

## M.S.Ramaiah University of Applied Sciences Bengaluru

## **Second Periodical Inspection Report**

#### submitted for

Karnataka State Higher Education Council,
Government of Karnataka

2023-24

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# Periodic Assessment Form (Filled)

#### KARNATAKA STATE HIGHER EDUCATION COUNCIL

## PERIODIC ASSESSMENT FORM FOR PRIVATE UNIVERSITIES OF KARNATAKA

ASSESSMENT YEAR/S: 2019-20 to 2023-24

(To be submitted in both soft and hard form)

As per the State Private University Act, the Karnataka State Higher Education Council (KSHEC) shall conduct periodic assessment and submit a Report to the State Government on the University regarding:

- (i) Standard of instruction for grant of Degrees
- (ii) Quality of education
- (iii) Commercialization of Higher Education, and
- (iv) Contravention of provisions of the Act, if any

Towards meeting this requirement, the KSHEC has devised the following Periodic Assessment Form to be filled in and submitted by the Private University on or before \_\_\_\_\_\_ of each year. This will form the basis to assess the University on 3 / 5 years basis or earlier, as may be decided by the KSHEC.

#### A. GENERAL INFORMATION

- 1. Name of the University as mentioned in the ACT:
  - M. S. Ramaiah University of Applied Sciences
- Location/ Address of the University: University House, Gnanagangothri Campus, New BEL Road, M S R Nagar, Bangalore Karnataka, 560054.
- 3. Year of Establishment (DD/MM/YYYY): 30.12.2013 (details enclosed in Annexure 1)
- 4. University Website URL: https://www.msruas.ac.in/
- a. Contact Details of Statutory Officers:

	Name	Mobile No	Phone With STD Code	Email
The Chancellor	Dr. M. R. Jayaram	080-4536 6666	080 4536 6666	chancellor@msruas.ac.in
Vice Chancellor	Dr. Kuldeep Kumar Raina	8191913845	080 4536 6666	vc@msruas.ac.in
Registrar	Dr. G. S. Venkatesh	9986038124	080 4536 6645	registrar@msruas.ac.in

Registrar	Dr. A. G. PRATHAB	9845195014	080 4536 6666	coe@msruas.ac.in
(Evaluation/				
CoE)				
Finance Officer	CA Udayakumara	9980214141	080 4536 6666	head.fa@msruas.ac.in
	Shetty			

#### b. Off-Campus Institutions/ Centres of the University and contact details

Sl.No	Name and address	Campus In-charge			
		Name and Designation	Phone no	Email	
Not Ap	plicable				

#### c. Recognition Details:

Sl. No	Description	Details with date
1.	Date of Recognition as a University by UGC (dd/mm/yyyy):	21-07-2016 (details enclosed in Annexure 2)
2.	2f of UGC (dd/mm/yyyy):	26-08-2021 (details enclosed in Annexure 3)
3.	12B of UGC (dd/mm/yyyy):	

#### d. Accreditation

	Accreditation					
Accreditation Agency	Status / Grade					
1. NAAC	<ul> <li>Ramaiah Medical College: A+ Grade (details enclosed in Annexure 4)</li> <li>Self-Study Report(SSR) for the University submitted on 21<sup>st</sup> Nov' 23.</li> <li>Peer Team Visit(PTV) inspection completed during 28<sup>th</sup> May to 30<sup>th</sup> May 2024</li> <li>Final Result awaited</li> </ul>					
2. NBA Accredited	Bachelor of Hotel Management accredited from Aug 2022 to June 2025 (details enclosed in Annexure 5a)					
3. NABH	Ramaiah Teaching Hospital (details enclosed in Annexure 5b)					
4. NABL	Ramaiah Teaching Hospital (details enclosed in Annexure 5c)					

#### e. Ranking (details enclosed in Annexure 6)

Ranking				
Ranking Agency	Rank			
1. NIRF	NIRF 2023 Rankings- Dental: 14th Rank, Medical: 43rd Rank, Pharmacy: 65th Rank			
2. QS I-GUAGE	GOLD Category			
3. Green Rankings 2024	Diamond Category			

#### **B. CURRICULAM DESIGN AND IMPLEMENATION**

Sl. No	Description	Details
1.	Year of last curriculum designed (Note: Provide copy of the BoS meeting proceedings)-	2023-2024 (details enclosed in Annexure 7)
2.	Year of last curriculum revised (Note: Provide copy of the BoS meeting proceedings)	2023-2024 (details enclosed in Annexure 8)
3.	Number of programmes where the syllabus revision was carried out during the last 3/5 years:	Each year revision happens based on feedback mechanism (details enclosed in Annexure 9)
4.	Number of new courses introduced of the total number of courses across all programmes offered during last 3/5 years:	Total new courses =1498 Total no of courses= 2441 (details enclosed in Annexure 10)
5.	Number of value-added courses introduced under each programme for imparting life skills.	177 (details enclosed in Annexure 11)
6.	No. of Add on courses introduced under each programme	92 (details enclosed in Annexure 12)
7.	Does the university practice the feedback mechanism on curriculum design by all the state holders (Note: Provide copy of the relevant documents)	Yes (details enclosed in Annexure 13)

## C. ACADEMIC PROGRAMMES (PREVIOUS 3 / 5 ACADEMIC YEAR'S DATA)

#### a. UG Programme/s

Sl.No	Name of the Programme	Year of Commence	YYYY	Y-YY	YYY	Y-YY	YYY	Y-YY
	(as per UGC Nomenclatu re)	ment	Sanctio ned Intake	Actual Admis sion	Sancti oned Intake	Actual Admiss ion	Sanctio ned Intake	Actual Admiss ion
(det	ails enclosed for	the years 2019	9-20, 2020-	21, 2021-2	22, 2022 <b>-</b> 2	23, 2023-24	in Annexu	re 14)

#### b. PG Programme/s

	I A OST MINISTER	Year of Commence			YYYY-YY		YYYY-YY	
No Programme (as per UGC Nomenclatur e)	ment	Sanctio ned Intake	Actual Admissi on	Sanct ioned Intak e	Actual Admiss ion	Sanctio ned Intake	Actual Admiss ion	

#### c. Ph. D Programme/s

Sl.N o	Name of the Programme	Commence ment	YYY	Y-YY	YY	YY-YY	YYYY-YY	
Ü	(as per UGC Nomenclature)		Sanctioned Intake	Actual Admission	Sancti oned Intake	Actual Admission	Sanctioned Intake	Actual Admissio n
	(details enclosed	d for the years 20	019-20, 2020-	21, 2021-22,	2022-23,	2023-24 in in	Annexure 16	)

#### d. Any other Programme/s

Sl. No	Name of the Programme	Year of Comme	YYY	Y-YY	YYY	Y-YY	YYY	Y-YY
110	(as per UGC Nomenclatu re)		Sanctio ned Intake	Actual Admiss ion	Sancti oned Intake	Actual Admis sion	Sanctio ned Intake	Actual Admis sion
(de	etails enclosed (o	r the years 20	019-20, 202	0-21, 2021	-22, 2022 <b>-</b>	23, 2023-2	4 in Annex	ure 17)

#### e. Student gender and category wise admission data (for the last 3/5 years)

			No of Students Admitted									
Sl.No	Name of the Programmes	Year	Male	Female	Total	SC	ST	OBC	GM			
1	UG											
2	PG			(details	enclosed i	n Annexi	ire 18)					
3	Ph.D			(actails	cheroscu r	1 2 2 1 1 0 7 1 0 3 0 1						
4	Others											

Note: The total of Male, Female and Total SC/ST/OBC/GM shall match

#### f. Details of Students from other States and Countries

Programmes	From	NRI Students			Foreign Students			Total			
	Y1	Y2	<b>Y</b> 3	<b>Y</b> 1	Y2	Y3	Y1	Y2	Y3		
UG											
PG	(de	tails enclo	osed for th	ie years .	e years 2019-20, 2020-21, 2021-22, 2022-23, 2023						
Ph.D				Annexure 19)							

#### g. Students centric learning methods in practice

SI.No.	Learning Methods	Name of the Courses
1	Experiential learning	Group Project; Dissertation and Publication
2	Participative learning	Laboratory courses
3	Problem solving method	Numerical Analysis
4	Project based learning	Group Project
5	Activity based learning	Workshop
6	Field based learning	Internship
7	Clinical based learning	Directed Clinical Education (Hospital Posting)
8	Others	

(Sample Course Specifications highlighting details of the above is enclosed as Annexure 20)

#### D. HUMAN RESOURCES

#### a. Details of Teaching and Non-Teaching Staff

#### i. Teaching:

	Prof	essor		Asso	Asso. Professor			Asst. Professor		
	T	M	F	T	M	F	T	M	F	
Sanctioned	155			126			462			
Recruited	155	92	63	126	63	63	462	188	266	
Vacant							07			
On Contract									-	

Note: Enclose the details of the faculty under each category

## ii. Non-Teaching: Administrative

	T	M	F
Sanctioned		415	
Recruited	397	260	137
Vacant	18	8	10
On	18	8	10
Contract			

#### Technical:

	T	M	F
Sanctioned		90	
Recruited	82	72	10
Vacant	8	1	7
On	8	1	7
Contract			

#### b. Qualification details of Teaching Staff

Permanent Faculty											
Highest Qualification	Professor		Assoc. Professor		Asst. Professor		Total				
	M	F	M	F	M	F					
D.Sc/D.Litt.											
Ph.D/ DM/ MCH	24	23	18	17	59	55	196				
PG	68	40	45	46	129	211	539				

		Tempo	rary Fa	culty			
Highest Qualification	Profes		essor Asso Prof		Asst. Professor		Total
	M	F	M	F	M	F	
D.Sc/D.Litt.	-	-	1	-	-	1	-
Ph.D/ DM/ MCH	-	-	-			-	-
PG	-	-	-	-	-	-	-

	P	art Tim	e/ Gues	t Facult	y		
Highest Qualification	Professor		Assoc. Professor		Asst. Professor		Total
	M	F	M	F	M	F	
D.Sc/D.Litt.	-		<b>-</b>	-		-	
Ph.D/ DM/ MCH	-	-	-	-	-	-	-
PG	-	ļ -	-	-	T-	-	-

#### c. Distinguished Academicians

Designation	Male	Female	Total
Professor Emeritus	5	2	7
Adjunct Professor	17	24	41
Visiting Professor	2	11	13
Professor of Practice	7	1	8

#### d. Student - Faculty ratio as per UGC / Regulatory Councils: 1: 15

#### e. Pass percentage of the final year students of last 3 / 5 years

			Pass Percentage	
Sl.No	Programs	Y1	Y2	Y3
1	UG	(details enclosed fo	, 2019-20, 2020-21,	
2	PG	2021-2	22, 2022-23 in Annex	cure 21)

#### f. Student / Faculty grievance redress mechanism

Sl.No.	Name of the Committee	No. of Grievances reported / addressed
1	Student Grievance Redressal Committee	10
2	Anti-Ragging Committee	
3	Internal Complaints Committee	02
4	Any other	NA

#### E. RESEARCH, INNOVATION AND EXTENSION

#### a. Research

#### i. Publications

Sl	Year	2019-20	2020-21	2021-22	2022-23	2023-24	Total
1	No of Publications (Scopus, Web of Sciences Indexed, PubMed and UGC Care list)	791	736	572	739	713	3551
2	Other Publications		-				

#### ii. Books and Book Chapters Published

Sl.No	Year	2019-20	2020-21	2021-22	2022-23	2023-24	Total
1	Books	73	150	133	153	84	593
2	Book Chapters in Edited Volumes						

#### iii. Patents (details enclosed in Annexure 22)

Sl.No	Year	2019-20	2020-21	2021-22	2022-23	2023-24	Total
1	No. of Patents filed	27	20	20	25	26	118
2	No. of Patents Published	20	28	16	21	02	87
3	No. of Patents Awarded	1	7	17	19	67	111
4	No. of Patents Commercialised		-				

#### b. Funded Research Projects

#### i. External Funded Projects (details enclosed in Annexure 23)

Year	2019-20	2020-21	2021-22	2022-23	2023-24	Total (in Lakhs)
Total No. Of Project	11	14	7	40	22	94
Total Amount (in lakhs)	191.09	622.72	156.41	646.98	488.67	2105.87

#### ii. University Funded Projects (details enclosed in Annexure 24)

Year	2019-20	2020-21	2021-22	2022-23	2023-24	Total (in lakhs)
Total No Of Project	6	1	11	71	44	133
Total Amount Granted (in Lakhs)	1.76	0.3	25.33	236.45	133.3	337.1

#### iii. No of JRFs, SRFs, PDFs, Research Associates (details enclosed in Annexure 25)

Sl. No			]	No. of Fe	llowship	S	
	Name of the Fellowship	2019-2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024	Total
1	JRF, SRF	4	4	1	32	11	52

- c. Innovation Eco-System
- i. Number of Workshops/ Seminars/ Conferences/ Symposia, etc organized by the University

			No. of ever	nts organize	d
SI. No	Name of the Workshops/ Seminars/ Conferences/ Symposia, etc	2020-21	2021-22	2022-23	Total

## ii. No of Workshops / Seminars / Conferences/ Symposia, etc attended by the Faculty

		N	o. of Teach	iers attend	ed
SI. No	Name of the Workshops/ Seminars/ Conferences/ Symposia, etc	2020-21	2021-22	2022-23	Total

#### iii. Awards / Rewards / Recognitions received for Research and Innovation

(details enclosed in Annexure 28)

				No. of	Teachers R	eceived	
Sl. No	Name of the Awards/ Rewards/ Recognition received	2019- 2020	2020- 2021	2021- 2022	2022-2023	2023-2024	Total
1	Awards/ Rewards/ Recognition received	25	21	11	55	28	140

#### iv. Resource Mobilisation

SI. No		Amount Generated (in INR)					
	Revenue generated through	2020-21	2021-22	2022-23	Total		
1	Consultancy	64,50,823	72,08,530	97,25,563	2,33,84,916		
2	Corporate Training	1,16,89,449	55,09,661	12,45,644	1,84,44,754		
3	Revenue from equipment/ laboratories						
4	Others	108,98,00,388	122,33,93,109	298,82,88,797	530,14,82,294		

#### v. Collaborations and MoUs (details enclosed in Annexure 29)

Total active MoUs	National / International	Academia	Industry	Total	Overall year wise
	National	1	20	21	
2018-2019					31
	International	6	4	10	
0040 0000	National	0	8	8	18
2019-2020	International	10	0	10	10
2022 2024	National	0	9	9	12
2020-2021	International	2	1	3	12
	National	1	18	19	21
2021-2022	International	1	1	2	21
2002 2002	National	0	7	7	08
2022-2023	International	0	1	1	08
	National	01	06	07	20
2023-2024	International	01	01	02	09
	99				

#### d. Extension

i. Number of extension and outreach programmes conducted (Such as NCC/NSS/YSR/etc.)

	No. of activities							
Types of activities	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024			
NCC	-	-	-		-			
NSS	-	-	18	11	24			
YSR	-	+	-					
Rotaract	-	-	-	24	42			
Service to Society	43	*	-	42	52			

ii. Average percentage of students participated in extension activities

	Percentage of students								
Types of activities	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024				
NCC	-	-	-	-	-				
NSS	-	-	78.7%	79.9%	81.4%				
YSR	-	-							
Rotaract	-	-	<u>-</u>	80.3%	82.7%				
Service to Society	27%	-	-	18%	19%				

e. Total number of awards and recognitions received for extension activities from Government / Government recognised organisations

	No. of awards							
Types of activities	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024			
NCC	-	-	-	-	-			
NSS	-	-	02	_	-			
YSR	-	-	-	-	-			
Rotaract	_	_	<del>-</del>	05	03			

#### F. INFRASTRUCTURE AND LEARNING RESOURCES

#### a. Physical Infrastructure:

Sl. No	Description	
1	Total land in acres	40.81 Acres
2	Details of competent Authority (BBMP/BMRD/Corporation/Municipality/Panchayat	BBMP / Panchayat
3	Total Build-up area in sq.m.	2,27,700 Sq.m
4	Instructional area in sq.m.	
	a. No. of Classrooms with average area per classroom in sq.m	155 Numbers / 83.87 Sq.m
	b. No. of Laboratories with average area per Lab. in sq.m.	162 Numbers / 106.72 Sq.m
	c. No. of Seminar Halls/auditorium with average area per hall in sq.m.	81 / 81.29 Sq.m
	d. Library area in sq.ms and seating capacity	7161.25 Sq.m 1950 Capacity
5	Administrative area in sq.ms	
	a. Office space for Chancellor	307.28 Sq.m
	b. Office space for Vice Chancellor	343.84 Sq.m
	c. Office space for Registrar	90.15 Sq.m
	d. Office space for (Registrar Evaluation)	557.41 Sq.m
	e. Office space for Finance Officer	108.75 Sq.m
	f. Office space for administration	8635.44 Sq.m
	g. Others	
6	Amenities area in sq.m	
	a. Playgrounds	14,720 Sq.m
	b. Toilets	3140.82 Sq.m
	c. Students' Activity Centre	980.44 Sq.m
	d. Canteen	1486.34 Sq.m
	e. Bank	286.14 Sq.m
	f. Post Office	154.59 Sq.m
	g. Boys common room	629.87 Sq.m
	h. Girls Common Room	605.18 Sq.m
	i. Boys Hostel/s	10426.56 Sq.m
	j. Girls Hostel/s	52185.11 Sq.m
	k. Health Centre	100 Sq.m
	Childcare Centre	292.08 Sq.m
	m. Gymnasium/Indoor Stadium	562.63 Sq.m
	n. Staff quarters	891.86 Sq.m
	o. Others	-
7	Circulation area in sq. m (Reception/ Louby/Display Area	25,978.13 Sq.m

#### b. Academic and Research Lab Facilities

		Numbers				
Sl. No	Laboratories	Y1	Y2	Y3	Total	
1	General Laboratories	(details enclosed in Annexure 30)				
2	Special Laboratories					
3	Central Research Laboratory					
4	Central Instrumentation facility					

#### c. Library as a Learning Resource

				Numbers			
Sl. No	Type of Documents	2019- 2020	2020- 2021	2021- 2022	2022- 2023	2023- 2024	Total
1	Books and E-Books						
	a. No. of Titles	18662	19370	20376	42863	43623	43623
	b. No. of Volumes	39687	41823	44076	76313	78854	78854
	c. No. of E-Books	179478	179545			326	326
2	Journals						
	a. No. of National	62		52	130	185	185
	b. No. of International	29		25	73	82	82
	c. E-Journals	1183	1460	1463	4174	4174	4174
	d. Databases	05	09	11	17	23	23
3	Digital Library Facility with number of nodes and video Lecturers			183	212	212	

#### d. The Status of Library Automation

Sl. No	Status of Library Automation	Y/N	Library Software Used
1	Fully Automated	Yes	Lib-soft 12.0 Version, Easy Lib-6.4 A & Juno ERP- Modules-Configuration, Members, Catalogue, Issue-Return, Digital Library, Book Bank, Reports, Library Purchase Etc
2	Partially Automated		
3	Not Automated		

## e. Annual Expenditure on Library on purchase of Books/ e-Books and Journals

		Amount spent (in INR)					
Sl. No	Year	2020-21	2021-22	2022-23	Total		
1	Books	43,53,647	34,89,372	71,86,138	1,50,29,157		
2	e-Books						
3	Journals						
4	e-Journals	23.43.528	56,61,051	2,21,74,995	3 01 79 574		
5	Data Bases						
6	Others						

#### f. IT Infrastructure

Sl.No	Description	Details
1	No. of Computers	2850
2	Hardware Specification	i3 / i5 / i7 Processor, 8GB / 16GB / 32GB RAM, 512GB / 1TB HDD, 19.5" / 22" LCD Monitors, Windows 10 / 11 OS
3	No of terminals on LAN and WAN	All computers are on LAN
4	Relevant Licensed Software	104 different types of application software
5	Peripherals	220 Projectors, 48 Interactive Panels, 54 Professional Display
6	Bandwidth of Internet	2350 Mbps
7	Is campus wi-fi enabled? give details	Yes, 763 Wi Fi Access Points spread across all buildings
8	No of Smart Classrooms	39
9	No of Classrooms with LCD projector	116
10	No of Seminar halls with ICT facilities	74
11	No of Audio Video recording facility	14
12	Language Lab	2
13	Media Centre	1
14	Any other	

#### g. Average Annual Expenditure on IT Infrastructure

Sl. No	Description	Amount spent (in INR))					
		2020-21	2021-22	2022-23	Total		
1	Annual Expenditure on IT Infrastructure	1,22,29,246	1,29,75,554	7,80,52,486	10,32,57,286		

#### h. Student-Computer Ratio:

#### 4:1

#### i. Maintenance of Campus Infrastructure:

Average percentage incurred on maintenance of Physical facility and academic support facilities excluding salary:

Amount Spent	2020-21	2021-22	2022-23	Total
(in INR)	9,73,27,546	13,21,11,781	71,19,59,227	94,13,98,554

#### G. STUDENT SUPPORT AND PROGRESSION

#### a. Scholarships and free ships:

#### Average percentage of students benefitted by the Scholarships and free ships

Sl. No	Type of Scholarship	2019-20	2020-21	2021-22	2022-23	Total in Rs.
1	Institution	18%	59%	61%	37%	4,65,87,101
2	Government	20%	19%	30%	19%	18,34,85,373
3	Non-Government (NGO)	.02%	0.2%	0.5%	0.7	13,72,700

#### b. Student Progression:

## Average percentage of Students appearing in State, National and International examinations

		No. of Students appeared							
Sl. No	Type of Examination	2019-20	2020-21	2021-22	2022-23	Total			
1	UGC NET	-	-	-	-	-			
2	SLET/ SET	-	-	_	-	-			
3	GATE	03	07		03	13			
4	GMAT	-	-	-	-	-			
5	CAT	-	-	-	00	00			
6	GRE		-	12		02			
7	TOFEL/ ELTS	05	02	02	03	12			

## c. Average percentage of Students qualifying in State, National and International examinations

Sl. No	Type of Examination	2019-20	2020-21	2021-22	2022-23	Total
1	UGC NET		-	-	l -	-
2	SLET/ SET		-	_	-	-
3	GATE	01	05		02	10
4	GMAT		-		-	-
5	CAT		-		-	-
6	GRE		-	01		01
7	TOFEL/ ELTS	05	02	02	03	12

#### d. Average percentage of placement of outgoing students

Year	2019-20	2020-21	2021-22	2022-23	2023 -24 (on-going)	Total
Number of students placed	342	902	830	990	615	3337
No of Companies visited	160	220	293	305	240	1058
Maximum pay package offered in Rs. Per annum	1000000	220000	4500000	2275000	5200000	
Minimum pay package offered in Rs. Per annum	160000	175000	180000	180000	180000	
Average pay package offered in Rs. Per annum	424000	480000	485000	510000	625000	525000

#### e. Details of Awards and Medals

			No.	of Awards v	von		
SI. No	Sports and Athletics	2019-20	2020-21	2021-22	2022-23	2023-24	Total
1	International	1	1		2	2	6
2	National	3	2		1	7	13
3	State			3	1		4
4	Inter University	1	1		2		4
			No.	of Awards v	von		
Sl. No	Cultural Activities	2019-20	2020-21	2021-22	2022-23	2023-24	Total
1	International					01	01
2	National			7	12	2	21
3	State						
4	Inter University			3	17	08	28

#### f. Details of Sports and Cultural Events Organized

		No. of Events Organized					
SI. No	Sports and Athletics	2019-20	2020-21	2021-22	2022-23	2023-24	Total
1	International	-	-	9	-	-	-
2	National	-	-	-			-
3	State		-	-		-	
4	Inter University	-	-	-	02	01	03

Sl. No			No. of Events Organized							
	Cultural Activities	2019-20	2020-21	2021-22	2022-23	2023-24	Total			
1	International	-	-	-	-	-	-			
2	National	-	-	-	-	-	-			
3	State		-	-	-	-	-			
4	Inter University	-	_	2	4	3	9			

#### g. Alumni Engagements

- State the existence of registered Alumni Association:
   M.S. Ramaiah University of Applied Sciences (MSRUAS) Alumni Trust was established on 16<sup>th</sup> February 2022 The Alumni Association, which was formally registered (Registration Number: C.D Number YPRD976)
- ii) Alumni Contribution for the development of the Institution: Rs. 1,05,00,000

#### H. LEADERSHIP, GOVERNANCE AND MANAGEMENT

- Does the University have an Institutional Development Plan (IDP):
  - a. Short Term: Yes Annual Strategic Perspective Plan(ASPP)- (details enclosed in Annexure 31a)
  - b. Long Term: Yes-2018-23 and 2023-2028 (IDP-Vision Document)- (details enclosed in Annexure 31b)
- Does the University have e-Governance in its area of operations

a. Administration:

Yes

b. Finance and Accounts:

Yes

c. Student Admissions and Support:

Yes

d. Examinations:

Yes

(details enclosed in Annexure 32)

• Does the University have a performance of appraisal system:

a. Teaching faculty:

Yes

b. Technical Staff:

Yes

c. Administrative staff:

Yes

(details enclosed in Annexure 33)

• Does the University provide financial support to faculty to attend: Yes

		Number /Amount				
Sl. No	Type of Activities	<b>Y</b> 1	Y2	<b>Y3</b>	Total	
1	Conferences/Seminars/Workshops /Symposia etc		(details enclo	sed in Annex	xure 27)	
2	Faculty Development Programs					
3	Capacity Building Programs					

- Does the University conduct annual audit (internal and external) regularly: Yes
   (Note: Provide with last three years Annual Statement of accounts and balance sheets) (details enclosed in Annexure 34)
- Does the University have Internal Quality Assurance Cell (IQAC): Yes
   (Note: Provide the copy of the Composition of IQAC Committee as per UGC with relevant documents)
   (details enclosed in Annexure 35)
- Does the University have undergone AAA process: Yes (Note: Provide necessary details for the last three years)
   (details enclosed in Annexure 36)

• Does the University periodically conduct meetings of all statutory bodies of the university as per the act: Yes

(Note: Provide necessary details for the last three years)- (details enclosed in Annexure 37)

- Does the University have implemented the UGC/AICTE pay-scales for teaching, other academic staff and state pay scale for non-teaching staff: Yes (Teaching Faculty scale is as per AICTE 6<sup>th</sup> pay norms and non-teaching scale is as per Govt. of Karnataka 6<sup>th</sup> pay norms. (Note: Provide necessary details for the last three years)-(details enclosed in Annexure 38)
- Does the University have the staff welfare measures:

Sl.No.	Welfare Measures	Action taken
1	Medical reimbursement	Discount on medical treatment in all the group hospitals
2	Health Insurance	Yes
3	Leave Provisions and Encashment	Yes
4	Maternity Leaves	Yes
5	Retirement benefit such as Gratuity, PF, etc.	Yes
6	Any other	Paternity Leave, Discount in fees for wards of teaching and non-teaching staff, Study leave

#### I. STEPS TAKEN TO ENSURE QUALITY OF HIGHER EDUCATION

		Details				
Sl.No.	Description	2020-21	2021-22	2022-23		
1	Average entry level percentage in each programme of study	(details enclosed in Annexure 39)				
2	No, of students admitted V/s No. of students graduated in each programme	(details enclo	osed in Annexu	re 40)		
3	Sponsored research funding received (in INR lakhs)	622.72	156.41	646.98		
4	Consultancy revenue generated (in INR)	64,50,823	72,08,530	97,25,563		
5	Indicate faculty attrition ratio		< 2 %			
6	Indicate whether outcome-based education practiced	Yes				
7	Average experience of faculty in each department (INR)	10.2 years				
8	Average expenditure incurred for the development of laboratories / equipment in each department (in INR)	1,29,56,114	4,02,56,862	5,78,34,66		
9	No. of conferences / seminars / workshops / symposia / etc organised		osed in Annexi			
10	Percentage of Faculty undergone FDPs	(details enclosed in Annexure 27)				
11	Others					

## J. STEPS TAKEN TO CONTROL COMMERCIALISATION OF HIGHER EDUCATION

Sl.No.	Control Measures	2020-21	2021-22	2022-23
1	Whether Fee Regulation Committee (FRC) is functional (provide details)	Yes (details enclose	ed in Annexure 41)	
2	Total fees collected (in INR)	98,83,33,665	109,12,90,467	202,90,86,984
3	Total expenditure incurred (in INR)	83,91,36,062	87,16,43,374	293,80,83,241
4	Whether any capitation fees charged	No		
5	Any other fees charged	No		
6	Notification of fee structure in website and prospectus	Yes		
7	Others	<b> </b>		

#### K. STEPS TAKEN TO FULFILL THE PROVISIONS OF THE UNIVERSITY ACT

Sl.No.	Description	Details
1	Whether the officers of the University have been appointed / nominated as per the Act	Yes (details enclosed in Annexure 42)
2	Whether authorities of the University have been constituted as per the Act	Yes (details enclosed in Annexure 43)
3	No. of meetings and dates of meeting of various authorities of last 3/5 years	(details enclosed in Annexure 37)
4	Whether the specified percentage of seats reserved for the Karnataka state students through KEA.	40% (as per provisions of the ACT)
5	Indicate the composition of Fee Regulation Committee (FRC) and details of meetings held	(details enclosed in Annexure 44)
6	Whether any development fees collected from the students	No
7	Contributions received from other sources towards development fund	Nil
8	Interest income received from the Permanent Statutory Fund	(details enclosed in Annexure 45)
9	Others	

#### L. INSTITUTIONAL VALUES AND BEST PRACTICES:

#### a. Institutional values and Social Responsibilities

• Measures initiated by the university for the following:

Sl.No.	Activities	Measures taken
1	Activities Gender equality	<ul> <li>The ratio of female employees and women in leadership roles is 50% at an average</li> <li>Periodic gender audit to ensure adequate representation</li> <li>Awards to women employees for exemplary performance</li> <li>Credited course in curriculum focusses on values and attitude to sensitize students on gender equity</li> <li>Female security guards, security cameras to ensure security to women</li> <li>Separate Common Rooms for Boys and Girls</li> <li>A functional Internal Complaints Committee to address gender related grievances</li> <li>Day care center for young mothers</li> <li>Awareness programs on gender sensitisation through lectures, rallies and street plays</li> <li>Celebration of Women's Day events</li> </ul>
2	Solar Energy	<ul> <li>80% of power requirement met by Solar Energy through PPA</li> <li>Solar panels generate 60 kw for inhouse requirement</li> <li>Solar Heat Pumps for hot water in hostels</li> </ul>
3	Bio-Gas Plant	<ul> <li>100 kgs capacity Biogas plant</li> <li>Currently 60 kgs food and kitchen waste fed to the plant</li> <li>Savings of 150 kgs of LPG (10 cylinders per month)</li> </ul>
4	Solid waste Management	<ul> <li>Solid Waste Management through segregation and disposal through BBMP Contractor and authorised recyclers</li> <li>"Sanitation, Waste Management and Environmental Engineering" (SWMEE) Research Centre for the development of innovative and sustainable technologies in waste management</li> </ul>
5	Liquid waste Management	Liquid Waste Management though STPs (150, 250 and 450 KLD),
6	Bio-Medical Waste Management	Bio Medical and Hazardous Chemicals Waste     Management through segregation and disposal through     authorised recycler
7	e-waste Management	Periodic E-Waste disposal through authorised contractors
8	Waste recycling system	<ul> <li>Compost Pits for dry green Waste</li> <li>Organic Converter to treat Organic waste</li> <li>Compost is used for gardening</li> </ul>

9	Rainwater harvesting system	<ul> <li>Rainwater Harvesting facilities in both campuses</li> <li>Harvested water used for ground water recharge</li> <li>1,00,000 litres capacity to store harvested rainwater</li> </ul>
10	Construction Tanks and Bunds	• Storage tanks (1,00,000 litres) are constructed to harvest rainwater
11	Waste water recycling	Treated water of STPs is used for re-use in gardening and toilet flushing
12	Green Campus Initiatives	<ul> <li>Campus with green cover and development footprints</li> <li>Retention of Natural Elements</li> <li>Integration of abundant natural daylight through good architectural methods</li> <li>Outdoor light pollution reduction</li> <li>Heat island effect reduction by planting native, drought-tolerant shade trees and smaller vegetation</li> <li>Annual Green Audit and Environment Audits</li> </ul>
13	Any other	Facilities for Differently Abled students and Staff  Barrier-free environment across campus  Ramps and Lifts for easy movement and access  Differently abled friendly toilets in all blocks  Mechanised wheel-chair assistance  Signages and General Information desks  Scribe assistance  Screen reading software

#### **b. Best Practices:**

Describe two best practices successfully implemented by the University:

#### Best Practice 1: Student Group Projects - An Avenue for Experiential Learning

Student Group Projects and exhibition are conducted to:

- Harness the Distinctiveness of University In Terms of Training & Consultancy (TCE, RALC & DTLL, RCPT), Innovation (RTBI, TCE) & Multidisciplinary Nature (13 Faculties) to Augment Overall Proficiency of Students
- Formulate Aim & Objectives of the Project Encompassing Attributes of Research
  Orientation, Innovative Practices, Industrial Applicability Eventually Satisfying Societal
  Needs
- Enrich the Experiential, Collaborative, Critical Thinking, Problem Solving and Entrepreneurial Outlook of Students

#### Best Practice 2: Community Outreach Services for Societal Well-being

Community Outreach Services are conducted with the following objectives

- To inculcate a sense of Responsibility and Duty to Comprehend Societal Issues
- To Collaborate and Participate In Formulating Holistic Solution for Societal Needs
- To develop as a Responsible Citizen with Empathy to the Needy
- To Foster a Transformational Change for Deeper Linkage with the Community
- To provide Academia-Industry Collaboration, Sponsorship & Funding

#### c. Institutional Distinctiveness:

Describe one area of distinctiveness to the University:

Institutional Distinctiveness - Excellence in Training, Consultancy and Sponsored

#### Research

A Distinctive Area of Focus on:

- Consultancy through a dedicated unit, Techno Centre and Sponsored Research, through the
  Directorate of Sponsored Research, evolves around generation of knowledge through research
  and provide technical and scientific solutions to real life problems posed by industry, business
  and society in Engineering and Technology, Art and Design, Management and Commerce,
  Health and Allied Sciences, Physical and Life Sciences, Arts, and Social Sciences
- Interdisciplinary Approach, Industry Relevance, Experienced Faculty and Industry Experts,
   Customised Programs and Solutions, Research Backed Consultancy and Industry relevant
   curriculum provide distinctiveness to Training, Consultancy and Sponsored Research at RUAS

This is to certify that the information provided above is true and correct to the best of our knowledge and belief. Further, if the information provided is false and incorrect, we are one of the information provided in false and incorrect, we are one of the information provided in false and incorrect, we are one of the information provided in false and incorrect, we are one of the information provided in false and incorrect, we are one of the information provided in false and incorrect, we are one of the information provided in false and incorrect, we are one of the information provided in false and incorrect, we are one of the information provided in false and incorrect, we are one of the information provided in false and incorrect, we are one of the information provided in false and incorrect, we are one of the information provided in false and incorrect, we are one of the information provided in the information prov abide by the action initiated as per the provisions of the Act.

Authorised Simatory of the University with the Seal.

M.S. Ramaiah University of Applied Science

Bangalore - 560 054

## **ANNEXURE 1**



No. ED 103 UNE 2013

Karnataka Government Secretariat, Higher Education Department, M.S. Building, Bangalore, dated 30-12-2013.

#### NOTIFICATION

Whereas, the Gokula Education Foundation (Medical), MSRIT Post, Bangalore 560 054 has submitted the proposal to Government requesting to grant Private University status to be named as M.S. Ramaiah University of Applied Sciences.

Whereas, the Government has referred the same to the Karnataka State Higher Education Council to inspect the Institution about its infrastructure etc., and submit its report to Government.

Whereas, the Karnataka State Higher Education Council has submitted its report. Based on the report of the Committee, Government has prepared draft M.S. Ramaiah University of Applied Sciences Bill and placed it before the Karnataka Legislature for its approval. After obtaining the approval of the Legislature and assent of His Excellency the Governor of Karnataka, M.S. Ramaiah University of Applied Sciences Act, 2012 was published in the Official Gazette dated: 09-07-2013 and it was given effect from 30-12-2013 as published in the Official Gazette.

Whereas, as per Section 3 of M.S. Ramaiah University of Applied Sciences Act, 2012, the Gokula Education Foundation (Medical), has submitted the proposal to Government for establishment of the M.S. Ramaiah University of Applied Sciences. Accordingly, Government of Karnataka has constituted a Committee vide its order No. ED 103 UNE 2013, dated: 06-07-2013 to inspect the physical infrastructure available at Gokula Education Foundation (Medical), Gnanagangothri Campus, New BEL Road, MSR Nagar, Bangalore – 560 054 and to submit its report in terms of Section 3(3) of the said Act.

Whereas, the Committee constituted for the purpose, visited the Gokula Education Foundation (Medical), Gnanagangothri Campus, New BEL Road, MSR Nagar, Bangalore – 560 054 on 24-07-2013 and after due inspection submitted its report to Government on 05-08-2013 on the issues as contained in Clauses (i) to (xiii) of Section 3(3) the M.S. Ramaiah University of Applied Sciences Act, 2012.

Whereas, the Gokula Education Foundation (Medical) has created Statutory Fund of Rs. 15.00 crores (Rupees Fifteen Crores only) as stipulated under Section 4 read with proviso to Section 47 of the M.S. Ramaiah University of Applied Sciences Act, 2012.

-2-

Now, therefore, after considering all the facts, Government of Karnataka has accorded approval with the following terms and conditions to Gokula Education Foundation (Medical), Gnanagangothri Campus, New BEL Road, MSR Nagar, Bangalore – 560 054 in accordance with Section 4(2) of M.S. Ramaiah University of Applied Sciences Act, 2012 to establish and commence a Private University in the name and style "M.S. Ramaiah University of Applied Sciences" at Yeralakkenahalli Village, Somenahalli Hobli, Gudibanda Taluk, Chikkaballapur District.

- The Gokula Education Foundation (Medical) shall have the right to establish the University of Unitary Nature subject to and in accordance with the provisions of this Act.
- 2. Since the University is being located at Yeralakkenahalli Village, Somenahalli Hobli, Gudibanda Taluk, Chikkaballapur District i.e. outside Bangalore Rural District, the University shall establish a permanent Statutory Endowment Fund of rupees fifteen crores out of which rupees ten crores shall be deposited in cash which shall be operated by the University with the joint signature of the Principal Secretary to Government and remaining amount of rupees five crores shall be in the form of bank guarantee.
- 3. The nature and functions of the University shall be strictly as per the provisions of M.S. Ramaiah University of Applied Sciences Act, 2012. It shall also comply the rules that will be made under the Act in due course. The University shall also comply all the prevailing relevant laws, which concern the governance of the University in any aspect.

4. Agenda matters shall be dealt as per section 2(b) of the Act.

- 5. "Statutes" and "Regulations" of the University under the Act shall be made within a period of 3 months from the date of this notification.
- 6. The University shall have the following faculties:
  - a) Faculty of Hospitality Management and Catering Technology.
  - b) Faculty of Pharmacy.
  - c) Faculty of Dental Sciences.
  - d) Faculty of Engineering & Technology.
  - e) Faculty of Art & Design.
  - f) Faculty of Management and Commerce.
  - g) Faculty of Complementary and Alternative Medicine.
  - h) Faculty of Science and Humanities
  - i) Faculty of Law.
- 7. As per section 4(3) & 6 of the Act, the University is not allowed to affiliate any other existing colleges of its own management till completion of five years and those colleges shall continue to be affiliated to the existing respective regular Universities. The constituent colleges, additional campuses, Regional Centres or Study Centres can only be established after five years from the date of commencement of the University with the prior permission of the state Government and shall be as per the norms of UGC and other National Accreditation bodies.
- 8. As per section 4(7) of the Act the property of the University shall be used for the purpose and objects of the University only.
- 9. The Trust shall possess land to an extent at least sixty acres.
- 10. The University shall always strive to achieve Global Standards and shall promote research and all progressive academic activities vigorously as per Section 7 of the Act.

....3....

- 11. The fees and other charges that may be collected by the University shall be as per the Statutes and rules as per section 8(v). Further provisions of section 38 of the Act regarding the Fee Regulation Committee shall be complied with...
- 12. The reservations in admissions shall be as per section 9 of the Act.
- 13. National Accreditations shall be sought from respective statutory bodies as per section 10 of the Act.
- 14. The directions of the Visitor to the University i.e. the H.E the Governor of Karnataka shall be complied by the University as and when they are issued.
- 15. All the statutory bodies and statutory functions are to be complied by the University well in time as per Act.
- 16. The periodical statutory reports shall be submitted to Government as per provisions of the Act.
- 17. The University shall prepare annual accounts as per section 53 of the Act and also the audit of the University shall be taken up as per sub section 2 of 53 of the Act.
- 18. The University shall place the annual accounts and audit reports before the Board of Governors before 30th November every year.
- 19. The Board of Governors shall send the annual accounts alongwith the annual reports and audit reports before 31st December every year to the Government.

By Order and in the name of Governor of Karnataka,

#### (S.R. REVANNA)

Under Secretary to Government, Education Department (Universities).

To:

The Compiler, Karnataka Gazette, Bangalore – to publish in a Special Gazette and to supply 1000 copies.

#### Copy to:

- 1. The Secretary to Government of India, Department of Higher Education, Ministry of Human Resources, Development, Shastry Bhavan, New Delhi-11.
- 2. The Chairman, University Grants Commission, New Delhi.
- 3. The Chairman, All India Council for Technical Education, New Delhi.
- 4. The Chairman, Medical Council of India, New Delhi.
- 5. The Chairman, NCTE, New Delhi.
- 6. The Secretary General, Association of Indian Universities, AIU House, No. 16, Gomrade Indrajit Gupta Marg (Kotla Marg), New Delhi 110 002.
- 7. The Secretary to His Excellency Governor and Chancellor, Raj Bhavan, Bangalore.
- 8. The Principal Secretary to Chief Minister, Vidhana Soudha, Bangaloge.
- 9. All the Vice Chancellors/Registrars of All the Universities in Karnataka.
- 10. The Authorised Signatory, Gokula Education Foundation (Medical), Gnanagangothri Campus, New BEL Road, MSR Nagar, Bangalore 560 054.
- 11. The Principal Secretary to Government, Primary and Secondary Education, Bangalore.
- 12. The Principal Secretary to Government, Department of Parliamentary Affairs and Legislation, Vidhana Soudha, Bangalore.
- 13. The PS to Hon'ble Minister for Higher Education, Vidhana Soudha, Bangalore.
- 14. The Joint Secretary, Cabinet Section, Vidhana Soudha, Bangalore.
- 15. The Secretary, Karnataka Legislative Assembly, Bangalore.
- 16. The Secretary, Karnataka legislative Council, Bangalore.
- 17. PS to Principal Secretary to Government, Higher Education Department.
- 18. PA to Joint Secretary to Government, Higher Education Department (Universities), M.S. Building, Bangalore.
- 19. SGF/Space Copies.



ಸಂಖ್ಯೆ: ಇಡಿ 103 ಯುಎನ್ಇ 2013

ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಸಚಿವಾಲಯ, ಬಹುಮಹಡಿ ಕಟ್ಟಡ, -ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 30–12–2013.

#### ಅಧಿಸೂಚನೆ

ಎಂ.ಎಸ್. ರಾಮಯ್ಯ ಅನ್ವಯಿಕ ವಿಜ್ಞಾನಗಳ ವಿಶ್ವವಿದ್ಯಾಲಯ ಅಧಿನಿಯಮ, 2012 (2013 ರ ಕರ್ನಾಟಕ ಅಧಿನಿಯಮ ಸಂಖ್ಯೆ: 15) ರ 1ನೇ ಪ್ರಕರಣದ (3)ನೇ ಉಪ ಪ್ರಕರಣದಡಿ ಪ್ರದತ್ತವಾದ ಅಧಿಕಾರವನ್ನು ಚಲಾಯಿಸಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರವು ಈ ಮೂಲಕ ಸದರಿ ಅಧಿನಿಯಮವು ದಿನಾಂಕ: 30–12–2013 ರಿಂದ ಜಾರಿಗೆ ಬರತಕ್ಕದ್ದೆಂದು ಗೊತ್ತುಪಡಿಸುತ್ತದೆ.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ

(ಎಸ್.ಆರ್. ಥೀವೆಣ್ಣ) ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ

ಕ್ಟತ ಶಿಕ್ಷಣ ಇಲಾಖೆ (ವಿಶ್ವವಿದ್ಯಾಲಯಗಳು)

ಇವರಿಗೆ,

ಸಂಕಲನಕಾರರು, ಕರ್ನಾಟಕ ರಾಜ್ಯಪತ್ರ, ಬೆಂಗಳೂರು – ಇಂದೇ ವಿಶೇಷ ರಾಜ್ಯಪತ್ರದಲ್ಲಿ ಪ್ರಕಟಿಸಲು ಮತ್ತು 50 ಪ್ರತಿಗಳನ್ನು ಒದಗಿಸಲು ಕೋರಿದೆ.

#### ಪ್ರತಿಯನ್ನು:-

- 1) ಕಾರ್ಯದರ್ಶಿಗಳು, ಉನ್ನತ ಶಿಕ್ಷಣ ಇಲಾಖೆ, ಮಾನವ ಸಂಪನ್ಮೂಲ ಮತ್ತು ಅಭಿವೃದ್ಧಿ ಮಂತ್ರಾಲಯ, ಶಾಸ್ತ್ರಿ ಭವನ, ಭಾರತ ಸರ್ಕಾರ, ವವದೆಹಲಿ—11......
- 2) ಅಧ್ಯಕ್ಷರು, ವಿಶ್ವವಿದ್ಯಾಲಯ ಧನಸಹಾಯ ಆಯೋಗ, ನವದೆಹಲಿ.
- 3) ಅಧ್ಯಕ್ಷರು, ಅಖಿಲ ಭಾರತ ತಾಂತ್ರಿಕ ಶಿಕ್ಷಣ ಪರಿಷತ್ತು, ನವದೆಹಲಿ.
- 4) ಅಧ್ಯಕ್ಷರು, ಎನ್.ಸಿ.ಟಿ.ಇ., ನವದೆಹಲಿ.
- 5) ಕಾರ್ಯದರ್ಶಿ, ಭಾರತೀಯ ವಿಶ್ವವಿದ್ಯಾಲಯಗಳ ಸಂಘ, ಎ.ಐ.ಯು. ಹೌಸ್, ನಂ.16, ಗೊಮ್ರೇಡ್ ಇಂದ್ರಜಿತ್ ಮಾರ್ಗ (ಕೋಟ್ಲಾ ಮಾರ್ಗ್), ನವದೆಹಲಿ–110002.
- 6) ಘನತೆವೆತ್ತ ರಾಜ್ಯಪಾಲರ ಕಾರ್ಯದರ್ಶಿಯವರು, ರಾಜಭವನ, ಬೆಂಗಳೂರು.
- 7) ಮಾನ್ಯ ಮುಖ್ಯಮಂತ್ರಿಯವರ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿಯವರು, ವಿಧಾನ ಸೌಧ, ಬೆಂಗಳೂರು.
- 8) ರಾಜ್ಯದ ಎಲ್ಲ ವಿಶ್ವವಿದ್ಯಾಲಯಗಳ ಕುಲಪತಿಗಳು / ಕುಲಸಚಿವರು.
- 9) ಅಧ್ಯಕ್ಷರು, ಗೋಕುಲ ಎಜುಕೇಷನ್ ಫೌಂಡೇಷನ್, ಜ್ಞಾನಗಂಗೋತ್ರಿ ಕ್ಯಾಂಪಸ್, ಹೊಸ ಬಿ.ಇ.ಎಲ್. ರಸ್ತೆ, ಎಂ.ಎಸ್.ಆರ್. ನಗರ, ಬೆಂಗಳೂರು–560054.
- 10) ಸರ್ಕಾರದ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿ, ಪ್ರಾಥಮಿಕ ಮತ್ತು ಪ್ರೌಢ ಶಿಕ್ಷಣ ಇಲಾಖೆ / ಸಂಸದೀಯ ವ್ಯವಹಾರಗಳು ಮತ್ತು ಶಾಸನರಚನಾ ಇಲಾಖೆ, ವಿಧಾನ ಸೌಧ, ಬೆಂಗಳೂರು.
- 11) ಮಾನ್ಯ ಉನ್ನತ ಶಿಕ್ಷಣ ಸಚಿವರ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿ, ವಿಧಾನ ಸೌಧ, ಬೆಂಗಳೂರು.
- 12) ಸರ್ಕಾರದ ಜಂಟಿ ಕಾರ್ಯದರ್ಶಿ, ಸಚಿವ ಸಂಪುಟ ಶಾಖೆ, ವಿಧಾನ ಸೌಧ, ಬೆಂಗಳೂರು.
- 13) ಕಾರ್ಯದರ್ಶಿ, ಕರ್ನಾಟಕ ವಿಧಾನ ಪರಿಷತ್ತು, ಬೆಂಗಳೂರು
- 14) ಕಾರ್ಯದರ್ಶಿ, ಕರ್ನಾಟಕ ವಿಧಾನ ಸಭೆ, ಬೆಂಗಳೂರು.
- 15) ಸರ್ಕಾರದ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿಯವರ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿ, ಉನ್ನತ ಶಿಕ್ಷಣ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
- 16) ಶ್ರಾಖಾ ರಕ್ಷ ಕಡತ / ಹೆಚ್ಚುವರಿ ಪ್ರತಿ.

## **ANNEXURE 2**

www.ugc.ac.in

No.F.8-22/2013 (CPP-1/PU)



12 7 JUL 2018 विश्वविद्यालय अनुदान आयोग बहादुरशाह जफर मार्ग नई दिल्ली-110 002 UNIVERSITY GRANTS COMMISSION BAHADURSHAH ZAFAR MARG NEW DELHI-110 002

Speed Post

July, 2016

The Registrar M.S. Ramaiah University of Applied Sciences, Administrative Block, New BEL Road, MSRIT Post, Bangalore - 560 054, Karnataka

2 1 JUL 2016

Sub: - Status of M.S. Ramaiah University of Applied Sciences, Karnataka.

Sir.

With reference to your letter dated 21.07.2016, I am directed to inform you that M.S. Ramaiah University of Applied Sciences, Administrative Block, New BEL Road, MSRIT Post, Bangalore -560 054, Karnataka has been established by an Act of State Legislature of Karnataka as a Private University and is empowered to award degrees as specified under Section 22 of the UGC Act through its main campus at regular mode with the approval of Statutory Bodies/Councils, wherever its required.

M.S. Ramaiah University of Applied Sciences, Bangalore - 560 054, Karnataka is not authorized to open study centre/ off campus centre beyond the territorial jurisdiction of the state as per the judgment of Hon'ble Supreme Court of India in case of Prof. Yashpal Vs. State of Chhattisgarh. The University cannot open its centre(s) even within the state as per the provision of UGC (Establishment of and Maintenance of Standards in Private Universities) Regulations, 2003 without the approval of UGC.

The UGC has not granted any approval to the University to open off campus/study centre.

Yours faithfully

Under Secretary

# **ANNEXURE 3**



विश्वविद्यालय अनुदान आयोग **University Grants Commission** शिक्षा मंत्रालय, भारत सरकार

(Ministry of Education, Govt. of India) बहादुरशाह जफरमार्ग नईदिल्ली- 110 002

Bahadurshah Zafar Marg, New Delhi-110002 Phone: 011-23604329, 011-23604325



### SPEED-POST

F.No.8-22/2013 (CPP-I/PU)

August, 2021

The Registrar, M.S. Ramaiah University of Applied Sciences, Administrative Block, New BEL Road, MSRIT Post, Bangalore - 560 054, Karnataka.

,2 6 AUG 2021

Status of the M.S. Ramaiah University of Applied Sciences, Bangalore, Subject:-Karnataka - regarding.

Sir.

With reference to your letter dated 16.08.2021 on the subject cited above, I am directed to inform you that M.S. Ramaiah University of Applied Sciences, Administrative Block, New BEL Road, MSRIT Post, Bangalore - 560 054, Karnataka has been established by the Act of the State Legislature of Karnataka as a Private University and is empowered to award degrees as specified under Section 22 of the UGC Act through its main campus in regular mode with the approval of Statutory Bodies of the University and Statutory Council(s), wherever it is required and after creating required academic and physical infrastructure facilities including library, laboratories and appointment of teaching and supporting staffs as per the norms and standards laid down by UGC and other relevant Statutory Council(s). The name of the University has been included in the list of Universities established as per section 2 (f) of the UGC Act, 1956.

Yours faithfully,

laresh Kumar Sharma)

**Under Secretary** 

# **ANNEXURE 4**



### राष्ट्रीय मुल्यांकन एवं प्रत्यायन परिषद

विश्वविद्यालयं अनुदान आयोग, का स्वायत्त संस्थान

#### NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

An Autonomous Institution of the University Grants Commission

# Gertificate of Accreditation

The Executive Committee of the National Assessment and Accreditation Council

is pleased to declare.

M. S. Ramaiah Medical College

MSR Nagar, Mathikere, Bengaluru, Dist. Bangalore Urban, affiliated to Rajiv Sandhi University of Health Sciences, Karnataka as

Accredited

with CGPA of 3.32 on four point scale

al A+ grade

valid up to April 25, 2027

Date : April 26, 2022



S. ( Durie Director



# **ANNEXURE 5a**

### राष्ट्रीय प्रत्यायन बोर्ड

चौथा तल, ईस्ट टावर, एन. बी. सी. प्लेस, भीष्म पितामह मार्ग, प्रगति विहार, लोधी रोड़, नई दिल्ली -110003

### NATIONAL BOARD OF ACCREDITATION



Date: 22-12-2022

4th Floor, East Tower, NBCC Place, Bhisham Pitamah Marg, Pragati Vihar, Lodhi Road, New Delhi 110003

File No.- 25-237-2021-NBA

To,
The Dean
M.S Ramaiah University of Applied Sciences,
Bangalore Urban, Karnataka-560054

Subject: Accreditation status of Hotel Management program applied by M.S Ramaiah University of Applied Sciences, Bangalore Urban, Karnataka-560054.

Sir,

This has reference to your Application ID No. 6167-13/12/2021 seeking accreditation by National Board of Accreditation to the UG-Hotel Management program applied by M.S Ramaiah University of Applied Sciences, Bangalore Urban, Karnataka-560054.

2. An Expert Team conducted onsite evaluation of the program from 05<sup>th</sup> to 07<sup>th</sup> August, 2022. The report submitted by the Expert Team was considered by the concerned Committees constituted for the purpose in NBA. The Competent Authority in NBA has approved the following accreditation status to the program as given in the table below:

S. No.	Name of the Program(s) (UG)	Basis of Evaluation	Accreditation Status	Period of validity	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
1.	Hotel Management	May, 2018 Document	Accredited	Academic Years 2022-2023 to 2024-2025 i.e. up to 30-06- 2025	Accreditation status granted is valid for the period indicated in Col.5 or till the program has the approval of the Competent Authority, whichever is earlier.

- 3. It may be noted that only students who graduate during the validity period of accreditation, will be deemed to have graduated with an NBA accredited degree.
- 4. The accreditation status awarded to the program as indicated in the above table does not imply that the accreditation has been granted to M.S Ramaiah University of Applied Sciences, Bangalore Urban, Karnataka-560054 as a whole. As such, the Institution should nowhere along with its name including on its letter head etc. write that it is accredited by NBA because it is program accreditation and not Institution accreditation. If such an instance comes to NBA's notice, this will be viewed seriously. Complete name of the program(s) accredited, level of program(s) and the period of validity of accreditation, as well as the date from which the accreditation is effective should be mentioned unambiguously whenever and wherever it is required to indicate the status of accreditation by NBA.
- 5. The accreditation status of the above program is subject to change on periodic review, if needed by the NBA. It is desired that the relevant information in respect of accredited program as indicated in the table in paragraph 2, appears on the website and information bulletin of the Institute.
- 6. The accreditation status awarded to the program as indicated in table in paragraph 2 above is subject to maintenance of the current standards during the period of accreditation. If there are any changes in the status (major changes of faculty strength, organizational structure etc.), the same are required to be communicated to the NBA, with an appropriate explanatory note.

Contd/..

- A copy each of Report of Chairman of the Visiting Team and Evaluators' report in respect of the above program is enclosed.
- If the Institute is not satisfied with the decision of NBA, it may appeal within thirty days of receipt of this communication giving reasons for the same and by paying the requisite fee.

Yours faithfully,

(Dr. Anil Kumar Nassa) Member Secretary

- Encls.: 1. Copy of Report of Chairman of the Visiting Team.
  - 2. Copy of Expert Report of the Visiting Team.

#### Copy to:

- 1. Principal Secretary (Hr. & Tech. Education) Govt. of Karnataka, K.G.S. 6th Floor M.S. Building, R No. 645 Dr. B.R. Ambedkar Road, Bangalore-560001, Karnataka
- 2. Director Technical Education Tantrik Shikshan Bhawan, Palace Road Bangalore-560001, Karnataka
- 3. Master Accreditation Folder of the State
- 4. Accreditation File

# **ANNEXURE 5b**

# National Accreditation Board for Hospitals & Healthcare Providers

(Constituent Board of Quality Council of India)

### CERTIFICATE OF ACCREDITATION

Ramaiah Medical College Hospital

MSR Nagar, MSRIT Post Bangalore - 560054, Karnataka

has been assessed and found to comply with NABH Accreditation Standards for Hospitals, 5th Edition. This certificate is valid for the Scope as specified in the annexure subject to continued compliance with the accreditation requirements.

Valid from : September 01, 2022 Valid thru : August 31, 2026







Certificate No. H-2022-1016

Dr. Atul Mohan Kashha

Dr. Atul Mohan Kochhar Chief Executive Officer

National Accreditation Board for Hospitals & Healthcare Providers, 5th Floor, ITPI Building, 4A. Ring Road, IP Estate, New Delhi 110 002, India Phone: +91-11-42600600, Fax: +91-11-2332 3415 - Email: helpdesk@nabh.co - Website: www.nabh.co





SI No. 010170

\*010170\*

NABH

NABH and the NABH Accreditation Standards for Hospitals are ISQua Accredited

# **ANNEXURE 5c**





#### National Accreditation Board for Testing and Calibration Laboratories

#### NABL

#### CERTIFICATE OF ACCREDITATION

#### M. S. RAMAIAH TEACHING HOSPITAL LABORATORY

has been assessed and accredited in accordance with the standard

ISO 15189:2012

"Medical laboratories - Requirements for quality and competence"

for its facilities at

MSR NAGAR, MSRIT POST, BENGALURU, KARNATAKA, INDIA

in the field of

Medical Testing

Certificate Number:

MC-6359

Issue Date:

05/03/2024

Valid Until:

04/03/2026

In view of the transition deadline for ISO 15189:2022, the validity of this accreditation certificate will cease on 31.12.2025.

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

(To see the scope of accreditation of thislaboratory, you may also visit NABL website www.nabl-india.org)

Name of Legal Entity: GOKULA EDUCATIONAL FOUNDATION (MEDICAL)

Signed for and on behalf of NABL



herlitism

N. Venkateswaran Chief Executive Officer

# **ANNEXURE 6**

#### NIRF Rankings 2023

#### Medical:



#### Dental:



#### Pharmacy:



#### **QSI-GAUGE**



### SUSTAINABLE INSTITUTIONS OF INDIA

**GREEN RANKINGS 2024** 

Certificate of Excellence

IN PURSUIT OF EXCELLENCE TOWARDS PRACTICING SUSTAINABLE EDUCATION, THIS CERTIFICATE IS AWARDED TO

M S RAMAIAH UNIVERSITY OF APPLIED SCIENCES

Institutional Band / Category: Diamond

R World Institutional RANKING

Executive President

# **ANNEXURE 7**

University House New BEL Road MSR Nagar Bangalore-560 054 T 080 4536 6666 F 080 4536 6677 E info@msruas.ac.in W www.msruas.ac.in www.ramaiah-india.org

# School of Law, M.S. Ramaiah University of Applied Sciences, Bengaluru Minutes of the 9<sup>th</sup> Board of Studies Meeting Held on 6<sup>th</sup> March 2024 from 2.00 pm

### **Members of Board of Studies:**

1. Shri Gurucharan Gollerkeri	Chairperson		
2. Dr. V. Vijayakumar	Professor of Eminence & Advisor		
3. Prof. T.R. Subramanya	External Member		
4. Mr. Raghavendra	External Member		
5. Dr. Aruna. L	Member Special Invitee Special Invitee Special Invitee Attendee		
5. Prof. (Dr.) Venugopal K.R.			
7. Prof. (Dr.) Gangadhar			
3. Gen JV Prasad			
. Ms. Surabhi Mathur			

### Agenda for the meeting:

- 1. Review the programme structure of LL.B.
- 2. Review the programme structure of B.Sc. LL.B. (Hons.) in Cyber Security.
- 3. Deliberate on the specializations of LL.M. and propose the programme structure.
- 4. Review existing programmes structures and approve reduction to 5 courses per semester.
- Deliberate and approve increase in credits for certain courses in the existing framework.
- 6. Suggestions on topics for FDP.
- 7. Any other matter with the permission of the chair.

Director
School of Social Sciences & School of Lawn
M S Ramaiah University of Applied Sciences
Bengaluru – 560054

9th Bos MoM

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### Minutes of the Meeting:

Introduction of all the members of Board of Studies meeting by Shri Gurucharan.

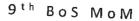
- Dr. Aruna introduced all the agenda points.
- presented course specification of the programme. Total 30 courses were proposed to be there in each semester spread across six semesters. Members suggested to interchange Option subject 1 in 2<sup>nd</sup> semester, Option subject 2 & 3 in 3<sup>rd</sup> semester and so on. Jurisprudence course to be shifted from 3<sup>rd</sup> semester to 1<sup>st</sup> semester. Suggestions to reposition Labour & Industrial laws-I to semester 5 and Labour & Industrial Laws-II in semester 6. Course on Moot court exercise to be repositioned to 4<sup>th</sup> semester. Members suggested that course on Drafting, Pleading and Conveyance to be put in 4<sup>th</sup> semester as this will comply with CPC & Law of Limitation course, and will be beneficial for students. Each subject will be of 4 credits. Internship diary to be maintained. The agenda point was ratified by all members.
- Agenda 2: Review the programme structure of B.Sc. LL.B. (Hons.) in Cyber Security:

  Dr. V. Vijaykumar presented the model course on this program currently run by
  National Law Institute University, Bhopal (NLIU). Program structure to have 14
  integrated courses including 2 language courses, 8 Honours courses based on Cyber
  Security, 20 Compulsory core courses, 6 Optional and 4 Clinical courses, as per Bar
  Council of India regulations. Dr. Vijaykumar explained that how program is running
  successfully in NLIU and received around 12,800 applicants which makes the course in
  high demand.

Dr. Vijaykumar introduced Proposal A for implementation as regular program with 10 semesters with 2 months of internship. In another Proposal B, it was proposed that entire last semester will be given for pursuing internships of 6 months. Members suggested that time table should be set in a way that the students get chance to visit court. Prof. Gangadhar suggested to push subjects more towards cyber security and legal aspects. Privacy laws and protection should be given more importance. Instead of making things technical, the legal aspects should be emphasized more. Members

Director

School of Social Sciences & School of Law-



discussed on how much level of mathematics and technology could be taught to law students. Ethical aspects of cyber laws like social media should be included.

Shri Gurucharan suggested that technical side should be more qualitative rather than quantitative, what one needs to know precisely, more importance for GRC of it and in terms of balance, Dr. Vijaykumar will help in reframing of course on balancing law and technology. With the changing times in cryptocurrency and digital currency, new laws and law makers will be required who have attained the required knowledge. This course will be helpful to such employment opportunities.

Members suggested that Honors courses to be repositioned in semester 6,7,8 & 9 specifically based on cyber security. Optional courses could be related to any law. It was suggested that if a student has finished all the required number of internships before last semester, depending on other aspects he should be allowed to leave the course at 4.5 years also as per National Education Policy. All members ratified Proposal B in principle, subject to required reframing and further deliberations.

- Agenda 3: Deliberation on the specializations of LL.M. and propose the programme structure: Dr. Aruna proposed two branches of postgraduation i.e., Constitutional & Administrative Law and Alternate Dispute Resolution (ADR). It was presented that there will be 3 compulsory course, with 6 optional courses as per UGC Regulations. Members suggested Online Dispute Resolution topic to be an important part of ADR branch in postgraduation as well as undergraduate course. Members suggested a third branch for LL.M. as 'Artificial Intelligence, Cyber Crime and Law' as no other law school is providing such a program. All members ratified the agenda in principle, subject to further deliberations.
- Agenda 4: Review existing programmes structures and approve reduction to 5 courses per semester: Dr. Aruna proposed change in Program Specification for B.Sc. LL.B. (Hons.) 2021 Batch and B.A. LL.B. (Hons.) & B.Sc. LL.B. (Hons.) 2022 Batch, to have 5 courses from upcoming semester, to reduce the workload of students. Course on internship in 10<sup>th</sup> semester to be removed. It was advised to check the spread of subjects to be done evenly with spread of credits before implementation. The agenda Director was approved by all members.

School of Social Sciences & School of Law ினைச்சி University of Applied &c3eի4ு

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- Agenda 5: Certificate and Executive Programs: Dr. Aruna presented two certificate courses proposed by Dr. TLS Bhaskar on Immigration Laws and CNSS, RUAS on Military Laws. Shri Gurucharan proposed to explore Migration Laws- International & National. Both programs are approved in principle. Members suggested to inform the course leaders to share a concept note on their courses. The 3<sup>rd</sup> Executive Program on Medical Jurisprudence and Toxicology was accepted and approved. Members suggested a program on Cyber Crimes either as Executive Program or Diploma Course. SOL and FET to make syllabus to work in synergy and come up with Course Specification on this program. All members approved the agenda in principle.
- Agenda 6: Suggestion on topics for FDPs: Members suggested that development program on teaching methods and assessments methods could be a topic. As technology usage is inevitable, so learning appropriate use of AI tools like ChatGPT is a necessity for both faculties and teachers. All members ratified for holding FDPs around these topics.

All the members ratified all the meeting agenda points.

Director

School of Social Sciences & School of Law wish University of Applied Sciences



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Minutes of the 5th Meeting of the Board of Studies of the Dept. of Psychology School of Social Sciences (SSS), Ramaiah University of Applied Sciences (RUAS) Held on 7th December 2023(Hybrid) Time: 4.00 AM to 5.30 PM

#### **Members Present:**

Sl.no	Name	Designation
1	Shri. Gurucharan Gollerkeri	Director, School of Social Sciences, Ramaiah University of Applied Sciences (Chairperson) (Attended Offline).
2	Dr. Sampath Kumar	Professor & Chairman, Department of Psychology, Mysore University (Attended online)
3	Dr. Murali Thyloth	Department of Psychiatry, Ramaiah Medical College (Attended offline)
4	Dr. Paulami Sudhir	Professor, Department of Psychology, NIMHANS
5	Dr. Chiradip Bandyopadyay,	Associate Professor, Fore School of Management, Delhi. (Attended online)
6	Prof. Anitha D. S	Professor, and Head, Department of Psychology, RUAS (Attended online)
7	Dr. Sreenivas Muniyappa	Professor, Department of Psychology, Bangalore University, Bangalore (Attended online)
8	Smt. Lakshmi Hariharan	Founder, and Principal, Srusthi Degree College (Attended online)
9	Dr. Pushpalata Gurappa,	Associate Professor and Head, Clinical Psychology, Kateel Ashok Pai Memorial Institute of Allied Health Sciences, Shivamogga. (Attended online)
10	Dr. Pratishtha Bhattacharyya	Assistant Professor, Department of Psychology, RUAS (Attended Offline).
11	Mrs. Aditi Arun Rao	Assistant Professor, Department of Psychology, RUAS (Attended Offline).

#### Call to order and Quorum:

The meeting was called to order by Sri Gurucharan Gollerkeri, Charperson at 4:00 pm. With sufficient quorum being present, the proceedings of the meeting were compared by the DIRECTOR Chairperson. S SCHOOL

"Established as per Boyt, of Karnataka ACT No: 15 of 2013, Recognized by UGC U/S 2(f) of the USC Act, 1956"

2

#### Welcome and Overview

Sri Gurucharan Gollerkeri, welcomed all members of the Board of Studies and introduced the external members. Dr. Anitha D. S presented the overview of the proposed agenda for the meeting:

Agenda Item 1. To review and recommend the proposed program specification of M.Sc in Psychology to be offered by the Department of Psychology, School of Social Sciences, M S Ramaiah University of Applied Sciences, Bengaluru for the upcoming batch 2024.

The curriculum has been developed after a cautious market survey among professionals and prospective students. The BoS members agreed to the suggestion that the existing students in the department can be potential feeders for a masters course in RUAS, especially with a conducive ecosystem supporting clinical psychology (e.g., RMC, MTH, Indic centre and Pharmacy). Moreover, there is significant demand among our existing psychology students as well as non-RUAS students to pursue an M.Sc in Psychology. In this context, a total of 23 new courses have been introduced as part of this new program, available to students starting from the 2024-2025 academic year, with an even distribution across each semester (see the Annexure for the program structure). The BoS suggested further offering major and minor options for students from 2<sup>nd</sup> semester onwards. It was also suggested by the BoS to incorporate more practical exposures, field visits, seminars, and workshops to make students industry-ready.

#### Resolution:

The members of the BoS recommended the programme specification and the internal members resolved to develop the course specifications based on the inputs of the BoS.

Agenda Item 2. To recommend Ph.D. program offered by the Department of Psychology, School of Social Sciences, M S Ramaiah University of Applied Sciences, Bengaluru for the upcoming batch 2024.

The internal members suggested that there is an increasing interest among prospective students to pursue a PhD, and they also felt that it would strengthen the Psychology research wing. The



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BoS members agreed to the suggestion of initiating a PhD program in the Department of Psychology.

#### Resolution:

The members of the BoS recommended the PhD program.

Agenda Item 3. To review and recommend open electives for the 7th semester of batch 2021 and 2022 offered by the Department of Psychology, School of Social Sciences, M S Ramaiah University of Applied Sciences, Bengaluru.

The list of open elective courses offered in the 7<sup>th</sup> semester for batch 2021 and 2022 was not discussed when the curriculum was initiated. Therefore, deliberation was required to decide on the list of open electives. The BoS members agreed to the suggestion of offering environmental psychology; sports psychology; media psychology, consumer behavior; Mental Health and Nutrition, Yoga, meditation, and Mindfulness in the Department of Psychology as 7<sup>th</sup> semester open electives. The BoS members also suggested incorporating courses based on positive psychology and health psychology.

#### Resolution:

The members of the BoS recommended the program and the internal members resolved to develop the course specifications based on the inputs of the BoS.

Vote of thanks and Adjournment: There being no further business, the Chairperson declared the meeting adjourned by unanimous consent. The meeting ended with a vote of thanks by the Chairperson.

Dr. Anitha D. S

HOD

Faculty of SSS, RUAS

Sri. Guruet ayaniv@ollerk

Professor and Men Directoral Tesparation of Feyntalous School S

M & warre to the me in the Append Sc Professor and Head Department of Psychology

School of Social Sciences 制 S Ramalah University of Applied Sciences

Bengaluru - 560054

Registered as: MS Ramaiah University of Applied Sciences

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Bengaluru - 560054

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## School of Law, M.S. Ramaiah University of Applied Sciences, Bengaluru

## Minutes of the 9th Board of Studies Meeting

## Held on 6th March 2024 from 2.00 pm

## Members of Board of Studies:

1. Shri Gurucharan Gollerkeri	Chairperson
2. Dr. V. Vijayakumar	Professor of Eminence & Advisor
3. Prof. T.R. Subramanya	External Member
4. Mr. Raghavendra	External Member
5. Dr. Aruna. L	Member
6. Prof. (Dr.) Venugopal K.R.	Special Invitee
7. Prof. (Dr.) Gangadhar	Special Invitee
3. Gen JV Prasad	
J. Ms. Surabhi Mathur	Special Invitee
	Attendee

## Agenda for the meeting:

- 1. Review the programme structure of LL.B.
- 2. Review the programme structure of B.Sc. LL.B. (Hons.) in Cyber Security.
- 3. Deliberate on the specializations of LL.M. and propose the programme structure.
- 4. Review existing programmes structures and approve reduction to 5 courses per
- 5. Deliberate and approve increase in credits for certain courses in the existing
- 6. Suggestions on topics for FDP.
- 7. Any other matter with the permission of the chair.

School of Social Sciences & School of Law Director M S Ramaiah University of Applied Sciences Bengaluru - 560054

9th Bos MoM

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## Minutes of the Meeting:

Introduction of all the members of Board of Studies meeting by Shri Gurucharan.

- Dr. Aruna introduced all the agenda points.
- Agenda 1: Review the programme structure of LL.B. 3 years course: Dr. Aruna presented course specification of the programme. Total 30 courses were proposed to be there in each semester spread across six semesters. Members suggested to interchange Option subject 1 in 2<sup>nd</sup> semester, Option subject 2 & 3 in 3<sup>rd</sup> semester and so on. Jurisprudence course to be shifted from 3<sup>rd</sup> semester to 1<sup>st</sup> semester. Suggestions to reposition Labour & Industrial laws-I to semester 5 and Labour & Industrial Laws-II in semester 6. Course on Moot court exercise to be repositioned to 4<sup>th</sup> semester. Members suggested that course on Drafting, Pleading and Conveyance to be put in 4<sup>th</sup> semester as this will comply with CPC & Law of Limitation course, and will be beneficial for students. Each subject will be of 4 credits. Internship diary to be maintained. The agenda point was ratified by all members.
- Agenda 2: Review the programme structure of B.Sc. LL.B. (Hons.) in Cyber Security: Dr. V. Vijaykumar presented the model course on this program currently run by National Law Institute University, Bhopal (NLIU). Program structure to have 14 integrated courses including 2 language courses, 8 Honours courses based on Cyber Security, 20 Compulsory core courses, 6 Optional and 4 Clinical courses, as per Bar Council of India regulations. Dr. Vijaykumar explained that how program is running successfully in NLIU and received around 12,800 applicants which makes the course in high demand.

Dr. Vijaykumar introduced Proposal A for implementation as regular program with 10 semesters with 2 months of internship. In another Proposal B, it was proposed that entire last semester will be given for pursuing internships of 6 months. Members suggested that time table should be set in a way that the students get chance to visit court. Prof. Gangadhar suggested to push subjects more towards cyber security and legal aspects. Privacy laws and protection should be given more importance. Instead of making things technical, the legal aspects should be emphasized more. Members

Director

School of Social Sciences & School of Law Ramaiah University of Applied Sciences

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discussed on how much level of mathematics and technology could be taught to law students. Ethical aspects of cyber laws like social media should be included.

Shri Gurucharan suggested that technical side should be more qualitative rather than quantitative, what one needs to know precisely, more importance for GRC of it and in terms of balance, Dr. Vijaykumar will help in reframing of course on balancing law and technology. With the changing times in cryptocurrency and digital currency, new laws and law makers will be required who have attained the required knowledge. This course will be helpful to such employment opportunities.

Members suggested that Honors courses to be repositioned in semester 6,7,8 & 9 specifically based on cyber security. Optional courses could be related to any law. It was suggested that if a student has finished all the required number of internships before last semester, depending on other aspects he should be allowed to leave the course at 4.5 years also as per National Education Policy. All members ratified Proposal B in principle, subject to required reframing and further deliberations.

- Agenda 3: Deliberation on the specializations of LL.M. and propose the programme structure: Dr. Aruna proposed two branches of postgraduation i.e., Constitutional & Administrative Law and Alternate Dispute Resolution (ADR). It was presented that there will be 3 compulsory course, with 6 optional courses as per UGC Regulations. Members suggested Online Dispute Resolution topic to be an important part of ADR branch in postgraduation as well as undergraduate course. Members suggested a third branch for LL.M. as 'Artificial Intelligence, Cyber Crime and Law' as no other law school is providing such a program. All members ratified the agenda in principle, subject to further deliberations.
- Agenda 4: Review existing programmes structures and approve reduction to 5 courses per semester: Dr. Aruna proposed change in Program Specification for B.Sc. LL.B. (Hons.) 2021 Batch and B.A. LL.B. (Hons.) & B.Sc. LL.B. (Hons.) 2022 Batch, to have 5 courses from upcoming semester, to reduce the workload of students. Course on internship in 10th semester to be removed. It was advised to check the spread of subjects to be done evenly with spread of credits before implementation. The agenda Director was approved by all members.

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- Agenda 5: Certificate and Executive Programs: Dr. Aruna presented two certificate courses proposed by Dr. TLS Bhaskar on Immigration Laws and CNSS, RUAS on Military Laws. Shri Gurucharan proposed to explore Migration Laws- International & National. Both programs are approved in principle. Members suggested to inform the course leaders to share a concept note on their courses. The 3<sup>rd</sup> Executive Program on Medical Jurisprudence and Toxicology was accepted and approved. Members suggested a program on Cyber Crimes either as Executive Program or Diploma Course. SOL and FET to make syllabus to work in synergy and come up with Course Specification on this program. All members approved the agenda in principle.
- Agenda 6: Suggestion on topics for FDPs: Members suggested that development program on teaching methods and assessments methods could be a topic. As technology usage is inevitable, so learning appropriate use of AI tools like ChatGPT is a necessity for both faculties and teachers. All members ratified for holding FDPs around these topics.

All the members ratified all the meeting agenda points.

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Minutes of the 5<sup>th</sup> Meeting of the Board of Studies of the Dept. of Psychology School of Social Sciences (SSS), Ramaiah University of Applied Sciences (RUAS) Held on 7<sup>th</sup> December 2023(Hybrid)

Time: 4.00 AM to 5.30 PM

#### **Members Present:**

Sl.no	Name	Designation
1	Shri. Gurucharan Gollerkeri	Director, School of Social Sciences, Ramaiah University
		of Applied Sciences (Chairperson) (Attended Offline).
2	Dr. Sampath Kumar	Professor & Chairman, Department of Psychology,
		Mysore University (Attended online)
3	Dr. Murali Thyloth	Department of Psychiatry, Ramaiah Medical College
		(Attended offline)
4	Dr. Paulami Sudhir	Professor, Department of Psychology, NIMHANS
5	Dr. Chiradip Bandyopadyay,	Associate Professor, Fore School of Management,
		Delhi. (Attended online)
6	Prof. Anitha D. S	Professor, and Head, Department of Psychology, RUAS
		(Attended online)
7	Dr. Sreenivas Muniyappa	Professor, Department of Psychology, Bangalore
		University, Bangalore (Attended online)
8	Smt. Lakshmi Hariharan	Founder, and Principal, Srusthi Degree College
		(Attended online)
9	Dr. Pushpalata Gurappa,	Associate Professor and Head, Clinical Psychology,
		Kateel Ashok Pai Memorial Institute of Allied Health
		Sciences, Shivamogga. (Attended online)
10	Dr. Pratishtha Bhattacharyya	Assistant Professor, Department of Psychology, RUAS
		(Attended Offline).
11	Mrs. Aditi Arun Rao	Assistant Professor, Department of Psychology, RUAS
		(Attended Offline).

#### Call to order and Quorum:

The meeting was called to order by Sri Gurucharan Gollerkeri, Chairperson at 4:00 pm. With sufficient quorum being present, the proceedings of the meaning were complemed by the Chairperson.

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#### Welcome and Overview

Sri Gurucharan Gollerkeri, welcomed all members of the Board of Studies and introduced the external members. Dr. Anitha D. S presented the overview of the proposed agenda for the meeting:

Agenda Item 1. To review and recommend the proposed program specification of M.Sc in Psychology to be offered by the Department of Psychology, School of Social Sciences, M S Ramaiah University of Applied Sciences, Bengaluru for the upcoming batch 2024.

The curriculum has been developed after a cautious market survey among professionals and prospective students. The BoS members agreed to the suggestion that the existing students in the department can be potential feeders for a masters course in RUAS, especially with a conducive ecosystem supporting clinical psychology (e.g., RMC, MTH, Indic centre and Pharmacy). Moreover, there is significant demand among our existing psychology students as well as non-RUAS students to pursue an M.Sc in Psychology. In this context, a total of 23 new courses have been introduced as part of this new program, available to students starting from the 2024-2025 academic year, with an even distribution across each semester (see the Annexure for the program structure). The BoS suggested further offering major and minor options for students from 2<sup>nd</sup> semester onwards. It was also suggested by the BoS to incorporate more practical exposures, field visits, seminars, and workshops to make students industry-ready.

#### Resolution:

The members of the BoS recommended the programme specification and the internal members resolved to develop the course specifications based on the inputs of the BoS.

Agenda Item 2. To recommend Ph.D. program offered by the Department of Psychology, School of Social Sciences, M S Ramaiah University of Applied Sciences, Bengaluru for the upcoming batch 2024.

The internal members suggested that there is an increasing interest among prospective students to pursue a PhD, and they also felt that it would strengthen the Psychology research wing. The



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BoS members agreed to the suggestion of initiating a PhD program in the Department of Psychology.

Resolution:

The members of the BoS recommended the PhD program.

Agenda Item 3. To review and recommend open electives for the 7<sup>th</sup> semester of batch 2021 and 2022 offered by the Department of Psychology, School of Social Sciences, M S Ramaiah University of Applied Sciences, Bengaluru.

The list of open elective courses offered in the 7<sup>th</sup> semester for batch 2021 and 2022 was not discussed when the curriculum was initiated. Therefore, deliberation was required to decide on the list of open electives. The BoS members agreed to the suggestion of offering environmental psychology; sports psychology; media psychology, consumer behavior; Mental Health and Nutrition, Yoga, meditation, and Mindfulness in the Department of Psychology as 7<sup>th</sup> semester open electives. The BoS members also suggested incorporating courses based on positive psychology and health psychology.

Resolution:

The members of the BoS recommended the program and the internal members resolved to develop the course specifications based on the inputs of the BoS.

Vote of thanks and Adjournment: There being no further business, the Chairperson declared the meeting adjourned by unanimous consent. The meeting ended with a vote of thanks by the Chairperson.

Dr. Anitha D. S

HOD

Faculty of SSS, RUAS

Professor and Head
Department of Psychology
School of Social Sciences
SRamalah University of Applied Sciences
Bengaluru – 560054

Director of Social Sciences

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# School of Law, M.S. Ramaiah University of Applied Sciences, Bengaluru Minutes of the gth Board of Studies Meeting Held on 7th December 2023 3.00 pm - Hybrid Mode

#### Members of Board of Studies:

1. Shri Gurucharan Gollerkeri	Chairperson	
2. Prof. T.R. Subramanya	External Member	
3. Mr. Raghavendra	External Member	
4. Dr. Aruna. L	Member	
5. Ms. Surabhi Mathur	Attendee	
6. Tasnim Jahan	Attendee	

#### Agenda for the meeting:

- 1. Extending the pass and promotion criteria of the Academic Regulations of 2022 to the first batch of B.Sc. LL.B. (Hons.).
- 2. Approval for introduction of B.Sc. LL.B. (Hons.) in Cyber Security 5 years course.
- 3. Approval for introduction of LL.B. (Hons.) 3years course.
- 4. Approval for introduction of LL.M. (2 programmes) 1 year course.
- 5. Approval to conduct feasibility test for introduction of new courses.
- 6. To deliberate on having Fall term and Spring term admissions.
- 7. Any other matter with the permission of the Chair.



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#### Minutes of the Meeting:

Dr. Aruna L. HoD (i/c), School of Law introduced all the agenda points.

- Agenda 1: Extending the pass and promotion criteria of the Academic Regulations of 2022 to the first batch of B.Sc. LL.B. (Hons.): The first batch of 2021 follows the Academic Regulations of 2020-21 and there is no specific pass or promotion criteria prescribed in it. As the Academic Regulations of 2022-23 are more defined and in line with the BCI Regulations, the same shall be applicable to 2021 batch also. It was proposed that the Continuous Evaluation (40%), Semester End Examination (40%) and individual 40% passing criteria to be followed henceforth.
  - It was observed by the members that keeping uniform promotion criteria, will be beneficial to the students. All the members ratified the agenda.
- Agenda 2: Approval for introduction of B.Sc. LL.B. (Hons.) in Cyber Security 5 years
   course: It was proposed that since the School of Law intends to introduce B.Sc. LL.B.
   programme in Cyber Security so it will be beneficial for the undergraduate students to
   read the nuanced and contemporary concepts. The experts opined that course will be
   beneficial keeping in mind the technological advancements in the present time. The
   members suggested to recruit faculties who are well versed with the relevant laws. All
   the members ratified the agenda.
- Agenda 3: Approval for introduction of LL.B. (Hons.) 3years course: It was proposed that a regular 3 years course in law is necessary and will lead to good number of enrolment of students as the course is more in demand. Dr. Aruna also brought out the fact that students from other sister institutions from within RUAS can be the possible candidates also this programme is not offered in Ramaiah College of Law. The members observed that this is one of the popular courses among all reputed private law colleges. All the members ratified the agenda.
- Agenda 4: Approval for introduction of LL.M. (2 programmes) 1 year course: It was
  proposed to introduce LL.M. programmes with 2 specializations. The School of Law
  offers UG and Ph.D courses but PG courses are not offered. Hence, this proposal. Each
  programme will have seats of 40 students. Prof. Subramanya suggested that

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specialization in Constitutional law and Commercial law should be avoided since they were offered by most Universities including Karnataka State Law University. Some of the subjects for specializations suggested by the members were, Criminal Laws, Sports Law, Cyber Law and Forensics, Intellectual Property Law, Human Rights and Alternate Dispute Resolution laws. Environmental law including Climate Justice was also seen as a prospective specialization to attract good students and keeping in mind the present scenario. The members emphasised that recruitment of faculties who have LL.M. and few published papers in that subject, for these specialization is necessary. Forensic Science as a specialization was discussed. Looking at the infrastructure and feasibility available for forensics as a specialization, it was observed to be a good area of post-graduation. Members also deliberated if a Forensic Lab could be setup which could be opened for lawyers and outsiders on commercial basis as well.

- All the members ratified the agenda.
- Agenda 5: Approval to conduct feasibility test for introduction of new courses: It was proposed, as the School of Law and the School of Social Sciences are in the process of introducing new courses, a general market survey of requirement of the courses, fee structure and its placement demand will be beneficial for assessment and analysis of the feasibility to introduce such courses. The School intends to involve a third party which specialises in advertisement of questionnaire and direct them to relevant crowd of students, parents, employers etc. from various cities. It shall enhance evidence-based decision making. This will not only be a basis for introduction of new programmes but will also identify existing inefficiencies. Chairperson suggested Dr. Aruna to make a questionnaire and share it with the members for further deliberations and procedure. All the members ratified the agenda.
- Agenda 6: To deliberate on having Fall term and Spring term admissions: It was proposed to have two admission cycles, in Fall term from August or September and another in January for those students who couldn't take admissions earlier or wish to switch to new course. This is a popular practise in western countries and by adopting this RUAS will align itself with global players. This will facilitate students who missed their chance of taking admission during August and will also be able to provide

%<sup>th</sup> BoS MoM Page 3 | 4



admission facility to students who do not get their choice of seats after taking up either Medical or Engineering entrance exams. A student taking admission in August or January will be a part of the same batch but degree will be dispensed with a gap of four to five months. The members observed that as long as this process aligns with Bar Council of India Regulations, the proposal can be approved in principle. All the members ratified the agenda.

All the members ratified all the meeting agendas.





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#### Minutes of the 5th Meeting of the Board of Studies of the Dept of Data Science and Analytics

School of Social Sciences (SSS), Ramaiah University of Applied Sciences (RUAS)

#### Held on 9th December 2023

Time: 3:00 pm-4:00 pm

The Board of Studies meeting was held on 09/12/2023 between 3:00-4:00 pm to review and discuss the below-mentioned agenda points at the School of Social Sciences, Ramalah University of Applied Sciences (RUAS), Bangalore, Karnataka-560054.

#### Attendees:

S.No.	Name	Designation
1	Sri. Gurucharan Gollerkeri	Chair of the Board: Director, SSS, RUAS, Bengaluru
2	Prof. Biswabrata Pradhan	Professor, Indian Statistical Institute, Calcutta
3	Prof. Supriyo Ghose	Professor, IFMI Business School, Bengaluru
4	Prof. Praphul Chandra	International School of Engineering, Bengaluru
5	Dr. Tapasi Ghosh	HOD and Associate Professor, Department of Data Sciences and Analytics (DSA), RUAS, Bengaluru
6	Dr. Sudarshana V Iyengar	Assistant Professor, DSA, RUAS, Bengaluru
7	Dr. Mohd. Shoaib Khan	Assistant Professor, DSA, RUAS, Bengaluru
8	Ms. Niveditta Batra	Assistant Professor, DSA, RUAS, Bengaluru
9	Mr. Suresh Darla	Lecturer, DSA, RUAS, Bengaluru

#### Members Absent:

S.No.	Name	Designation
1	Prof. Manisha Chakrabarty	Professor, Indian Institute of Management, Calcutta
2	Prof. Govind R. Kadambi	Pro-Vice Chancellor research, RUAS

Call to Order and Quorum:

The meeting was called to order by Dr. Tapasi Ghosh, HoD, Department of Data Sciences and Analytics, at 3:00pm. With full quorum among the attendees, the proceedings of the BoS meeting-

were commenced by the Chairperson.

Welcome and Overview:

Dr. Tapasi Ghosh cordially welcomed the members of the BoS and introduced the Director of SSS

to the BOS members and presented the overview of the ongoing courses in the curriculum and highlighted the agenda points to be discussed in the meeting. The Director briefed about the

rationale for launching the new M.Sc. programme, and also the scope of employability of the

new programme.

Agenda Points Discussed and Resolutions/Suggestions:

The key points derived at through the detailed discussion among the Board members under each

of the agenda items are summarized as follows:

Agenda 1: Discussion on the nomenclature and the programme specification of a new Masters

Programme starting from the academic year 2024-25

Duration: 2 years; Level 9 according to UGC regulations of programmes offered by HEIs.

Credits: 72-80

Maximum Intake of Students: 20

Nomenclature: According to UGC guidelines "M.Sc. in Data Science and Analytics" with

specialization.

Target Students: Those who have completed at least 3 years bachelor's degree and studied

Mathematics and Statistics.

Programme Specification (PS): Dr. Tapasi Ghosh outlined the PS semester-wise in details,

highlighting the following categories:

Fundamentals: Mathematics, Statistics, Programming Language, etc.



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- Analytical courses: Economics, Finance, Business Analysis, etc.
- Skill-based courses: Modelling techniques, Spreadsheet analytics, etc.
- Tools and Techniques/hands-on: Big Data, Machine Learning, Cloud Analytics, etc.
- The programme delivery is broadly distributed into 5 categories: Core courses, Elective courses, Skill-Enhancement courses, Domain Specific Electives, and Specialization.

The Board members raised the following queries and the Director, and the DSA faculty members discussed and responded to the following questions:

- The pedagogical process to deliver the contents of the curriculum: Process to be
  interdisciplinary so that the students learn to address the real-world problems along with
  building the theoretical concept building for the subjects. After completing the
  programme the students will be data scientists who have a perspective on social sciences,
  public governance, public health, etc.
- Focus of the programme: Focus should be in practice and hands-on. In collaboration with government and industry. Bridge between theory and practice.
- Potential employability opportunity after completion of the programme: Corporate, Academics, Research, Government sector.

BoS members appreciated the incorporation of mandatory capstone projects and internships in the curriculum as they contribute to experiential learning opportunities for data science students.

The members further appreciated the curation of course specification adept to employability, skill development, encompassing SDG while following the NEP paradigm. Further the members congratulated the entire team members and the director for the exponential progress the department has had since the last BOS meeting. Additionally, the members allowed full liberty to department core committee members to independently design a syllabus based on the suggestions.

#### Suggestions received:

- 1. Emphasize more on advanced statistics, so that there should be a strong essence of Data Science.
- 2. Applied Econometrics course may be reconsidered.
- 3. Include Large Language Models (LLMs) and Generative Models (GMs) in the course.

- 4. Machine Learning is to be spread across multiple courses, splitting in advance and basic levels, "Advanced Machine Learning" to be added as an elective. Decision is made to shift the basic ML course to earlier semester.
- 5. Fuzzy Logic may be suitable as an elective instead of a core course.
- 6. Course design should cater to the need of students who will join the programme from all academic disciplines.

Resolution: The members of the BoS approved the programme and suggested developing the programme specifications based on the inputs of the BoS and recommended the programme for further approval from the Academic Council.

Agenda 2: To approve Ph.D. program for Department of Data Sciences and Analytics.

Resolution: The members unanimously approved to start Ph.D. student's enrollment under the University-approved Ph.D. Guides.

Agenda 3: To replace "Risk Management" with the "Supply-chain management" course in 6th Sem of the B.Sc. (Hons.) Data Sciences and Analytics Programme.

Resolution: The Board members suggested changing the name to "Supply-chain management and Analytics", as this course has demand for employability and suggested circulating the updated course specifications.

Vote of thanks and Adjournment: There being no further business, the Chairperson declared the meeting adjourned by unanimous consent. The meeting ended with the vote of thanks by the Chairperson.

Dr. Tapasi Ghosh,

Head of the Department,

Data Sciences and Analytics,

RUAS, Bengaluru

Associate Professor and HOD Department of Data Sciences and A. Milde School of Social Sciences

M S Ramaiah University of Applied Sciences Bengaluru - 560054

Sri Gurucharan Gollerkeri

Director.

School of Social Sciences,

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#### **School of Social Sciences Department of Public Policy**

Board of Studies (BoS) Meeting-

Meeting Held: 5th December 2023 (Tuesday)

Time: 11.00 am - 12.30 pm Mode of Meeting: Online

#### Minutes of the Meeting

The meeting was presided over by Sri. Gurucharan Gollerkeri, IAS (Retd.), Director, School of Social Sciences (SSS), RUAS.

#### **Members Present**

- 1) Sri, Gurucharan Gollerkeri, IAS (Retd.), Director, SSS, RUAS Chair of the BoS
- 2) Prof. Sridhar Pabbisetty, Director, Senior Director, School of Government, MIT, Pune
- 3) Prof Vinod Vyasulu, Former Professor and Vice Dean (Academic Affairs), Jindal School of Governance and Public Policy, Sonipat, Haryana
- 4) Prof MJ Vinod, Professor, Department of International Studies, Political Science and History, Christ University, Bengaluru
- 5) Dr. Aradhana Talwar, Assistant Professor, Dept of Public Policy, SSS, RUAS, Bengaluru
- 6) Dr Aishwarya, Assistant Professor, Dept of Public Policy, SSS, RUAS, Bengaluru

#### Members Absent

1) Dr Suma Singh, Registrar Academics and Former Dean, School of Humanities and Social Sciences, Mount Carmel College (Autonomous), Bengaluru and Co-Founder, Applied Policy and Research Foundation, Bengaluru

#### Special Invitees

- 1) Prof. Ravi Bhandari, Professor of Eminence, Department of Economics, SSS, RUAS
- 2) Dr. Annapoorna Ravichander, Head- Training, Resource Mobilization, Policy Engagement and Communication, Public Affairs Centre, Bengaluru

#### Agenda and discussion

Call to Order and Quorum:

The meeting was called to order by Sri. Gurucharan Gollerkeri, the Chairperson, at 11:00am. With full quorum among the attendees, the proceedings of the BoS meeting commenced with the Chairperson's opening remarks followed by Dr. Aradhana Talwar's presentation.

#### Welcome and Overview:

Chairperson cordially welcomed the members of the BoS and presented the overview of the agenda to be discussed in the meeting. The agendas were the following:

- 1. Approval of Nomenclature of the new Programme 'MA in Sustainable Development, Governance and Public Affairs'
- 2. Approval of the Programme Structure and Course Structure of the new Programme

Draft syllabi and new programme structure were circulated in advance through email to all members of BoS. The key points derived at through detailed discussion among the Board members under each of the agenda raised are summarized as under:

#### Agenda-1:

**Discussion:** BoS members approved the nomenclature as 'MA in Sustainable Development, Governance and Public Affairs' Members agreed that usage of terms such as Governance and Sustainable Development in the title of the programme will highlight the integration of role of law, state, society, and market, that is, an inter-disciplinary approach to study real-world problems. Further, they opined that Public Affairs is wider concept than Public Policy that will expand the scope of study of the programme.

Resolution: BoS members unanimously suggested and approved the nomenclature 'MA in Sustainable Development, Governance and Public Affairs'

#### Agenda-2:

The BoS members opined that syllabus of all courses is comprehensive and covers all the relevant topics. They acknowledged the need to bridge the gap between theory and practice that can enable MA students to either pursue further studies or smooth transition to job market. In the light of this, the BoS members emphasized that programme structure and course structure of the new programme is appropriate. They also appreciated the thematic spread of courses over four semesters within the broader framework of International Relations, Economics and Sociology.

Members suggested that the programme should have electives in the second year of this programme considering their area of interest. However, members opined that number of electives offered in the course of time should be decided by size of cohort. They also highlighted the need to have pedagogies and assessments in the curriculum that will test the reading, writing, and speaking skills of students. Convener of the meeting also underlined the fact that programme will have case-studies to supplement theoretical constructs in the different courses. While appreciating topics such as data and governance, members suggested to include social accountability tools and further stress on stakeholder engagement to convey one's research to various stakeholders.

Chair of the meeting also introduced the idea of setting up of Policy Lab in the department. Members appreciated this initiative and discussed how Policy Lab is an important set to solve real-world issues. They also mentioned that Policy Labs will be extremely useful to MA



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students and will work as a platform to encourage them to write blogs, working papers at the initial stages.

Resolution: BoS members unanimously approved the Programme Structure and Course Structure of the New Programme. Programme Structure and Course Specifications are placed in annexure-1.

#### Vote of Thanks & adjournment:

Chairperson conveyed that existing 'MA in Public Policy' programme will be replaced by 'MA in Governance, Sustainable Development and Public Affairs'. There being no further business, the Chairperson declared the meeting adjourned by unanimous consent. The meeting ended with vote of thanks by the Chairperson.

**School of Social Sciences** M S Ramaiah University of Applied Sciences Ramaian University of

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### Minutes of the 5th Meeting of the Board of Studies of the Dept of Data Science and Analytics

School of Social Sciences (SSS), Ramaiah University of Applied Sciences (RUAS)

#### Held on 9th December 2023

Time: 3:00 pm-4:00 pm

The Board of Studies meeting was held on 09/12/2023 between 3:00-4:00 pm to review and discuss the below-mentioned agenda points at the School of Social Sciences, Ramaiah University of Applied Sciences (RUAS), Bangalore, Karnataka-560054.

#### Attendees:

S.No.	Name	Designation
1	Sri. Gurucharan Gollerkeri	Chair of the Board: Director, SSS, RUAS, Bengaluru
2	Prof. Biswabrata Pradhan	Professor, Indian Statistical Institute, Calcutta
3	Prof. Supriyo Ghose	Professor, IFMI Business School, Bengaluru
4	Prof. Praphul Chandra	International School of Engineering, Bengaluru
5	Dr. Tapasi Ghosh	HOD and Associate Professor, Department of Data Sciences and Analytics (DSA), RUAS, Bengaluru
6	Dr. Sudarshana V Iyengar	Assistant Professor, DSA, RUAS, Bengaluru
7	Dr. Mohd. Shoaib Khan	Assistant Professor, DSA, RUAS, Bengaluru
8	Ms. Niveditta Batra	Assistant Professor, DSA, RUAS, Bengaluru
9	Mr. Suresh Darla	Lecturer, DSA, RUAS, Bengaluru

#### Members Absent:

S.No.	Name	Designation
1	Prof. Manisha Chakrabarty	Professor, Indian Institute of Management, Calcutta
2	Prof. Govind R. Kadambi	Pro-Vice Chancellor research, RUAS

Associate Professor and HOD Department of Data Sciences and Analytics School of Social Sciences M S Ramaiah University of Applied Sciences Bengaluru - 560054

Call to Order and Quorum:

The meeting was called to order by Dr. Tapasi Ghosh, HoD, Department of Data Sciences and Analytics, at 3:00pm. With full quorum among the attendees, the proceedings of the BoS meeting

were commenced by the Chairperson.

Welcome and Overview:

Dr. Tapasi Ghosh cordially welcomed the members of the BoS and introduced the Director of SSS to the BOS members and presented the overview of the ongoing courses in the curriculum and highlighted the agenda points to be discussed in the meeting. The Director briefed about the

rationale for launching the new M.Sc. programme, and also the scope of employability of the

new programme.

Agenda Points Discussed and Resolutions/Suggestions:

The key points derived at through the detailed discussion among the Board members under each of the agenda items are summarized as follows:

Agenda 1: Discussion on the nomenclature and the programme specification of a new Masters Programme starting from the academic year 2024-25

Duration: 2 years; Level 9 according to UGC regulations of programmes offered by HEIs.

Credits: 72-80

Maximum Intake of Students: 20

Nomenclature: According to UGC guidelines "M.Sc. in Data Science and Analytics" with specialization.

Target Students: Those who have completed at least 3 years bachelor's degree and studied

Programme Specification (PS): Dr. Tapasi Ghosh outlined the PS semester-wise in details, highlighting the following categories:

Fundamentals: Mathematics, Statistics, Programming Language, etc.



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- Analytical courses: Economics, Finance, Business Analysis, etc.
- Skill-based courses: Modelling techniques, Spreadsheet analytics, etc.
- Tools and Techniques/hands-on: Big Data, Machine Learning, Cloud Analytics, etc.
- The programme delivery is broadly distributed into 5 categories: Core courses, Elective courses, Skill-Enhancement courses, Domain Specific Electives, and Specialization.

The Board members raised the following queries and the Director, and the DSA faculty members discussed and responded to the following questions:

- The pedagogical process to deliver the contents of the curriculum: Process to be interdisciplinary so that the students learn to address the real-world problems along with building the theoretical concept building for the subjects. After completing the programme the students will be data scientists who have a perspective on social sciences, public governance, public health, etc.
- Focus of the programme: Focus should be in practice and hands-on. In collaboration with government and industry. Bridge between theory and practice.
- · Potential employability opportunity after completion of the programme: Corporate, Academics, Research, Government sector.

BoS members appreciated the incorporation of mandatory capstone projects and internships in the curriculum as they contribute to experiential learning opportunities for data science students.

The members further appreciated the curation of course specification adept to employability, skill development, encompassing SDG while following the NEP paradigm. Further the members congratulated the entire team members and the director for the exponential progress the department has had since the last BOS meeting. Additionally, the members allowed full liberty to department core committee members to independently design a syllabus based on the suggestions.

#### Suggestions received:

- 1. Emphasize more on advanced statistics, so that there should be a strong essence of Data Science.
- 2. Applied Econometrics course may be reconsidered.
- 3. Include Large Language Models (LLMs) and Generative Models (GMs) in the course.



- 4. Machine Learning is to be spread across multiple courses, splitting in advance and basic levels. "Advanced Machine Learning" to be added as an elective. Decision is made to shift the basic ML course to earlier semester.
- 5. Fuzzy Logic may be suitable as an elective instead of a core course.
- 6. Course design should cater to the need of students who will join the programme from all academic disciplines.

Resolution: The members of the BoS approved the programme and suggested developing the programme specifications based on the inputs of the BoS and recommended the programme for further approval from the Academic Council.

Agenda 2: To approve Ph.D. program for Department of Data Sciences and Analytics.

Resolution: The members unanimously approved to start Ph.D. student's enrollment under the University-approved Ph.D. Guides.

Agenda 3: To replace "Risk Management" with the "Supply-chain management" course in 6th Sem of the B.Sc. (Hons.) Data Sciences and Analytics Programme.

Resolution: The Board members suggested changing the name to "Supply-chain management and Analytics", as this course has demand for employability and suggested circulating the updated course specifications.

**Vote of thanks and Adjournment:** There being no further business, the Chairperson declared the meeting adjourned by unanimous consent. The meeting ended with the vote of thanks by the Chairperson.

Dr. Tapasi Ghosh, Head of the Department, Data Sciences and Analytics, RUAS, Bengaluru Sri Gurucharan Gollerkert 12.23

Director,

School of Social Sciences,

RUAS, Bengaluru



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## School of Social Sciences Department of Economics

Board of Studies (BoS) Meeting

Meeting Held: 4th December 2023 (Monday)

Time: 11.00 am - 12.30 pm Mode of Meeting: Online

### Minutes of the Meeting

The meeting was presided over by Sri. Gurucharan Gollerkeri, IAS (Retd.), Director, School of Social Sciences (SSS), RUAS.

### Members Present

- 1) Sri, Gurucharan Gollerkeri, IAS (Retd.), Director, SSS, RUAS Chair of the BoS
- 2) Prof. M R Narayana, Consultant (A&R), Fiscal Policy Institute, Govt of Karnataka, Bengaluru and Former Professor, CESP, Institute for Social and Economic Change, Bengaluru
- 3) Prof. Narendra Pani, Professor, National Institute of Advanced Studies (NIAS), Bengaluru
- 4) Prof. N R Bhanumurthy, Vice-Chancellor, Dr. B R Ambedkar School of Economics University, Bengaluru
- 5) Prof. Somashekhar, Professor of Economics, National Law School of India University, Bengaluru
- 6) Dr. Anantha Ramu M R, Assistant Professor, Dept of Economics, SSS, RUAS, Bengaluru.

### Members Absent

Nil

#### **Special Invitees**

- 1) Prof. Ravi Bhandari, Professor of Eminence, SSS, RUAS
- 2) Dr. Tapasi Ghosh, HoD, Dept. of Data Science & Analytics, SSS, RUAS

### Agenda and discussion

Call to Order and Quorum:

The meeting was called to order by Sri. Gurucharan Gollerkeri, the Chairperson, at 11:00am. With full quorum among the attendees, the proceedings of the BoS meeting were commenced by the Chairperson followed by Dr. Anantha Ramu M R.

### Welcome and Overview:

Chairperson cordially welcomed the members of the BoS and presented the overview of the agenda to be discussed in the meeting. The agendas were the following:

- 1. Approval of Nomenclature of the Programme "B.Sc (Hons) in Applied Economics with Data Science"
- 2. Approval of the Programme Structure and Course Structure of the new Programme

Draft Syllabus and New Programme Structure were circulated in advance through email to all members of BoS. The key points derived at through detailed discussion among the Board members under each of the agenda raised are summarized as under:

### Agenda-1:

**Discussion:** BoS members suggested to keep the nomenclature as 'B.Sc (Hons) in Applied Economics'. Members were of the opinion that if we include data science in the title itself it may not be appropriate. This may cause problem for students while taking the UGC exams and for pursuing higher education. As Data Science is offered as a minor course, it may be specified in the programme and course structure as well as in the advertisements for the programme and not explicitly in the programme title.

Resolution: BoS members unanimously suggested and approved the nomenclature 'B.Sc (Hons) in Applied Economics'.

### Agenda-2:

The BoS members were of the opinion that the syllabus covers all the relevant topics and comprehensive. Members were of the opinion that Programme structure and course structure of the new programme is appropriate. Members suggested to think on the appropriate workload on students. Core courses may be dealt in-depth and can reduce the contact hours in open elective courses. Members suggested to encourage students to take online courses from NPTEL and other Government approved bodies as open elective courses. Members suggested to encourage students in co-curricular activities and it may be graded also. It was further suggested that ability enhancement courses or open electives may be dealt with using workshop or seminar and audited through a term paper. This will help in reducing the workload on students.

Members suggested to encourage students to take short-term internships after 5<sup>th</sup> Semester. Members suggested to integrate data science with economics while teaching and introduce Databases on Indian Economy, characteristics of the data sources and limitation of the data sources. It was suggested to teach data extraction from the large data bases. Members also suggested to consider Big Data course as an elective but not as a core course. Members suggested to introduce the Union and State Budgets and audit of the Government finances to students.

Convener of the meeting mentioned that presently NEP structure of 60:40 (60% for continuous evaluation and 40% for Semester End Exams) is being followed in the Dept of Economics.



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Students are encouraged and also being evaluated based on their performance in class seminar, group discussions, assignments, term tests etc. It was also mentioned that a chapter on Databases on Indian Economy has already introduced as a separate chapter in 'Indian Economy' Course.

Resolution: BoS members unanimously approved the Programme Structure and Course Structure of the New Programme. Programme Structure and Course Specifications are placed in annexure-1.

### Vote of Thanks & adjournment:

Chairperson conveyed that existing 'B.Sc (Hons) Economics' programme will be replaced as 'B.Sc (Hons) in Applied Economics'. There being no further business, the Chairperson declared the meeting adjourned by unanimous consent. The meeting ended with vote of thanks by the Chairperson.

School of Social Sciences

M S Ramaiah University of Applied Sciences

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DIRECTOR

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DIRECTOR SCHOOL SOCIAL SCIENCE Bengaluru-560

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# Department of Sociology School of Social Sciences M.S. Ramaiah University of Applied Sciences (MSRUAS) Bengaluru

Proceedings of the Meeting of the Board of Studies in Sociology held on December 4, 2023, at the Board Room of the School of Social Sciences, M.S. Ramaiah University of Applied Sciences, Bengaluru from 2.30-4.30 PM in the Hybrid Mode

#### **Members Present**

- 1. Sri Gurucharan Gollerkeri, Director, School of Social Sciences, M.S. Ramaiah University of Applied Sciences.
- 2. Prof. A.F. Mathew, Professor, Humanities and Liberal Arts in Management, IIM Kozhikode.
- 3. Prof. Antony Palackal, Chairperson, Department of Sociology, University of Kerala, Thiruvananthapuram
- 4. Prof. Manisha Rao, Department of Sociology, Mumbai University, Mumbai
- 5. Dr. Indira Ramarao, Professor of Eminence, School of Social Sciences, M.S. Ramaiah University of Applied Sciences.
- 6. Dr. Sakshi Shukla, Assistant Professor, Department of Sociology, School of Social Sciences, M.S. Ramaiah University of Applied Sciences.

#### Invitees

- 7. Dr. TLS Bhaskar, Assistant Professor, School of Social Sciences, M.S. Ramaiah University of Applied Sciences.
- 8. Dr. Parimala Hiremath, Assistant Professor, School of Social Sciences, M.S. Ramaiah University of Applied Sciences.

#### Welcome and Overview:

Sri Gurucharan Gollerkeri, Director, School of Social Sciences welcomed the members and presented the agenda to be discussed in the meeting.

### Agenda 1: Approval of the B.Sc. (Hons.) in Computational Social Sciences Programme.

The matter of introduction of the programme of the B.Sc. (Hons.) in computational Social Sciences were discussed by the BOS. After discussion and the semester wise review of the courses proposed in the programme, the Board conveyed its approval for the introduction of the B.Sc. (Hons.) in Computational Social Sciences from the academic year 2024-2025.

### Agenda 2: Approval of the B.Sc. in Rehabilitation Science Course

The matter of introduction of the programme of the B.Sc. in Rehabilitation Science course were discussed by the BOS. After discussion and the semester wise review of the courses proposed in the programme, the Board conveyed its approval for the introduction of the B.Sc. in Rehabilitation Science Course from the academic year 2024-2025.

### Agenda 3: Approval for continuation of the Sociology of Health and Well-being course as an Open Elective for the upcoming semester

The BOS was informed that the Department of Sociology which was offering Sociology of Health and Well-being as a Discipline-Specific Elective for students of the V Semester BA Sociology course, also offered this course as an open elective for students of Psychology, Economics, Data Science and Analytics and Faculty of Management and Commerce in the semester just completed. In view of the interest evinced by the students in the course, the Department sought the approval of the Board of Studies to continue the course as an Open Elective in the next semester. The BOS was briefed about the course outline, pedagogical strategies, and the references.

The Board of Studies in Sociology approved the continuation of the Sociology of Health and Wellbeing course an Open Elective for the upcoming semester.

### Agenda 5: Any other item with the permission of the Chair.

No matter was brought to the discussion with the Members of the Board of Studies.

The meeting ended with a vote of thanks to the chair and members.

Director School of Social Sciences

M.S. Ramaiah University of Applied Sciences, Ramaich University Bengaluru- 560054

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## FACULTY OF PHARMACY

### Minutes of the 8th Board of Studies Meeting Held on Wednesday, 4th October 2023, at 10.00 A.M at the Dean's Office, Faculty of Pharmacy, M.S Ramaiah University of Applied Sciences

### Members Present:

10:1100:0		Strands and part were at the suggest of the suggest
SI. No.	Name	Designation
4	Dr. S Bharath	Chairperson
1	Dr. E Maheswari	Secretary
	Prof. M. Narayana Babu	Internal Member
3	Ages Town Committee of the Committee of	Internal Member
4	Or. Anbu J	Internal Member
5	Dr. D.R Harish Kumar	Internal member
6	Dr. Ashoka Babu V.L	External Member
7	Dr. Manjunatha P Mudagal	
8	Dr. Geetha Thangamariappan	External Member- Industry Expert

### Invitees Present:

SI. No.	Name	Designation
31. INV.	Dr. B.V Basavara	HoD Pharmaceutics
	Dr. G.R Saraswathy	HoD Pharmacy Practice
2	and the same of th	Academic Coordinator
3	Dr. Judy Jays	BoF Member
4	Dr. Sundara Saravanan	IQAC and NAAC Coordinator
5	Dr. Sindhu Abraham	DAAPC Coordinator
6	Dr. Kesha Desai	Ph. D Coordinator
7	Dr. AR Mahesh	Associate Professor, FPH
8	Dr. BV Suma	
9	Dr R Deveswaran	Professor, FPH

### Leave of Absence:

Dr. J Saravanan (External Member)

Dr. B Wilson (External Member)

Mr. Venkatesh Iyer (External Member)

### Call to Order and Quorum:

The meeting was called to order by Dr. S Bharath, Chairperson at 10.30 AM. With a sufficient quorum being present, the proceedings of the meeting commenced

Minutes of the 8th Meeting of the Board of Studies, FPH

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### 1) Agenda 8.1: Welcome and Overview

The Chairperson welcomed all the members and invitees to the 8th Board of Studies meeting. He briefed the members about the Faculty's academic & research progress since the 7th BoS and also outlined the agendas of the 8th BoS to the members and invitees. The Chairperson opened the discussion on the Agenda Items as outlined below.

### Apologies for absence

**Document:** Annexure 1 (Attendance sheet)

Dr. J Saravanan, Dr. B Wilson and Mr. Venkatesh Iyer could not attend the meeting due to some prior professional commitments.

### 2) Agenda 8.2: Approval of resolutions of 7th BOS meeting

**Document:** Annexure 2 (Minutes of Meeting of 7th BOS held on 24th May 2022)

### Observation/ Remarks made by the member:

Dr. Sindhu Abraham presented the minutes of the 7th BOS meeting held on 24th May 2022 pertaining to the agenda in Annexure 2 and the resolutions made in the 26th meeting of the University Academic Council (26th ACM dtd. 14th July 2022). The minutes were circulated to all the members of the Board of Studies for their inputs.

All the members reviewed minutes of the 7th BOS meeting. No comments were received from the members. Thus, the minutes of meeting were consented by all the members. The chairperson signed the copy of the MoM in confirmation of the approval.

### 3) Agenda 8.3: Action Taken Report of agenda presented at 26th ACM

Document: Annexure 3 (ATR of 26th ACM dtd. 14th July 2022)

### Observation/ Remarks made by the member:

Dr. Sindhu Abraham presented the Action Taken Report of the 7th BOS agenda ratified in the 26th meeting of the University Academic Council (26th ACM dtd. 14th July 2022).

The members of the academic council approved the following proposals for implementation from the academic year 2022-23 onwards

- Modifications /Inclusions Inclusion of topics in B.Pharm, Pharm.D and M.Pharm course specifications
- Revisit of ILOs of the Courses to align with CO-PO mapping
- Introduction of two mandatory courses on "Innovation and Entrepreneurship" and "Project Management" courses in the 3rd and 4th year B Pharm for the current 2022-23 batch
- Inclusion of 48 credits with grades in the internship certificate for Pharm. D. VI year students (AY 2021-22) onwards

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# FACULTY OF PHARMACY

Revision in promotion criteria of Pharm.D courses, such that the candidate failing in one component (Theory/ Practical) is permitted to re-appear in supplementary examination only, in that particular component. The pass criterion of Pharm D was implemented from the YEE (AY 2022-23) for all the batches

All approved modifications were incorporated in the updated AR, PS and CS Documents which came into force from the AY 2022-23 onwards.

#### Resolution:

All the members approved the implementation of the decisions taken. Dr. Geetha recommended that the courses on "Innovation and Entrepreneurship" and "Project Management" could be implemented for M.Pharm students as well and that the course specifications for "Innovation and Entrepreneurship" can be made department specific. Dr. Geetha also offered to support the design of curriculum for Innovation related courses and also emphasized the need for a curriculum that could bridge the gap between industry- academia interactions.

4) Agenda 8.4: To consider the proposal for introduction of new P.G. programme M. Pharm in Pharmaceutical Regulatory affairs

**Document:** Annexure 4

### Observation/ Remarks made by the member:

Dr. B.V. Basavaraj presented the proposal for introduction of a new P.G. programme - M.Pharm in Pharmaceutical Regulatory Affairs. Programme and Course specifications for the programme, along with departmental requirements were presented.

#### Resolution:

The members considered and approved the proposal.

- Dr. Manjunath suggested the appointment of three teaching faculty exclusively for teaching Pharmaceutical Regulatory Affairs along with adjunct faculty. He also suggested the procurement of pharmaREADY: eCTD & eDMS Submissions Software.
- Dr. Geetha, Industry Expert appreciated the introduction of the new programme as the Indian pharma industry is currently experiencing an exponential growth in regulatory affairs and research
- In the II semester programme structure, Dr. Geetha suggested the separation of the course "Regulatory Aspects of Herbal & Biologicals" into two separate units as the regulatory requirements for herbals and biologicals are different. She also suggested the inclusion of topics "Regulatory understanding of Biosimilars" and QbD.
- 5) Agenda 8.5: To consider implementation of MOOC / NPTEL in III-year B. Pharm and III year Pharm.D. other than regular courses. This can be considered as choice-based learning for fast learners and the credit points earned could be utilized to evaluate their overall performance in the graduate programme as an academic merit

Minutes of the 8th Meeting of the Board of Studies, FPH

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# FACULTY OF PHARMACY

**Document:** - Annexure 5

#### Observation/ Remarks made by the member:

Dr. Judy Jays, Academic Coordinator presented the list of recommended MOOC/NPTEL Courses available in the portal for pharmacy students from July to December 2023.

Resolution: The members considered and approved the proposal.

- Dr. Manjunath suggested to implement the courses for VII and VIII semester B. Pharm students. He also emphasized the need for implementing research and entrepreneurial culture from II year of undergraduate study onwards, where students can be divided into groups of similar interest.
- Dr. Geetha suggested that the application aspects of the above courses in different areas
  of pharmacy could be explained to the students so they can choose the right certification
  courses. She also suggested the inclusion of courses pertaining to AI/ML and 3D printing
- 6) Agenda 8.6: To introduce "Basic kannada language proficiency", as a compulsory course for non Karnataka students admitted to first year B.Pharm & Pharm.D programmes

Document: - Annexure 6

#### Observation/ Remarks made by member:

Dr Judy Jays, Academic Coordinator, proposed the introduction of "Basic Kannada Language Proficiency" as mandatory course for Non – Karnataka students admitted to First year B. Pharm & Pharm.D. programmes. The students will be awarded one credit, but the credit will not be not considered for SGPA calculation.

#### Resolution:

The members considered and approved the proposal.

The external members appreciated and supported the need for introduction of basic Kannada language course

7) Agenda 8.7: To introduce "Constitution of India" and "Human Rights & Human Values" as elective subjects / Value added Courses in the curriculum of VII semester of B.Pharm & V- Year of Pharm.D. as a non-credited system

**Document:** Annexure 7

Minutes of the 8th Meeting of the Board of Studies, FPH

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#### Observation/ Remarks made by the member:

Dr Judy Jays, Academic Coordinator, proposed the introduction of "Constitution of India" & "Human Rights & Human Values" as Elective Courses / Value Added Courses in the curriculum of II Year B. Pharm & II Year Pharm. D as a Non-Audited Course.

### Resolution:

The members considered and approved the proposal.

The members also suggested the inclusion of topics related to "Environmental Law and Safety", "Pharmaceutical Waste Management", "Safety Health and Hazards" and "Safety Management in the industrial workplace" in the curriculum or as Value Added Courses.

Dr. Manjunath also suggested the replacement of the topic "Intellectual Property Rights" with "Universal Human Values" in the proposed "Human Rights & Human Values" course specifications as the students are exposed to the IPR in their regular curriculum.

8) Agenda 8.8: To implement blue print of Course Specification for theory courses with information on the marks weightage for each topic

**Document:** - Annexure 8

#### Observation/ Remarks made by the member:

Prof. M. Narayana Babu, Fmr. Academic Registrar presented the proposal to implement the blue print of the course specifications for theory courses with information on the marks weightage for each topic. The presentation also included clear indication of the topics to be covered for term tests for CE evaluation which will impose for uniform syllabus coverage both at Course Leader & Students perspective.

#### Resolution:

The members approved the proposal.

Dr. Manjunath suggested the inclusion of a marks allotment table in the blue print as a checklist for question paper setters and as a reference for students to understand the relevance of each unit in a course

Agenda 8.9: To review and revise Modern Pharmaceutical Analysis Course (MPAT)
 M. Pharm theory

Document: - Annexure 9

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# FACULTY OF PHARMACY

### Observation/ Remarks made by the member:

Dr. Harish Kumar, HOD, Dept. of Pharmaceutical Chemistry, proposed to include important topics and experiments as per the recent need in the M. Pharm Theory and Practical courses Modern Pharmaceutical Analysis (MPAT).

As per the PCI syllabus of MPAT for M.Pharm in Pharmaceutics specialization, the following topics were not included in the course contents.

Chapter on Thermal Techniques: Principle, thermal transitions and Instrumentation (Heat flux and power-compensation and designs). Modulated DSC, Hyper DSC, experimental parameters (sample preparation, experimental conditions, calibration, heating and cooling rates, resolution, source of errors) and their influence, advantage and disadvantages, pharmaceutical applications. Differential Thermal Analysis (DTA): Principle, instrumentation and advantages and disadvantages, pharmaceutical applications, derivative differential thermal analysis (DDTA). TGA: Principle, instrumentation, factors affecting results, advantages and disadvantages. pharmaceutical applications.

Hence it was proposed to include the above topics.

Similarly, it was proposed to include Interpretation of IR, NMR and Mass Spectrum in theory for all M. Pharm specializations.

In M.Pharm Pharmacology specialization: Immunological assays: RIA (Radio immunoassay). ELISA, and Bioluminescence assays were not included, hence it was proposed to include the same

The members approved the proposal and suggested the inclusion of hands-on training in LC-MS for bioanalysis which was accepted by course leaders

10) Agenda 8.10: Conduct of Value Added Courses by all departments

Document: - Annexure 10

### Observation/ Remarks made by the member:

Dr. Sindhu Abraham, NAAC and IQAC Coordinator, proposed the conduction of Value Added Courses for B. Pharm / M. Pharm / Pharm D students for the AY 2023-24 for a duration of 30 hours. Based on the feedback received from the earlier batches, the following contemporary topics were proposed:

- 1. Introduction to Biomaterials and Manufacturing techniques
- 2. Tissue Engineering and Cell culture Technologies
- 3. Bioanalytical Techniques
- 4. Antibiotic stewardship

Resolution: All members approved the proposal

11) Agenda 8.11: Introduction of internship / hospital postings for P.G. students M. Pharm - Pharmacy Practice as a value addition

Document: - Annexure 11

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### Observation/ Remarks made by the member:

Dr G. R. Saraswathy, HOD – Department of Pharmacy Practice proposed to introduce internship / hospital postings for P.G. students of M. Pharm - Pharmacy Practice as a value addition.

#### Resolution:

The members approved the proposal

- Dr. Manjunath also suggested the introduction of OSCE -"Objective Structured Clinical Examination training for Pharm.D students
- 12) Agenda 8.12: Result analysis of academic year 2022-23 (UG, PG, Ph.Ds)

### Observation/ Remarks made by the member:

Dr K. Sundara Saravanan; Member – BOE presented an overview of the academic results of the academic year 2022-23.

13) Agenda 8.13: UG, PG & Ph.D. admissions of AY 2023-24

Dr Judy Jays, Academic Coordinator, presented the details of UG, PG and Ph.D. admissions for the academic year 2023-24.

- 14) Agenda 8.14: Accomplishments of Individual Departments
- Dr. D. R. Harish Kumar- Department of Pharmaceutical Chemistry, Dr. B.V. Basavaraj Department of Pharmaceutics, Dr. V.L. Ashoka Babu Department of Pharmacognosy, Dr. J. Aribu Department of Pharmacology, Dr. G.R. Saraswathy Department of Pharmacy Practice presented the accomplishments of individual departments from July 2022 onwards till date.
- 15) Agenda 8.15: Revision in SEE/YEE Evaluation pattern

### Observation/ Remarks made by the member:

Dr. K. Sundara Saravanan, Member – BOE proposed revision in SEE/YEE evaluation pattern. The theory scripts evaluation pattern of single evaluation with multiple evaluators for SEE/YEE have been revised to Digital Evaluation system of theory answer scripts with single evaluation. The revaluation of theory answer scripts have been again introduced for the students to apply as per the norms.

### Resolution:

All members approved the proposal.

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## FACULTY OF ELLENANT

16) Agenda 8.16: Introduction of College Uniform for B. Pharm, Pharm. D & M. Pharm based on feedbacks received from the students

### Observation/ Remarks made by the member:

Dr. S. Bharath, Dean proposed the implementation of College uniform for B. Pharm, Pharm. D & M. Pharm students to have students identity in the campus & also to maintain professional decorum within the Faculty. During the conduct of Department of Academic and Advisory Planning Committee (DAAPC) meeting, the same was been discussed and the students representatives were also of the opinion for the implementation of the proposal.

### Any other matter with the approval of the Chairperson

17) Agenda 8.17: PhD course work as per Doctoral Research Programme Regulations 2023 - 2024

Document: - Annexure 12

### Observation/ Remarks made by the member:

Dr. A.R. Mahesh, Doctoral Research Coordinator, presented the course structure for Department specific courses as a part of PRP-1&2:

### Resolution:

All members approved the proposal.

In the course topics of Department of Pharmacy Practice, Dr. Manjunath suggested to reframe the nomericlature of Unit 1 - Clinical Pharmacy and Unit 3 - Pharmacoeconomics and reframe the topics. Dr. Geetha and Dr. Manjunath also offered to go through the contents of the courses and provide inputs.

### Vote of Thanks and Adjournment:

There being no further business, the Chairperson declared the meeting adjourned by unanimous consent. The meeting ended with a vote of thanks by the Chairperson.

(Chairperson)

Dean

Faculty of Pharmacy

M.S. Ramaieh University of Applied Sciences

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# **ANNEXURE 8**



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#### NOTICE

A meeting of the **Board of Studies** of the **Department Automotive and Aeronautical Engineering, Faculty of Engineering and Technology,** will be held to address the following agenda:

Date: 07 March 2024

Time: 11.00 AM to 12.30 PM

Venue: Board Room - Ramaiah Technology Campus

SI. No.	Agenda	
1	Welcome and Overview	
2	i) Renaming of the department to Department of Aerospace and Automotive Engineering	
	ii) B. Tech. Aerospace Engineering 2023 batch Programme Structure for 2 <sup>nd</sup> year	
	iii) B. Tech. Automotive Engineering 2023 batch Programme Structure for 2 <sup>nd</sup> year	
	iv) B. Tech. (Hons.) in Aerospace Engineering with specialization in Space Science and Technology	
	v) B. Tech. (Hons.) in Automotive Engineering with specialization in Electric Vehicles	
	vi) M. Tech. 2023 batch Programme Structure	
3	Observation / Remarks made by members	
4	Vote of Thanks & Adjournment	

All members are requested to attend the meeting.

Sl. No.	Name	
1	Dr. Srisha Rao M. V External Member	
2	Dr. Varunkumar S External Member	
3	Dr. Poonkodi Sampath - External Member	
4	Mr. V. Hima Kiran Vithal - External Member	
5	Prof. Srikari S Internal Member	
6	Prof. Raja R Internal Member	
7	Dr. A. T. Sriram - Internal Member	
8	Dr. Mahesh K. Varpe - Internal Member	
9	Dr. Jayahar Sivasubramanian - Internal Member	

m. Liapresosam

Dr. M. Sivapragasam OB MAR 2024 Chairperson BoS

Date: 06 March 2024

Department of Automotive and Aeronautical Engineering

Faculty of Engineering and Technology Ramaiah University of Applied Sciences

Bangalore - 560 058. Ph: 080-49065555
Registered as: MS Ramaiah University of Applied Sciences
'Established as per Govt. of Karnataka ACT No: 15 of 2013, Recognized by UGC U/S 2(f) of the UGC Act, 1956"



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### **Minutes of the Board of Studies Meeting** Held on 07th March 2024, from 11.00 AM to 12.30 PM, at the Board Room -Ramaiah Technology Campus.

### **Department of Automotive and Aeronautical Engineering Faculty of Engineering and Technology** M. S. Ramaiah University of Applied Sciences

### **Members Present:**

Dr. M. Sivapragasam	Chairperson	
Dr. A. T. Sriram	Secretary	
Prof. Srikari S.	Internal Member	
Prof. Raja R.	Internal Member	
Dr. Mahesh K. Varpe	Internal Member	
Dr. Jayahar Sivasubramanian	Internal Member	

#### **External Members:**

Dr. Srisha Rao M. V.	External Member
Dr. Varunkumar S.	External Member
Dr. Poonkodi Sampath	External Member
Mr. V. Hima Kiran Vithal	External Member

Leave of Absence:				
	a			



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### Call to Order and Quorum:

The meeting was called to order by Dr. M. Sivapragasam - Chairperson at 11.00 AM. With the sufficient quorum being present the proceedings of the meeting were commenced.

### 1) Agenda 1: Welcome and Overview

Dr. M. Sivapragasam welcomed the members of the Board of Studies. He briefed the members about the UG, PG and PhD programmes being offered in the department and the agenda points to be discussed in the Board of Studies meeting for approval.

### 2) Agenda 2: Renaming of the department to Department of Aerospace and **Automotive Engineering**

Dr. M. Sivapragasam briefed the members that the department started offering PG programmes in Automotive Engineering, and later a PG programme in Aircraft Design. Hence the name of the department was kept as Department of Automotive and Aeronautical Engineering. In the Academic Year 2017-18, the department started offering B. Tech. programmes in both Aerospace Engineering and Automotive Engineering. Further, in the Academic Year 2020-21, the M. Tech. Aircraft Design programme was renamed as M. Tech. Aerospace Engineering.

Currently the department offers the following programmes:

- 1) B. Tech. in Aerospace Engineering
- 2) B. Tech. in Automotive Engineering
- 3) M. Tech. in Aerospace Engineering
- 4) Ph. D.

It is proposed to rename the department as "Department of Aerospace and Automotive Engineering" in order to correctly and fully reflect the programmes offered in the department. The name change was also approved by the BoS on 01 July 2022, but kept on hold in the Academic Council.

Clarification was sought from the Registrar regarding renaming of the department. In a note dated 30 January 2024, he mentioned that the approval may be taken from BoS.

Fresh approval is sought from the present BoS to approve the name change of the Department.

**Document:** Note from the Registrar dated 30 January 2024

### Observation/ Remarks made by members:

The members unanimously agreed to rename the department as "Department of Aerospace and Automotive Engineering".

### 3) Agenda 3: B. Tech. Aerospace Engineering 2023 batch Programme Structure and Course Specifications for 2nd year.

**Document:** PS and CS of B. Tech. Aerospace Engineering, 2023 batch.

### Observation/ Remarks made by members:

- 1. Dr. Sivapragasam presented the PS and CS of B. Tech. Aerospace Engineering, 2023 batch.
- The members agreed to the PS and CS.

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#### Resolution:

The Programme Structure and Course Specifications can be presented in the Academic Council for approval.

4) Agenda 3: B. Tech. Automotive Engineering 2023 batch Programme Structure and Course Specifications for 2<sup>nd</sup> year.

**Document:** PS and CS of B. Tech. Automotive Engineering, 2023 batch.

### Observation/ Remarks made by members:

- 1. Dr. Sivapragasam presented the PS and CS of B. Tech. Automotive Engineering, 2023 batch.
- 2. The members agreed to the PS and CS.

#### Resolution:

The Programme Structure and Course Specifications can be presented in the Academic Council for approval.

The following courses are common to both Aerospace Engineering and Automotive Engineering programmes in the 3<sup>rd</sup> semester:

- Engineering Mathematics 3
- · Engineering Materials
- Strength of Materials
- Fluid Mechanics and Machines
- Thermodynamics
- Essence of Indian Knowledge System

The following courses are common to both Aerospace Engineering and Automotive Engineering programmes in the 4<sup>th</sup> semester:

- Engineering Mathematics 4
- Manufacturing Processes
- Computer-Aided Drafting and Mechanical Dissection
- Indian Constitution, Human Rights and Law

Further, Internship -1 has to be done by students of both the programmes after the 1<sup>st</sup> year. The award of credits will be done during the 4<sup>th</sup> semester. This arrangement is made so that the lateral entry students can also do their internship during/after the 3<sup>rd</sup> semester.

- B. Tech. Aerospace Engineering students will take the following programme specific courses in the 4th semester:
  - Low Speed Aerodynamics
  - Aircraft Propulsion 1
- B. Tech. Automotive Engineering students will take the following programme specific courses in the 4th semester:
  - Automotive Powertrain
  - Theory of Machines and Mechanisms

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## 5) Agenda 4: B. Tech. (Hons.) in Aerospace Engineering with specialization in Space Science and Technology

**Document:** Notice from Chairman, AICTE, and AICTE Approval Handbook 2023-24 were presented. Draft course list for the Hons. Programme was presented.

### Observation/ Remarks made by members:

- 1. Dr. Sivapragasam briefed the members about the need for Hons. Programme as recommended by AICTE.
- 2. He also mentioned that the students need to earn 18 20 additional credits cumulatively (including credits transferred from the SWAYAM platform)
- 3. Dr. Sivapragasam presented the list of courses for the Hons. Programme in Space Science and Technology.
- 4. The following courses are proposed:
  - a) Introduction to Astronautics
  - b) Orbital Mechanics
  - c) Spacecraft Propulsion
  - d) Satellite Communication
  - e) Spacecraft Materials and Structures

### Resolution:

The Course Specifications will be prepared and circulated to the BoS members for approval.

## 6) Agenda 4: B. Tech. (Hons.) in Automotive Engineering with specialization in Electric Vehicles

**Document:** Notice from Chairman, AICTE, and AICTE Approval Handbook 2023-24 were presented. Draft course list for the Hons. Programme was presented.

### Observation/ Remarks made by members:

- Dr. Sivapragasam briefed the members about the need for Hons. Programme as recommended by AICTE.
- 2. He also mentioned that the students need to earn 18 20 additional credits cumulatively (including credits transferred from the SWAYAM platform)
- 3. Dr. Sivapragasam presented the list of courses for the Hons. Programme in Electric Vehicles.
- 4. The following courses are proposed:
  - a) Electric Drives & Controls
  - b) Power Electronics for Electric Vehicles
  - c) Energy Storage & Management System
  - d) Electric Vehicle System Design
  - e) Electric Vehicle Safety & Regulations

#### Resolution:

The Course Specifications will be prepared and circulated to the BoS members for approval.

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7) Agenda 4: M. Tech. 2023 batch Programme Structure and Course Specifications **Document:** PS and CS of M. Tech. Aerospace Engineering, 2023 batch.

### Observation/ Remarks made by members:

- 1. Dr. Sivapragasam presented the revised draft programme structure of M. Tech. Aerospace Engineering programme.
- 2. He also mentioned that the revised PS incorporates the suggestions made by the members during the BoS meeting held on 04 December 2023.
- 3. BOS members considered and approved the Programme Structure and Course Specifications of the second year of M. Tech. Aerospace Engineering programme of the 2023 Batch.
- 4. Students will do Internship and Dissertation Phase -1 in the 3rd semester, and Dissertation Phase - 2 in the 4th semester.

### Resolution:

The Programme Structure and Course Specifications can be presented in the Academic Council for approval.

### Vote of Thanks & Adjournment:

There being no further business the Chairperson declared the meeting adjourned by unanimous consent. The meeting ended with the vote of thanks by the Chairperson.

M. Dr. M. Sivapragasam 07 MAR 2024

Chairperson - BoS

Department of Automotive and Aeronautical Engineering

Faculty of Engineering and Technology

M. S. Ramaiah University of Applied Sciences

Dept. of Automotive & Aeronautical Engg. Faculty of Engineering & Technology M.S. Ramalah University of Applied Sciences #476-P, Peenya Industrial Area, 6th Phase Sangalore - 560 058. Ph: 080-49065555



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### **Attendance Record**

### **Board of Studies Meeting**

Department:

**Automotive and Aeronautical Engineering** 

Faculty:

Faculty of Engineering and Technology (FET)

Date:

07th March 2024

Time:

11.00 AM to 12.30 PM

Venue:

**Board Room - Ramaiah Technology Campus** 

- 1) Dr. M. Sivapragasam, Chairperson
- 2) Prof. Srikari S, Internal Member
- 3) Prof. Raja R, Internal Member
- 4) Dr. A. T. Sriram, Internal Member
- 5) Dr. Mahesh K. Varpe, Internal Member
- 6) Dr. Jayahar Sivasubramanian, Internal Member
- 7) Dr. Srisha Rao M. V., External Member
- 8) Dr. Varunkumar S., External Member
- 9) Dr. Poonkodi Sampath, External Member
- 10) Mr. V. Hima Kiran Vithal, External Member

M. Strapuseson

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Shi

Email consent

### BoS presentation 07 March 2024

Dr. M Sivapragasam < hod.aae.et@msruas.ac.in> Fri 3/8/2024 2:10 PM

To:Srisha Rao M V <srisharao@iisc.ac.in>;Varunkumar S <varuns@iitm.ac.in>;POONKODI SAMPATH <poonkodi.sampath@gmail.com>:himakiran.venna@tatamotors.com <himakiran.venna@tatamotors.com> Cc:Ms. Priyanka D S <sec.aae.et@msruas.ac.in>

1 attachments (625 KB) BoS AAE 07 MAR 2024.pptx:

Dear All.

We conducted the BoS Meeting with the Internal Members (i.e., faculty members of our department) to discuss the following Agenda Points on 07 March 2024:

- 1. Renaming of the department to Department of Aerospace and Automotive Engineering
- 2. B. Tech, Aerospace Engineering 2023 batch Programme Structure for 2nd year
- 3. B. Tech. Automotive Engineering 2023 batch Programme Structure for 2nd year
- 4. B. Tech. (Hons.) in Aerospace Engineering with specialization in Space Science and Technology
- 5. B. Tech. (Hons.) in Automotive Engineering with specialization in Electric Vehicles
- 6. M. Tech. 2023 batch Programme Structure

We had to do this meeting internally due to paucity of time, the MoM of the BoS are to be sent to the Academic Council by 11 March 2024.

I'm attaching herewith the presentation made during the BoS meeting. I kindly request you to please review the points mentioned in the presentation and give your approval. If there are any other points you would like to add or suggestions to make, please do not hesitate to write to us. We will then send the agenda points for further approval & ratification in the Academic Council.

Thank you.

With regards Shiva

Dr. M. Sivapragasam Professor and Head Department of Aerospace Engineering Faculty of Engineering and Technology M. S. Ramaiah University of Applied Sciences # 470 - P, Peenya Industrial Area Peenya 4th Phase

Bangalore - 560 058 India. Website: www.msruas.ac.in

E-mail: sivapragasam.aae.et@msruas.ac.in

Phone: +91 99806 77717

### Re: BoS presentation 07 March 2024

POONKODI SAMPATH <poonkodi.sampath@gmail.com>

Sat 3/9/2024 1:02 PM

To:Dr. M Sivapragasam < hod.aae.et/dmsruas.ac.in>

Cc:Ms. Priyanka D S <sec.aae.et@msruas.ac.in>:Srisha Rao M V <srisharao@iisc.ac.in>:Varunkumar S <varuns@itm.ac.in>;himakiran.venna@tatamotors.com <himakiran.venna@tatamotors.com>

Hello Sir,

Seems good to me. No suggestion from my end.

Many thanks, Poonkodi S

### RE: BoS presentation 07 March 2024

himakiran.venna@tatamotors.com < himakiran.venna@tatamotors.com > Sat 3/9/2024 1:14 PM

To Dr. M Sivapragasam < hod.aac.et@msruas.ac.in>

Cc:Ms. Priyanka D S <sec.aae.et@msruas.ac.in>:srisharao@iisc.ac.in <srisharao@iisc.ac.in>;
varuns@iitat.ac.in <varuns@iitm.ac.in>:poonkodi.sampath@gmail.com <poonkodi.sampath@gmail.com>

Dear Dr. Siva

We can go ahead with this, its good to go

### Thanks & Regards

Hima Kiran

Learning & Development, Corporate HR Product Leadership Academy

TATA Motors | Engineering Research Center

Pune | Maharashtra | India +91 7796623902

### RE: BoS presentation 07 March 2024

Srisha Rao M V <srisharao@iisc.ac.in> Mon 3/11/2024 10:53 AM

To:Dr. M Sivapragasam <hod.aac.et@msruas.ac.in<;Varunkumar S <varuns@iitm.ac.in>;POONKODI SAMPATH <poonkodi.sampath@gmail.com>;himakiran.venna@tatamotors.com <himakiran.venna@tatamotors.com>

Cc:Ms. Priyanka D S <sec.aae.et@msruas.ac.im-

Dear Dr. Sivapragasam,

I have gone through the presentation. All items are in agreement with our previous discussions on these matters. I have no other suggestions to make and concur with the content of the presentation.

With regards, Srisha

#### Srisha Rao M V

Associate Professor,
Department of Aerospace Engineering,
Indian Institute of Science,
Bengaluru, Karnataka State,
India – 560012

Ph. No. +91-80-22932426 Email: <u>stisharae ir iise ac.in</u>

### RE: BoS presentation 07 March 2024

From: Varunkumar S <varuns@iitm.ac.in> Sent: Sunday, March 10, 2024 5:05 PM

To: Dr. M Sivapragasam < hod.aae.et@msruas.ac.in>
Subject: Re: BoS presentation 07 March 2024

Dear Sir,

I have browsed through the ppt. The changes look fine. Go ahead.

Varun



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#### NOTICE

A meeting of the **Board of Studies** of the **Department Automotive and Aeronautical** Engineering, Faculty of Engineering and Technology, will be held to address the following agenda:

Date: 04 Dec 2023

Time: 10.30 AM to 12.00 PM

Venue: Board Room - Ramaiah Technology Campus

SI. No	Agenda	
1	Welcome and Overview	
2	<ul> <li>i) Discussion on feedback from stakeholders</li> <li>ii) B. Tech. (Hons.) in Aerospace Engineering with specialization in Satellite Technologies</li> <li>iii) B. Tech. (Hons.) in Automotive Engineering with specialization in Electric Vehicles</li> <li>iv) Discussion on Programme Structure for M. Tech. in Aerospace Engineering</li> </ul>	
3	Observation / Remarks made by members	
4	Vote of Thanks & Adjournment	

All members are requested to attend the meeting.

Sl. No.	Name	
1	Dr. Srisha Rao M. V External Member	
2	Dr. Varunkumar S External Member	
3	Dr. Poonkodi Sampath - External Member	
4	Mr. V. Hima Kiran Vithal - External Member	
5	Prof. Srikari S Internal Member	
6	Prof. Raja R Internal Member	
7	Dr. A. T. Sriram - Internal Member	
8	Dr. Mahesh K. Varpe - Internal Member	
9	Dr. Shashank Vadlamani - Internal Member	
10	Dr. Jayahar Sivasubramanian - Internal Member	
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autical Engg. Dr. M. Sivapragasam pept. of A. A. Yethnel**ogy** Fia Chairperson BoS Applied Sciences M.S. Tarret #470-1. th Phase, Date: 30 Nov 2023

Place: Bangalore

Department of Automotive and Aeronautical Engineering

Faculty of Engineering and Technology Ramaiah University of Applied Sciences



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### **Attendance Record**

### **Board of Studies Meeting**

Department: Automotive and Aeronautical Engineering Faculty: Faculty of Engineering and Technology (FET)

Date: 04th Dec 2023

Time: 10.30 AM to 12.00 PM

Venue: Board Room - Ramaiah Technology Campus

1) Dr. M. Sivapragasam, Chairperson 2) Prof. Srikari S, Internal Member 3) Prof. Raja R, Internal Member 4) Dr. A. T. Sriram, Internal Member 5) Dr. Mahesh K. Varpe, Internal Member 6) Dr. Shashank Vadlamani, Internal Member 7) Dr. Jayahar Sivasubramanian, Internal Member NLINE 8) Dr. Srisha Rao M. V., External Member BCENT 9) Dr. Varunkumar S., External Member ONLINE 10) Dr. Poonkodi Sampath, External Member 11) Mr. V. Hima Kiran Vithal, External Member 12) Dr. S. Chandankumar, Invited Member



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Minutes of the Board of Studies Meeting Held on 04th Dec 2023, from 10.30 AM to 12.00 PM, at the Board Room -Ramaiah Technology Campus.

### **Department of Automotive and Aeronautical Engineering Faculty of Engineering and Technology** M. S. Ramaiah University of Applied Sciences

Members Present

Dr. M. Sivapragasam	Chairperson
Dr. A. T. Sriram	Secretary
Prof. Srikari S.	Internal Member
Prof. Raja R.	Internal Member
Dr. Mahesh K. Varpe	Internal Member
Dr. Shashank Vadlamani	Internal Member
Dr. Jayahar Sivasubramanian	Internal Member

Members Present Online through MS Teams Meeting:

Dr. Srisha Rao M. V.	External Member
Dr. Poonkodi Sampath	External Member
Mr. V. Hima Kiran Vithal	External Member

### **MS Teams Link:**

https://teams.microsoft.com/l/meetupjoin/19%3ameeting\_OWY2ZGMwNmItMDg4NC00MzEwLWI2YzAtODQ2N2FmOGMzODE4%40 thread.v2/0?context=%7b%22Tid%22%3a%22e038180b-0021-401f-83a9a2d45acee0dc%22%2c%22Oid%22%3a%2265b7a192-a3d0-4683-b476-424f7ed91750%22%7d

### Leave of Absence:

Dr. Varunkumar S.



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### Call to Order and Quorum:

The meeting was called to order by Dr. M. Sivapragasam - Chairperson at 10.30 AM. With the sufficient quorum being present the proceedings of the meeting were commenced.

### 1) Agenda 1: Welcome and Overview

Dr. M. Sivapragasam welcomed the members of the Board of Studies. He briefed the members about the UG, PG and PhD programmes being offered in the department and the agenda points to be discussed in the Board of Studies meeting for approval.

### 2) Agenda 2: Discussion on Feedback from Stakeholders

Dr. M. Sivapragasam briefed on the Curriculum Feedback and Faculty Feedback for B.Tech. Aerospace Engineering and B.Tech. Automotive Engineering.

### **Document:** Feedback forms

### Observation/ Remarks made by members:

- 1. Dr. Sivapragasam showed the sample feedback forms and briefed about the Curriculum Feedback and Faculty Feedback to the BoS members.
- 2. In general, the feedback from the stakeholders was good.
- 3. The Automotive Engineering students had suggested an Industrial Visit to an Electric Vehicle industry. It was agreed that this visit will be arranged to an industry or a Centre of Excellence.

### 3) Agenda 3: B. Tech. (Hons.) in Aerospace Engineering with specialization in Satellite Technologies.

**Document:** Notice from Chairman, AICTE, and AICTE Approval Handbook 2023-24 were presented. Draft course list for the Hons. Programme was presented.

### Observation/ Remarks made by members:

- 1. Dr. Sivapragasam briefed the members about the need for Hons. Programme as recommended by AICTE.
- 2. He also mentioned that the students need to earn 18 20 additional credits cumulatively (including credits transferred from the SWAYAM platform)
- 3. Dr. Sivapragasam presented the list of courses for the Hons. Programme in Satellite Technologies.
- 4. Dr. Poonkodi Sampath enquired about Avionics course; Dr. Sivapragasam clarified that it is part of the regular curriculum.
- 5. Dr. Srisha Rao M. V. remarked that the course titles looks fine. He then enquired about the course contents. It was clarified that the course contents will be shared with the BoS members soon for their comments.
- 6. Dr. Srisha Rao M. V. emphasized the need for Satellite Applications as a part of one of the courses. It was agreed.
- 7. Dr. Srisha Rao M. V. enquired about Orbital Mechanics course; Dr. A. T. Sriram clarified that it is on different types of orbits, 6 degree-of-freedom system. He also mentioned the course is formulated on the lines of the textbooks of Prof. Ashish Tewari, IIT Kanpur. He also mentioned that MATLAB exercises will be included for this course.



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- 8. Dr. Srisha Rao M. V. also mentioned that docking of space bodies can be included as one unit in the Orbital Mechanics course; it was agreed.
- Dr. Srisha Rao M. V. suggested that current trends point to Deep Space, for example, Aditya L1, James Webb telescope, exoplanets. He mentioned that Deep Space Propulsion can be included as one of the units of Space Propulsion course; it was agreed
- 10. Dr. Srisha Rao M. V. suggested that Remote Sensing be included in one of the Satellite Applications courses; it was agreed.

### Resolution:

The Course Contents will be prepared incorporating all the suggestions made by the BoS members and circulated for further comments and approval.

# 4) Agenda 4: B. Tech. (Hons.) in Automotive Engineering with specialization in Electric Vehicles

**Document:** Notice from Chairman, AICTE, and AICTE Approval Handbook 2023-24 were presented. Draft course list for the Hons. Programme was presented.

### Observation/ Remarks made by members:

- Dr. Sivapragasam briefed the members about the need for Hons. Programme as recommended by AICTE.
- 2. He also mentioned that the students need to earn 18 20 additional credits cumulatively (including credits transferred from the SWAYAM platform)
- 3. Dr. Sivapragasam presented the list of courses for the Hons. Programme in EV.
- 4. Mr. V. Hima Kiran Vithal appreciated that EV Systems Design course is included in the programme.
- 5. Mr. V. Hima Kiran Vithal enquired if EV Architecture Design is incorporated in the EV Systems Design course. Dr. Raja replied that Architecture Design is a part of this course.
- Mr. V. Hima Kiran Vithal suggested that to give more importance to practical classes. It was agreed since a Centre of Excellence in EV is being planned to be set up in RUAS.
- Mr. V. Hima Kiran Vithal suggested to include High voltage safety as a part of a course.
   It was agreed.
- 8. Mr. V. Hima Kiran Vithal mentioned that a lot of EV buses are operated and there is a lot of demand in TATA- as Smart Mobility Services, Ashok Leyland as Switch Mobility, to gather the attention of industries, more importance should be given to practical classes.
- 9. Mr. V. Hima Kiran Vithal suggested a M. Tech. programme can be offered in EV. It was replied that the experience with running the Hons. in EV will be helpful in developing this programme.

### **Resolution:**

The Course Contents will be prepared incorporating all the suggestions made by the BoS members and circulated for further comments and approval.



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# 5) Agenda 5: Discussion on Programme Structure for M. Tech. in Aerospace Engineering

<u>Document:</u> Draft Programme Structure M. Tech. Aerospace Engineering programme <u>Observation/ Remarks made by members:</u>

- 1. Dr. Sivapragasam presented the draft programme structure of M. Tech. Aerospace Engineering programme.
- 2. Dr. Srisha Rao M. V. asked for the intake in Aerospace Engineering, and had a query if different stream students can take Aerospace Engineering. Dr. Sivapragasam answered that we take students from other streams such as Mechanical etc.
- 3. Dr. Srisha Rao M. V. remarked the that 1<sup>st</sup> and 2<sup>nd</sup> semesters consists of too many course, and that can be a burden to the students. Dr. Sivapragasam explained that Research Methodology is a 2-hour course, and Professional Communication is an audit credit course. It was agreed that the courses in 1<sup>st</sup> semester can be reduced & one course from the 1<sup>st</sup> semester can be moved to the 2<sup>nd</sup> semester for balancing the course.
- 4. Dr. Poonkodi Sampath suggested that AIML course can be removed from main course and put in the electives. Dr. Raja replied that AIML is a current area of interest & our students should be given the opportunity of undergoing this course. Dr. Poonkodi Sampath agreed.
- 5. Dr. Poonkodi Sampath suggested that CAE Lab and Theory can be combined. Dr. Raja clarified that the CAE course indeed has theory and lab components combined.
- 6. Dr. Sivapragasam explained that from a job prospective for the students FEA is a separate course. The BoS members agreed.
- 7. Dr. Poonkodi Sampath suggested that one year of Internship and Dissertation can be combined and can be done full time. The BoS members agreed and the present programme structure is indeed formulated based on this need.
- 8. Dr. Srisha Rao M. V. suggested that publication of journal paper should not be made mandatory. Dr. Sivapragasam clarified that the students will be encouraged to publish their work in a conference or a journal.

### Resolution:

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The modified Programme Structure and the Course Contents will be prepared incorporating all the suggestions made by the BoS members and circulated for further comments and approval.

### 6) Agenda 6: Courses for Ph. D. Course work

Document: List of courses for Ph. D. Course work:

### Observation/ Remarks made by members:

- 1. Dr. Sivapragasam presented the list of courses for Ph. D. course Work.
- 2. Dr. Srisha Rao M. V. commented that title of the courses are fine. He also mentioned that the Ph. D. students should be allowed to take courses depending on their problem statement. Dr. Sriram replied that this is indeed the case as the students take Ph. D.



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Courses offered in other departments as their problem demands, and also students from other departments take courses offered in our department.

Resolution:

1

The Course Contents will be prepared and circulated to them for further comments and approval.

### 7) Agenda 7: Additional Mathematics Courses for Lateral Entry Students. **Document: PPT**

Observation/ Remarks made by members:

1. Dr. Chandan Kumar, Head, Department of Mathematics and Statistics, explained that Additional Mathematics-1 and Additional Mathematics-2 conducted for lateral entry students are being considered as demanding by the students.

2. Dr. Chandan Kumar apprised the BoS members that in lieu of these courses, 15 sessions (bridge course) will be conducted to these students in the first two weeks of their admission to the programme.

3. Dr. Poonkodi Sampath mentioned that two weeks will be less for students to grasp the concepts of Mathematics. To this, Dr. Chandan Kumar clarified that the number of classes may be extended depending on the feedback from the students and also based on the performance in an interim assessment.

4. Dr. Chandan Kumar told that these changes will come into effect for the 2022-23 batch students. BoS members expressed their viewpoint that the PS and CS is already formed for 2022 batch students and also the credits are finalized. Hence they suggested that this change can be made effective from 2023 batch.

Resolution:

The suggestions made by the BoS members will be discussed with the University leadership.

8) Agenda 8: Special Approval to student to complete the M.Tech. in Turbomachinery Design.

**Document:** Request letter from Mr. Mohammad Afzal and note by Dean – Academics.

Observation/ Remarks made by members:

- 1. Dr. Sivapragasam presented the case of Mr. Mohammad Afzal (Reg. No. 18ETAA025001) who belongs to the FT-2018 batch M. Tech. Turbomachinery Design.
- 2. Mr. Mohammad Afzal has not completed Rotor Dynamics & Vibration module, and Final Dissertation Presentation during the stipulated time period.
- 3. Student requested to University, dated 31 July 2023, to permit to clear the module and final dissertation presentation.
- 4. Permission granted to the student to complete the academic requirements via a note from Dean-Academics dated 06 September 2023.
- 5. Subsequently, Mr. Mohammad Afzal cleared the module and made the final dissertation presentation.
- 6. Approval is sought from the BoS to approve this as a special case.

#### Resolution:

BoS members approved the completion of course by the student.



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#### Vote of Thanks & Adjournment:

There being no further business the Chairperson declared the meeting adjourned by unanimous consent. The meeting ended with the vote of thanks by the Chairperson.

Dr. M. Sivapragasam Chairperson - BoS Department of Automotive and Aeronautical Engineering Faculty of Engineering and Technology M. S. Ramaiah University of Applied Sciences

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#### NOTICE

A meeting of the **Board of Studies** of the **Department Automotive and Aeronautical** Engineering, Faculty of Engineering and Technology will be held to address the following agenda:

Date: 04 July 2023

Time: 10.30 AM to 12.30 PM

Venue: Board Room - Ramaiah Technology Campus

SI. No	Agenda				
1	Welcome and Overview				
2	<ul> <li>i) Discussion of Programme Structure and Course Structure for B. Tech Aerospace Engineering and B. Tech. Automotive Engineering</li> <li>ii) Discussion of MOOC Courses</li> <li>iii) Any other points</li> </ul>				
3	Observation/ Remarks made by members				
4	Vote of Thanks & Adjournment				

All members are requested to attend the meeting.

SI. No.	Name
1	Prof. Srikari S Internal Member
2	Prof. Raja R Internal Member
3	Prof. Ashok C. Meti - Internal Member
4	Dr. A. T. Sriram - Internal Member
5	Dr. Mahesh K. Varpe - Internal Member
6	Dr. Shashank Vadlamani - Internal Member
7	Dr. Jayahar Sivasubramanian - Internal Member
8	Dr. Srisha Rao M. V External Member
9	Dr. Varunkumar S External Member
10	Dr. Poonkodi Sampath - External Member
11	Mr. V. Hima Kiran Vithal - External Member

M. Limpregosam

Dr. M. Sivapradasam, Chairperson BoS

Date: 01 July 2023 Place: Bangalore

Department of Automotive and Aeronautical Engineering

Faculty of Engineering and Technology Ramaiah University of Applied Sciences

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### Ramaiah University of Applied Sciences

#### **Board of Studies**

Programmes  Department		B. Tech. in Aerospace Engineering and B. Tech. in Automotive Engineering M. Tech. in Aerospace Engineering and M. Tech. in Automotive Engineering Ph. D.  Automotive and Aeronautical Engineering				
Cha	irperson					
SI No	Name	Affiliation	Designation	Contact Details (Email & Contact No)		
1	Dr. M. Sivapragasam	RUAS	Professor and Head	hod.aae.et@msruas.ac.in 9980677717		
Inte	rnal Faculty Members					
2	Prof. Srikari S.	RUAS	Professor	srikari.aae.et@msruas.ac.in 9845167020		
3	Prof. Raja R.	RUAS	Professor	raja.aae.et@msruas.ac.in 9972398600		
4	Prof. Ashok C. Meti	RUAS	Professor	meti.aae.et@msruas.ac.in 94480 57297		
5	Dr. A. T. Sriram	RUAS	Associate Professor	atsriram.aae.et@msruas.ac.in 8660427467		
6	Dr. Mahesh K. Varpe	RUAS	Associate Professor	maheshkvarpe.aae.et@msrua s.ac.in 7022457883		
7	Dr. Shashank Vadlamani	RUAS	Assistant Professor	shashankvadlamani.ase.et@m sruas.ac.in 9632384387		
8	Dr. Jayahar Sivasubramanian	RUAS	Assistant Professor	jayahar.ase.et@msruas.ac.in 7795701987		
Exte	rnal Members					
1	Dr. Srisha Rao M. V.	Indian Institute of Science	Associate Professor	srisharao@iisc.ernet.in 97398 49075		
2	Dr. Varunkumar S.	Indian Institute of Technology- Madras	Associate Professor	varuns@iitm.ac.in 99008 26039		
3.	Dr. Poonkodi Sampath	Mercedes Benz Research and Development India	Domain Expert	poonkodi.sampath@gmaif.co m 95471 42336		
4	Mr. V. Hima Kiran Vithal	Tata Motors	Deputy General Manager	himakiran.venna@tatamotors. com 97429 45575		

M. diapherosam

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470-P, Peenya Europeia.

Bançaloro - 560 058, Pri: 0RC-49055555

Registered as : MS Ramalah University of Applied Science

"Established as per Govt, of Karnataka ACT No: 15 of 2013, Recognized by UGC U/S"

#### **BOARD OF STUDIES - 2023**

3rd July 2023

The Board of Studies Members Department of Automotive and Aeronautical Engineering Faculty of Engineering and Technology Ramaiah University of Applied Sciences Bangalore

#### Sub: Constitution of Board of Studies - 2023

- 1. Dr. M. Sivapragasam
- 2. Prof. Srikari S.
- 3. Prof. Raia R.
- 4. Prof. Ashok C. Meti
- 5. Dr. A. T. Sriram
- 6. Dr. Mahesh K. Varpe
- 7. Dr. Shashank Vadlamani
- 8. Dr. Jayahar Sivasubramanian

Taking into consideration your expertise and experience in this domain, we are pleased to invite you as a member of Board of Studies 2023, Department of Automotive and Aeronautical Engineering, Faculty of Engineering and Technology, Ramaiah University of Applied Sciences. Request you to confirm your acceptance as member of Board of Studies by replying to this email communication.

For Ramaiah University of Applied Sciences

Prof. Govind R. Kadambi

**Pro Vice Chancellor** 

Enclosed: Annexure



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#### Functioning of Board of Studies, RUAS

The Board shall have the following functions, powers and responsibilities:

- a) Course Structure Development
- b) Curriculum Development and Pedagogy
- c) Review of Curriculum, Subject/Module notes, Teaching and Learning Methods, Teaching and Learning Facilities
- d) To interact with the concerned Faculty or Faculties to suggest and make improvements in the courses of study
- e) To consult with specialists who are not members of the Board
- f) To consider and take action upon any matters referred to it by the Dean
- g) The Committee may constitute one or more Sub-Committees comprising such members and with such terms and conditions and delegate to it such powers and functions as it may think fit
- h) Any other matter related to Curriculum Development and Delivery





#### **Attendance Record**

#### **Board of Studies Meeting**

Department:

**Automotive and Aeronautical Engineering** 

Faculty:

Faculty of Engineering and Technology (FET)

Date:

04 July 2023

Time:

10.30 AM to 12.30 AM

Venue:

**Board Room - Ramaiah Technology Campus** 

1) Dr. M. Sivapragasam, Chairperson

2) Prof. Srikari S., Internal Member

3) Prof. Raja R., Internal Member

4) Prof. Ashok C. Meti, Internal Member

5) Dr. A.T. Sriram, Internal Member

6) Dr. Mahesh K. Varpe, Internal Member

7) Dr. Shashank Vadlamani, Internal Member

8) Dr. Jayahar Sivasubramanian, Internal Member

9) Dr. Srisha Rao M. V., External Member

10) Dr. Varunkumar S., External Member

11) Dr. Poonkodi Sampath, External Member

12) Mr. V. Hima Kiran Vithal, External Member

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ABSENT

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Minutes of the Board of Studies Meeting Held on 04<sup>th</sup> July 2023, from 10.30 AM to 12.30 PM, at the Board Room -Ramaiah Technology Campus.

# Department of Automotive and Aeronautical Engineering Faculty of Engineering and Technology M. S. Ramaiah University of Applied Sciences

#### **Members Present:**

Dr. M. Sivapragasam	Chairperson		
Dr. A. T. Sriram	Secretary		
Dr. Srisha Rao M. V.	External Member		
Prof. Srikari S.	Internal Member		
Prof. Raja R.	Internal Member		
Prof. Ashok C. Meti	Internal Member		
Dr. Mahesh K. Varpe	Internal Member		
Dr. Shashank Vadlamani	Internal Member		
Dr. Jayahar Sivasubramanian	Internal Member		

Members Present Online through MS Teams Meeting:

Dr. Varunkumar S.	External Member
Dr. Poonkodi Sampath	External Member
Mr. V. Hima Kiran Vithal	External Member

#### MS Teams Link:

https://teams.microsoft.com/l/meetup-join/19%3ameeting\_MzgwMGQ3YTItY2M3Ni00ZGI3LTk2OGEtOWFmOTM2M2UxYTMz%40thread.v2/0?context=%7b%22Tid%22%3a%22e038180b-0021-401f-83a9-a2d45acee0dc%22%2c%22Oid%22%3a%2265b7a192-a3d0-4683-b476-424f7ed91750%22%7d

#### Leave of Absence:

Prof. Raja R. Prof. Ashok C. Meti



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#### Call to Order and Quorum:

The meeting was called to order by Dr. M. Sivapragasam - Chairperson at 10.30 AM. With the sufficient quorum being present the proceedings of the meeting were commenced.

#### 1) Agenda 1: Welcome and Overview

Dr. M. Sivapragasam welcomed the members of Board of Studies Meeting. He briefed the members about the UG, PG and PhD programmes being offered in the department and the agenda points to be discussed in the Board of Studies meeting for approval.

# 2) Agenda 2: Discussion of Programme Structure and Course Structure for B.Tech. Aerospace Engineering and B.Tech. Automotive Engineering

Dr. M. Sivapragasam proposed the 2023-2027 batch UG programme Structure and Course Structure for B.Tech. Aerospace Engineering and B.Tech. Automotive Engineering

#### **Document:** Presentation

#### Observation/ Remarks made by members:

- 1. Dr. Srisha Rao M. V. asked for the courses, Basic Electrical and Electronics, Manufacturing Process.
- 2. Dr. Srisha Rao M. V. had a query about both Theory and Practical being together will be for 2 hours, and its implementation. He then suggested that the practical classes can be offered after the corresponding theoretical portion is covered in the class.
- 3. Dr. Srisha Rao M. V. asked for Data Science as a general subject with emphasis for Automotive/ Aerospace applications. Dr. Srikari S. clarified that one of the Internships to be related to Data Science-based courses. Dr. A. T. Sriram commented that the elective courses to be developed can include one unit on domain-specific applications.
- 4. Dr. Poonkodi Sampath asked for Aircraft Structures course. Dr. Shashank Vadlamani explained that the Aircraft Structural Dynamics and Vibration can take up by students as Elective subjects.
- 5. Dr. Srisha Rao M. V. enquired about Aeromodelling lab. Dr. A. T. Sriram explained that this is covered in Introduction to Aerospace Engineering course. He also explained the marks distribution for the theory and lab components.
- 6. Dr. Srisha Rao M. V. appreciated the inclusion of Space Flight Mechanics and Launch Vehicles and Missiles courses so that it gives a flavour of space engineering.
- 7. It was suggested by the BoS members that the name of the course Low speed Aerodynamics can be changed to Incompressible Aerodynamics.
- 8. Dr. Varunkumar commented that it is good to have Introduction to Automotive Engineering course in the first year itself.
- 9. Mr. V. Hima Kiran Vithal expressed satisfaction regarding Automotive Powertrain Course specification
- 10. Dr. A. T. Sriram enquired with Mr. V. Hima Kiran Vithal about the current developments in the automotive industry. Mr. V. Hima Kiran Vithal replied hydrogen combustion or hydrogen fuel cell is given importance in industry. He also mentioned these can be added in the course contents.
- 11. Mr. V. Hima Kiran Vithal enquired about inclusion of embedded systems. Dr. Srikari S. clarified that they are part of Automotive Electrical or Automotive sensors courses.

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- 12. The BoS members appreciated the inclusion of Control Systems as a Core subject. This course is titled as Automotive Sensors and Controls for B. Tech. Automotive Engineering.
- 13. Mr. V. Hima Kiran Vithal suggested the inclusion of Hydrogen in Automotive engines.
- 14. Dr. Srisha Rao M. V. emphasized that Engineering Materials should have Composites, Advanced Materials, and Smart Materials. He also suggested that Additive Manufacturing can be included.
- 15. Dr. Varunkumar S. sought clarification about the differences in Automotive Noise Vibration and Harshness and Vehicle Dynamics and Handling courses. Mr. S. Umesh explained the differences.
- 16. Dr. Varunkumar S. mentioned that the PS are broadly in place.
- 17. Dr. Srisha Rao M. V. enquired if Heat Transfer is included. Dr. Mahesh Varpe clarified it is partially covered in Thermodynamics course.
- 18. Dr. Srisha Rao M. V. suggested some amount of Basic Electrical Technology like motors can be covered in the Unmanned Aerial Vehicles course.

#### Resolution:

The BoS approved the PS for B.Tech. Aerospace Engineering and B.Tech. Automotive Engineering, and the CS for the first two years for both the programmes.

#### 3) Agenda 3: Discussion of MOOC Courses.

**Document:** List of NPTEL courses

#### Observation/ Remarks made by members:

- The list of possible NPTEL courses that can be taken up by students of B. Tech. 2020 batch in the 7<sup>th</sup> semester for Professional Core Elective or Open Elective was discussed.
- 2. Mr. Hima Kiran Vithal suggested the students can visit <u>www.classcentral.com</u> for looking at the various online courses.

#### Resolution:

The BoS approved the list of 15 NPTEL courses.

#### 4) Agenda 4: Any other points

#### Document:

#### Observation/ Remarks made by members:

 It was proposed to have the entire duration of second year (i.e., 3<sup>rd</sup> & 4<sup>th</sup> semesters) for the M.Tech. programmes, as Internship / Project work to enable students to enrich their industry / experiential learning.

#### Resolution:

BoS approved the proposal.



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#### Vote of Thanks & Adjournment:

There being no further business the Chairperson declared the meeting adjourned by unanimous consent. The meeting ended with the vote of thanks by the Chairperson.

M. Sivapragasam

Chairperson – BoS Department of Automotive and Aeronautical Engineering

Faculty of Engineering and Technology

M. S. Ramaiah University of Applied Sciences

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### Department of Mechanical and Manufacturing Engineering Minutes of the Board of Studies Meeting

Held on Friday, 22-June-2023 in Person / Online Mode

https://teams.microsoft.com/l/meetupjoin/19%3a46074f7e482842b7806d6aac1d28ba71%40thread.tacv2/1687339316433?context=%7b%22Tid%22%3a%22e03 8180b-0021-401f-83a9-a2d45acee0dc%22%2c%22Oid%22%3a%22345fe4b3-8b5a-4576-b57d-b441861a99d4%22%7d

Members Present:	et open dig til der hiller skip av en, ej handelskip med meg geformer meg gipt in har syndemer meg etter. In der opende
Dr. B.S.Dayananda, Associate Prof & Head, MMF, RUAS	Chairperson
Prof. Ashitava Ghosal, Professsor, Department of Mechanical Engineering, IISC, Bengaluru	Member
Dr. C. M. Manjunatha, Chief Scientist and Head, Structural Integrity Division, CSIR-National Aerospace Laboratories, Bangalore	Member
Dr. Vishwas P. R., Lead, Amace Micromatics, Bangalore	Member
Dr Arockia Selvakumar, Professor, Design and Automation Research Group, SMEC, Vellore Institute of Technology, Chennai	Member
Dr. T.N.Srikantha Dath, Professor, MME, RUAS	Member
Dr. N.C.Mahendra Babu, Professor, MME, RUAS	Member
Dr. Suresh R., Professor, MME, RUAS	Member
Dr. Rahul M.Cadambi, Associate Professor, MME, RUAS	Member
Dr. Ananth S. Iyengar, Assistant Professor, MME, RUAS	Member Secretary
eave of Absence:	
Dr. U. Chandrasekhar, CEO, GMSIR Scientific Innovation & Research, Bangalore	Member
Dr. M.C. Murugesh, Associate Professor, MME, RUAS	Member
vited Members:	Symptom 1 or second the passessment of the passes 10 or 10 maps 12
Dr. Niranjana Prabhu, Professor and Head, Department of Chemistry, RUAS	Invitee
Dr. Prem Kumar, Professor and Head, Department of Physics RUAS	Invitee
Dr. Chandan Kumar, Associate Professor and Head, Department of Mathematics, RUAS	Invitee



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#### Call to Order and Quorum:

The meeting was called to order by Dr. B. S. Dayananda, the Chairperson, at 11.00 AM. With sufficient quorum being present, the proceedings of the meeting were commenced by the Chairperson.

#### Welcome and Overview:

The chairperson welcomed all members of the Board of Studies and introduced the External Members. The Agenda and the related files were shared in advance with the external members by email on 15.06.2023. The chairperson presented the agenda and files for the review of programme structure of B. Tech in Mechanical Engineering and B. Tech in Robotics programmes, prepared as per NEP, to the members. The chairperson requested the members to suggest and approve the changes.

Prof. Ashitava Goshal, Dr. C. M. Manjunatha, Dr. Vishwas P. R. provided their comments for as below:

1. B. Tech Programmes being developed as per NEP.

#### Mechanical Engineering programme

- For the first year internship, it is suggested to encourage students to acquire hands on experience in
  - Machining operations
  - o 3D printing
  - Product design in CAD or
  - Register for equivalent online courses on platforms such as Coursera or NPTEL.
- Members recommended exposure to various necessary life skills such as welding, plumbing,
   Carpentry to be included in the course on workshop practice
- Members recommended to retain the course name as Engineering Graphics.
- Suggested to include sustainability, renewable energy in Thermal Engineering course.
- All the external members recommended to include examples on applications related to the specific course along with the fundamentals.
- Members suggested to include a course on Digital manufacturing/Industry 4.0 as a core course instead of including it as a Professional Elective courses.
- To have a relook at the course content of Engineering Mechanics

#### Robotics

- The same points suggested for the B.Tech. Programme in Mechanical Engineering may be followed here. In addition, students may be encouraged to showcase their talents by building Robots for specific applications.
- Members recommended to have a relook at the content of the course on Strength of Materials for Robotics Engineering and incorporate basic concepts in other course.

Minutes of the Meeting of the Board of Studies held on 22-June-2023

Page 2 of 4



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- Panel members suggested to have a relook at the Programme Structure and include a pre-requisite course, if needed, on Data Analytics, before they study a course on Artificial Intelligence.
- External members recommended to look into Robot Dynamics and suggested if it can be clubbed with Control Systems.
- Panel suggested to include mechanics and principles of robots other than manipulators like UAV, MAV and other robotic systems.

#### 2. Review of M. Tech Programme structure.

The Programme structure of all the three existing PG Programmes was submitted. The experts suggested the following.

- More time may be given for internship and dissertation by removing the group project.
- A course on Innovation and Entrepreneurship may be introduced in place of the course on Value Education.
- Considering this opportunity course content of existing courses and addition of new courses, deemed necessary, may be included.

The chairperson acknowledge feedback, comments and suggestions given by the BoS members. He added that the Programme and the Course Structure will be reviewed and the suggestions would be appropriately incorporated,

#### Vote of thanks and Adjournment:

There being no further business, the chairperson declared the meeting adjourned by unanimous consent. The meeting ended with the vote of thanks by the Chairperson.

Dr. Ananth Siyenger

Assistant Professor

Department of Mechanical and Manufacturing

Faculty of Engineering and Technology M S Ramaiah University of Applied Sciences

Bengaluru

Dr. B. S. Dayananda

Associate Professor and Head

Department of Mechanical and Manufacturing

Faculty of Engineering and Technology

M.S. Ramaiah University of Applied Sciences

Bengaluru



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#### 8th BOS - Action Taken Report

Sl.No	Points Discussed	Action Taken		
	B.Tech. in Mecha	nical Engineering		
1	Internship in the first year - Facilitate	Internship at first year level to facilitate		
	hands on experience to students	awareness about and strengthening of skills		
		by including the suggested topics.		
2	Contents of Course on Workshop	It was decided to include contents on		
	Practice to develop and strengthen life	Plumbing, Carpentry, Welding, and similar		
	skills.	skills in the Workshop practice course content		
3	Engineering Graphics	The course is now limited to first angle		
		projection only. Also, it was decided to		
		include demonstration on 2D and 3D		
		modelling in the course content using		
		relevant modelling software		
4	Sustainability aspects in Thermal	The content is already included in the course		
	Engineering	on Renewable Energy Systems, an open		
		elective course.		
5	Inclusion of examples of applications	This is already being followed. However,		
	related to the specific course along	course content will be reviewed and whereve		
	with the fundamentals	necessary, will be included		
6	Inclusion of Course on Digital	Incorporated in the Programme Structure and		
	Manufacturing	will be offered in the third year of the B.Tech.		
		Programme		
7	Engineering Mechanics- Review and	Course was reviewed and modified to cater to		
	Modification of Syllabus	the domain of Mechanical Engineering. The		
		same content will be followed for B.Tech. in		
	Include Mechanics for B.Tech.	Robotics also. Will be renamed as Applied		
	Robotics Programme	Mechanics		
	B.Tech. ir	Robotics		
8	Internship in the first year - Facilitate	To be followed as per details listed for B.Tech.		
	hands on experience to students	in Mechanical Engineering		
9	Relook at the course content of	It was decided to include basic aspects of both		
	Strength of Materials	Material Science and Strength of Materials to		
, M, - Boo -		orient to the B.Tech. Robotics Programme.		
10	Relook at the course structure to	Already incorporated in the programme		
	incorporate pre-requisite course to	structure and course content		
	Artificial Intelligence for Robotics	Company of the control of the contro		
11	Robot Dynamics to Include Controls	Incorporated and the course renamed as		
		Robot Dynamics and Control. Contents will be		
		modified suitably		

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#### **NOTIFICATION**

A meeting of Board of Studies of the Mechanical and Manufacturing Engineering Department, Faculty of Engineering and Technology will be held to address the following agenda

Date: 22.06.2023, Thursday

Time: 11.00 Am

Venue: Board Room, Ramaiah Technology Campus (Peenya).

SI. NO.	Agenda
1	Welcome by Chair
2	Review of programme Structure of B.Tech in Mechanical and Robotics programmes.
3	Review of Course contents of 1st and 2nd year B. Tech in ME and RE programmes as per NEP
4	Any other matters

Programme	B.Tech.: Mechanical Engineering B.Tech.: Robotics M.Tech.: Robotic Engineering	
Department	Department of Mechanical and Manufacturing Engineering	
Faculty	Faculty of Engineering and Technology	

1	Professor Ashitava Ghosal	IISc	Department of Mechanical Engineering, Indian Institute of Science, Bangalore	asitava@iisc.ac.in 08022932956
2	Dr. Arockia Selva Kumar	VIT	Associate Professor, Department of Mechanical Engineering, Vellore Institute of Technology, Chennai	arockia.selvakumar@vit.ac.ii +91 99626 81933
3	Dr. Manjunath C. M.	NAL	Chief Scientist and Head Structural Integrity Divison CSIR-NAL, Bangalore	manjucm@nal.res.in 9663847107

1			Program Director Addwize	
4	Dr. Chandrashekar U.	Wipro	Wipro 3D	u.chandrasekhar@wipro.com
			Bangalore	6374025665
			Business Head	
5	Dr. Vishwas R Puttige,	AMACE	amace Solutions Pvt. Ltd.	vishwas@am-ace.com 9880189822
		0	Bangalore	J0001030&&

Intern	Internal Members					
1	Dr T. N. Srikantha Dath	RUAS	Professor, Department of MME, RUAS	srikanthdath.me.et@msruas. ac.in 9741934576		
2	Dr. N. C. Mahendra Babu	RUAS	Professor, Department of MME, RUAS	mahendrababu.me.et@msrua s.ac.in / 9986006059		
3	Dr. Suresh R	RUAS	Professor, Department of MME, RUAS	suresh.me.et@msruas.ac.in / 9448929160		
4	Dr. Rahul M Cadambi	RUAS	Associated Professor, Department of MME, RUAS	Rahulmc.me.et@msruas.ac.in / 8884871261		
5	Dr. Ananth S. Iyengar	RUAS	Assistant Professor, Department of MME, RUAS	ananth.me.et@msruas.ac.in / 9480343844		

Chairperson BOS

Name and Signature

Date: 15 - 5-27

Department of ME,

FET, RUAS.

Dean - FET



# Department of Mechanical and Manufacturing Engineering **Board of Studies Meeting**

Date: 22.06.2023, Thursday

#### Attendance:

Sl. No.	Names	Designation	Signatures
01	Dr. B S Dayananda	Associate Professor & Head, Department of MME, RUAS	The state of
02	Professor Ashitava Ghosal	Department of Mechanical Engineering, Indian Institute of Science, Bangalore	ONLine
03	Dr. Arockia Selva Kumar	Associate Professor, Department of Mechanical Engineering, Vellore Institute of Technology, Chennai	Juno
04	Dr. Manjunath C. M.	Chief Scientist and Head Structural Integrity Divison CSIR-NAL, Bangalore	Strt 5
05	Dr. Chandrashekar U.	Program Director Addwize Wipro 3D, Bangalore	Absent
06	Dr. Vishwas R Puttige	Business Head amace Solutions Pvt. Ltd. Bangalore	184 900
07	Dr T. N. Srikantha Dath	Professor, Department of MME, RUAS	Mary other
08	Dr. N. C. Mahendra Babu	Professor, Department of MME, RUAS	7.40
09	Dr. Suresh R	Professor, Department of MME, RUAS	forming.
10	Dr.Rahul M Cadambi	Associate Professor, Department of MME, RUAS	C.M. Rald
11	Dr. Ananth S. Iyengar	Assistant Professor, Department of MME, RUAS	S. Andre
12	Dr.S.Chandan Kumar	Associate Professor & Head, Department of Mathematics, RUAS	4. CL 1L
13	Dr.Prem Kumar H B	Associate Professor & Head, Department of Physics, RUAS	8 W 2 1613
14	Dr.T. Niranjana Prabhu	Associate Professor & Head, Department of Chemistry, RUAS	NENS22/4/23

# Ramaiah University of Applied Sciences Faculty of Engineering and Technology

#### Notes for the 29th ACM

Date: 06.07.2023

#### Adoption of National Education Policy (NEP) for B.Tech. Programmes

#### Agenda-1: Review of Programme and Course Specifications of B.Tech. Programmes

Further to the adoption of NEP in other than Engineering Programmes of RUAS, it was decided by the Factulty of Engineering and Technology to follow NEP guidelines for the B.Tech. Programmes offered from the Academic Year 2023-24. It was also committed during the 28<sup>th</sup> ACM held on 7<sup>th</sup> March 2023 that NEP would be adopted for B.Tech. Programmes.

In line with the above, it was discussed during in the respective Department meetings and in principle it was decided to adopt the same.

HoDs of FET decided to review the Programme Structure and decided on the following as per NEP guidelines:

- 1. To have lighter load in the first semester. 16 credits in first semester and 21 credits in the second semester.
- 2. To incorporate Programme specific courses from the first year itself. Details are given below

		Sem	ester -1 - l	Engineerin	g Sciences	Course – 1	
CE	CE Building Materials and Construction Technology		ASE Introduc		Introductio	ntroduction to Aerospace Engineering	
EE Introduction to Electrical Engineering		AE Introduct		Introductio	oduction to Automobile Engineering		
ECE	E Introduction to Electronics Engineering		ME/RE		Introduction to Mechanical Engineering		
			CSE/AIN	/IL/ISE/MC	Introduction to Computer Science and Engineering		
	HILL	Sem	ester -2 -I	Engineerin	g Sciences	Course - 2	
CE/AI	E/ASE	Engineering Mech	nanics	ME/RE		Applied Mechanics	
EE		Introduction to Electronics Engineering		CSE/AIML	/ISE/MC	Introduction to Electrical and Electronics Engineering	
ECE Introduction to E Engineering		lectrical					
			Pre	gramming	Language		
CSE/AIML/ISE/MC		Programming in C		AE/ASE/CI ME/RE	E/ECE/EEE/	Programming in Python	

- 3. To have four common courses in the first semester and six in the second semester.
- 4. Merging of Theory and Laboratory courses.
- 5. In higher semesters, Common courses across Programmes to be offered in the same semester.

Subsequently, the common structure of first year and the specific structure of higher semesters for each of the programmes were presented in the BOS meetings of the respective departments. The course specifications of all the courses listed in the first and the second year were also reviewed.

The structure of the following Programmes and the related course specifications is presented as per details below:

Sl.No	Department	Programme Name		
1.	Automotive and	Aerospace Engineering Automotive Engineering		
2.	Aeronautical Engineering			
3.	Civil Engineering	Civil Engineering		
4.	Computer Science	Computer Science and Engineering		
5.	Engineering	Artificial Engineering and Machine Learning		
6.		Information Science and Engineering		
7.		Mathematics and Computing		
8.	Electrical, Electronics	Electrical and Electronics Engineering		
9.	and Communication Engineering	Electronics and Communication Engineering		
10.	Mechanical and	Mechanical Engineering		
11.	Manufacturing Engineering	Robotics		

The reviewed Programme structure and the course specifications are submitted to the consideration of the Academic Council for review and approval.

#### Agenda-2: Review of Programme Specifications of M.Tech. Programmes

The Curriculum of all the PG programmes were reviewed. It was noted that the programme structure needs modification as per NEP guidelines. The modified programme structure of the Programmes offered in each department was presented in the respective BoS. The revised programme structure for the Academic Year 2023-24 of all PG programmes is attached.

As per the discussions, theory (Core and Elective) courses would be offered during first year. In addition, the following two non-core courses are included in the first year

- 1. Innovation and Entrepreneurship in place of Value Education
- 2. Research methodology and IPR, as earlier

Presently the courses in the second year of study are the following:

- 1. Internship (duration of five weeks)
- 2. Group Project (duration of eight weeks)
- 3. Dissertation ( Duration eighteen weeks)

To facilitate longer stay in the industry that could convert to a placement after the dissertation, it is proposed that the courses that come under the category of Experiential Learning, namely,

- (i) Internship
- (ii) Project Work

Would be introduced in the second year. This is in line with the course structure of other reputed universities.

The structure of the following PG Programmes is presented as per details below:

SI.No	Department	Programme Name		
1.	Automotive and	Aerospace Engineering Automotive Engineering		
2.	Aeronautical Engineering			
3.	Civil Engineering	Structural Engineering		
4.		Construction Engineering and Management		
5.		Transportation Engineering		
6.		Environmental Engineering		
7.	Computer Science	Artificial Engineering and Machine Learning		
8.	Engineering	Data Science and Engineering		
9.	Electrical, Electronics and	Power Electronics and Drives		
10.	Communication Engineering	VLSI and Nano technology		
11.	Mechanical and	Robotic Engineering		
12.	Manufacturing Engineering	Advanced Machinery Design		
13.		Manufacturing Technologies and Engineering Management		

The reviewed PG Programme structure of all programmes are submitted to the consideration of the Academic Council for review and approval.

#### Agenda-3: Approval of Online Courses offered by MOOC/ SWAYAM/ NPTEL to FET students

Several programme specific courses were identified to facilitate students to register for the same in lieu of Open Electives and Professional Core Electives. A student is permitted to register for a maximum of 12 credits. The courses identified under each programme is submitted as an annexure.

The identified courses are submitted to the consideration of the Academic Council for review and approval.

#### Minutes of the 11th Board of Studies Meeting Held on 09th March 2024, at 11.00 AM, at the Board Room RTC

# Department of Electrical engineering Faculty of Engineering and Technology, MS Ramaiah University of Applied Sciences

#### Members Invited:

Name	Designation		
Dr. S. Nagaraja Rao	Associate Head - EE		
Dr. Sachin S	Internal Member		
Or. B K Swathi Prasad	Internal Member		
Dr. D. Punithavathi	Internal Member		
Dr. Pallaviram Sure	Internal Member		
Dr. T. Christy Bobby	Internal Member		
Dr. Ugra Mohan Roy	Internal Member		
Dr. B R Karthikeyan	Internal Member		
Mr. K. Padmanabhan	External Member (Joined Online)		
Dr. K Manickavasagam	External Member		
Dr. Suresh Babu	External Member (Joined Online)		
Mr. Prajwal K T	Internal Member, Member Secretary		

Leave of Absence: NIL

#### Call to Order and Quorum:

The meeting was called to order by Dr. S Nagaraja Rao, Chairperson at 11.00 am. With the sufficient quorum being present the proceedings of the meeting were commenced.

Agenda 1 : Welcome and Overview

Mr. Prajwal K T welcomed the members of Board of Studies meeting. He briefed the BoS members about the significance of NEP implementation and revisions being proposed in 2023 programmes being introduced and also the need for revisions being made in the existing B.Tech and M.Tech programmes being presented in the Board meeting for approval.

- Agenda 2 : Apologies for absence
- Agenda 3: Presentation of Programme structure for 8. Tech in Electrical and Electronics Engineering (Semester 3 to Semester 8).

**Documents:** Programme Structure for B. Tech in EEE and revision are circulated to all the BOS members

Member secretary addressed the following salient features of revised programme structure:

- NEP implementation from B. Tech EEE 2023 batch onwards
- Internship opportunities at the end of every even semester (UG)
- Theory and practical component (Lab experiments) of few courses:

Analog and Digital Electronics, Microprocessor & Controllers, High Voltage Engineering and Laboratory

- Employability enhancement course 1 and 2 for placements of students (common for all B. Tech programmes)
- Engineering Economics course is renamed as Estimation and Costing for Electrical Engineers.
- Electric Power Generation is included in the 5th sem as the mandatory course instead of professional core elective in place of Electrical machines-2.
- Special Purpose Electrical Machines course is introduced as part of professional core elective.
- Open Elective-2 i.e., Electrical Devices and Applications is added (Its. is common across university)

#### Observation/ Remarks made by BoS members:

Dr. K Manickavasagam (External BoS member) raised a query on merging of two electrical machines courses. He suggested that the lab component may also be modified and need to take care of the delivery by the course leader as it seems to be a vast course after merging.

Dr. Padmanaban K (external member) appreciated the variety of core elective choices available to students.

#### Resolution:

The board of studies approved the changes for the curriculum and Course Specifications need to be framed appropriately.

#### Vote of Thanks & Adjournment:

There being no further business the Chairperson declared the meeting adjourned by unanimous consent. The meeting ended with the vote of thanks by the member secretary.

7.7

Dr. S Nagaraja Rao
Associate Head – Department of EE
Faculty of Engineering and Technology
MS Ramaiah University of Applied Sciences



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# Minutes of the 10th Board of Studies Meeting Held on 09th December 2023, at 11.00 AM, at the Board Room RTC

# Department of Electrical engineering Faculty of Engineering and Technology, MS Ramaiah University of Applied Sciences

#### Members Invited:

Name			
Dr. S. Malathi	Chairperson - ECE		
Prof. Govind R. Kadambi	Internal Member		
Dr. K. Manickavasagam	Internal Member		
Dr. D. Punithavathi	Invited Member		
Dr. Pallaviram Sure	Invited Member		
Dr. T. Christy Bobby	Internal Member		
Dr. Ugra Mohan Roy	Internal Member		
Dr. S. Nagaraja Rao	Associate Head - EE		
Dr. B R Karthikeyan	Internal Member, Member Secretary		
Prof. T. Srinivas	External Member		
Dr. Gurunath Gurrala	External Member		
Dr Prithvi Sekhar Pagala	External Member		
Dr. K Mohanvelu	External Member (Joined Online)		
Mr. K. Padmanabhan	External Member (Joined Online)		
Mr. Velkumar	Invited Member (Joined Online)		
Dr. Suresh Babu	Invited Member (Joined Online)		
Mr. Prajwal K T	Invited Member		
Mr. Divya Kiran	Invited Member		

#### MS Team Link:

https://teams.microsoft.com/l/meetup-

join/19%3ameeting NmE3Mjc2OGYtOWM5YS00Mzg5LWI4NmUtNjQ3YzUzYzQyNWM2%40thr ead.v2/0?context=%7b%22Tid%22%3a%22e038180b-0021-401f-83a9-a2d45acee0dc%22%2c%22Oid%22%3a%22db4f6a21-bf7d-4073-9bd2-b0b2eaedf66e%22%7d

Leave of Absence: Prof. T. Srinivas, Dr. Gurunath Gurrala, Dr. Punithavathi D, Dr. K. Manickavasagam, Dr Prithvi Sekhar Pagala

#### Call to Order and Quorum:

The meeting was called to order by Prof. S. Malathi, Chairperson at 11.00 am. With the sufficient quorum being present the proceedings of the meeting were commenced.

Agenda 1 : Welcome and Overview

Dr. B. R. Karthikeyan welcomed the members of Board of Studies meeting. He briefed the BoS members about the significance of NEP implementation and revisions being made / proposed in 2023 programmes being introduced and also the need for revisions being made in the existing B. Tech and M. Tech programmes being presented in the Board meeting for approval.

#### Agenda 2 : Apologies for absence

• Agenda 3: Presentation of Programme structure for B. Tech in Electrical and Electronics Engineering, M.Tech. in Power Electronics and Drives and Various Minors / Honours as applicable.

**Documents:** Programme Structure for B. Tech in EEE, B.Tech Minors and M.Tech and revision are circulated to all the BOS members on 05-December-2023 through email.

Member secretary addressed the following salient features of revised programme structure:

- NEP implementation from B. Tech EEE 2023 batch onwards
- Internship opportunities at the end of every even semester (UG)
- Theory and practical component (Lab experiments) of few courses:

Analog and Digital Electronics, Microprocessor & Controllers, High Voltage Engineering and Laboratory

- Employability enhancement course 1 and 2 for placements of students (common for all B. Tech programmes)
- Engineering Economics course as common course for all B.Tech programmes, in place of Cost Estimation and Engineering Economics course earlier
- Streamwise professional core elective courses.
- 8th semester: Internship / Project work enabling students to enrich their industry / experiential learning
- M.Tech. programme: 3<sup>rd</sup> sem Internship / Project Phase 1 and 4<sup>th</sup> sem Internship / Project Phase 2 & Publication enabling students to enrich their industry / experiential learning
- B.Tech Minor/Hons. Programme as choice available to develop domain specialization

Observation/ Remarks made by BoS members:

**Dr. K Mohanvelu** (External BoS member) raised a query on duration of the internship mentioned in odd semester. It is clarified that, the internship are carried during semester break between even and odd semester to bring industrial exposure to student. These internship slots are common across all B.Tech. programmes.

**Dr. Suresh Babu** (external member) appreciated the variety of core elective choices available to students. He suggested that the course related to smart grid technologies to be introduced in the elective courses. He also mentioned to check the feasibility of using MI Power software for the labs in Power system area.

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• Agenda 4: BOS Member-secretary addressed the members regarding the list of Professional Core elective proposed to offer for 6th and 7th in B. Tech EEE Programme. The list has been circulated to all the BOS members for their perusal. Members questioned about the stream of professional elective courses listed and choices available for the students, however members clarified that, students are advised to take up the course in stream wise to develop specialization, on the other hand the option of switch to other streams is open to students.

#### Resolution:

Board of Studies approved the Course structure for B.Tech in EEE, M.Tech in PED with suggestions as recommended.

- Agenda 5: The Dept. of EE to offer B.Tech (Hons.) as choice for students. Additional 18 to 20 credits are warranted, for which the Hons. Courses are proposed to deliver in semester 4, 5, 6 and 7.
  - For EEE Students
    - B.Tech. (Hons.) in Electric Vehicle Technology

Students of other department (other than host department) shall take these courses as MINOR specialization. Member questioned the whether it will named in degree? It is clarified that, the degree will be awarded as B.Tech in Electrical and Electronics Engineering with Hons, in Electric Vehicle Technology. The students of EEE can also choose Minor programmes of ECE Department.

#### Resolution:

The board of studies approved the Minor/Hons. Programme and curriculum should be framed appropriately.

#### Vote of Thanks & Adjournment:

There being no further business the Chairperson declared the meeting adjourned by unanimous consent. The meeting ended with the vote of thanks by the member secretary.

Dr. S Nagaraja Rao
Associate Head – Department of EE
Faculty of Engineering and Technology
MS Ramajah University of Applied Sciences

Dept. of Electrical Engineering Faculty of Engineering & Technology M.S. Ramalah University of Applied Sciences # 470-P, Peenya Industrial Area, 4th Phase, Bangalore - 560 058. Ph: 080-49065555



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### Minutes of the 9th Board of Studies Meeting Held on 4.7.22, at 10.00 AM, at the Board room, RUAS, RTC campus

Faculty of Engineering and Technology, Department of Civil Engineering, MS Ramaiah University of Applied Sciences.

Name	The state of the control of the cont
Dr. Nayana N Patil	Chairperson
Dr. Harshad Ramesh Parate	Secretary
Dr. Jyant Kumar	External Member(Online)
Prof Ashish Verma	External Member
Dr. Yogish C.B	External Member
Dr. S D Anitha Kumari	Internal Member
Dr. Harshad Ramesh Parate	Internal Member
Dr. S. P. Sreenivas Padala	Internal Member
Mr. Chetan Gowda R K	Invited Member
Mr. Yateen Lokesh	Invited Member
Mr. Nikhil T R	Invited Member
Mr. Manish Haveri	Invited Member
Mr. Akshaya Kumar Hanagodinath	Invited Member
Mr. Naveen Kumar H S	Invited Member
Ms. Sushma R	Invited Member

#### Leave of Absence:

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Dr. Nagesh D.	External Member
Dr. Pratima Singh	External Member

### Call to Order and Quorum:

The meeting was called to order by Dr. Nayana N Patil, Chairperson at 10,000 are. With the sufficient quorum being present the proceedings of the meeting were commenced.

### 1) Agenda 1 : Welcome and Overview

Prof. Nayana N Patil welcomed the members of Board of Studies Meeting. She briefed the Members about the significance of the revisions being made/ proposed in programmes being introduced and also the significance and need for revisions being made in the existing programmes being presented in the Board meeting for approval.

### 2) Agenda 2 : Apologise for absence

Dr. Nagesh could not attend the meeting as he was in USA. He requested other members to proceed with the decisions taken in the meeting.

Dr. Pratima Singh was out of station and could not attend the meeting. She also requested members to proceed with the decisions taken in the meeting.



Street HEL Road MSR Anger Bangulor 500 054 Agenda 3: Presentation of Programme Specification, and Course Specification of B.Tech Civil Engineering 2019 - (Presenter - Dr. Harshad R Parate)

The Programme and the course specification documents were presented to the members explaining every sub-section. The course outcomes, programme outcomes, programme educational objectives, the programme specific outcomes and their mapping were shown. Further, the course specification document was presented and the content of the course specifications indicating the individual course mapping, the delivery and assessment plan and the course resources were explained.

**Document:** Programme Specification and Course Specification of B.Tech Civil Engineering 2019.

#### Observation/ Remarks made by member:

As per AICTE requirements, total credits of B.Tech programme should be more than 160 credits. However, the existing programme has 159 credits. Prof. Ashish Verma suggested to increase credits with proper justification. The members approved the revised programme and course specifications of B.Tech Civil Engineering 2019.

#### Resolution:

In revised 2019 B.Tech PS and CS, total number of credits increased from 159 to 163. In  $8^{th}$  semester, two credits each increased for project work -1 and 2 i.e., for Project work -1, credits are increased from 6 to 8 and for project work 2-8 to 10 credits. For project work -1, problem solving in internship or mini project component will be added of 2 credits. For project work-2, the addition of 2 credits will be for paper publication.

4) Agenda 4: Presentation of Programme Specification, and Course Specification of B.Tech Civil Engineering 2021 - (Presenter- Dr. Harshad R Parate)

The Programme and the course specification documents were presented to the members explaining every sub section. The course outcomes, programme outcomes, programme educational objectives, the programme specific outcomes and their mapping were shown. Further, the course specification document was presented and the content of the course specifications indicating the individual course mapping, the delivery and assessment plan and the course resources were explained.

**Document:** Programme Specification, and Course Specification of B. Fach Civil Engineering 2021.

#### Observation/ Remarks made by member:

Specifications are revised as per NAAC requirements. Prof. Astron Verma and Dr. Yogish suggested to look into implementation of NEP 2020. The major changes in the programme and course specifications are presented as follows:



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- Objectives and graduate attributes are added which are common for all engineering programmes.
- 1º semester courses are presented. Total credits are 20. Laboratory courses are combined with theory courses. Dr. Yogish suggested to include method of joints and sections in Engineering Mechanics course. As Engg Mechanics is being handled for all branches, Dr. Nayana and Dr. Anitha said it is difficult for other branches.
- 2 semester courses are presented. Total credits are 21.
- 3" semester courses are presented. Total credits are 27. Prof. Jyant suggested to consider same faculty for survey practice and Engineering survey laboratory. Environmental studies course of 2 credits is added in 3<sup>rd</sup> semester.
- 4<sup>th</sup> semester courses are presented. Total credits are 23. Prof. Ashish Verma suggested to increase more number of credits in this semester and reduce number of credits on subsequent semesters.
- 5<sup>1H</sup> Semester courses are presented. Total credits are 24. Entrepreneurship development course is moved from 6<sup>th</sup> to 5<sup>th</sup> semester. Prof. Jyant suggested to assess this course through quiz or presentation. Prof. Ashish Verma recommend to add Traffic survey work in Extensive Survey Camp project. Also, advanced survey methods such as drone surveying for 3D terrain mapping can be included. He also suggested that the course seminar should be focused more on reviewing journal papers.
- Dr. Yogish C B suggested to avoid teaching Structural analysis -2 and Design of RCC structures in parallel or in same semester. Design of RCC structures should precede SA-2.
- 6<sup>st</sup> semester courses are presented. Total credits are 23. The list of professional elective course specifications are shown.
- 7<sup>th</sup> semester courses are presented. Total credits are 17. For seminar course, Prof.
  Ashish Verma suggested to finalize only those topics where chance of plagirisim is
  very less. Seminar topics can also include critical review of research papers and
  analytical problem solving using software. He further recommended to introduce
  programming language related courses such as python in early semesters.
- Prof. Jyant suggested to incorporate Project work-2 or internship in between 6<sup>th</sup> and 7<sup>th</sup> semester to avoid clashing with professional elective courses in 7<sup>th</sup> semester.
   Students can feel difficult to manage elective courses and internship in same semester. Also, internships in other cities or states cannot be done.
- 8th semester courses are presented. Total credits are 12. Prof. Ashish Verma suggested to introduce new courses Smart Cities and Pavement rehabilitation course as professional elective courses as Infrastructure Asset Management is a major issue in our country. From sustainability point of view, he suggested to teach green construction or sustainability practices as core course to the UG students. Geo-informatics courses can also be covered for UG/B.Tech students.
- Further, Prof. Ashish Verma suggested to introduce communication courses as 1 credit course or include in existing courses of higher semesters. These courses can



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enhance writing, presentation, and talking skills of students. He strongly recommended that concern faculty should make sure that all students go through

entire programme specifications especially mapping of courses ILOs with PEOs and PSOs. Students should also expose to reading journal papers. Library should have subscription to the Civil Engineering journals.

- Prof Ashish Verma suggested to recruit or invite Industry people as a "Professors
  of Practice" position for teaching existing construction practices for UG students.
  IITs and NITs also in the process of recruiting these positions.
- Prof. Ashish Verma strongly recommended to avoid referring or sharing class notes to both UG and PG students and encourage students to refer books for better understanding of subject.
- In Transportation Engineering-1 course, Traffic Engineering book by Chakraborty
  can be referred in course specifications. In Traffic engineering course (PCE-1),
  traffic flow models can be introduced. In Pavement materials course specifications
  document (PCE-2), refer specific IRC codes. The implementation of 4 stage models
  can be added in urban planning course (PCE1). Topics such as scenario and
  forecasting analysis can be covered in this course.
- Prof. Ashish Verma has recommended the few books for transportation Engineering courses which has to be updated in course specifications document.

#### Resolution:

The external members approved the programme and course specifications of B.Tech in Civil Engineering 2021. The curriculum is revised as per NAAC standards. The above mentioned suggestions will be incorporated in next academic year by in consultation with higher authorities of university.

5) Agenda 5: Presentation of Programme Specification, and Course Specification of M.Tech Construction Engineering and Management Programme 2021 of Civil Engineering - (Presenter - Dr. Harshad R Parate)

The Programme and the course specification documents were presented to the members explaining every sub section. The course outcomes, programme outcomes, programme educational objectives, the programme specific outcomes and their mapping were shown. Further, the course specification document was presented and the content of the course specifications indicating the individual course mapping, the delivery and assessment plan and the course resources were explained.



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**Document:** Programme Specification, and Course Specification of MTech Programme – Construction Engineering and Management 2021.

#### Observation/ Remarks made by member:

- Prof Ashish Verma and Dr. Yogish C B mentioned that the duration of internship is very less and stressed importance of Internship.
- In value education course, the topics related to professional ethics should be covered. For instance, on-site requirement analysis which is conducted by construction engineers follows bottom to top communication (avoiding top to bottom decision making which is unrealistic from project performance point of view).
- In 3<sup>rd</sup> Semester, zero credits are given for Dissertation phase − 1. This course should be assessed or can be removed from programme specifications.
- Prof Ashish Verma recommended to include Operation Research and Data Science as core course for all M.Tech Programmes.
- For M.Tech- Construction Engineering and Management programme, Dr S P Sreenivas Padala is handling four courses (two are shared) in one semester and one course in 2<sup>nd</sup> semester. In addition, he also handling one more course in B.Tech 6<sup>th</sup> semester along with odd semester. He is overloaded in odd semester.

#### Resolution:

The external members has approved the programme and course specifications of M.Tech in Construction Engineering and Management 2021 programme. The above mentioned suggestions will be incorporated in next academic year by consulting with higher authorities of our university.

To balance the teaching workload of Dr. S.P.Sreenivas Padala, the chairperson has decided to swap one course from  $1^{\rm st}$  and  $2^{\rm nd}$  semester of M.Tech Construction Engineering and Management after discussing with the concerned faculties.

Details are given below:

Current PS of M.Tech CEM			Faculty assigned
Semester	Course code and Title Credits		
1	19CMC502A- Design of Form Work and Pre-Cast structures	5	Mr. Naveen Kumar H S and Dr S P Sreenivas Padala
2	19CMC512A - Resource Management in Civil Construction	4	Mr. Akshayakumar V H
Revised I	S of M.Tech CEM	Faculty assigned	
Semester   Course code and Title   C		Credits	
	19CMC512A - Resource Management in Civil Construction	4	Mr. Akshayakumar V H
2	19CMC502A- Design of Form Work and Pre-Cast structures	5	Mr. Naveen Kumar H S and Dr S P Sreenivas Padala

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6) Agenda 6: Presentation of Programme Specification, and Course Specification of M.Tech Structural Engineering Programme 2021 of Civil Engineering - (Presenter - Dr. Ha shad R Parate)

The Programme and the course specification documents were presented to the members explaining every sub section. The course outcomes, programme outcomes, programme educational objectives, the programme specific outcomes and their mapping were should Further, the course specification document was presented and the content of the course specifications indicating the individual course mapping, the delivery and assessment plan and the course resources were explained.

**Document:** Programme Specification, and Course Specification of M.Tech Programme = Structural Engineering 2021.

# Observation/ Remarks made by member:

- Prof Ashish Verma and Dr. Yogish C B mentioned that the duration of internship is very less. However the concept of Group Project was appreciated.
- In value education course, the topics related to professional ethics should be covered. For instance, on-site requirement analysis which is conducted by construction engineers follows bottom to top communication (avoiding top to bottom decision making which is unrealistic from project performance point of
- In  $3^{rd}$  Semester, zero credits are given for Dissertation phase -1. This course should be assessed or can be removed from programme specifications.

#### Resolution:

The external members has approved the programme and course specifications of M.Tech Structural Engineering. The above mentioned suggestions will be incorporated in next academic year by consulting with higher authorities of our university...

7) Agenda 7: Presentation of Programme Specification, and Course Specification of M.Tech Transportation Engineering and Management Programme 2021 of Civil Engineering -(Presenter - Mr. Yateen Lokesh)

The Programme and the course specification documents were presented to the members explaining every sub section. The course outcomes, programme outcomes, programme educational objectives, the programme specific outcomes and their mapping were shown. Further, the course specification document was presented and the content of the course specifications indicating the individual course mapping, the delivery and assessment plan and the course resources were explained.



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**Document:** Programme Specification, and Course Specification of Mtech Programme – Transportation Engineering and Management 2021.

# Observation/ Remarks made by member:

Prof Ashish Verma and Dr. Yogish C B mentioned that the duration of internship is very less.

 In value education course, the topics related to professional ethics should be covered. For instance, on-site requirement analysis which is conducted by construction engineers follows bottom to top communication (avoiding top to bottom decision making which is unrealistic from project performance point of view).

 In 3<sup>rd</sup> Semester, zero credits are given for Dissertation phase – 1. This course should be assessed or can be removed from programme specifications.

 Prof Ashish Verma recommended to include Operation Research and Data Science as core course for all M.Tech Programmes. . Further, he also suggested to split pavement engineering course into two courses (rigid and flexible payment). Intelligent Transportation system (ITS) and Airport planning course can be considered as elective course.

## Resolution:

The external members has approved the programme and course specifications of M.Tech. Transportation Engineering and Management. The above mentioned suggestions will be incorporated in next academic year by consulting with higher authorities of our university.

8) **Agenda 8:** Presentation of Programme Specification, and Course Specification of M.Tech Environmental Engineering and Management Programme 2021 of Civil Engineering - (Presenter – Ms. Sushma R.)

The Programme and the course specification documents were presented to the members explaining every sub section. The course outcomes, programme outcomes, programme educational objectives, the programme specific outcomes and their mapping were shown. Further, the course specification document was presented and the content of the course specifications indicating the individual course mapping, the delivery and assessment plan and the course resources were explained.

**Document:** Programme Specification, and Course Specification of Mtech Programme – Environmental Engineering and Management 2021.

# Observation/ Remarks made by member:



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- Prof Ashish Verma and Dr. Yogish C B mentioned that the duration of internship is very less.
- In value education course, the topics related to professional ethics should be covered. For instance, on-site requirement analysis which is conducted by construction engineers follows bettom to top communication (avoiding top to bottom decision making which is unrealistic from project performance point of view).
- In 3<sup>rd</sup> Semester, zero credits are given for Dissertation phase 1. This course should be assessed or can be removed from programme specifications.
- Prof Ashish Verma recommended to include Data Science as core course for all M.Tech Programmes. He also suggested to include courses related to renewable energy.

### Resolution:

The external members has approved the programme and course specifications of M.Tech Environmental Engineering and Management. The above mentioned suggestions will be incorporated in next academic year by consulting with higher authorities of our university.

9) **Agenda 9:** Presentation of Programme Specification, and Course Specification of Ph.D Programme 2021 of Civil Engineering - (Presenter - Dr. Harshad R Parate)

The Programme and the course specification documents were presented to the members explaining every sub-section. The course outcomes, programme outcomes, programme educational objectives, the programme specific outcomes and their mapping were shown. Further, the course specification document was presented and the content of the course specifications indicating the individual course mapping, the delivery and assessment plan and the course resources were explained.

**Document:** Programme Specification, and Course Specification of PhD Civil Engineering 2021.

### Observation/ Remarks made by member:

The programme and course specifications of PhD in Civil Engineering is presented. For PhD admissions, external members suggested to advertise department wise PhD topics in various social media platforms. Ph.D Brochures or flyers can be prepared for Civil Department.



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The external members approved the programme and course specifications of PhD in Civil Engineering programme. The suggestions given for PhD admissions will be considered in next academic year by consulting with our admission team.

Board of Studies approved the documents of programme and course specifications of B.Tech in Civil Engineering and for all four M.Tech programmes with suggestions as recommended.

## Vote of Thanks & Adjournment:

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There being no further business the Chairperson declared the meeting adjourned by unanimous consent. The meeting ended with the vote of thanks by the Chairperson.

Prof. Nayana N Patil
Chairperson,
Dept. of Civil Engg,
Faculty of Engg and Technology,
MS Ramaiah University of Applied Sciences



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REF: RUAS/FET/CSE/BOS-MOM/2023-24

# Minutes of the Board of Studies Meeting

Date: 24th June 2023

Time: 02:00 PM to 05:00 PM

Venue: B-306 Discussion Room, RTC

# **Department of Computer Science and Engineering Faculty of Engineering and Technology** M. S. Ramaiah University of Applied Sciences

#### **Members Present**

Dr Rinki Sharma	Chairperson	
Prof. N. D. Gangadhar	Internal Member	
Dr. C. Narendra Babu	Internal Member	
Dr. T. P Pushphavathi	Internal Member	
Dr. Thompson S.	Internal Member	
Dr. B. S. Divya	Internal Member	
Dr. Jyothi A. P.	Internal Member	
Dr. Nayana B R	Invited Internal Member	
Prof. Ashitava Ghosal	External Member	
Prof. P. V. R. Murthy	External Member	

## Leave of Absence

Dr. P. Balamuralidhar	External Member
Prof. Shishir N. Y. Kolathaya	External Member
Dr. Murali Krishna	External Member

### Meeting Link:

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a2d45acee0dc%22%2c%22Oid%22%3a%22860767b0-ebd1-42d9-9d7c-1

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Faculty of Engineering & Technology

Department of Computer Science & Engg.

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## Call to Order and Quorum

The meeting was called to order by Dr. Rinki Sharma (Chairperson) at 02.00 PM. With sufficient quorum being present, the proceedings of the meeting were commenced.

## 1) Agenda 1: Welcome and Overview

Dr. Rinki Sharma welcomed the members of Board of Studies to the meeting. She briefed the Members about the significance and need for revisions being made in the existing B.Tech and M. Tech programmes, being presented in the BoS meeting for approval. The new B.Tech program structure is NEP based and is being proposed to be implemented from 2023 batch.

## 2) Agenda 2: Apologies for Absence

Apologies for the absence were received from Dr. P. Balamuralidhar due to work commitments.

# 3) Agenda 3: Review of Programme Structures of B. Tech. Programmes

- a. B. Tech. in Computer Science and Engineering (CSE)
- b. B. Tech. in Information Science and Engineering (ISE)
- c. B. Tech. in Artificial Intelligence and Machine Learning (AIML)
- d. B. Tech. in Mathematics and Computing (MC)

**Documents:** Program Structure (PS) documents of the four programmes

## Observations/Remarks made by the members

- 1. The Program Structure documents of the four B. Tech. programs framed as per NEP guidelines were presented
- 2. It was highlighted that the Program Structure remains identical for all programs in the first year and that the CSE and ISE Programmes are identical up to the second year whereas the AIML and MC Programmes have branch-specific courses beginning from the second year
- 3. Prof. PVR Murthy suggested that a brochure highlighting the differences between the four programmes and specialization be produced for aid to prospective students.
- 4. He was informed that these details are available already, and can be provided as a brochure
- 5. It was brought to the notice of the members that the laboratory courses of all the years, in all the Programmes have been merged into their respective theory courses, in line with the University Guidelines as well as the best practice across the globe. This is expected to facilitate a unified experience of the taught and experiential learning components of the courses
- 6. The agenda items 3.1 3.5 were presented to the BoS members for consideration

**Resolution:** A brochure bringing out the programme-specific courses and the specializations Should be propaled

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# Agenda 3.1: Proposal to introduce new courses in line with the NEP guidelines

- 7. The following new courses are proposed to be introduced in all four B. Tech. programmes:
  - a. Programming in C (2<sup>nd</sup> Semester)
  - b. Kannada Kali/Kannada Manasu (2<sup>nd</sup> Semester)
  - c. Essence of Indian Knowledge System (Value Based Course) (3<sup>rd</sup> Semester)
  - d. Three Internships (during the Summers following  $2^{nd}$ ,  $4^{th}$  and  $6^{th}$  Semesters) to enhance the skill-based and experiential learning of the students

# Observations/Remarks made by the members

8. It was unanimously voiced by the members that the proposed new courses are a good addition to the Programmes

Resolution: It is resolved that the proposed new courses and their specifications may be presented before the Academic Council in the next Academic Council Meeting (ACM) for its approval

Agenda 3.2: Proposal to introduce a new course titled System Architecture and Programming common to all the four B. Tech. Programmes which is a revised version of an existing course titled Microprocessor Architecture and Programming

**Document:** Course Specification of the proposed System Architecture and Programming course

9. A new course System Architecture and Programming is proposed for replacing the Microprocessor Architecture and Programming course. The new course to include coverage of the multicore processors and Graphical Processing Units (GPUs) reflecting their extensive use in general-purpose computing. The new title is proposed to better reflect the technological trajectory of the computing units beyond the traditional architectures

# Observations/Remarks made by the members

10. Upon analyzing the Course Specifications of the proposed course, members of the board have unanimously agreed that this is a development in the correct direction

Resolution: It is resolved that the proposed new course may be included in the Programme Structures of all the four B. Tech. Programmes to be presented before the Academic Council in the next Academic Council Meeting (ACM) for its approval

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# Agenda 3.3: Proposal to introduce Probability and Statistics course as a new common core course for all the four B. Tech. Programmes and Data Mining course for B. Tech. CSE, ISE and MC Programmes

- 11. Keeping up with the heightened need for developing the students' proficiency in AI, ML and Data Science domains, the foundational course Probability and Statistics is made a core course for the B. Tech CSE, ISE and AIML Programmes. For B. Tech MC Programme this course is retained
- 12. In the same spirit, the techniques and application course Data Mining ig proposed to be made a core course for the B. Tech CSE, ISE and MC Programmes. For B. Tech AIML students, Data Mining topics covered in other ML core courses and hence not proposed to be included
- 13. Dr. Narendra Babu pointed out that Database Systems course may be included in B. Tech. AIML Programme as a pre-requisite for Data Mining and related courses

## Observations/Remarks made by the members

14. Members of the Board appreciated the proposal for the addition of a greater focus on AI, ML and Data Science education of students from B. Tech CSE, ISE and MC Programmes

### Resolution:

- 15. The Database Systems course would be introduced as a core course in the fourth semester for B. Tech AIML Programme in line with the B. Tech CSE, ISE and MC Programmes
- 16. It is resolved that Probability and Statistics, Data Mining and Database Systems core courses be included in the Programme Structures of the B. Tech. Programmes as appropriate and be presented before the Academic Council in the next Academic Council Meeting (ACM) for its approval

Agenda 3.4: Proposal to unify Mathematics for Machine Learning-1 and Mathematics for Machine Learning-2 courses into a new course Mathematics for Machine Learning and proposal to use the latter in conjunction with the Probability of Statistics course to replace Engineering Mathematics-3 for B. Tech. AIML **Programme** 

**Document:** Course Specification of the proposed new Mathematics for Machine Learning course

17. Based on a thorough scrutiny of the outcomes and content of the Mathematics for Machine Learning-1 and Mathematics and Machine Learning-2 courses into a new course Mathematics for Machine Learning and in keeping with the proposal to include Probability

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- 18. and Statistics as a core course, it is proposed that the former two courses can be combined to avoid repetition.
- 19. The proposed merged Mathematics for Machine Learning course along with the Probability and Statistics course is proposed to replace the existing Engineering Mathematics-3 course during the 3<sup>rd</sup> Semester of B. Tech. AIML Programme
- 20. With these modifications, Engineering Mathematics-1 and Engineering Mathematics-2, are common to all the four B. Tech. Programmes whereas Engineering Mathematics-3 for AIML and Engineering Mathematics-3 and Engineering Mathematics-4, respectively for AIML and MC Programmes, are replaced with a combination of customized mathematics courses relevant for each of the disciplines

# Observations/Remarks made by the members

- 21. The members of the Board have unanimously agreed to both proposals
- 22. Prof. Ghoshal suggested that the course outcomes and contents of Engineering Mathematics-1, Engineering Mathematics-2, Engineering Mathematics-3 and Engineering Mathematics-4 may be restructured to better suit the requirements of all the four B. Tech. Programmes

## Resolution:

- 23. It was resolved that the proposed modifications may be presented before the Academic Council in the next Academic Council Meeting (ACM) for its approval
- 24. It was also resolved that Prof. Ghoshal's suggestion be taken up with the Deans of the Faculties of Engineering and Technology, and Mathematics and Physical Sciences

# Agenda 3.5: Review of Professional Core Electives for the four B. Tech. Programmes

**Documents:** Proposed Programme Specifications for the four B. Tech. Programmes

- 25. The proposed modifications to the listing and sequencing of the Professional Core Electives (PCEs) for each of the four B. Tech. Programmes was presented to the BoS members
- 26. It was brought to the notice of the members that a new stream of PCEs, namely Cyber Security, has been added for all four B. Tech. Programmes consisting of the following courses:
  - a. Principles and Practice of Cryptography
  - b. Information Security and Protection
  - c. Number Theory and Elliptic Curve Cryptography

27 Prof. Murthy suggested that Deep Learning and Computer Vision courses may be interchanged in their order of introduction so that Artificial Intelligence and Deep Learning courses are not in the same semester

Head

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- 28. Prof. Murthy also suggested that Reinforcement Learning may be added as a PCE course for B. Tech. AIML Programme
- 29. Prof. Ghoshal suggested that in the AI in Healthcare stream of PCEs, a course on biomedical image processing may be introduced
- 30. Prof. Gangadhar conveyed that Reinforcement Learning is a PCE for MTech students and it would be evaluated for inclusion in the basket of PCEs for B. Tech. AIML Programme
- 31. He also conveyed that a course on Bio-Medical Signal Modalities would be considered for inclusion as a PCE for B. Tech. AIML Programme

**Resolution:** It was unanimously resolved that after appropriate action was taken on the points raised, the Programme Structure documents for all the four B. Tech. Programmes may be updated and presented before the Academic Council in the next Academic Council Meeting (ACM) for its approval

4) Agenda 4: Review of the Course Specifications for the first- and second- year courses being offered for the four B. Tech. Programmes

**Documents:** Course Specifications for the first- and second-year courses from the four B. Tech. Programmes

32. The Course Specifications for all the courses being offered during the first two years of each of the four B. Tech. Programmes were presented to the BoS members.

## Observations/Remarks made by the members

- 33. The members of the Board appreciated the emphasis on experiential learning laid in the Course Specifications
- 34. Prof. Murthy enquired about the feasibility of offering Probability and Statistics and Mathematics for Machine Learning courses in parallel during the third semester of B. Tech. AIML Programme.
- 35. Using the Course Specifications of these two courses, it was conveyed that the proposed new course Mathematics for Machine Learning takes into cognizance the Probability and Statistics course being offered in parallel
- 36. Prof. Murthy pointed out that Artificial Intelligence and Machine Learning-2 courses are being offered in parallel during the Semester 5 of B. Tech. AIML Programme and enquired if there is any overlap
- 37. The members pointed out the complementary nature of the outcomes and topics in Artificial Intelligence and Machine Learning-2 courses and that neither is a pre-requisite for the other and hence can be offered in parallel

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- 38. Prof. Murthy also pointed out that Semester 5 consists of a heavier load on the students compared to other Semesters and suggested that one of Computer Networks and Operating Systems courses may be relocated to the sixth semester
- 39. Following an examination of the Programme Specifications of all the courses, it was pointed out by other members that both Computer Networks and Operating Systems are prerequisites for the Moden Application Development course and several PCEs offered during the sixth semester. However, Dr. Rinki Sharma conveyed that the course ordering for all the Programmes would be analyzed for improvement in their order of study
- 40. Prof. Murthy suggested that AI and ML courses may incorporate a graded introduction via practical programming exercises before advanced concepts are introduced in theory
- 41. Prof. Gangadhar pointed out that the laboratory components of introductory Machine Learning-1 and Artificial Intelligence courses are designed in a very graded manner and students would have experienced practice with simpler concepts before moving on to higher level concepts
- 42. Prof. Ghoshal and Prof. Murthy suggested that at least one more course in the domain of ML may be offered to the three B. Tech. Programmes other than AIML
- 43. Prof. Gangadhar conveyed that a new stream of PCEs in Machine Learning would be designed and incorporated in B. Tech. CSE, ISE and MC Programmes
- 44. Prof. Murthy suggested that skill-based 2-credit courses may be introduced in the **Programmes**
- 45. Dr. Rinki Sharma conveyed that skill-based Value Added Courses would be offered

Resolution: It was resolved that the Course Specifications of the courses offered during the first- and second-years of the four B. Tech. Programmes are acceptable and may be presented before the Academic Council in the next Academic Council Meeting (ACM) for its approval

# 5) Agenda 5: Review of Programme Structure of M. Tech. Programmes

- a. M. Tech. in Artificial Intelligence and Machine Learning (AIML)
- b. M. Tech. in Data Science and Engineering (DSE)

**Documents:** Programme Specifications of M. Tech. AIML and DSE programmes.

46. The Program Structure documents of the M. Tech. AIML and DSE Programmes were presented

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- 47. It was brought to the notice of the members of the Board that the following new courses are proposed to be introduced as Core Electives:
  - a. Biomedical Signal Modalities (AIML)
  - b. Multimedia Processing (DSE)
  - c. Computing Architectures (AIML and DSE)
  - d. Generative AI and Applications (AIML and DSE)
  - e. High Performance Computing (DSE)
  - f. Time Series Analysis (DSE)
- 48. It was conveyed that the following new courses are proposed as core courses given their increased relevance in the AIML and DSE domains:
  - a. Neural Networks and Deep Learning (AIML and DSE)
  - b. Natural Language Processing (AIML)
  - c. Data Processing (DSE)
- 49. In order to accommodate the above changes, the following restructuring of the existing courses were proposed:
  - The existing courses titled Data Processing and Advanced Data Processing were proposed to be merged into Data Processing
  - b. The existing courses Artificial Neural Networks and Deep Learning were proposed to be merged into a new course Neural Networks and Deep Learning

## Observation/Remarks made by members

- 50. The BoS members appreciated the Program Structure of the M. Tech. AIML and DSE Programmes
- 51. Prof. Ghoshal suggested the introduction of a course on sensors and actuators for the AI for Robotics stream
- 52. Dr. Thompson conveyed that a course on sensors and actuators would be identified to be introduced for the AI for Robotics stream
- 53. Prof. Murthy asked for clarification on the title of the newly proposed Computing Architectures course in HPC stream of DSE program
- 54. Prof. Gangadhar clarified that the title is chosen to cover the architectural components of modern computing systems which range from processors through memory to virtualized network and cloud architectures

**Resolution:** It was unanimously resolved that with action taken on Prof. Ghoshal's suggestion, the Programme Structures of M. Tech. AIML and DSE Programmes are acceptable to be presented before the Academic Council in the next Academic Council Meeting (ACM) for its approval

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6) Agenda 6: Any other matters

None

7) Vote of Thanks & Adjournment

Dr. Rinki Sharma thanked all the members of the Board, especially the external members, for their participation and valuable inputs. The meeting concluded with the vote of thanks to the Chairperson. There being no further business the Chairperson declared the meeting adjourned by unanimous consent.

Dr. Rinki Sharma

Prof & Head Department of Computer Science and Engineering Dear Faculty of Engineering & Technology Chairperson of the Board of Studies Department of CSE Ramaida University of Applied Sciences

M. S. Ramaiah University of Applied Sciences

Bangalore - 569 884.

Head

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Notice

A meeting of the board of studies of the Department of, Electrical, Electronic and Communication Engineering, Faculty of Engineering and Technology will be held to address following agenda: Date: 03rd of July 2023.

Time: 11.30 AM

Venue: Board Room, Ramaiah Technology Campus

S. No.	Agenda			
1	Welcome and Overview			
2	Apologies for absence			
3	<ul> <li>a. Presentation of program structure and Course structure (First and second year for B. Tech in ECE and B. Tech in EEE) batch 2023-24 (NEP)</li> <li>b. Presentation of program structure and Course structure (First and second year for M. Tech in VLSI and Nanotechnology and M. Tech in Power electronics and Drives) batch 2023-24</li> <li>c. NPTEL/MOOC Course list approval (as per Annexure)</li> <li>d. Proposed VAC list (as per Annexure)</li> </ul>			
4	Observation and Remarks made by BoS Members			
4	Vote of Thanks & Adjournment			

All member are requested to attend the meeting:

Name	WWW bearing and a second and a
Dr. S. Malathi	Chairperson
Prof. Govind R. Kadambi	Internal Member
Dr. K. Manickavasagam	Internal Member
Dr. T. Christy Bobby	Internal Member
Dr. Ugra Mohan Roy	Internal Member
Dr. S. Nagaraja Rao	Internal Member
Dr. B. Ramaswamy Karthikeyan	Internal Member
Prof. T. Srinivas	External Member
Dr. Sheeba Rani	External Member
Mr. Ashutosh Kumar	External Member
Ms. Shruthi RN	External Member
Dr. Gurunath Gurrala	External Member
Dr. Prithvi Sekhar Pagala	External Member
Dr. K Mohanvelu	External Member
Mr. K.Padmanabhan	Invited Member
Dr. V Suresh Babu	Invited Member
Dr. D. Punithavathi	Invited Member
Dr. Pallaviram Sure	Invited Member

Prof. S. Malathi

Chairperson, Dept. of EECE

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## Attendance Record - Board of Studies Meeting

Department: Electrical, Electronic and Communication Engineering

Date: 03rd of July 2023. Time: 11.30 AM

Venue:	Board	Room	and Online	e, Ramaiah	Technology Campus
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Name		Signature
Dr. S. Malathi	Chairperson	harter
Prof. Govind R. Kadambi	Internal Member	Negri
Dr. K. Manickavasagam	Internal Member	K. Marchyun
Dr. T. Christy Bobby	Internal Member	2 King Pri
Dr. Ugra Mohan Roy	Internal Member	3 23
Dr. S. Nagaraja Rao	Internal Member	
Dr. B. Ramaswamy Karthikeyan	Internal Member	Danninger.
Prof. T. Srinivas	External Member	-Absut -
Dr. Sheeba Rani	External Member	-Absut -
Mr. Ashutosh Kumar	External Member	-Alosent-
Ms. Shruthi RN	External Member	- Almert -
Dr. Gurunath Gurrala	External Member	-Absort -
Dr Prithvi Sekhar Pagala	External Member	-Alsent-
Dr. K Mohanvelu	External Member	online.
Dr. V Suresh Babu	Invited Member	13 9 23
Mr. K.Padmanabhan	Invited Member	online
Dr. D. Punithavathi	Invited Member	Skutle
Dr. Pallaviram Sure	Invited Member	



7 080 4536 6666 9 080 4536 6677 Einfo@msruas.ac.in Www.msruas.ac.in www.ramaiah-india.org

# Minutes of the 9<sup>th</sup> Board of Studies Meeting Held on 03<sup>rd</sup> July 2023, at 11.30 AM, at the Board Room RTC

Department of Electrical, Electronics and Communication engineering Faculty of Engineering and Technology, MS Ramaiah University of Applied Sciences

### Members Invited:

rempers inviced.	
Name	
Dr. S. Malathi	Chairperson
Prof. Govind R. Kadambi	Internal Member
Dr. K. Manickavasagam	Internal Member
Dr. T.Christy Bobby	Internal Member
Dr. Ugra Mohan Roy	Internal Member
Dr. S.Nagaraja Rao	Internal Member
Dr. B R Karthikeyan	Internal Member
Prof. T. Srinivas	External Member
Dr. Sheeba Rani J	External Member
Mr. Ashutosh Kumar	External Member
Ms. Shruthi RN	External Member
Dr. Gurunath Gurrala	External Member
Dr Prithvi Sekhar Pagala	External Member
Dr. K Mohanvelu	External Member (Suggestion provided through mail)
Mr. K.Padmanabhan	Invited Member (Joined Online)
Dr. Suresh Babu	Invited Member
Dr. D.Punithavathi	Invited Member
Dr. Pallaviram Sure	Invited Member

#### MS Team Link:

https://teams.microsoft.com/l/meetup-

 $\underline{join/19\%3ameeting\ ZmQyMzYxYjAtYThiNS00YWVhLTg0MzUtNDczNiEwYmJiMGQx\%40thread.v2/0?context=\%7b\%22Tid\%22\%3a\%22e038180b-0021-401f-83a9-20021-401f-80021-40$ 

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Leave of Absence: Prof. T. Srinivas, Dr. Gurunath Gurrala, Dr. Sheeba Rani, Mr. Ashutosh

Kumar, Ms. Shruthi RN, Dr Prithvi Sekhar Pagala

Dept. of Rectionic & Communication Engg. Faculty of Engineering & Technology M.S. Ramalah University of Applied Sciences # 470-P, Peenya Industrial Area, 4th Phase,

### Call to Order and Quorum:

The meeting was called to order by Prof. S. Malathi, Chairperson at 11.30 am. With the sufficient quorum being present the proceedings of the meeting were commenced.

## Agenda 1: Welcome and Overview

Prof. Malathi S. welcomed the members of Board of Studies meeting. She briefed the BoS members about the significance of NEP implementation and revisions being made / proposed in programmes being introduced and also the significance and need for revisions being made in the existing B.Tech and M.Tech programmes being presented in the Board meeting for approval.

- Agenda 2 : Apologies for absence
- Agenda 3: Presentation of Programme structure for B. Tech (ECE and EEE) 1<sup>st</sup> to 4<sup>th</sup> semester and M.Tech in VLSI and Nanotechnology by Dr. Malathi

**Document:** Programme Structure for B. Tech in ECE and EEE and M.Tech (VLSI and Nanotechnology) and revision are circulated to all the BOS members on 30-June-2023 through email.

BOS chairman addressed the following salient features of revised syllabus:

- NEP implementation from B. Tech ECE & EE 2023 batch onwards
- Internship opportunities at the end of every even semester ( UG)
- Theory and practical component (Lab experiments) of few courses:

Electronic circuits, Digital Logic design, Linear Integrated circuits and microprocessor & controller

- 8<sup>th</sup> semester: Internship / Project work enabling students to enrich their industry / experiential learning
- M.Tech. programme: 3<sup>rd</sup> sem Internship / Project Phase 1 and 4<sup>th</sup> sem Internship / Project Phase 2 & Publication enabling students to enrich their industry / experiential learning

## Observation/ Remarks made by BoS members:

**Dr. K Mohanvelu** (External BoS member) suggested internship shall be enhanced to have internal/external case studies in line with courses offered in syllabus. Hands-on and practical skill development is a highlight of NEP and is captured in the revised 2023 programme structure.

Mr. K.Padmanabhan (External invited member) suggested and appreciated the one year internship opportunity for M.Tech programme, is highly warranted in industry. He

Dept. of Electronic & Communication Engg. Faculty of Engineering & Technology M.S. Ramaiah University of Applied Sciences #470-2, Peenya Industrial Area, 4th Phase, Bangalore - 560 058. Ph: 080-49065555



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## List of NPTEL Courses identified for B.Tech ECE Students

SI. No	Course Title	Credit	Number of Weeks	Start	End	Enrolment Ends on
1	Cyber Security and Privacy	3	12	24-Jul- 23	13-Oct- 23	31-Jul-23
2	C-Based VLSI Design	3	12	24-Jul- 23	13-Oct- 23	31-Jul-23
3	Analog VLSI Design	3	12	24-Jul- 23	13-Oct- 23	31-Jul-23
4	Real-Time Digital Signal Processing	3	12	24-Jul- 23	13-Oct- 23	31-Jul-23
5	Mathematical Aspects Of Biomedical Electronic System Design	3	12	24-Jul- 23	13-Oct- 23	31-Jul-23
6	Learning Analytics Tools	3	12	24-Jul- 23	13-Oct- 23	31-Jul-23
7	Introduction To Industry 4.0 And Industrial Internet Of Things	3	12	24-Jul- .23	13-Oct- 23	31-Jul-23
8	Fundamentals Of Nano And Quantum Photonics	3	12	24-Jul- 23	13-Oct- 23	31-Jul-23
9	Design & Implementation Of Human- Computer Interfaces	3	12	24-Jul- 23	13-Oct- 23	31-Jul-23
10	Deep Learning for Computer Vision	3	12	24-Jul- 23	13-Oct- 23	31-Jul-23
11	VLSI Design Flow: RTL to GDS	3	12	24-Jul- 23	13-Oct- 23	31-Jul-23
12	Social Network Analysis	3	12	24-Jul- 23	13-Oct- 23	31-Jul-23
13	Simulation Of Communication Systems Using Matlab	3	12	24-Jul- 23	13-Oct- 23	31-Jul-23

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11.5. Remark a service of Amplied Socrates

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## List of Tentative titles of Value Added Courses (VAC)

- 1. Low Power CMOS Design and SDR for Wireless Communication Applications
- 2. Beyond Nyquist: Signal Sampling, Reconstruction and Case Studies to Wireless Communication
- 3. Lint and CDC Essentials for VLSI Design Verification
- 4. Protocols in VLSI: A Practical Approach
- 5. Space Electronics: Design and Reliability for Aerospace Applications
- 6. Microwave Photonics Integrated Circuit Design
- 7. Recent trends in Electric Vehicles

JP 1/2023

Dept. of Electronic & Communication Engg.
Faculty of Engineering & Technology
N.S. Rampian University of Applied Sciences
#470-7, Feenya Industrial Area, 4th Torse,
Bangalore - 500, 455, For - 50, 49 (-5555)

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https://outlook.office365.com/mail/inbox/id/AAMkADdmZ/TI5MDQ5LTU2ZmQtNDU0OS.

### Re: Board of Studies Meeting Schedule

Mohanavelu Kalathe <mohanvelk.debel@gov.in> Mon 03/07/2023 10:42

To:Dr. 8 Ramaswamy Karthikeyan <karthikeyan.ec.et@msruas.ac.in>

Cc:Dr. Malathi S <hod.ec.et@msruas.ac.in>

Dear Sir

Some of my inputs are

- 1. Is internship shall be enhanced to have internal/external case studies wrto what student studied so far till that semester?
- 2. More practical skill development is a highlight of NEP. So can highlight on that aspect for each semester?
- 3. Remaining is fine and can be discussed as team

Thanks

Dr. K Mohnanavelu

On 01-07-2023 12:17, karthikeyan.ec.et@msruas.ac.in wrote:

Dear Board of Studies members,

The Board of Studies (BOS) meeting is scheduled on 3<sup>rd</sup> July 2023 at 11:30 AM at Board Room, Peenya Campus, to discuss the below agenda.

#### Agenda

- 1. Proposed program and course structure for B.Tech ECE and B.Tech EEE ( first and second year courses only)
- 2. Proposed program and course structure for M.Tech VLSI and Nanotechnology and M.Tech in Power Drives
- 3. VAC/ mooc/nptel course list

Please find attached details for the changes in the programme structure.

We request you to join in-person or online as per your convenient.

The link for online joiners is below:

You're invited to a Teams meeting!

7/3/2023, 10:44 AX

Lof3

#### **BOS Meeting**

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Join conversation teams.microsoft.com

Tap on the link or paste it in a browser to join.

Thanks with best regards,

#### Dr. B R Karthikeyan

Associate Professor
Department of Electronic and Communication Engineering
Ramaiah University of Applied Sciences



470-P | Peerya industrial Area | IV Phase | Bengaluru | Karnataka 560058 | India

Email: karthikeyan.ec.et@msruas.ac.in | Tel: +91-80-4906-5555

of 3

7/3/2023, 10:44 AM

# **ANNEXURE 9**

**MSRUAS- Programs-Revision** 

Sl. No	o Name of the Programme Year of			Revision (	Yes/No)	
	UNDER GRADUATE PROGRAMS	2019	2020	2021	2022	202
1	B.Tech. in Civil Engineering	Yes	Yes	Yes	Yes	Yes
2	B.Tech. in Computer Science and Engineering	Yes	Yes	Yes	Yes	Yes
3	B.Tech. in Electrical and Electronics Engineering	Yes	Yes	Yes	Yes	Yes
4	B.Tech. in Electronics and Communication Engineering	Yes	Yes	Yes	Yes	Yes
5	B.Tech. in Mechanical Engineering	Yes	Yes	Yes	Yes	Yes
6	B.Tech. Aerospace Engineering	Yes	Yes	Yes	Yes	Yes
7	B.Tech. in Automotive Engineering	Yes	Yes	Yes	Yes	Yes
8	B.Tech. Artificial Intelligence and Machine Learning	Yes	Yes	Yes	Yes	Yes
9	B.Tech. in Information Science and Engineering	Yes	Yes	Yes	Yes	Yes
10	B.Tech. in Mathematics and Computing	Yes	Yes	Yes	Yes	Yes
11	B.Tech, in Robotics	Yes	Yes	Yes	Yes	Yes
12	B.Des in Fashion Design	Yes	Yes	Yes	Yes	
13	B.Des in Interaction Design	NA	NA	NA	NA	
14	B. Des in Product Design	Yes	Yes	Yes	Yes	
15	B.Sc. (Hons) in Physics, Chemistry, Mathematics, Statistics		Yes		Yes	
16	Bachelor of Dental Surgery			Yes	Yes	
17	Bachelor of Pharmacy (B.Pharm)			Yes	Yes	
18	BBA	Yes	Yes		Yes	
19	B.Com (Hons)	Yes	Yes		Yes	
20	B.A. (Hons) in Sociology	NA	NA	NA	Yes	
21	B.Sc. (Hons) in Data Sciences and Analytics	NA	NA	NA	Yes	Yes
22	B.Sc. (Hons) in Economics	NA	ΝΆ	NA	Yes	Yes
23	B.Sc. (Hons) in Psychology	NA	NA	NA	Yes	Yes
24	B.Sc. LLB (Hons)	NA	NA	NA	Yes	Yes
25	B.A. LLB (Hons)	NA	NA	NA	Yes	Yes
26	B.Sc. (Hons) Biotechnology	100	Yes		Yes	Yes
27	B.Sc. (Hons) Food Processing and Technology		Yes		Yes	Yes
28	B.Sc. (Hons) Medical Radiology & Imaging Technology	-	Yes		Yes	Yes
29	B.Sc. (Hons) Anesthesia and Operation Theatre Technology		Yes		Yes	Yes
20	D. C. (Nama) Distrais Thermany 9. Teachmology		Yes		Yes	Yes
30	B.Sc. (Hons) Dialysis Therapy & Technology	+	Yes		Yes	Yes
31	B.Sc. (Hons) Cardiac Care Technology	+			Yes	Yes
32	B.Sc. (Hons) Optometry	Vac	Yes		Yes	163
33	Bachelor of Hotel Management	Yes	NIA	NA	Yes	
34	B.Sc. Nursing	NA	NA		Yes	
35	B.Sc. (Post Basic in Nursing)	NA	NA	NA	Yes	
36	Bachelor of Physiotherapy (BPT)	NA	NA	NA		
37	MBBS (Bachelor of Medicine Bachelor of Surgery)	NA	NA	NA	Yes	
38	B. Voc in Product Design and Modelling	+	Yes		Yes	
39	B. Voc in Culinary Operations		Yes		Yes	
40	B. Voc in Mechatronics	-	Yes		Yes	
41	B.Voc in Post - Harvest Technology		Yes		Yes	
	POST GRADUATE					
42	M.Tech. in Advanced Machinery Design				Yes	-
43	M.Tech. in Manufacturing Technologies and Engineering Management				Yes	
44	M.Tech. in Robotic Engineering				Yes	

45	M.Tech. in Artificial Intelligence and Machine Learning	Yes	Yes		Yes	
46	M.Tech. in Data Science and Engineering	Yes	Yes		Yes	
47	M.Tech. in Power Electronics and Drives		Yes		Yes	
48	M.Tech. in VLSI and Nanotechnology		Yes		Yes	
49	M.Tech. in Aerospace Engineering		Yes		Yes	
50	M.Tech. in Automotive Engineering		Yes		Yes	
51	M.Tech. Structural Engineering		Yes		Yes	
52	M.Tech. Construction Engineering and Management		Yes		Yes	
53	M.Tech. in Transportation Engineering		Yes		Yes	
54	M.Tech. in Environmental Engineering and Management		Yes		Yes	
55	M.Sc. in Industrial Chemistry		Yes		Yes	
56	M.Sc. in Organic Chemistry		Yes		Yes	
57	M.Sc. in Analytical Chemistry		Yes		Yes	
58	M.Sc. in Mathematics	Yes	Yes		Yes	
59	M.Sc. in Physics		Yes		Yes	
60	M.Des in Fashion Design		Yes		Yes	
61	M.Des in Product Design		Yes		Yes	
62	MDS in Oral Medicine and Radiology		1.03		Yes	
63	MDS in Pediatric and Preventive Dentistry				Yes	
64	MDS in Public Health Dentistry				Yes	
65	MDS in Orthodontics and Dentofacial Orthopaedics				Yes	
66	MDS in Oral and Maxillofacial Surgery	_			Yes	
	MDS in Periodontology				Yes	
67		_	_		Yes	
68	MDS in Prosthodontics and Crown & Bridge	_	_			
69	MDS in Conservative Dentistry and Endodontics	+	_	_	Yes	
70	MDS in Oral and Maxillofacial Pathology and Oral				\	
	Microbiology	-	-	V	Yes	
71	Doctor of Pharmacy (Pharm.D)			Yes	Yes	
72	M.Pharm in Pharmacognosy	-		Yes	Yes	
73	M.Pharm in Pharmaceutical Chemistry		_	Yes	Yes	
74	M.Pharm in Pharmaceutics			Yes	Yes	
75	M.Pharm in Pharmacology	_		Yes	Yes	
76	M.Pharm in Pharmacy Practice			Yes	Yes	
77	MBA	Yes	Yes		Yes	
78	M.Com	Yes	Yes		Yes	
79	M.A. in Public Policy	NA	NA		Yes	
80	Masters in Hospital Administration	Yes			Yes	
81	Master in Public Health	NA	NA	Yes	Yes	
82	M.Sc Food Nutrition and Dietetics	NA	NA	NA		
83	M.Sc Biotechnology	NA			Yes	
84	M.Sc Molecular and cellular biology	NA			Yes	
85	M.Sc. Food Science and Technology				Yes	
86	M.Sc. Nursing				Yes	
87	MPT Musculoskeletal Sciences				Yes	
88	MPT Cardio Vascular & Pulmonary Sciences				Yes	
89	MPT Neurological Sciences				Yes	
90	MPT Community Health				Yes	
91	MPT Paediatrics				Yes	
92	MD Anatomy				Yes	
93	MD Physiology				Yes	

94	MD Biochemistry	Yes
95	MD Microbiology	Yes
96	MD Pathology	Yes
97	MD Pharmacology	Yes
98	MD Forensic Medicine	Yes
99	MD Community Medicine	Yes
100	MD General Medicine	Yes
101	MS General Surgery	Yes
102	MS Obstetrics and Gynaecology	Yes
103	MD Paediatrics	Yes
104	MS Orthopedics	Yes
105	MD Anesthesiology	Yes
106	MD Radiation Oncology	Yes
107	MS Ophthalmology	Yes
108	MD Radio diagnosis	Yes
109	MD Dermatology	Yes
110	MS Otorhinolaryngology	Yes
111	MD Psychiatry	Yes
112	MD Emergency Medicine	Yes
113	MD Respiratory Medicine	Yes
114	MD Hospital Administration	Yes
115	DM Neurology	Yes
116	DM Endocrinology	Yes
117	DM Gastroenterology	Yes
118	DM Cardiology	Yes
119	DM Nephrology	Yes
120	DM Medical Oncology	Yes
121	M.Ch. Urology	Yes
122	M.Ch. Vascular Surgery	Yes
123	M.Ch. Neuro Surgery	Yes
124	M.Ch. Plastic Surgery	Yes
125	M.Ch. Paediatric Surgery	Yes
126	M.Ch Surgical Oncology	Yes
127	Doctor of Philosophy	Yes

# B. CURRICULAM DESIGN AND IMPLEMENATION

Sl. No	Description	Details
1.	Year of last curriculum designed (Note: Provide copy of the BoS meeting proceedings)	2023-2024 Annexure 1
	(Note: Provide copy of the Bos meeting proceedings)	Annexure 1
2.	Year of last curriculum revised	2023-2024
	(Note: Provide copy of the BoS meeting proceedings)	Annexure 2
3.	Number of programmes where the syllabus revision was carried	Each year revision
	out during the last 3/5 years:	happened in some
		programs
4	Number of new courses introduced of the total number of	Annexure 3 Total new courses
4.	courses across all programmes offered during last 3/5 years:	1482+16=1498
	courses across an programmes offered during last 3/3 years.	Total no of courses=
		2441
5.	Number of value added courses introduced under each	177 (159 till 2022+18
	programme for imparting life skills	2023-2024)
6.	No. of Add on courses introduced under each programme	92
7.	Does the university practices the feed back mechanism on	Yes
	curriculum design by all the state holders	
	(Note: Provide copy of the relevant documents)	

# C. ACADEMIC PROGRAMMES (PREVIOUS 3 / 5 ACADEMIC YEAR'S DATA)

# a. UG Programme/s

Sl.No	Name of the	Year of Commenc ement	YYYY-YY		YYYY-YY		YYYY-YY	
	Programm e (as per UGC Nomenclat ure)		Sanctio ned Intake	Actua l Admi ssion	Sancti oned Intake	Actual Admis sion	Sanctio ned Intake	Actual Admis sion
1								
2								
3								

# b. PG Programme/s

SI. No	Name of the Programme	Year of Commenc		Y-YY	YYY	YY-YY	YYY	Y-YY
140	(as per UGC Nomenclatu re)		Sanctio ned Intake	Actual Admiss ion	Sanc tione d	Actual Admis sion	Sanctio ned Intake	Actual Admis sion

# **ANNEXURE 10**

Programme name with code	Total number of courses in 1st year	New Course Introduced in 2023-2024 (Course name with Code)	New courses introduced in 2023-2024
		CED103A - Building materials and construction technology	6+4+2+3+1=16
B.Tech in Civil Engineering (001)	12 - Physics/Chemistry cycle	TSM103A - English Communication TeM104A איימים איים איים דיים איים איים דיים איים דיים ד	
		CSD106A - Programming in Python	
		MEF104A - Workshop Practice	
B. Tech in Computer Science and Engineering (002)		ECD104A-Introduction to Electrical and Electronics Engineering	
B. Tech in Information Science and Findingering (411)	12 - Chemistry cycle/Physics cycle		
B. Tech in Artificial Intelligence and			
Machine Learning (410)		CSD105A - Programming in C	
		MEF103B- Engineering Graphics MED103A- Introduction to Mechanical Engineering	
B.Tech in Mechanical Engineering	12 - Chemistry cycle/Physics cycle	MEC113A - Applied Mechanics	
(005) B.Tech in Robotics (074)			
		MEL104A-Workshop Practice	
		MEF105B- Engineering Graphics	
		AUD103A- Introduction to Automotive Engineering	
B. Tech. in Automotive Engineering			
(013)	tz - nigatoz/Onenitatiy uyute		
		MEF105B- Engineering Graphics	
		ASD103A - Introduction to Aerospace Engineering	
B. Tech. In Aerospace Engineering	12 - Physics/Chemistry cycle		
(0.12)			
B.Tech in Electronics and Communication	ation		
Engineering (004)			
ysics	Physics / Chemsitry		
		BTN101A- Environmental Studies	

# **ANNEXURE 11**

1.3.2 Number of certificate/value added courses/ Diploma Programmes offered by the institutions and online courses of MOOCs, SWAYAM/e-PG Pathshala/NPTEL and other recognized platforms where the students of the institution have enrolled and successfully completed during the last five year

	NPTEL and other recognized platforms wh	ere the students of th		and successfully comp	leted during	the last five	year	
Faculty	Name of the course/programme	Course/programme Code (if any)	Mode of the Course- offered by the HEI or Online (Specify the platform like MOOCS, SWAYAM, etc.)	Year of offering /Year of enrolment	Contact hours of course	Number of students enrolled in the year	completing the course in the year	Link to the relevant
FAD	Apparel Designing	NA	VAC-Offline-MSRUAS	2018-2019	30	16	15	
FAD	Rejuvenation of Heritage Textiles for Contemporary Draping Styles & Designing	NA	VAC-Offline-MSRUAS	2019-2020	30	8	7	
FAD	Application of Sustainable Fibres for Fashion Designing	NA	VAC-Offline-MSRUAS	2020-2021	30	11	9	
FAD	Haute Couture Fashion and Accessories for Digital Era	NA	VAC-Offline-MSRUAS	2021-2022	30	8	7	
FAD	Advanced Pattern Making and Accessory Making Techniques for Apparel Manufacturing and Fashion	NA	VAC-Offline-MSRUAS	2022-2023	30	19	17	
FAD	Conventional and Comprehensive Textiles, Fashion and Apparels for Time Ahead	NA	VAC-Offline-MSRUAS	2022-2023	30	31	28	
DS	Cephalometrics in Diagnosis and Treatment planning of Functional and Surgical cases.	NA	VAC-Offline-MSRUAS	2018-2019	30	40	40	
DS	Demystifying functional appliance	NA	VAC-Offline-MSRUAS	2018-2019	30	40	40	
/DS	Dental photography	NA	VAC-Offline-MSRUAS	2018-2019	40	40	40	
FDS	Diagnosis and management of potentially premalignant oral epithelial lesions	NA	VAC-Offline-MSRUAS	2018-2019	30	25	25	
FDS	Dia nosis of Vesiculo-Bullous Lesions	NA	VAC-Offline-MSRUAS	2018-2019	33	40	40	
FDS	Diode lasers in day-to-day dentistry	NA	VAC-Offline-MSRUAS	2018-2019	30	40	40	
FDS	Laur hing gas - A myth or reality	NA	VAC-Offline-MSRUAS	2018-2019	30	42	42	
FDS	Layering for a better smile - composites in anterior esthetics	NA	VAC-Offline-MSRUAS	2018-2019	30	25	25	
FDS	Minor surgical procedures in periodontology	NA	VAC-Offline-MSRUAS	2018-2019	30	40	40	
FDS	Periodontal approach to esthetic dentistry	NA	VAC-Offline-MSRUAS	2018-2019	30	40	40	
FDS	Photomicrography and scoring of oral athological lesions	NA	VAC-Offline-MSRUAS	2018-2019	33	40	40	
FDS	Preclinical and Cadaveric Training programme on Temporomandibular Joint Arthrocentesis, Arthrography and Sialography	NA	VAC-Offline-MSRUAS	2018-2019	30	9	9	
FDS	Proposal writing for undergraduates	NA	VAC-Offline-MSRUAS	2018-2019	30	46	46	
FDS	Regenerative Endodontics - A paradigm	NA	VAC-Offline-MSRUAS	2018-2019	30	25	25	
FDS	School oral health promotion	NA	VAC-Offline-MSRUAS	2018-2019	30	30	30	
FDS	Strategy and Tactics in Combinatorial Organic Synthesis and Applications	NA	VAC-Offline-MSRUAS	2018-2019	30	25	25	
FD\$	Surgical skill training on cadavers- Ortho nathic Surgery	NA	VAC-Offline-MSRUAS	2018-2019	30	5	5	
FDS	Surgical skill training on cadavers-Basic Anatomy	NA	VAC-Offline-MSRUAS	2018-2019	30	6	6	
FDS	Tips and tricks for rubber dam application technique	NA	VAC-Offline-MSRUAS	2018-2019	30	25	25	
FDS	Understanding TMDs	NA	VAC-Offline-MSRUAS	2018-2019	30	32	32	
FDS	Advanced diagnosis of oral potentially mali mant disorders	NA	VAC-Offline-MSRUAS	2019-2020	33	40	40	
FDS	Advances in 2D and 3D Imaging	NA	VAC-Offline-MSRUAS	2019-2020	30	26	26	
FDS	Anterior esthetics - tooth tissue harmony	NA	VAC-Offline-MSRUAS	2019-2020	30	25	25	
FDS	Applications of eductaion technology - hack dentistry	NA	VAC-Offline-MSRUAS	2019-2020	33	43	43	
FDS	Biostatistics for dental professionals	NA	VAC-Offline-MSRUAS	2019-2020	30	35	35	
FDS	Clinical perspectives on dental materials	NA	VAC-Offline-MSRUAS	2019-2020	30	57	57	
FDS	Collaborative reaserch in oral pathology	NA	VAC-Offline-MSRUAS	2019-2020	33	40	40	
FDS	Damon orthodontic system -Module 1	NA	VAC-Offline-MSRUAS	2019-2020	32	36	36	
FDS	Dental Photography	NA	VAC-Offline-MSRUAS	2019-2020	30	40	40	
FDS	Dentistry out under anesthesia	NA	VAC-Offline-MSRUAS	2019-2020	30	41	41	

Denture treatment awareness	NA	VAC-Offline-MSRUAS	2019-2020	30	37	37	
Embracing the culture of pediatric rotary Endodontics	NA	VAC-Offline-MSRUAS	2019-2020	30	41	41	
Geriatric dentistry - need for an hour	NA	VAC-Offline-MSRUAS	2019-2020	30	30	30	
Hard and Soft Tissue Augmentation	NA	VAC-Offline-MSRUAS	2019-2020	30	40	40	
Infant oral health	NA	VAC-Offline-MSRUAS	2019-2020	30	41	41	
Managerial operations in private practice	NA	VAC-Offline-MSRUAS	2019-2020	30	10	10	
Microsurgical approach for recession	NA	VAC-Offline-MSRUAS	2019-2020	30	40	40	
mana ement	IVA	VAC-OHIIIIE-IVISKOAS					
Overview on transmucosal drug delivery	NA	VAC-Offline-MSRUAS	2019-2020	30	12	12	
Preclinical and Cadaveric Training programme on Temporomandibular Joint Arthrocentesis, Arthrography and Sialography	NA	VAC-Offline-MSRUAS	2019-2020	30	9	9	
Research for health care professionals	NA	VAC-Offline-MSRUAS	2019-2020	30	36	36	
Rotary Endodontics - Success simplified	NA	VAC-Offline-MSRUAS	2019-2020	30	25	25	
Rubber Dam Application and Techniques	NA	VAC-Offline-MSRUAS	2019-2020	30	25	25	
Screening and holistic treatment for geriatric patients	NA	VAC-Offline-MSRUAS	2019-2020	30	30	30	
Stereoimaging in periodontology	NA	VAC-Offline-MSRUAS	2019-2020	30	40	40	
Surgical skill training on cadavers	NA NA	VAC-Offline-MSRUAS	2019-2020	30	4	4	-
2x4 appliance for pediatric dentists	NA	VAC-Offline-MSRUAS	2020-2021	30	45	45	
Application of special stains in oral	NA	VAC-Offline-MSRUAS	2020-2021	33	40	40	
pathology practice	NA	VAC-Offline-MSRUAS	2020-2021	30	20	20	
Basics of magnification	NA NA	VAC-Offline-MSRUAS	2020-2021	30	10	10	
CBCT in Endodontics Clinical pharmacokinetics applications in	IVA	VAC-OTHINE-IVISKUAS	2020-2021	30	10	10	
nediatric dental practice	NA	VAC-Offline-MSRUAS	2020-2021	30	44	44	
Diagnosis and management of potentially premalignant oral epithelial lesions	NA	VAC-Offline-MSRUAS	2020-2021	30	37	37	
Digital advances in dentistry	NA	VAC-Offline-MSRUAS	2020-2021	30	23	23	
Immunohistochemistry for Diagnosis and Characterization	NA	VAC-Offline-MSRUAS	2020-2021	33	43	43	
Lasers in restorative dentistry	NA	VAC-Offline-MSRUAS	2020-2021	30	25	25	
Magnification simplified	NA	VAC-Offline-MSRUAS	2020-2021	30	20	20	
Minor periodontal surgeries - The know how	NA	VAC-Offline-MSRUAS	2020-2021	30	40	40	
Perio lasers for soft tissue	NA	VAC-Offline-MSRUAS	2020-2021	30	40	40	
Pink and white esthetics	NA	VAC-Offline-MSRUAS	2020-2021	30	30	30	
Preclinical and Cadaveric Training programme on Temporomandibular Joint Arthrocentesis, Arthrography and Sialography	NA	VAC-Offline-MSRUAS	2020-2021	30	7	7	
Presurgical nasoalveolar moulding	NA	VAC-Offline-MSRUAS	2020-2021	30	36	36	
Preventive Medicine	NA	VAC-Offline-MSRUAS	2020-2021	30	19	19	
Role of oral pathologist in dentistry and health	NA	VAC-Offline-MSRUAS	2020-2021	30	42	42	
Rubber dam isolation in pediatric	NA	VAC-Offline-MSRUAS	2020-2021	30	44	44	
dentistry Surgical skill training on cadavers	NA	VAC-Offline-MSRUAS	2020-2021	30	7	7	
Volatilomics insights - human saliva	NA	VAC-Offline-MSRUAS	2020-2021	30	13	13	
Applications of carving skills in clinical	NA	VAC-Offline-MSRUAS	2021-2022	30	45	45	
dentistry Composites made easy	NA	VAC-Offline-MSRUAS	2021-2022	30	30	30	
Damon orthodontics system - module 2	NA	VAC-Offline-MSRUAS	2021-2022	32	24	24	
Day-to-day dentistry with lasers	NA	VAC-Offline-MSRUAS	2021-2022	30	25	25	
Demystifying functional appliances	NA	VAC-Offline-MSRUAS	2021-2022	30	40	40	
Dental practice management - A pathway							
to success	NA	VAC-Offline-MSRUAS	2021-2022	30	14	14	
Embracing the culture of pediatric rotary Endodontics	NA	VAC-Offline-MSRUAS	2021-2022	30	46	46	
Forensic odontology	NA	VAC-Offline-MSRUAS	2021-2022	33	43	43	
Innovation in Precast Industry	NA	VAC-Offline-MSRUAS	2021-2022	30	21	21	
Introduction to basal implantology	NA	VAC-Offline-MSRUAS	2021-2022	30	20	20	
Lasers for general practitioner	NA	VAC-Offline-MSRUAS	2021-2022	30	40	40	
Lasers in Clinical Dentistry	NA	VAC-Offline-MSRUAS	2021-2022	30	25	2.5	
Periodontal ancillary surgery	NA	VAC-Offline-MSRUAS	2021-2022	30	40	40	
Preventive Medicine	NA	VAC-Offline-MSRUAS	2021-2022	30	22	22	

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os	Principles and pitfalls of tissue processing in oral pathology	NA	VAC-Offline-MSRUAS	2021-2022	30	40	40	
)\$	Role of exfoliative cytology in dia mosis	NA	VAC-Offline-MSRUAS	2021-2022	30	40	40	
S	Rubber base impressions	NA	VAC-Offline-MSRUAS	2021-2022	30	30	30	
5	School oral health education	NA	VAC-Offline-MSRUAS	2021-2022	30	38	38	
	Surgical skill training on cadavers-	NA	VAC-Offline-MSRUAS	2021-2022	30	6	6	
S	Orthognathic Surgery Surgical skill training on cadavers-Basic	NA	VAC-Offline-MSRUAS	2021-2022	30	6	6	
5	Anatomy							
•	Tobacco cessation training programme Understanding dental chair peripherals	NA	VAC-Offline-MSRUAS	2021-2022	30	54	54	
5	including chrome-cobalt lab	NA	VA -Offline-MSRUAS	2021-2022	30	26	26	
5	Basics of implantology	NA	VAC-Offline-MSRUAS	2022-2023	30	30	30	
	Community based learning programme	NA	VAC-Offline-MSRUAS	2022-2023	30	70	70	
	Digital orthodontics- Clear Aligner	NA	VAC-Offline-MSRUAS	2022-2023	30	21	21	
	Forensics and the dentist : An exciting career	NA	VAC-Offline-MSRUAS	2022-2023	30	44	44	
	Lasers in clinical dental practice	NA	VAC-Offline-MSRUAS	2022-2023	30	24	24	
	Nitrous oxide inhalational sedation	NA	VAC-Offline-MSRUAS	2022-2023	30	18	18	
	Restorative Considerations -	NA	VAC-Offline-MSRUAS	2022-2023	30	32	32	
	interdisciplinary approach				20	-		
1	Surgical skill training on cadavers	NA	VAC-Offline-MSRUAS	2022-2023	30	6	6	
	Tobacco cessation training programme	NA	VAC-Offline-MSRUAS	2022-2023	30	78	78	
	Challenges In Hypersonic Flows and	NA	VAC-Online-MSRUAS	2021-2022	30	125	125	
	Engineering in Nature	NA	VAC-Online-MSRUAS	2021-2022	30	34	34	
	LaTeX for Quality Typesetting Towards Defect-free programming	NA NA	VAC-Online-MSRUAS	2021-2022	30	16	16	
-CE	Advancements in testing equipment	NA NA	VAC-Offline-MSRUAS	2020-2021	30	22	22	
CE CE	Alternative Building Materials	NA NA	VAC-Offline-MSRUAS	2020-2021	30	24	24	
CL	Design and Installation of precast	NA NA	VAC-Offline-MSRUAS	2020-2021	30	22	22	
-CE	sellments in Hillh rise structures							
MME	Manufacturing – An Overview	NA	VAC-Offline-MSRUAS	2022-2023	36	31	31	_
1CT	Patisserie	NA	VAC-Offline-MSRUAS	2019-2020	36	15	14	
1CT	Skill Enhancement in Garde-manger	NA	VAC-Offline-MSRUAS	2019-2020	30	12	12	
1CT	Wine Education, Appreciation and Tasting -(WEAT)	NA	VAC-Offline-MSRUAS	2019-2020	30	44	44	
лст	Workplace Hygiene	NA	VAC-Offline-MSRUAS	2019-2020	30	14	14	
	Housekeeping Redefined Post Pandemic- COVID Protocols	NA	VAC-Offline-MSRUAS	2020-2021	30	18	18	
ACT	Food Writing and Photography	NA	VAC-Offline-MSRUAS	2021-2022	30	33	33	
ACT	Journey of a Successful Foodpreneur	NA NA	VAC-Offline-MSRUAS	2021-2022	35	20	20	
1CT	Wine Education, Appreciation and Tasting	NA NA	VAC-Offline-MSRUAS	2021-2022	30	97	97	
VCT	- WEAT		144 0 0 000 14 CD 14 C	2022 2022	22	24	24	
ИСТ	Gourmet Trends and Equipment	NA	VAC-Offline-MSRUAS	2022-2023	32	24	24	_
HS	Edible Coating in Food Packaging	NA NA	VAC-Offline-MSRUAS	2018-2019	30	111	111	-
HS	Recent advancements in Optometry Update in Diagnostics & Concepts in	NA	VAC-Offline-MSRUAS	2021-2022	30	25	25	
HS	Outometry	NA	VAC-Offline-MSRUAS	2022-2023	30	38	38	
HS-BT	Mushroom Cultivation	NA	VAC-Offline-MSRUAS	2021-2022	30	48	48	
HS-BT	Synthetic Biology	NA	VAC-Online-MSRUAS	2021-2022	30	48	48	_
HS-FT	Mushroom Technology	NA	VAC-Offline-MSRUAS	2020-2021	30	79	79	_
IS-FT	Wine making and Tasting	NA	VAC-Offline-MSRUAS	2021-2022	30	68	68	
:	Dynamics of International Trade	NA	VAC-Offline-MSRUAS	2018-2019	30	32	32	
:	Advanced Data Analysis using excel	NA	VAC-Offline-MSRUAS	2019-2020	30	35	32	
	Dynamics of International Trade	NA NA	VAC-Offline-MSRUAS	2019-2020	30	22	22	
- 8	Dynamics of International Trade	NA NA	VAC-Offline-MSRUAS	2020-2021	30	30 100	30 97	
	Advanced Data Analysis using excel	NA NA	VAC-Offline-MSRUAS	2021-2022 2021-2022	30 30	22	22	
	Digital Marketing	NA NA	VAC-Offline-MSRUAS  VAC-Offline-MSRUAS	2021-2022	30	30	30	
	Dynamics of International Trade  Multipariate Methods for Applysis	NA NA	VAC-Offline-MSRUAS	2021-2022	30	200	180	
s	Multivariate Methods for Analysis Enrichments in Medicinal Chemistry	NA NA	VAC-Offline-MSRUAS	2018-2019	30	10	10	
د	Biodegradable polymers - Futuristic	ING		7800				
S	Materials	NA	VAC-Offline-MSRUAS	2019-20	30	20	20	
S	Chromatographic Separation Techniques	NA	VAC-Offline-MSRUAS	2021-2022	30	39	39	
S	Polymer Testin Methods	NA	VAC-Offline-MSRUAS	2021-2022	30	39	39	
-	Materials Synthesis and its							
S-PH	characterization techniques	NA	VAC-Online-MSRUAS	2021-2022	30	26	2.6	
25-PHY	Wolframalpha-Computational intellinence and Latex	NA	VAC-Online-MSRUAS	2021-2022	30	4	4	
	Applications of Robotics and Al in					10	10	

Clinical Pharmacokinetics: Applications in Pediatric Practice	NA	VAC-Offline-MSRUAS	2018-2019	30	24	24	
Traditional Systems of Medicine	NA	VAC-Offline-MSRUAS	2018-2019	30	10	10	
Understanding of Preclinical studies and Al in Pharmacological Research	NA	VAC-Offline-MSRUAS	2018-2019	30	10	10	
Artificial Intelligence and Machine Learning In Preclinical and Clinical Research	NA	VAC-Offline-MSRUAS	2019-2020	30	12	12	
Comprehending Avant-Garde Stratagems to Revitalize Personalized Medicine	NA	VAC-Offline-MSRUAS	2019-2020	30	22	22	
Insights into Food Adulteration'	NA	VAC-Offline-MSRUAS	2019-2020	30	13	13	
Recent developments in Medicinal Chemistry	NA	VAC-Offline-MSRUAS	2019-2020	30	12	12	
Advances in medicinal chemistry	NA	VAC-Offline-MSRUAS	2020-2021	30	24	24	
Biotechnology of natural products	NA	VAC-Offline-MSRUAS	2020-2021	30	48	48	
A Treatise in Cosmetic Technology	NA	VAC-Offline-MSRUAS	2021-2022	30	22	22	
Advances in medicinal chemistry	NA	VAC-Offline-MSRUAS	2021-2022	30	22	22	
Artificial intelligence and Machine Learning in clinical and preclinical research	NA	VAC-Offline-MSRUAS	2021-2022	30	21	21	
Biotechnology of natural products	NA	VAC-Offline-MSRUAS	2021-2022	30	20	20	
Artificial Intelligence & Machine Learning in Preclinical and Clinical Research	NA	VAC-Offline-MSRUAS	2022-2023	30	15	15	
Biotechnology of natural products	NA	VAC-Offline-MSRUAS	2022-2023	30	16	16	
Contemporary Approaches to Pharmaceutical Marketing	NA	VAC-Offline-MSRUAS	2022-2023	30	37	37	
Contemporary developments in medicinal chemistry and analysis	NA	VAC-Offline-MSRUAS	2022-2023	30	15	15	
PG intensive training programme	Nil	VAC-Offline-MSRUAS	2022-2023	22.5	147	131	
Emerging issues in Public Policy in India: Education, Health, Technology and Environment Policies	NA	VAC-Offline-MSRUAS	2020-2021	30	35	35	

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	MSRUAS	
S.N.	Value Added Courses offered in 2023-2024	
1	Ansys Mechanical, CFD & Multiphysics_Apr2024	FET-AAE
2	3D Experience_Apr2024	FET-AAE
3	Develoment of Business Plan 2023-24	FHMCT
4	Entrepreneurial Essentials 2023-24	FHMCT
5	Human Resource Management 2023-24	FHMCT
6	Innovation & Entrepreneurship in the Indian Food Sector 2023-24	FHMCT
7	Starting a Food Entrepreneurial Venture in India 2023-24	FHMCT
8	Pharmaceutical development and manufacturing	FLAHS-BT
9	Food Safety	FLAHS-FT
10	Applications on Biostatistics	FPH
11	IMPLANTS CERTIFICATE (1)	FDS
12	INTERDISCIPLINARY ORTHO	FDS
13	OMFS BASAL IMPLANTS (2)	FDS
14	Surgical skills training in cadavers 1	FDS
15	Surgical skills training in cadavers 2	FDS
16	Surgical skills training in cadavers 3	FDS
17	Technical advancements and innovations in medical imaging	FLAHS-AH
18	Application of PCR and Sanger sequencing in pathology practice	FDS

# **ANNEXURE 12**

### Add on (Online) courses offered

Name of the course/programme	Mode of the Course- offered by the HEI or Online (Specify the platform like MOOCS, SWAYAM, etc.)	Year of offering /Year of enrolment	Contact hours of course	Number of students enrolled in the year	Number of Students completing the course in the year
Complete Blender Creator: Leran 3D	MOOC-Online	2019-2020	64	1	1
modelling for Beginners					
Deep learning	NPTEL-Online	2019-2020	60	1	11
Maya For Beginners : Complete Guide to 3D Animation	MOOC-Online	2019-2020	38	2	2
Rhino 3D Tutorial V5 and V6 Beginner					
Level to Advanced Level	MOOC-Online	2019-2020	37	1	1
Semiconductor optoelectronics	NPTEL-Online	2019-2020	60	1	1
Solid State Physics	NPTEL-Online	2019-2020	60	1	1
Theoritical Mechanics	NPTEL-Online	2019-2020	60	2	2
Adobe illustrator CC 2020	MOOC-Ónline	2020-2021	39.5	1	1
Adobe illustrator CC 2020	WIGGE GIIIIIE	2020 2021	33.3		
Complete Character Drawing Course	MOOC-Online	2020-2021	26.5	1	1
Complete Course in Adobe	MOOC-Online	2020-2021	39.5	1	1
Photoshop CC	141000 Online	2020 2021	33.3		
Masterclass of Realistic Drawing and	MOOC-Online	2020-2021	30	1	1
Shading Human features	WIGGE GIIIIIE		50		
The blender Encyclopedia	MOOC-Online	2020-2021	46	1	1
Air Pollution & Control	NPTEL	2021-2022	45	2	2
Basics In Biology	NPTEL-Online	2021-2022	36	8	8
Business Analytics for Management Decision	NPTEL-Online	2021-2022	60	4	4
Computational Physics	NPTEL-Online	2021-2022	60	1	1
Entrepreneurship Essentials	NPTEL-Online	2021-2022	30	1	1
Excel Skills for Business Essentials	Coursera-Online	2021-2022	30	2	2
Fluid dynamics for Astrophysics	NPTEL-Online	2021-2022	60	3	3
Foundation of Project Management	Coursera-Online	2021-2022	30	2	2
Health Research Fundamentals	NPTEL	2021-2022	30	5	5
Introduction to Astrophysical Fluids	NPTEL-Online	2021-2022	60	2	2
Introduction to Brain and Behaviour	NPTEL	2021-2022	30	1	1
Introduction to Google SEO	Coursera-Online	2021-2022	30	2	2
Introduction to HTML5	Coursera-Online	2021-2022	30	2	2
IT Fundamentals for Cyber security	MOOC-Online	2021-2022	45	1	1
	MOOC-Online	2021-2022	45	10	10
Machine Learning Physics of renewable energy system		2021-2022	60	2	2
Psychology of stress, health and well	NPTEL-Online NPTEL-Online	2021-2022	30	7	7
being Quantum chemistry of atoms and					
molecules	NPTEL-Online	2021-2022	60	1	1
Regression Analysis	NPTEL-Online	2021-2022	60	3	3
Soft skill develo ment	NPTEL	2021-2022	30	12	12
Space flight mechanics	NPTEL-Online	2021-2022	60	1	1
Understanding Visual Data with Python	Coursera-Online	2021-2022	30	4	4
Bioinformatics: Algorithms and Application	NPTEL	2021-2022	36	6	6
Forests and Their Management	NPTEL	2021-2022	36	8	8
Google Data Analytics	Course era	2021-2022	60	1	1
Maternal Infant Young Child Nutrition	NPTEL	2021-2022	36	7	7
Structural Biology	NPTEL	2021-2022	36	1	1
Basic Course in Biomedical Research	Swayam/NPTEL/Online	2022-2023	16 weeks	1	1
Blockchain	MOOC-Online	2022-2023	45	1	1
Consumer Behaviour	NPTEL-Online	2022-2023	30	2	2
Contextualizing Gender	NPTEL-Online	2022-2023	30	3	3
Cybersecurity Essentials	MOOC-Online	2022-2023	45	3	3

Data Analytics with Python	NPTEL-Online	2022-2023	30	13	13
Ethical Hacking	MOOC-Online	2022-2023	45	2	2
Foundation Certificate in Palliative	WIOOC OILLIE	2022 2023			
Care	NPTEL-Online	2022-2023	30	7	₹
German 1	NPTEL-Online	2022-2023	30	1	1
Group theory methods in physics	NPTEL-Online	2022-2023	60	2	2
group triedly methods in physics	INI TEE OTHITE	2022 2025	- 00		-
Introduction to cognitive psychology	NPTEL-Online	2022-2023	30	4	4
Introduction to environmental					3:-
engineering and science-			[	_ []	
Fundamental and sustainability	NPTEL-Online	2022-2023	60	2	2
concerts					
Introduction To Internet Of Things	NPTEL-Online	2022-2023	30	10	10
Introduction to machine learning	NPTEL-Online	2022-2023	60	1	1
Introduction to Psychology	NPTEL-Online	2022-2023	30	4	4
Javascript Essentials	MOOC-Online	2022-2023	45	1	1
Leadership and Team Effectiveness	NPTEL-Online	2022-2023	30	1	1
Mathematics for Economics - I	NPTEL-Online	2022-2023	30	1	1
Model Thinking	MOOC-Online	2022-2023	45	1	1
Natural Language Processing	NPTEL-Online	2022-2023	30	3	3
Object Oriented Design	Coursera-Online	2022-2023	30	3	3
			30	2	2
Product Design and Manufacturing	NPTEL Online	2022-2023	60	1	1
Quantum mechanics I	NPTEL-Online	2022-2023	DU DU	1	1
Renewable energy engineering: Solar,	NETTL O. P.	2022 2022	60	4	1
wind and biomass energy sysyem	NPTEL-Online	2022-2023	60	1	1
		2000 0000	20		2
RNA Biology	NPTEL-Online	2022-2023	36	2	2
Sociology of Development	NPTEL-Online	2022-2023	30	1	1
Speaking Effectively	NPTEL-Online	2022-2023	30	2	2
The Joy of Computing using PYTHON	NPTEL-Online	2022-2023	30	11	11
Understanding Incubation and Entrepreneurship	NPTEL-Online	2022-2023	30	2	2
United Nations Sustainable					
Development Goals	SWAYAM-Online	2022-2023	30	3	3
Biological process design for wastewater					
treatment	NPTEL	2022-2023	36	2	2
Cooling technology: why and how					
utilized in food processing and allied	NPTEL	2022-2023	60	7	7
industries					
Enzyme Sciences and Technology	NPTEL	2022-2023	36	1	1
Fundamentals of Protein Chemistry	NPTEL	2022-2023	36	1	1
Genome Editing and Engineering	NPTEL	2022-2023	36	1	1
Introduction to history of architecture in			20	9	9
india	NPTEL	2022-2023	30	3	
Medical Image Analysis	NPTEL	2022-2023	36	1	11
Novel technologies for food processing	NPTEL	2022-2023	60	2	2
and shelf life extesion	INFIEL	2022-2023	00		4-
Soil and water conservation engineering	NPTEL	2022-2023	60	2	2
Java Programming: Arrays, Lists and	M0000 0 11 -	2021 2022	20	2	2
Structured data	MOOC-Online	2021-2022	30	2	
Agile meets design thinking	MOOC-Online	2021-2022	30	2	2
Cryptography Hash and Integrity Protection	MOOC-Online	2021-2022	30	1	1
Online Japanese N5 course	MOOC-Online	2020-2021	30 -	1	1
Emotional Intelligence	NPTEL	2022-2023	30	1	1
Design Technology and Innovation	NPTEL	2022-2023	30	1	1
Principles of Industrial Engineering	NPTEL	2021-2022	30	1	1
Engineering Graphics and Design	NPTEL	2021-2022	30	1	1
Search Engine Optimization	NPTEL	2021-2022	30	1	1
Fundamentals of Equities	NPTEL	2021-2022	30	1	1

Exploratory Data analysis for Machine Learning	MOOC-Online	2021-2022	30	1	1
Statistics with Python	MOOC-Online	2021-2022	30	1	1
Applied Cryptography Specialization	MOOC-Online	2021-2022	30	1	1
Introduction to DevOps	MOOC-Online	2021-2022	30	1	1

# **ANNEXURE 13**



New BEL Road MSR Nagar Bangatore 560 054 T 080 4536 6666 F 080 4536 6677 E info@msruas.ac.in W www.msruas.ac.in www.ramaiah-india.org

## FACULTY OF LIFE AND ALLIED HEALTH SCIENCES DEPARTMENT OF FOOD TECHNOLOGY

Ref: MSRUAS /FLAHS /FT /Feedback report/2022-23

To The Chief Manager OAC/IOAC MSRUAS

Subject: Action taken report on Feedback of stakeholders

Dear Sir

As per the BOS meeting held on 9th Feb 2023, the feedback analysis reports were discussed based on the feedback taken from all stakeholders and the suggestions have been incorporated into the action taken report, enclosed herewith for your perusal.

Ch18/13: 28 Thanking you.

Dr. Lokesh AC.

HOD-Department of Food Technology

Faculty of Life and Allied Health Sciences

M.S. Ramaiah University of Applied Sciences

Enclosed: Analysis Report and Action taken report on feedback

ally of Life & Allied Health Sciences RAMAGAH UNIVERSITY OF APPLIED SCIENCE.

Registrar M.S. Ramaiah University of Applied Science

Bangalore - 560 854

Chief, Quality Control (Academics) Directorate of QEPET

M.S.Ramatah University of Applied Science! Bangalore - 560 054

Date: 20th Feb 2023

Registered as J MS Ramaian University of Applied Sciences "Established as per Govt. of Karnataka ACT No. 15 of 2013. Recognized by UGC U/S 2(f) of the UGC Act, 1056"



Student Feedback on Curriculum Design and Development

Name of the Faculty	FLAHS
Programme	B.Sc. Food Processing and Technology
Period for which feedback taken	Academic Year 2022-23_1st year (1st and 2nd semester)
Type of Feedback	Student Feedback on Curriculum Design and Development
Semester/Year covered	Odd and even semester / Batch 2022
Name of the Faculty feedback Coordinator	Dr. Chennappa Gurikar

SI. No.	Course on which feedback obtained	Semester/Year	Critical Observations from feedback	Action Taken with target date	Any other remarks/comments
1	B.Sc. FPT	1st /2022	Class Lectures are not provided after the class hours	Yes, points have been considered and extra classes were taken	NO
2	B.Sc. FPT	1 <sup>st</sup> /2022	Few basic classes are needed to understand the concept of courses	Yes, points have been considered	NO
3	B.Sc. FPT	2 <sup>nd</sup> /2023	Need hands-on training on food processing	Yes, points have been considered and implemented	

**Food Nutrition and Dietetics** 

Signature with Date of Feedback Coordinator	1
Signature with Date of Head of Department	Chy & De Sur
Signature with Date of Respective Dean	(In)

Sangalore

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Faculty of Life & Allied Hear.

M.S. RAMAIAH UNIVERSITY OF APPLIED SCIENCE

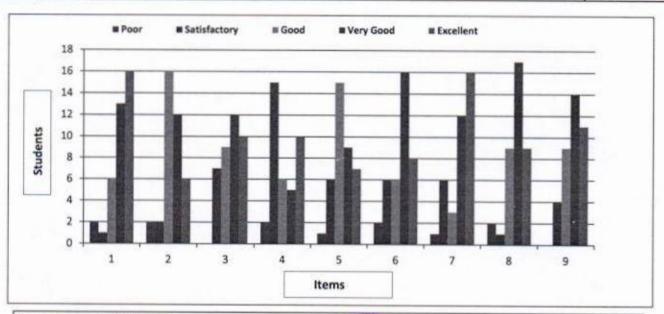
BANGALORE-560 054

Registrar

## Faculty of Life and allied Health Sciences M.S.Ramaiah University of Applied Sciences

Faculty Feedback on Curriculum Analysis Report										
Programme	B.sc.(FPT)			Sem / Year		182/2022	Academic Year		2022-23	
Category	1	2	3	4	5	6	7	8	9	
Poor	2	2	0	2	1	2	1	2	0	1
Satisfactory	1	2	7	15	6	6	6	1	4	2
Good	6	16	9	6	15	6	3	9	9	3
Very Good	13	12	12	5	9	16	12	17	14	4
Excellent	16	6	10	10	7	8	16	9	11	5
Responses	38	38	38	38	38	38	38	38	38	Overall Avg.
Average	4.05	3.47	3.66	3.16	3.39	3.58	3.95	3.79	3.84	3.65

SI.No	Items	Rating
1	Aims and objectives of the Programme are well defined	Very Good
2	The depth of the course content is adequate to fulfil the specified learning outcomes	Good
3	The course intended learning outcomes are mapped to intended programme outcomes	Very Good
4	Syllabus (indicative content) is suitable to the course outcomes and industry need based	Good
5	Evaluation process provide opportunities for demonstrating their learning through higher order of thinking.	Good
6	Delivery of the course contents has got good balance between cognitive, psychomotor and affective domain.	Very Good
7	The practical enable to develop experimental, design, problem solving and analysis skills of the students.	Very Good
8	Timely coverage of syllabus is possible in the mentioned number of teaching hours.	Very Good
9	Sufficient number of recommended books and reference material are available in the library.	Very Good
	Overall Average	Very Good



Any other comments / Suggestions:

Class lectures are not provided after the class hour

Class lectures are not provided after the class in the concepts of cours few basic classes are needed to understand the concepts of cours few basic classes are needed to understand the concepts of cours few basic classes.

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## Student Feedback on Curriculum Design and Development

Name of the Faculty	FLAHS		
Programme	B.Sc. Food Processing and Technology		
Period for which feedback taken	Academic Year 2022-23 _ 2 <sup>nd</sup> year (3 <sup>rd</sup> and 4 <sup>th</sup> semester		
Type of Feedback	Student Feedback on Curriculum Design and Development		
Semester/Year covered	Odd and even semester/ Batch 2020		
Name of the Faculty feedback Coordinator	Dr. Chennappa G		

SI. No.	Course on which feedback obtained	Semester/Year	Critical Observations from feedback	Action Taken with target date	Any other remarks/com ments
1	B.Sc. FPT	3 <sup>rd</sup> /2022	Wi-Fi facility need to be improved	Yes point has been considered and Wi-Fi facility will be improved	
2	B.Sc. FPT	3 <sup>rd</sup> /2022	Needs hand on trainings on novel food processing	Arrangements are made for hands on trainings for next semester	

Signature with Date of Feedback Coordinator	V
Signature with Date of Head of Department	C128181 28
Signature with Date of Respective Dean	Two!



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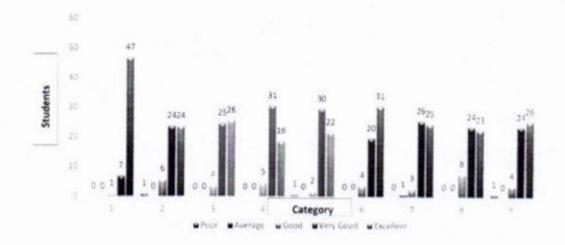
Dean

Faculty of Life and Allied Health Sciences M.S. Ramaiah University of Applied Sciences Bangalore-560054

## Faculty of Life and allied Health Sciences M.S.Ramaiah University of Applied Sciences

Programme		B.Sc.(FPT			/ Year	384/2021	Acemadic	nd Develo		
Category	1	2	3	4	5	6	7	-		2022-2023
Poor	0	1	0	0	1	0	0	8	9	
Average	0	0	0	0	0	0	0	0	1	1
Good	1	6	4	5	0	0	1	0	0	2
Very Good	1	24	24		- 2	4	3	8	4	3
Excellent	- 17	The second second	25	31	30	20	26	24	24	4
Excenent	47	24	26	19	22	31	25	23	26	5
Responses	55	55	55	55	55					
Average	-	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN	THE RESIDENCE OF THE PERSON NAMED IN		-	55	55	55	55	Overall Ave
- Training or	4.84	4.27	4.40	4.25	4.31	4.49	4.36	4.27	4.35	4.39

SI.No	Items	Rating
1	Aims and Objectives of the programme are well defined	Excellent
2	The depth of the course content is adequate to fulfil the specified learning outcomes	Very Good
3	The Course Intended Learning Outcomes are Mapped to Intended Programme Outcomes	Very Good
4	Syllabus (Indicative Content) is suitable to the course outcomes and industry need based	Very Good
5	Evaluation process provide opportunities for demonstrating their learning through higher order of thinking	Very Good
6	Delivery of course contents has got good balance between cognitive, psychomotor and affective domain	Very Good
7	The practical enable to develop experimental, design, problem solving and analysis skills of the students.	Very Good
8	Timely coverage of syllabus is possible in the mentioned number of teaching hours.	Very Good
9	Sufficient number of recommended books and reference material are available in the library.	Very Good
	Overall Average	Very Good



Any other comments / Suggestion: Need Laboratory facilities Needs hands on training for food processing courses Innovative assignment can be given



## Student Feedback on Curriculum Design and Development

Name of the Faculty	FLAHS
Programme	B.Sc. Food Processing and Technology
Period for which feedback taken	Academic Year 2022-23 _ 3rd year (5th and 6th semester)
Type of Feedback	Student Feedback on Curriculum Design and Development
Semester/Year covered	Odd and even semester/ Batch 2020
Name of the Faculty feedback Coordinator	Dr. Chennappa G

SI. No.	Course on which feedback obtained	Semester/Year	Critical Observations from feedback	Action Taken with target date	Any other remarks/comments
1	B.Sc. FPT	5 <sup>th</sup> /2022	Working hours of the library need to be extended	Yes, points have been considered	
2	B.Sc. FPT	5 <sup>th</sup> /2022	Needs industrial visits	Yes, points have been considered and industrial visits are planned	
3	B.Sc. FPT	6 <sup>th</sup> /2023	Need more placement for students.	Yes, points have been considered and informed to the concerned course leader	

Signature with Date of Feedback Coordinator	
Signature with Date of Head of Department	
Signature with Date of Respective Dean	Vacal

Registrar

M.S.Ramaiah University of Applied Sciences Bangalore - 500 054

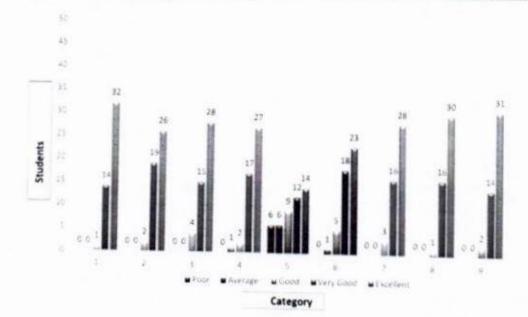
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Faculty of Life and Allied Health Sciences M.S. Ramaiah University of Applied Sciences Bangalore-560054

#### Faculty of Life and allied Health Sciences M.S.Ramaiah University of Applied Sciences

	Analysis	Report	on Stu	dent Fe	edback (	on Curriculur	n Design	and Develop	ment	
Programme	B.Sc.(FPT)			Sem	Sem / Year	586/2020	Acemadic Year		2022-2023	
Category	1	2	3	4	5	6	7.	8	9	
Poor	0	0	0	0	6	0	0	0	0	1
Average	0	0	0	1	6	1	0	0	0	2
Good	1	2	4	2	9	5	3	1	2	3
Very Good	14	19	15	17	12	18	16	16	14	4
Excellent	32	26	28	27	14	23	28	30	31	5
Responses	47	47	47	47	47	47	47	47	47	Overall Avg
Average	4.66	4.51	4.51	4.49	3.47	4.34	4.53	4.62	4.62	4,42

SI.No	Items	Rating
1	Aims and Objectives of the programme are well defined	Excellent
2	The depth of the course content is adequate to fulfil the specified learning outcomes	Excellent
3	The Course Intended Learning Outcomes are Mapped to Intended Programme Outcomes	Excellent
4	Syliabus (Indicative Content) is suitable to the course outcomes and industry need based	Very Good
5	Evaluation process provide opportunities for demonstrating their learning through higher order of thinking	Good
6	Delivery of course contents has got good balance between cognitive , psychomotor and affective domain	Very Good
7	The practical enable to develop experimental, design, problem solving and analysis skills of the students.	Excellent
8	Timely coverage of syllabus is possible in the mentioned number of teaching hours.	Excellent
9	Sufficient number of recommended books and reference material are available in the library.	Excellent
_	Overall Average	Very Good



Any other comments / Suggestions:

For group projects- innovative topics to be included

Number of placement should be increased

Programme was good and more helpful for students partier

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Faculty of Life and Allied Health Sciences M.S. Ramaiah University of Applied Sciences Bangalore-560054

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# Student Feedback on Curriculum Design and Development

Name of the Faculty	FLAHS
Programme	M.Sc. Food Nutrition and Dietetics
Period for which feedback taken	Academic Year 2022-23 _ 1" year (1" and 2" semester)
Type of Feedback	Student Feedback on Curriculum Design and Development
Semester/Year covered	Odd and even semester/ Batch 2022
Name of the Faculty feedback Coordinator	Dr. Chennappa G

SI. No.	Course on which feedback obtained	Semester/Year	Critical Observations from feedback	Action Taken with target date	Any other remarks/com ments
1	M.Sc. FND	1 <sup>st</sup> &2 <sup>nd</sup> /2022	Needs more books in library	Yes, Books have been purchased	-
3	M.Sc. FND	1st & 2nd /2022	Reduce number of slides per presentation	Yes point have been considered and informed to respective course leaders	

signature with Date of Feedback Coordinator	
Signature with Date of Head of Department	No.
Signature with Date of Respective Dean	10.3

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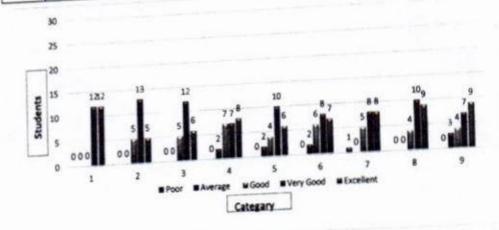
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Faculty of Life and Allied Health Sciences M.S. Ramaiah University of Applied Sciences Bangalore-560054

## Faculty of Life and allied Health Sciences M.S.Ramalah University of Applied Sciences

		M.S	.Rama	ah Uni	versity	of Applied	Science	- d David	loome	nt
Ana	lysis Repor	t on St	tudent	Feedba	ck on (	Curriculum	Design a	na vev	20	022-2023
CONTRACTOR AND ADDRESS OF THE PARTY OF THE P		Sc.(FND		Sem /		182/2022	Acemadi	c tear	9	
Programme	1,1	2	3	4	5	6	1	0	0	1
Category	0	0	0	0	0	0	1	0	3	2
Poor	0	0	0	2	2	2	0	4	4	3
Average	0	5	5	7	4	6	3	10	7	4
Good	_	13	12	7	10	8	- 8	9	9	5
Very Good	12	13	6	8	6	7	8	23	23	Overall Avg
Excellent	12	5	23	24	22	23	22	4.22	2.06	4.04
Responses	24	23	23	III SALI	2.91	3.87	4.00	S. Canada	The state of	
Average	4.50	4.00	4.14	200	MILE ALL				_	Rating

100	The state of the s	Rating
	l tems	Very Good
SI.No	Aims and Objectives of the programme are well defined	
1	Aims and Objectives of the programme and the second description outcomes	Very Good
2	The depth of the course content is adequate to fulfil the specified learning outcomes	Very Good
3	the stand Learning Dutcomes are Mapped to Intended Programme	Very Good
4	Collabor (Indicative Content) is suitable to the course outcomes and indicative Content) is suitable to the course outcomes and indicative Content) is suitable to the course outcomes and indicative Content) is suitable to the course outcomes and indicative Content).	Very Good
5	thinking.	Very Good
6	domain.  The practical enable to develop experimental, design, problem solving and analysis skills of the	very Good
7	students.	Very Good
8	Students.  Timely coverage of syllabus is possible in the mentioned number of teaching hours.  Timely coverage of syllabus is possible in the mentioned number of teaching hours.	Very Good
9	Sufficient number of recommended books and reference material are available in the library.  Overall Average	



Any other comments / Suggestion:

1. Needs more books in library

2. Reduce number of slides per presentation

Faculty of Life and Allied Health Sciences M.S. Ramaiah University of Applied Sciences Bangalore-560054





# Programme Feedback by Alumni Students

Name of the Faculty	FLAHS
Programme	B.Sc. (FPT)
Period for which feedback taken	Academic Year 2022-23 (Even Mid-Semester/Year) ongoing
Type of Feedback	Programme Feedback by Students on ongoing semester/year courses
Semester/Year covered	Even Sem and all years of study
Name of the Faculty feedback Coordinator	Dr. Channappa Gurikar

SI. No.	Programme feedback obtained	Semester/Year	Critical Observations from feedback	Action Taken with target	Any other remarks/comments
1	B.Sc. (Hons.) Food Processing and Technology	VI/III	More new courses can be added     More practical exposure is required     Need placement opportunities	Considered for the next academic years	

Signature with Date of Feedback Coordinator	
Signature with Date of Head of Department	1 AV
Signature with Date of Respective Dean	N N . 20
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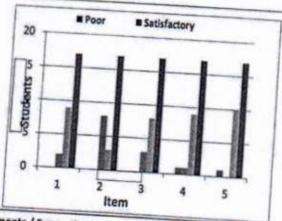
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Faculty of Life and allied Health Sciences M.S.Ramalah Univ

Programme	1		Alumni	sity of Applied S Feedback	renees	
Batch	1	2020	B.Sc.(Foo	d Processing and To	chnology)	
Criteria	1	2	1	Total Numi	ber of Students	28
Poor	0	0	3	4	5	40
Satisfactory	0		0	0	0	1 .
Good	2	0	0	1	1	1
Very Good	0	8	3	1	0	2
xcellent	17	3	8	9		3
Responses	17	17	17	17	10	4
verage	28	28	28	28	17	5
11-10-0	4.54	4.32	4.50	4.50	28	Overall Avg
				100	4,54	4 48

SI. No		4.48
1	Programme Outcomes facilitate the common in	Rating
2	Programme Outcomes facilitate the competency levels and proficiency of recruits.  Curriculum Imbibes Self-Directed Levels (1994)	Excellent
3	Curriculum imbibes Self-Directed-Learning (SDL), Time Management and Professional ethics  Curriculum is in line with regulatory norms and recent advancements added in the	Very Good
4	The curriculum has been designed to make students industry ready by imparting analytical and reasoning, language and soft skills in addition to technical competencies.	Very Good
5	The course enrichment and value add it	Very Good
6	humans with high value for gender sensitivity and national integrity.  Suggestions for the improvement of the curriculum	Excellent
	Overall Average	Very Good



Any other comments / Suggestions: More new courses can be added More practical exposure is required Need place placement opportunities

Head of the Department

ean Faculty of Life and Allied Health Sciences M.S. Ramaiah University of Applied Sciences

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## Student Feedback on Curriculum Design and Development

Name of the Faculty	FLAHS			
Programme	M.Sc. Food Science and Technology			
Period for which feedback taken	Academic Year 2022-23 2nd Year (3rd and 4th semester)			
Type of Feedback	Student Feedback on Curriculum Design and Development			
Semester/Year covered	Odd and even semester/ Batch 2021			
Name of the Faculty feedback Coordinator	Dr. Chennappa G			

Si. No.	Course on which feedback obtained	Semester/Year	Critical Observations from feedback	Action Taken with target date	Any other remarks/comments
1	M.Sc. FST	3 <sup>rd</sup> /2021	Shortage of reference books in library	Yes points has been considered and books will be purchased	
3	M.Sc. FST	4 <sup>th</sup> /2022	Wi-Fi connection need to be improved	Yes points has been considered Wi-Fi connection will be improved	

Signature with Date of Feedback Coordinator	
Signature with Date of Head of Department	~ C678/24 Dy
Signature with Date of Respective Dean	( my com

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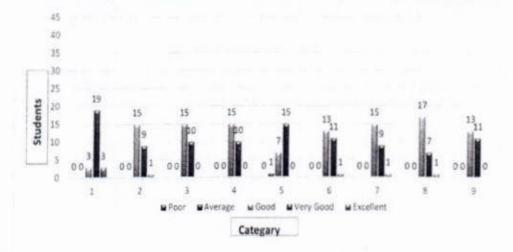
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Faculty of Life and Allied Health Sciences M.S. Ramaiah University of Applied Sciences Bangalore-560054

Faculty of Life and allied Health Sciences M.S.Ramaiah University of Applied Sciences

Ana	lysis Repo	rt on 5	tudent	Feedb	ack on	Curriculum	Design a	and Dev	relopme	ent
Programme	A	A.Sc.(FS	n	Sem	/ Year	3&4/2021	Acemad	ic Year	2	023-2023
Category	1	2	3	4	5	6	7	8	9	
Poor	0	0	0	0	0	0	0	0	0	1
Average	0	0	0	0	1	0	0	0	0	2
Good	3	15	15	15	7	13	15	17	13	3
Very Good	19	9	10	10	15	11	9	7	11	4
Excellent	3	1	0	0	0	1	1	1	0	5
Responses	25	25	25	25	23	25	25	25	24	Overall Avg
Average	4.00	3.44	3.40	3.40	3.61	3.52	3.44	3.36	3.46	3.51

SI.No	ltems :	Rating
1	Aims and Objectives of the programme are well defined	Very Good
2	The depth of the course content is adequate to fulfil the specified learning outcomes	Good
3	The Course Intended Learning Outcomes are Mapped to Intended Programme Outcomes	Good
4	Syllabus (Indicative Content) is suitable to the course outcomes and industry need based	Good
5	Evaluation process provide opportunities for demonstrating their learning through higher order of thinking.	Very Good
6	Delivery of course contents has got good balance between cognitive , psychomotor and affective domain	Very Good
7	The practical enable to develop experimental, design, problem solving and analysis skills of the students.	Good
8	Timely coverage of syllabus is possible in the mentioned number of teaching hours.	Good
9	Sufficient number of recommended books and reference material are available in the library.	Good
	Overall Average	Very Good



Any other comments / Suggestion:

1. Shortage of reference books in library

2. Wi-Fi connection need to be improved

Dean

Faculty of Life and Allied Health Sciences

M.S. Ramaiah University of Applied Sciences

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### Faculty Feedback on Curriculum

FLAHS
M.Sc. Food Science and Technology
Academic Year 2022-23 (Yearly)
Faculty Feedback on Curriculum
3 <sup>rd</sup> and 4 <sup>th</sup> Sem and all years of study
Dr. Chennappa Gurikar

SI. No.	Course on which feedback obtained	Semester/Year	Critical Observations from feedback	Action Taken with target date	Any other remarks/comments	
1	Innovation and Entrepreneurship	3 <sup>rd</sup>	This course is more relevant for post graduate students	Not required	NO	
2	Dissertation & Publication		The course content and programme specific outcomes are well suited for this course	Not required	NO	

Signature with Date of Feedback Coordinator	W. F.
Signature with Date of Head of Department	Charle was
Signature with Date of Respective Dean	(Try)

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				Allied H					_	_
				rsity of						
	Faculty	Feedba	ack on (	Curriculu						
Programme				MS	ic FST (Fo	od Techn	ology)			
Academic year		2022-23		Se	m				3	
Please Note: 1: Poor (P), 2: Average (A), 3: Satisfactory (5), 4: Good (G), 5: Very Good (VG)	Post- Harvest Technolog y of Cereals & Pulses	Millet Processin g Technolo gy	Fruits and Vegetable Processin g Technolo	Spices and Flavour Technolog Y	in Dairy	n and	Dairy Microbiol ogy	Dairy Engineerin g	Dairy Food Packaging	Group Project
Aims and Objectives of the programme are well defined	5	5	5	5	5	5	5	5	5	5
The depth of the course content is adequate to fulfil the specified learning outcomes	5	5	5	5	5	5	4	5	5	4
The Course Intended Learning Outcomes are Mapped to Intended Programme Over mes	4	4	4	5	4	5	4	5	5	4
Sylvous (Indicative Content) is suitable to the course outcomes and industry need based	5	3	4	5	4	4	4	4	4	5
Evaluation process provide opportunities for demonstrating their learning through higher order of thinking.	4	4	4	4	5	4	5	3	4	3
Delivery of course contents has got good balance between cognitive, psychomotor and affective domain	5	5	5	4	3	5	4	5	3	5
The practical enable to develop experimental, design, problem solving and analysis skills of the students.	3	5	4	4	4	3	5	5	5	4
Timely coverage of syllabus is possible in the mentioned number of teaching hours.	5	5	4	4	4	4	5	4	4	5
Sufficient number of recommended books and reference material are available in the libeary.		4	5	4	4	5	4	4	4	4
Overall Average	4.56	4.44	4.44	4.44	4.22	4.44	4.44	4.44	4.33	4.33



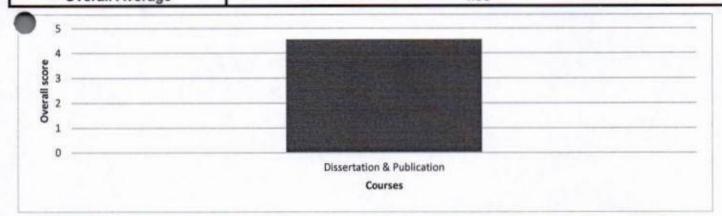
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Any other comments / Suggestions:

This course is more relevant for post graduate students

Registrar

Faci	ulty of Life and Alli	ed Health Sciences	
M.S.F	Ramaiah University	of Applied Sciences	
Faculty	Feedback on Curri	culum Analysis Repo	ort
Programme		MSc FST (Food Tech	
Academic year	2022-23	Sem	4
Please Note: 1: Poor (P), 2: Average (A), 3: Satisfactory (S), 4: Good (G), 5: Very Good (VG)		Dissertation & Public	cation
Aims and Objectives of the programme are well defined		5	
The depth of the course content is adequate to fulfil the specified learning outcomes		5	
The Course Intended Learning Outcomes are Mapped to Intended Programme Outcomes		4	
Syllabus (Indicative Content) is suitable to the course outcomes and industry need based		5	
Evaluation process provide opportunities for demonstrating their learning through higher order of thinking.		5	
Delivery of course contents has got good balance between cognitive , psychomotor and affective domain		5	
The practical enable to develop experimental, design, problem solving and analysis skills of the students.		4	
Timely coverage of syllabus is possible in the mentioned number of teaching hours.		4	
Sufficient number of recommended books and reference material are available in the library.		4	
Overall Average		4.56	37-10



Any other comments / Suggestions:

The course content and programme specific outcomes are well suited for this course.

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Faculty of Life & Allied Health Sciences
M.S. RAMAIAH UNIVERSITY OF APPLIED SCIENCES BANGALORE-560 054



### **Faculty Feedback on Curriculum**

Name of the Faculty	FLAHS
Programme	M.Sc. Food Science and Technology
Period for which feedback taken	Academic Year 2022-23 (Yearly)
Type of Feedback	Faculty Feedback on Curriculum
Semester/Year covered	1st and 2nd Sem and all years of study
Name of the Faculty feedback Coordinator	Dr. Chennappa Gurikar

SI. No.	Course on which feedback obtained	Semester/Year	Critical Observations from feedback	Action Taken with target date	Any other remarks/comments
1	Enzymes in Food Processing	1 <sup>st</sup>	The course content is well suited for under gradate	Not required	NO
2	Enzymes in Food Processing	1 <sup>st</sup>	Basic of this course are aligned with programme outcomes	Not required	NO
3	Baking and Confectionery Technology	2 <sup>nd</sup>	This course will provide the skills on bakery technology	Not required	NO

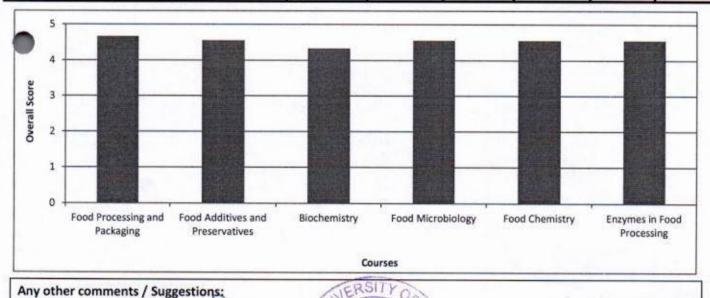
Signature with Date of Feedback Coordinator	W. T.
Signature with Date of Head of Department	Cersus. 200
Signature with Date of Respective Dean	Xmy.

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Faculty of Life & Allied Health Sciences

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Faculty of	of Life and A	llied Health	Sciences			
M.S.Rama	iah Universi	ty of Appli	ed Science	s		
Faculty Feed	back on Cui	rriculum Ar	alysis Rep	ort		
Programme		M.Sc.	Food Science	and Technol	logy	
Academic year		2022-23		Sem		1
Please Note: 1: Poor (P), 2: Average (A), 3: Satisfactory (S), 4: Good (G), 5: Very Good (VG)	Food Processing and Packaging	Food Additives and Preservatives	Biochemistry	Food Microbiology	Food Chemistry	Enzymes in Food Processing
Aims and Objectives of the programme are well defined	5	5	5	5	5	5
The depth of the course content is adequate to fulfil the specified learning outcomes	5	5	5	5	5	4
The Course Intended Learning Outcomes are Mapped to Intended Programme Outcomes	4	5	4	4	4	5
Sylvenus (Indicative Content) is suitable to the course out ones and industry need based	5	5	5	5	5	5
Evaluation process provide opportunities for demonstrating their learning through higher order of thinking.	5	5	5	5	4	5
Delivery of course contents has got good balance between cognitive , psychomotor and affective domain	4	4	4	4	4	4
The practical enable to develop experimental, design, problem solving and analysis skills of the students.	5	4	3	4	5	4
Timely coverage of syllabus is possible in the mentioned number of teaching hours.	4	4	4	5	5	4



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Any other comments / Suggestions:

Sufficient number of recommended books and reference

**Overall Average** 

material are available in the library.

The course content is well suited for under graduate.

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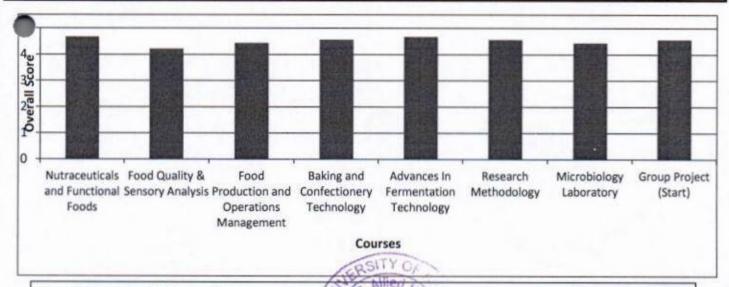
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## **Faculty of Life and Allied Health Sciences**

## M.S.Ramaiah University of Applied Sciences

Faculty Feedback on Curriculum Analysis Re
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Programme		M	Sc. Food Sci	ence and T	echnolog	v	
Academic year		2022-23 Sem			2		
Please Note: 1: Poor (P), 2: Average (A), 3: Satisfactory (S), 4: Good (G), 5: Very Good (VG)	Nutraceutical s and Functional Foods	Food Quality & Sensory Analysis	Food Production and Operations Management	Baking and Confectione ry Technology	Advances In Fermenta tion Technolo 8y	Research Methodolog Y	Group Project (Start)
Aims and Objectives of the programme are well defined	5	5	4	5	5	5	5
The depth of the course content is adequate to fulfil the specified learning outcomes	5	5	5	5	4	5	5
The Course Intended Learning Outcomes are Mapped to Intended Programme Outcomes	5	4	5	4	4	4	5
Sylmous (Indicative Content) is suitable to the course outcomes and industry need based	4	3	5	4	5	5	5
Evaluation process provide opportunities for demonstrating their learning through higher order of thinking.	5	4	4	5	4	5	4
Delivery of course contents has got good balance between cognitive , psychomotor and affective domain	5	4	3	5	5	4	4
The practical enable to develop experimental, design, problem solving and analysis skills of the students.	4	4	5	4	5	5	4
Timely coverage of syllabus is possible in the mentioned number of teaching hours.	5	4	4	5	5	4	5
Sufficient number of recommended books and reference material are available in the library.	4	5	5	4	5	4	4
Overall Average	4.67	4.22	4.44	4.56	4.67	4.56	4.56



Any other comments / Suggestions:

This course will provide the skills on bakery technology

Faculty of City & Allied Health Sciences
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Bangalore - 560 054

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#### Faculty Feedback on Curriculum

Name of the Faculty	FLAHS
Programme	B.Sc. Food Processing and Technology
Period for which feedback taken	Academic Year 2022-23 (Yearly)
Type of Feedback	Faculty Feedback on Curriculum
Semester/Year covered	1 <sup>st</sup> and 2 <sup>nd</sup> Sem and all years of study
Name of the Faculty feedback Coordinator	Dr. Chennappa Gurikar

SI. No.	Course on which feedback obtained	Semester/Year	Critical Observations from feedback	Action Taken with target date	Any other remarks/comment	
1	Introduction to Food Technology-I	1 <sup>st</sup>	The course content is well suited for under gradate	Not required	NO	
2	Principles of Food Science	1 <sup>st</sup>	This course is well defined for this programme	Not required	NO	
3	Food Processing are alig program		Basic of this course are aligned with programme outcomes	Not required	NO	
4	Bakery and Confectionery	2 <sup>nd</sup>	This course is well defined for under graduate students	Not required	NO	

Signature with Date of Feedback Coordinator	W. O
Signature with Date of Head of Department	Challe Sa
Signature with Date of Respective Dean	(Xun)

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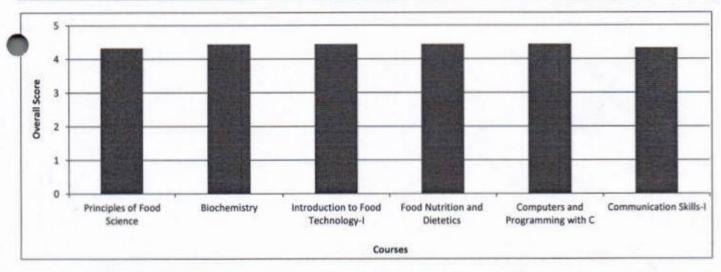
Faculty of Life & Allied Health Sciences

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			Health Scien			
	The second secon		f Applied Sci			
Facul	ty Feedbac		lum Analysis	_		
Programme			. Food Process	ing and Techno	ology	
Academic year		2022-23		Se	m	1
Please Note: 1: Poor (P), 2: Average (A), 3: Satisfactory (S), 4: Good (G), 5: Very Good (VG)	Principles of Food Science	Biochemistry	Introduction to Food Technology-I	Food Nutrition and Dietetics	Computers and Programmin g with C	Communica on Skills-I
Aims and Objectives of the programme are well defined	5	5	5	5	5	5
The depth of the course content is adequate to fulfil the specified learning outcomes	5	5	4	5	5	4
The Course Intended Learning Outcomes are Mapped to Intended Programme Outcomes	5	5	5	5	5	4
llabus (Indicative Content) is suitable to the course outcomes and industry need based	5	5	4	5	4	5
Evaluation process provide opportunities for demonstrating their learning through higher order of thinking.	3	3	4	4	4	5
Delivery of course contents has got good balance between cognitive, psychomotor and affective domain	4	4	5	4	4	4
The practical enable to develop experimental, design, problem solving and analysis skills of the students.	4	5	5	4	5	4
Timely coverage of syllabus is possible in the mentioned number of teaching hours.	3	4	4	3	3	4
Sufficient number of recommended books and reference material are available in the library.	5	4	4	5	5	4
Overall Average	4.33	4.44	4.44	4.44	4.44	4.33





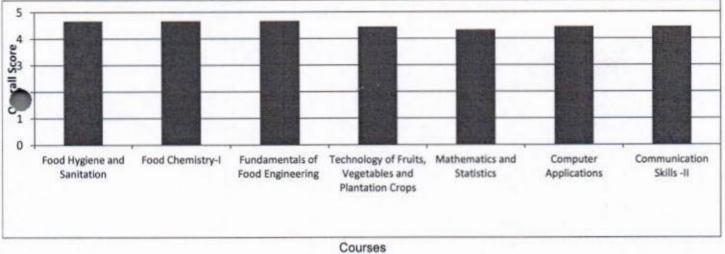
The course content is well suited for under graduate. the course is well defined for this programme

Basic of his course are aligned with programme outcomes.

Faculty of Life & Allied Health Sciences
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	Faculty	of Life and	Allied Health	Sciences			
	M.S.Ram	aiah Univer	sity of Applie	d Sciences			
CI CIEDRO	Faculty Fee	dback on Co	urriculum Ana	lysis Report			
Programme			B.Sc. Food Pr	ocessing and T	echnology		
Academic year		2022-23		Se	m	2	
Please Note: 1: Poor (P), 2: Average (A), 3: Satisfactory (5), 4: Good (G), 5: Very Good (VG)	Food Hygiene and Sanitation	Food Chemistry-I	Fundamentals of Food Engineering	Technology of Fruits, Vegetables and Plantation Crops	Mathematic s and Statistics	Computer Applications	Commun cation Skills -II
Aims and Objectives of the programme are well defined	5	5	5	5	5	5	5
The depth of the course content is adequate to fulfil the specified learning outcomes	5	5	5	4	4	5	4
The Course Intended Learning Outcomes are Mapped to Intended Programme Outcomes	4	4	5	4	4	4	4
Syllabus (Indicative Content) is suitable to the course outcomes and industry need based	5	5	5	4	5	4	5
Evaluation process provide opportunities for destrating their learning through higher order of thinking.	5	5	4	5	4	4	5
Delivery of course contents has got good balance between cognitive, psychomotor and affective domain	5	5	5	4	4	5	4
The practical enable to develop experimental, design, problem solving and analysis skills of the students.	4	5	4	5	4	4	5
Timely coverage of syllabus is possible in the mentioned number of teaching hours.	5	4	4	4	5	5	5
Sufficient number of recommended books and reference material are available in the library.	4	4	5	5	4	4	3
Overall Average	4.67	4.67	4.67	4.44	4.33	4.44	4.44



Any other comments / Suggestions:

The course is well defined for under graduate

Faculty of Life & Allied Health Science
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#### **Employer Feedback**

Name of the Faculty	FLAHS	
Programme	B.Sc. Food Processing and Technology	
Period for which feedback taken	Academic Year 2022-23	
Type of Feedback	Employer Feedback	
Semester/Year covered	2019-22	
Name of the Faculty feedback Coordinator	Dr. David H	

SI. No.	Course on which feedback obtained	Semester/Year	Critical Observations from feedback	Action Taken with target date	Any other remarks/comments
1	B.Sc FPT	2019-22	Advanced technologies related to food processing need to be included	Yes, Guest lectures was arranged on Novel Food Technologies	

Signature with Date of Feedback Coordinator	ten of
Signature with Date of Head of Department	Chillio .
Signature with Date of Respective Dean	(Xmay)

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Bangalore - 560 054

Dean

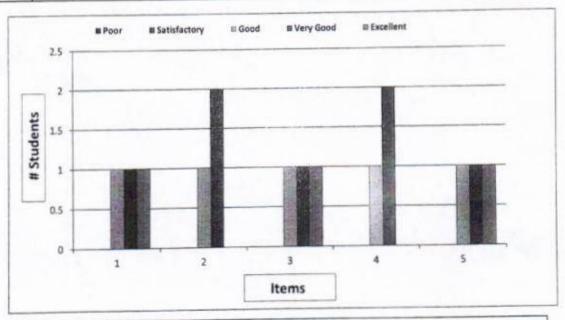
### Faculty of Life and allied Health Sciences

## M.S.Ramalah University of Applied Sciences

### **Employer Feedback Analysis Report**

Programme	B.:	B.Sc Hons FPT		B.Sc Hons FPT Batch		2019
Criteria	1	2	3	4	5	
Poor	0	0	0	0	0	1
Satisfactory	0	0	0	0	0	2
Good	1	1	1	1	1	3
Very Good	1	2	1	2	1	4
Excellent	1	0	1	0	1	5
Responses	3	3	3	3	3	Overall Avg.
Average	4.00	3.67	4.00	3.67	4.00	3.87

SI.No	Average 4.00 3.67 4.00 5.67	Rating
1	Programme Outcomes tacilitate the competency levels and proficiency of recruits	Very Good
2	Curriculum imbibes Self-birected-Learning (SDL), Time Management and Professional ethics	Very Good
3	Curriculum is in line with regulatory norms and recent advancements added in the programme	Very Good
4	The curriculum has been designed to make students industry ready by imparting analytical and reasoning, language and soft skills in addition to technical competencies	Very Good
5	The course enrichment and value added courses help the recruits of RUAS to be a good humans with high values for gender sensitivity and national integrity	Very Good
-	Overall Average	Very Good



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Any other comments / Suggestions: Advanced technologies related to food processing need to be included

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Faculty of Life and Allied Health Sciences M.S. Ramaiah University of Applied Sciences Bangalore-560054 Registrar malah University of Applied Sciences Bangalore - 560 054



## **Employer Feedback**

Name of the Faculty	FLAHS
Programme	B.Sc. Food Processing and Technology
Period for which feedback taken	Academic Year 2023
Type of Feedback	Employer Feedback
Semester/Year covered	2020-23
Name of the Faculty feedback Coordinator	Dr. David H

SI. No.	Course on which feedback obtained	Semester/Year	Critical Observations from feedback	Action Taken with target date	Any other remarks/comments
1	B.Sc FPT	2020-23	Hands training on innovative food processing is required.	Yes, point has been considered and it will be implemented.	

Signature with Date of Feedback Coordinator	m d
Signature with Date of Head of Department	Centero
Signature with Date of Respective Dean	X-may)

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M.S.Ramalah University of Applied Sciences Bangalore - 560 654

Dean

Faculty of Life and Allied Health Sciences
M.S. Ramaiah University of Applied Sciences
Bangalore-560054

#### Faculty of Life and allied Health Sciences

#### M.S.Ramaiah University of Applied Sciences

#### **Employer Feedback Analysis Report**

Programme	e B.Sc Hons FPT Batch		2020			
Criteria	1	2	3	4	5	
Poor	0	0	0	0	0	1
Satisfactory	0	0	0	0	0	2
Good	0	0	2	1	0	3
Very Good	0	4	0	1	4	4
Excellent	4	0	2	2	0	5
Responses	4 4 2	4	4	4	4	Overall Avg.
Average	5.00	4.00	4.00	4 25	4.00	4.25

SI.No	Items	Rating			
1	Programme Outcomes tacilitate the competency levels and proficiency of recruits				
2	Curriculum imbibes Self-birected-Learning (SDL), Time Management and Professional ethics	Very Good			
3	Curriculum is in line with regulatory norms and recent advancements addedin the programme				
4	The curriculum has been designed to make students industry ready by imparting analytical and reasoning, language and soft skills in addition to technical competencies	Very Good			
5	The course enrichment and value added courses help the recruits of RUAS to be a good humans with high values for gender sensitivity and national integrity	Very Good			
	Overall Average	Very Good			



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Any other comments / Suggestions:

Hands training on innovative food processing is required.

Dean

Faculty of Life and Allied Health Sciences M.S. Ramaiah University of Applied Sciences Bangalore-560054

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# Programme Feedback by Alumni Students

Name of the Faculty	FLAHS
Programme	M.Sc. ( FST)
Period for which feedback taken	Academic Year 2022-23 (Even Mid-Semester/Year) ongoing
Type of Feedback	Programme Feedback by Students on ongoing semester/year courses
Semester/Year covered	Even Sem and all years of study
Name of the Faculty feedback Coordinator	Dr. Channappa Gurikar

SI. No.	Programme feedback obtained	Semester/Year	Critical Observations from feedback	Action Taken with target date	Any other remarks/comments
1	M.Sc. Food Science and Technology	IV/II	Projects has to be done based on student interest	It has been implemented, once again we will make sure for the coming academic years	

Signature with Date of Feedback Coord	inator	
Signature with Date of Head of Departm	nent	
Signature with Date of Respective Dean	Allieo Or July	
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Faculty of Life and Amed Health Sciences M.S. Ramaiah University of Applied Sciences Bangalore-560054

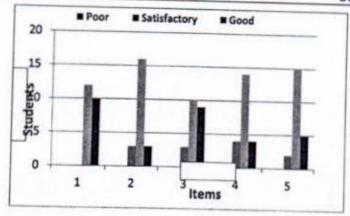
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# Faculty of Life and allied Health Sciences M.S. Ramaiah University of Applied Sciences

December			Alumni i	Feedback				
Programme		M.Sc.(Food Science and Technology)						
Batch		2021		Total M	inology)			
Criteria	1	2	1 2	Total Numb	er of Students	22		
Poor	0	0	3	4	5			
Satisfactory	0	0	0	0	0	1		
Good	0	0	0	0	0	2		
Very Good		3	3	4	2	2		
	12	16	10	14	15	3		
Excellent	10	3	9	4	- 13	4		
Responses	22	22	22	22	3	5		
Average	4.45	4.00	4.27	4.00	4.14	Overall Avg		

SI. No	Items	
1		Rating
2	Programme Outcomes facilitate the competency levels and proficiency of recruits.	Very Good
3	Curriculum imbibes Self-Directed-Learning (SDL), Time Management and Professional ethics	Very Good
3	Curriculum is in line with regulatory norms and recent advancements added in the programme.	Very Good
4	The curriculum has been designed to make students industry ready by imparting analytical and reasoning, language and soft skills in addition to technical competencies.	Very Good
5	The course enrichment and value added courses help the recruits of RUAS to be a good humans with high value for gender sensitivity and national integrity.	
6	Suggestions for the improvement of the curriculum	Very Good
	Overall Average	Very Goo



Any other comments / Suggestions: Projects has to be done based on students intrest

Head of the Department

Dean

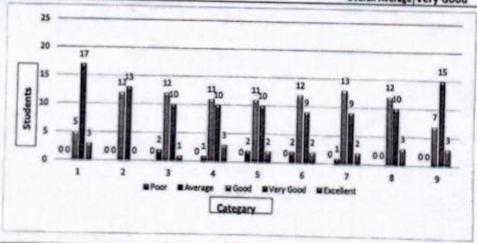
Faculty of Life and Allied Health Sciences M.S. Ramaiah University of Applied Sciences Bangatore-560054



#### Faculty of Life and allied Health Sciences M.S.Ramaiah University of Applied Scien

Programme		lysis Report on Student M.Sc.(FST)		Sem / Year		3&4/2019	Acemadic Year		2020-2021	
Category	1	2	3	4	5	6	7	2	0	020-2021
Poor	0	0	0	0	0	0	0	0	0	
Average	0	0	2	1	2	2	-		_	1
Good	5	12	12	11	11	12	1	0	0	2
Very Good	17	13	10	10	10	12	13	12	7	3
Excellent	3	0	10	10	10	9	9	10	15	4
Responses		_	1	3	2	2	2	3	3	5
	25	25	25	25	25	25	25	25	25	Overall Ave
Average	3.92	3.52	3.40	3.60	3.48	3.44	3.48	3.64	3.84	3.59

SLNo	Items	Rating
1	Aims and Objectives of the programme are well defined	Very Good
2	The depth of the course content is adequate to fulfil the specified learning outcomes	Very Good
3	The Course intended Learning Outcomes are Mapped to Intended Programme Outcomes	Good
4	Syllabus (Indicative Content) is suitable to the course outcomes and industry need based	
5	Evaluation process provide opportunities for demonstrating their learning through higher order of thinking.	Very Good Good
6	Delivery of course contents has got good balance between cognitive , psychomotor and affective domain	Good
7	The practical enable to develop experimental, design, problem solving and analysis skills of the students.	Good
8	Timely coverage of syllabus is possible in the mentioned number of teaching hours.	Very Good
9	Sufficient number of recommended books and reference material are available in the library.	Very Good
	Overall Average	Very Good



Any other comments / Suggestion: 1. Needs more practical activities

- Needs encouragement to attend workshops and conferences
   Needs orientation class at the beginning of the programme
- 4.Include value added courses

Faculty of Life & Allied Head A.S. RAMAIAH BANGALORE-560 05 Registrar M.S. Ramaiah University of Applied Sciences Bangalore - 560 054



# Course Feedback by Alumni Students

Name of the Faculty	FLAHS	
Programme	B.Sc. Food Processing and Technology	
Period for which feedback taken	Academic Year 2022-23	
Type of Feedback	Course Feedback I	
Semester/Year covered	Course Feedback by Alumni Students 2019-22	
Name of the Faculty feedback Coordinator	Dr. David H	

SI. No.	Course on which feedback obtained	Semester/Year	Critical Observations from feedback	Action Taken with target date	Any other remarks/comments
1	B.Sc. FPT	2019-22	Wi-Fi facility need to be provided.	Yes, Wi-Fi facility has been provided	

Signature with Date of Feedback Coordinator	V.
Signature with Date of Head of Department	Charat Da
Signature with Date of Respective Dean	1/m



Registrar

M.S. Ramalah University of Applied Sciences Sangatore - 500 054

Dean

Faculty of Life and Allied Health Sciences

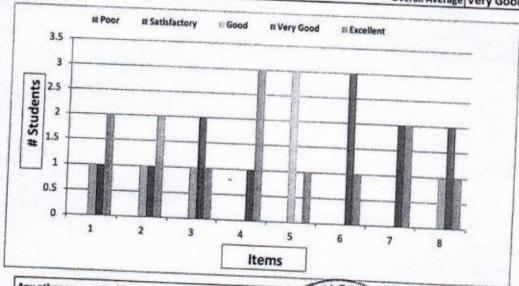
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# Faculty of Life and allied Health Sciences M.S.Ramaiah University of Applied Sciences

		-	Alumni f	eedbac	k Analy:	sis Repor	t	Trans	
Programme	В	.Sc Hons				-			T
Criteria	1	2	3	4	1		В	atch	2019
Poor	0	0	0	-	5	6	7	8	1000
Satisfactory	0			0	0	0	0	0	1
Good	1	0	0	0	0	0	0	0	1 2
/ery Good	1	1	1	0	3	0	0	1	4
xcellent	1	1	2	1	0	2	-	1	3
	2	2	1	3	1	3	2	2	4
Responses	4	4	4	-	1	1	2	1	5
verage	4.25	4.25	4.00	4	4	4	4	4	Overall Avg
DE INSTITUTE OF		7123	4.00	4.75	3.50	4.25	4.50	4.00	4.19

SI.No	4.00	4.19
1	Items How were the courses designeed and their spacing in regard	Rating
2		Very Good
3	Curriculum provides excellent exposure towards outcome based learning contents  The adequate focus was given to acquire Competency / Transferable Skills / career  counselling / research projects / field visits etc.,	Very Good
4	The Collaborative and Co-operating learning environment during the programme period	Very Good
900 Y	The ambience of University was cohesive to create interest in Life Long Learning ,  Entrepreneurship skill and Career Development	Excellent
6	The programme has laid down a strong foundation to pursue next level of education	Good
7	Developed ability to communicate effectively in written, verbal and technical forms	Very Good
8	Prepared me to work as a part of multidisciplinary team and for successful career in	Very Good
		Very Good
	Overall Average	Very Good



Any other comments / Suggestions: Wi-Fi facility needs to be provided. HAND Bangalore Scientiff B

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## A. ACADEMIC PROGRAMMES (PREVIOUS 3 / 5 ACADEMIC YEAR'S DATA)

## a. UG Programme/s

			201	19-20	20	20-21	202	1-22	2022	2-23	202	3-24
Sl.No	Name of the Programme (as per UGC Nomenclature)	Year of Commenc ement	Sanctio ned Intake	Actual Admissio n	Sanct ioned Intak e	Actual Admissio n		Actual Admis sion	Sanction ed Intake	Actual Admissio n	Sanction ed Intake	Actual Admissio n
1	B.Des. in Product Design	2014	60	37	60	32	60	31	30	14	30	22
2	B.Des. in Visual Communication	2014	0		0	0	0	0	0	0	0	0
3	B.Des. in Fashion Design	2017	60	12	60	8	60	15	20	15	20	11
4	B.Des.in Interaction Design	2022	0		0	0	0	0	30	17	30	12
5	BDS	2014	60	60	60	60	60	60	60	60	60	60
6	B.Tech. in Aerospace Engineering	2017	60	50	60	49	60	51	60	56	60	57
7	B.Tech. in Automotive Engineering	2017	60	16	60	7	60	12	30	13	30	17
8	B.Tech. in Civil Engineering	2014	120	33	60	25	60	17	30	14	30	18
9	B.Tech. in Computer Science and Engineering	2014	180	163	180	167	180	165	180	180	180	180
10	B.Tech. in Electrical and Electronics Engineering	2014	120	47	60	30	60	38	60	30	60	55
11	B.Tech. in Electronics and Communication Engineering	2014	120	66	120	76	120	78	60	60	60	59
12	B.Tech. in Mechanical Engineering	2014	120	50	120	19	60	32	60	15	60	32
13	B.Tech. in Robotics	2020	0		60	30	60	30	30	30	30	26
14	B.Tech. in Artificial Intelligence and Machine Learning	2020	0		60	57	60	59	60	60	60	60

15	B.Tech. in Information Science and Engineering	2020	0		60	38	60	55	60	60	60	59
16	B.Tech. in Mathematics and Computing	2020	0		60	20	60	37	30	26	30	23
17	внм	2014	120	80	120	83	120	103	120	74	120	60
18	B.Sc. (Hons) in Biotechnology	2018	60	56	60	59	60	59	60	56	60	52
19	B.Sc. (Hons) in Food Processing and Technology	2018	60	60	60	60	60	60	60	41	60	34
20	B.Sc Medical Radiology And Imaging Technology	2018	30	30	30	27	30	29	30	17	30	20
21	B.Sc Dialysis Therapy Technology	2018	30	20	30	11	30	13	30	9	30	5
22	B.Sc Operation Theater Technology	2018	30	20	30	20	30	24	30	24	30	21
23	B.Sc Optometry	2019	30	9	30	17	30	17	30	12	30	8
24	B.Sc Cardiac Care Technology	2019	30	30	30	30	30	29	30	30	30	30
25	BBA	2018	120	93	120	119	120	120	120	120	120	120
26	B.Com (Hons)	2018	60	32	60	60	60	59	60	60	60	41
27	B.Sc.(Hons) [PCMSCE]	2018	120	22	120	60	120	48	60	22	60	16
28	B.Pharm	2014	100	95	100	100	100	98	100	96	100	98
29	Pharm.D	2014	30	30	30	30	30	30	30	29	30	30
30	B.Sc. (Hons). LLB	2021	0		0	0	60	10	60	16	60	3
31	B.A.(Hons).LLB	2022	0		0	0	0	0	60	53	60	46
32	B.Sc.(Hons) Psychology	2021	0		0	0	60	57	60	60	60	60
33	B.Sc.(Hons) Economics	2021	0		0	0	60	6	60	10	60	4
34	B.A. (Hons)Sociology	2021	0		0	0	60	4	0	0	0	0
35	B.Sc.(Hons) Data Science and Analytics	2021	0		0	0	60	21	60	59	60	22
	ВРТ	2022							40	40	80	65
	B.Sc Nursing	2022							100	72	100	100
	Post B.Sc Nursing	2022							30	17	30	16
	MBBS	2022							150	148	150	150

B.Voc - Product Design & Modelling	2015									30	22
B.Voc - Culinary Operations	2015									30	11
B.Voc - Post Harvest Technology	2015									30	8
B.Voc - Retail Management	2015									30	0
TOTAL		1780	1111	1900	1294	2140	1467	2180	1715	2340	1733



## a. PG Programme/s

		Year of	201	19-20		0-21		1-22	2022	2-23	202	3-24
Sl.No	Name of the Programme (as per UGC Nomenclature)	Comm enceme nt	Sancti	Actual Admissio n	Sanction ed Intake	Actual Admissio n	Sanction ed Intake	Actual Admissio n	Sanction ed Intake	Actual Admissio n	Sanction ed Intake	Actual Admissio n
1	M.Des. in Product Design	2014	24	6	24	11	24	8	10	10	10	10
2	M.Des. in Fashion Design	2014	24	0	24	3	24	4	10	7	10	4
3	M.Des. in Rural Product Design	2014	0	0	0	0	0	0	0	0	0	0
4	M.Des. in Computer Animation and Game Design	2014	0	0	0	0	0	0	0	0	0	0
5	M.Des. in Commercial and Retail Design	2014	0	0	0	0	0	0	0	0	0	0
6	MDS in Oral Medicine, Diagnosis & Radiology	2015	3	3	3	3	3	2	3	2	3	3
7	MDS in Periodontology	2015	5	5	5	5	5	4	5	5	5	4
8	MDS in Oral & Maxillofacial Surgery	2015	6	6	6	6	6	6	6	6	6	6
9	MDS in Conservative Dentistry and Endodontics	2015	5	5	5	5	5	5	5	5	5	5
10	MDS in Orthodontics	2015	5	5	5	5	5	5	5	5	5	5
11	MDS - Oral Pathalogy	2015	3	1	3	0	3	1	3	1	3	0
12	MDS-Public Health Dentistry	2015	2	2	2	2	2	1	2	1	2	2
13	MDS in Pedodontics	2015	6	6	6	6	6	6	6	6	6	6
14	MDS in Prosthodontics	2015	5	5	5	5	5	5	5	5	5	4
15	M.Tech. in Automotive Engineering	2014	18	4	18	5	12	7	6	0	6	1
16	M.Tech. in Automotive Product Design	2014	0		0	0	0	0	0	0	0	0

			,									
17	M.Tech. in Automotive Powertrain Design	2014	0		0	0	0	0	0	0	0	0
18	M.Tech. in Turbo Machinery Design	2014	0		0	0	0	0	0	0	0	0
19	M.Tech. in Aircraft Design	2014	18	7	0	0	0	0	0	0	0	0
20	M.Tech. in Aerospace Engineering	2020	0		18	11	18	7	12	9	12	8
21	M.Tech. in Advanced Machinery Design	2014	18	5	18	4	12	0	6	0	6	0
22	M.Tech. in Advanced Manufacturing Technologies	2014	0		0	0	0	0	0	0	0	0
23	M.Tech. in Engineering and Manufacturing Management	2014	0		0	0	0	0	0	0	0	0
24	M.Tech. in Manufacturing Technologies and Engineering Management	2019	18	4	18	10	18	2	12	0	12	7
25	M.Tech. in Robotic Engineering	2019	18	7	18	7	12	5	6	6	6	3
26	M.Tech. in Civil Structural Design	2014	0		0	0	0	0	0	0	0	0
27	M.Tech. in Structural Engineering	2019	24	10	24	12	24	8	12	9	12	11
28	M.Tech. in Construction Engineering and Management	2014	24	19	24	17	24	21	18	9	18	13
29	M.Tech. in Transportation Engineering	2016	18	9	18	9	18	14	12	4	12	4
30	M.Tech. in Sanitation Engineering and Waste Management	2016	18	6	0	0	0	0	0	0	0	0
31	M.Tech. in Environmental Engineering and Management	2019	0		18	10	18	7	12	4	12	6

32	M.Tech. in Electrical Machineray Design	2014	0		0	0	0	0	0	0	0	0
33	M.Tech. in Sensors and Control System	2014	0		0	0	0	0	0	0	0	0
34	M.Tech. in Biomedical Engineering	2014	0		0	0	0	0	0	0	0	0
35	M.Tech. in Electronic System Design Engineering	2014	0		0	0	0	0	0	0	0	0
36	M.Tech. in Digital Signal and Image Processing	2014	0		0	0	0	0	0	0	0	0
37	M.Tech. in Signal Processing and Communication Technologies	2014	0		0	0	0	0	0	0	0	0
38	M.Tech. in VLSI System Design	2014	0		0	0	0	0	0	0	0	0
39	M.Tech. in VLSI and NanoTechnology	2019	18	9	18	10	18	2	12	1	12	9
40	M.Tech. in Power Electronics and Drives	2019	18	8	18	4	12	3	6	0	6	2
41	M.Tech. in Computer Science and Networking	2014	0		0	0	0	0	0	0	0	0
42	M.Tech. in Real Time Embedded System	2014	0		0	0	0	0	0	0	0	0
43	M.Tech. in Automotive Electronics	2014	0		0	0	0	0	0	0	0	0
44	M.Tech. in Data Science and Engineering	2019	18	8	18	8	18	9	18	13	18	9
45	M.Tech. in Machine Learning and Intelligent Systems	2016	18	11	0	0	0	0	0	0	0	0
46	M.Tech. in Artificial Intelligence and Machine Learning	2019	0		24	12	24	17	18	12	18	17

47	MBA in Hospitality Management (MBA in HM)	2014	0	11	0	0	0	0	0	0	0	
48	M.Sc in Bio-Technology	2018	30	28	30	30	30	30	30	27	30	30
49	M.Sc in Food Science and Technology	2019	30	30	30	30	30	30	30	30	30	30
50	M.Sc in Food Nutrition & Dietetics	2022	0	0	0	0	0	0	30	29	30	30
51	M.Sc in Molecular and Celluar Biology	2019	30	17	30	28	30	27	30	26	30	30
52	Master of Public Health	2020	0	0	30	22	30	30	30	24	30	30
53	Master of Hospital Administration (MHA)	2014	30	23	30	26	30	29	30	28	30	29
54	MBA	2014	240	118	240	198	240	221	240	240	240	240
55	MBA - FMT											
56	MBA - HRM											
57	MBA - MMT											
58	MBA - OPM											
59	MBA - BFSI											
60	MBA - BNA											
61	MBA - HM											
62	M.Com in ACT	2014	30	8	30	12	30	9	0	0	0	
63	M.Com in BAF	2014										
64	Master of Science - Physics	2014	30	10	30	18	30	13	15	13	15	14
65	Master of Science - SS	2014										
66	Master of Science - NPT	2014										
67	Master of Science - OE	2014										
68	Master of Science - Chemistry	2014	30	8	30	30	30	27	30	30	30	29
69	Master of Science - AC	2014										
70	Master of Science - IC	2014										
71	Master of Science - OC	2014										
72	Master of Science -Applied Maths	2014	30	4	30	9	30	11	15	8	15	14

73	M. Pharm - Pharmacognosy	2014	15	2	15	0	15	0	15	10	15	8
74	M. Pharm - Pharmaceutical Chemistry	2014	15	5	15	14	15	13	15	14	15	15
75	M. Pharm - Pharmaceutics	2014	15	11	15	12	15	13	15	15	15	15
76	M. Pharm - Pharmacology	2014	15	10	15	15	15	14	15	15	15	15
77	M. Pharm - Phraceutical Analysis	2014	0		0		0	0	0		0	0
78	M. Pharm - Pharmaceutical Quality Assurance	2014	0		0		0	0	0		0	0
79	M. Pharm - Pharmacy Practice	2014	9	3	9	4	9	7	9	9	9	9
80	M. Pharm - Pharmaceutical Technology	2014	0		0		0	0	0		0	0
81	M. Pharm - Hearbal Drug Technology	2014	0		0		0	0	0		0	0
82	MBA in Pharma Business Management (PBM)	2017	0	9	0	0	0	0	0	0	0	0
83	MA in Public Policy	2020	0	0	60	6	60	7	60	5	60	4
84	MPT	2022							20	19	30	20
85	M.Sc Nursing	2022							35	14	35	14
86	MD/MS	2022							169	147	169	154
87	Super Speciality DM/M.Ch	2022							50	40	50	48
	TOTAL		883	448	979	624	955	630	1093	863	1103	917



**Ph.D. Admissions Details** 

Year	Full Time	Part Time	Total
2018-19	5	46	51
2019-20	8	49	57
2020-21	15	39	54
2021-22	10	56	66
2022-23	13	8	21
2023-24	27	22	49
Total	78	220	298



### Ph. D Programme/s

SI.	Name of the	Year of	2020	)-21	202	1-22	202	2-23	202	3-24
No	the Commen cement me (as per UGC Nomenc lature)	Sancti oned Intake	Actua I Admi ssion	Sancti oned Intake	Sancti oned Intake	Actua I Admi ssion	Actua I Admi ssion	Actua I Admi ssion	Actua I Admi ssion	
	Ph.D.	2014		54 (Sept 2020)		66 (July 2021)		43 (Aug 2022 + Jan 2023)		49 (Aug 2023 + Jan 2024)



## **Vocational Programmes offered:**

Sl.No	Name of the Programme	Year of Commencement	2019-20		2020-21		202	2021-22		2022-23		2023-24	
	(as per UGC Nomenclature)		Sanctioned Intake	Actual Admission									
1	B.Voc in Culinary Operations	2016-17	30	33	30	16	30	21	30		30	11	
2	B.Voc in Product Design and Modelling	2016-17	45	6	45	3	45	2	30		30		
3	B.Voc in Mechatronics	2018-19	45	2	45		45		30		30		
4	B.Voc in Post Harvest Technology	2019-20	30	11	30	8	30	12	30		30	8	



				No of Students Admitted					
Sl.No	Name of the Program mes	Year	Male	Female	Total	SC	ST	OBC	GM
		2019	674	437	1111	66	23	414	608
		2020	723	571	1294	73	28	445	748
1	UG	2021	800	667	1467	82	24	540	821
1		2022	857	858	1715	114	25	612	964
		2023	938	795	1733	144	45	665	879
		TOTAL	3992	3328	7320	479	145	2676	4020
		2019	202	246	448	26	10	156	256
		2020	290	334	624	43	15	226	340
2	PG	2021	306	324	630	41	13	218	358
	PG	2022	385	478	863	54	20	248	541
		2023	401	516	917	67	28	302	520
		TOTAL	1584	1898	3482	231	86	1150	2015

# **ANNEXURE 19**



## a. Details of Students from other States and Countries

Program	F	From Other States of India			NRI Students				Foreign Students(INCLUDING NEPAL)						
mes	Y1 (2019)	Y2 (2020)	Y3 (2021)	Y4 (2022)	Y5 (2023)	Y1 (2019)	Y2 (2020)	Y3 (2021)	Y4 (2022)	Y5 (2023)	Y1 (2019)	Y2 (2020)	Y3 (2021)	Y4 (2022)	Y5 (2023)
UG	404	460	513	640	566						3	3	1	2	11
PG	157	200	210	318	335						1	1	1	1	0
Ph.D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	1	-	-	-	-	-	-	-	-	-	1	1	-



2019 -20 9		VISE DIVER	SITY	2020-21 STAT	E-WISE	2020-21 ST	ATE-	2021-22 STA	TE-	2021-22 STA	TE-	2022-23 STAT	TE-WISE	2022-23 STAT	E-WISE	2023-24 STAT	E-WISE	2023-24 STATE	E-WISE
UG		PG		UG		PG		UG		PG		UG		PG		UG		PG	
STATES	Total	STATES	Total	STATES	Total	STATES	Total	STATES	Total	STATES	Total	STATES	Total	STATES	Total	STATES	Total	STATES	Total
A P	63	A P	26	ΑP	78	ΑP	33	A P	102	ΑP	47	A P	85	A P	58	A P	88	A P	62
ASSAM	14	ASSAM	9	ASSAM	18	ASSAM	5	ASSAM	22	ASSAM	4	ASSAM	31	ASSAM	9	ASSAM	30	ASSAM	8
BIHAR	27	BIHAR	3	BIHAR	43	BIHAR	6	BIHAR	32	BIHAR	5	BIHAR	46	BIHAR	9	BIHAR	34	BIHAR	15
DELHI	5	DELHI	5	DELHI	3	DELHI	4	DELHI	3	DELHI	1	DELHI	12	DELHI	6	DELHI	10	DELHI	6
GOA	2	GOA	0	GOA	1	GOA	0	GOA	1	GOA	2	GOA	0	GOA	3	GOA	1	GOA	0
GUJRAT	7	GUJRAT	5	GUJRAT	7	GUJRAT	4	GUJRAT	9	GUJRAT	3	GUJRAT	12	GUJRAT	6	GUJRAT	9	GUJRAT	4
				HIMACHAL		HIMACHAL		HIMACHAL	0	HIMACHAL	0	HIMACHAL	0	HIMACHAL	1	HIMACHAL	3	HIMACHAL	0
J & K	3	J & K	1	PRADESH	1	PRADESH	0	PRADESH	Ů	PRADESH	0	PRADESH	Ů	PRADESH		PRADESH		PRADESH	
JHARKAND	29	JHARKAND	4	J & K	5	J & K	5	J & K	11	J & K	5	J & K	11	J & K	9	J & K	9	J & K	5
KERALA	89	KERALA	36	JHARKAND	20	JHARKAND	3	JHARKAND	20	JHARKAND	11	JHARKAND	34	JHARKAND	7	JHARKAND	15	JHARKAND	5
		MAHARASH						KERALA	118	KERALA	45	KERALA	161	KERALA	58	KERALA	134	KERALA	81
MAHARASHTRA	8	TRA	9	KERALA	106	KERALA	55	IVIAHAKASHTK		A A A L L A D A CLITTO A	42		24		24				24
MANIPUR	1	MANIPUR	1	MAHARASHTRA	11	MAHARASHTRA	8		9	MAHARASHTRA	12	MAHARASHTRA	21	MAHARASHTR	24	MAHARASHTR	16	MAHARASHTRA	21
MEGHALAY	0	MEGHALAY	2	MANIPUR	7	MANIPUR	0	MANIPUR	2	MANIPUR	2	MANIPUR	2	MANIPUR	3	MANIPUR	5	MANIPUR	0
PUNJAB RAJASTHAN	11	PUNJAB RAJASTHAN	0	MEGHALAY PUNJAB	2	MEGHALAY PUNJAB	0	MEGHALAY PUNJAB	0	MEGHALAY PUNJAB	8	MEGHALAY PUNJAB	0	MEGHALAY	0	MEGHALAY PUNJAB	1	MEGHALAY PUNJAB	2
KAJASTHAN	11	KAJASTHAN	0	PUNJAB		PUNJAB	U	PUNJAB	0	PUNJAB	•	PUNJAB	0	PUNJAB	- 0	PUNJAB	1	PUNJAB	
TAMILNADU	29	TAMILNADU	13	RAJASTHAN	11	RAJASTHAN	3	RAJASTHAN	5	RAJASTHAN	2	RAJASTHAN	10	RAJASTHAN	3	RAJASTHAN	13	RAJASTHAN	5
TELANGANA	10	TELANGANA	3	TAMILNADU	29	TAMILNADU	23	TAMILNADU	45	TAMILNADU	24	TAMILNADU	37	TAMILNADU	49	TAMILNADU	42	TAMILNADU	57
UTTAR		UTTAR				-										-			
PRADESH	19	PRADESH	5	TELANGANA	10	TELANGANA	3	TELANGANA	12	TELANGANA	5	TELANGANA	18	TELANGANA	13	TELANGANA	5	TELANGANA	11
		WEST						UTTAR	23	UTTAR	2	UTTAR	32	UTTAR	8	UTTAR	19	LITTAD DDADECH	6
WEST BENGAL	42	BENGAL	13	UTTAR PRADESH	23	UTTAR PRADESH	10	PRADESH	23	PRADESH		PRADESH	32	PRADESH	8	PRADESH	19	UTTAR PRADESH	ь
	0		0	PUNJAB	1	PUNJAB	0	PUNJAB	1	PUNJAB	1	PUNJAB	0	PUNJAB	2	PUNJAB	1	PUNJAB	2
Nagaland	1	Nagaland	1	WEST BENGAL	37	WEST BENGAL	14	WEST BENGAL	44	WEST BENGAL	10	WEST BENGAL	60	WEST BENGAL	15	WEST BENGAL	62	WEST BENGAL	18
MADHYA	_	MADHYA	_		_			Nagaland	0	Nagaland	1	Nagaland	5	Nagaland	1	Nagaland	3	Nagaland	2
PRADESH	9	PRADESH	3	Nagaland	0	Nagaland	1						_	_		_			
	_	CHATTISGAR	_	MADHYA		MADHYA	_	MADHYA	5	MADHYA	7	MADHYA	8	MADHYA	4	MADHYA	2	MADHYA	6
CHATTISGARH	7	Н	5	PRADESH	8	PRADESH	5	PRADESH		PRADESH		PRADESH		PRADESH		PRADESH		PRADESH	
Tripura	2	Tripura	2	CHATTISGARH	12	CHATTISGARH	3	CHATTISGARH	16	CHATTISGARH	0	CHATTISGARH	9	CHATTISGARH	3	CHATTISGARH	9	CHATTISGARH	6
ORISSA	9	ORISSA PUDUCHERR	2	Tripura	3	Tripura	0	Tripura	2	Tripura	3	Tripura	7	Tripura	2	Tripura	8	Tripura	1
PUDUCHERRY	1	Y	1	ORISSA	5	ORISSA	5	ORISSA	11	ORISSA	1	ORISSA	6	ORISSA	4	ORISSA	13	ORISSA	5
TODOCHERKI	<u> </u>	UTTARAKHA		ONISSA		ONISSA													
UTTARAKHAND	1	ND	0	PUDUCHERRY	1	PUDUCHERRY	1	PUDUCHERRY	1	PUDUCHERRY	1	PUDUCHERRY	0	PUDUCHERRY	0	PUDUCHERRY	1	PUDUCHERRY	0
HARYANA	4	HARYANA	4	UTTARAKHAND	2	UTTARAKHAND	2	UTTARAKHAND	3	UTTARAKHAND	1	UTTARAKHAND	5	UTTARAKHAN	3	UTTARAKHAND	2	UTTARAKHAND	1
MIZORAM	2	MIZORAM	0	HARYANA	4	HARYANA	1	HARYANA	3	HARYANA	3	HARYANA	5	HARYANA	4	HARYANA	4	HARYANA	1
ARUNACHAL		ARUNACHAL		ARUNACHAL		ARUNACHAL		ARUNACHAL	5	ARUNACHAL	0	ARUNACHAL	_	ARUNACHAL		ARUNACHAL	5	ARUNACHAL	
PRADESH	2	PRADESH	1	PRADESH	6	PRADESH	0	PRADESH	) 3	PRADESH	U	PRADESH	5	PRADESH	2	PRADESH	5	PRADESH	1
SIKKIM	1	SIKKIM	0	Nagarhaveli	0	Nagarhaveli	1	SIKKIM	3	SIKKIM	1	SIKKIM	7	SIKKIM	3	SIKKIM	2	SIKKIM	0
NEPAL	2	NEPAL	0	SIKKIM	1	SIKKIM	1	SRILANKA	0	SRILANKA	1	SRILANKA	0	SRILANKA	0	SRILANKA	0	SRILANKA	0
		CHITTAGON						ANDAMAN		ANDAMAN		ANDAMAN		ANDAMAN	_	ANDAMAN		ANDAMAN	
CHITTAGONG,B		G,BANGALD		ANDAMAN		ANDAMAN	_	NICOBAR	3	NICOBAR	0	NICOBAR	1	NICOBAR	3	NICOBAR	3	NICOBAR	1
ANGALDESH	1	ESH	1	NICOBAR	1	NICOBAR	3	-		-									$\vdash$
ANDAMAN NICOBAR	2	ANDAMAN NICOBAR	1	USA	1	USA	0	NEPAL	1	NEPAL	0	MIZORAM	2	MIZORAM	1	MIZORAM	1	MIZORAM	0
INICODAN		INICODAR	L 1	NEPAL	0	NEPAL	1	<del> </del>	I			NEPAL	2	NEPAL	1	NEPAL	0	NEPAL	0
				YEMAN,	-	YEMAN,	-	1											
				KINGDOM OF	2	KINGDOM OF	0					MANIPUR	2	MANIPUR	0	MANIPUR	0	MANIPUR	0
								-				LADAKH	1	LADAKH	0	LADAKH	0	LADAKH	0
												DADRA AND	1	DADRA AND	0	DADRA AND	1	DADRA AND	0
												NAGAR HAVELI	1	NAGAR HAVELI		NAGAR HAVELI		NAGAR HAVELI	
												DUBAI	0	DUBAI	1	DUBAI	1	DUBAI	1
																BHUTAN	1	BHUTAN	0
																SOUDI ARABIA USA	6	soudi arabia	2ရှိရ
																GREAT BRITAIN	1	GREAT BRITAIN	0
																ONLA! BRITAIN	1	OWEN DULININ	

# **ANNEXURE 20**

# **Experiential Learning**

Course Specifications: Project Work

Course Title	Project Wor	k			
Course Code	18MPP318A				
Course Type	Laboratory (	Course			
Department	Chemistry	Physics	Mathemalics	Statistics	
Faculty	Mathematic	al and Physic	al Sciences		

#### 1. Course Summary

The aim of this course is to give students an experience of identifying a scientific problem, conceptualize a solution, perform experiments and analyze the results obtained.

The students are expected to work in a team of not more than 4 members and are required to develop an appropriate solution by identifying a problem for which a better or new scientific solution is required. The team needs to demonstrate the working of the solution and write a technical report.

#### 2. Course Size and Credits:

Number of Credits	15
Credit Structure (Lecture:Tutorial:Practical)	0:0:15
Total Hours of Interaction	450
Number of Weeks in a Semester	15
Department Responsible	Chemistry
Total Course Marks	100
Pass Criterion	As per the Academic Regulations
Attendance Requirement	As per the Academic Regulations

#### 3. Course Outcomes (COs)

After the successful completion of this course, the student will be able to:

co- ... Recognise the need for developing a new or improving an existing scientific problem through an organised survey of literature. Deept As

co- . Define scientific problem.

CO- .Design and perform the experiments.

CO- .Analyse the results obtained.

CO- . Write a technical Report.

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#### 4. Course Contents

Selection of topic for research Critical review on the chosen topic Performance of experiments Collection of relevant data Presentation and Interpretation of data

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## 5. Course Map (CO-PO-PSO Map)

	Programme Outcomes (POs)											Programme Specific Outcome (PSOs)		
	PO- 1	PO- 2	PO- 3	PO-4	PO- 5	PO- 6	PO- 7	PO- 8	PO- 9	PO- 10	PSO- 1	PSO- 2	PSO-	
CO-1	3		3		3						3			
CO-2			3		3			3				3	3	
CO-3			3	3	3			3				3	3	
CO-4					3			3				3	3	
CO-5									3	2			3	

#### 6. Course Teaching and Learning Methods

Teaching and Learning Methods	Duration in hours	Total Duration in Hours
Face to Face Lectures		
Demonstrations		
1.Demonstration using Videos	00	00
2. Demonstration using Physical Models / Systems	00	00
3. Demonstration on a Computer	00	
Numeracy		00
Solving Numerical Problems	00	00
Practical Work		
Course Laboratory / Dissertation work	440	
2. Computer Laboratory	00	
3. Engineering Workshop / Course/Workshop / Kitchen	00	440
4. Clinical Laboratory	00	
5. Hospital	00	
6. Model Studio	00	
Others		
Case Study Presentation	00	
2. Guest Lecture	00	
3. Industry / Field Visit	00	00
4. Brain Storming Sessions	00	
5. Group Discussions	00	
6. Discussing Possible Innovations	00	
Term Tests, Laboratory Examination/Written Examinati	on, Presentations	1Registrar
Total Duration in Hours	M.S. Ram	ala 450 versity of Applied Scie Bangalore - 560 054

#### 7. Course Assessment and Reassessment

The details of the components and subcomponents of course assessment are presented in the Programme Specifications document pertaining to the B.Sc. (Hons) Programmes. The procedure to determine the final course marks is also presented in the Programme Specifications document.

The evaluation questions are set to measure the attainment of the COs. In either component (CE or SEE) or subcomponent of CE (SC1), COs are assessed as illustrated in the following Table.

Focus of COs on each Component or Subcomponent of Evaluation

Faculty of Mathematical and Physical Sciences

B.Sc. (Hons) (Chemistry) Physics

Component 1: CE (50% Weightage)	Component 2: SEE (50% Weightage)
SC1	
Report	Presentation
100 Marks	100 Marks
×	×
×	×
×	×
×	×
×	DE MENTENER DE
	Weightage) SC1 Report 100 Marks × × ×

The Course Leader assigned to the course, in consultation with the Head of the Department, shall provide the focus of COs in each component of assessment in the above template at the beginning of the

Course reassessment policies are presented in the Academic Regulations document.

#### 8. Achieving COs

The following skills are directly or indirectly imparted to the students in the following teaching and learning methods:

S. No	Curriculum and Capabilities Skills	How imparted during the course
1.	Knowledge	Classroom lectures
2.	Understanding	Classroom lectures, Self-study
3.	Critical Skills	Assignment, Solving Numerical Problems
4.	Analytical Skills	Assignment, Solving Numerical Problems
5.	Problem Solving Skills	Assignment, Examination, Solving Numerical Problems
6.	Practical Skills	Assignment
7.	Group Work	
8.	Self-Learning	Self-study
9.	Written Communication Skills	Assignment, Examination
10.	Verbal Communication Skills	7
11.	Presentation Skills	•÷:
12.	Behavioral Skills	••
13.	Information Management	Assignment
14.	Personal Management	
15.	Leadership Skills	**:

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- 9. Course Resources
- a. Essential Reading
  - 1. Research Articles Related to the topic Chosen
  - 2. Dissertation reports
- b. Recommended Reading
- c. Magazines and Journals

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Faculty of Mathematical and Physical Sciences

## B.Sc. (Hons) (Chemistry) Physics | Mathematics | Statistics.

#### d. Websites

#### e. Other Electronic Resources

#### 10. Course Organization

Course Code	18MPP318A						
Course Title	Project Work	Project Work					
Course Leader	's Name	As per Timetable					
		Phone: +91-804-906-5555					
Course Leader	's Contact Details	E-mail:	hod.cy.mp@msruas.ac.in				
Course Specific	cations Approval Date	14 <sup>th</sup> June 2018					
Next Course Sp	pecifications Review Date	June 2021					

Resports

Redistrar
Redistrar
Applied Solences
M.S. Romaich University of Applied Solences
Bangalore - 560 054

Faculty of Residence of Applied Science of Applied

#### 8. Achieving COs

The following skills are directly or indirectly imparted to the students in the following teaching and learning methods:

S. No	<b>Curriculum and Capabilities Skills</b>	How imparted during the course
1.	Knowledge	Class room lectures
2.	Understanding	Class room lectures
3.	Critical Skills	Assignment
4.	Analytical Skills	Class room, assignment
5.	Problem Solving Skills	Assignment
6.	Practical Skills	Assignment
7.	Group Work	Case study Presentation
8.	Self-Learning	Assignment
9.	Written Communication Skills	Assignment, examination
10.	Verbal Communication Skills	Case study and group discussions
11.	Presentation Skills	Student Presentations
12.	Behavioral Skills	Group discussions
13.	Information Management	Assignment
14.	Personal Management	Effective Time Management in Learning Process
15.	Leadership Skills	Class room lectures
16.	Ability Enhancement	Assignment and Problem Solving
17.	Skill/Vocational Enhancement	Student Presentations

#### 9. Course Resources

#### a. Essential Reading

Kothari, C. and Garg, G. (2016). Research methodology. 4th ed. New Delhi: New Age International (P) Limited, pp.1-183.

#### Recommended Reading

- 1. Cooper, D. R. and Schindler, S. S. (2014). Business Research Methods, 11th Edition, McGraw-Hill, New York
- 2. Krishnaswamy, K.N., Sivakumar, A.I. and Mathirajan, M. (2006) Management Research Methodology, 1st Edition, Pearson Education, New Delhi, India...

#### c. Magazines and Journals

d. Websites

1. http://web.a.ebscohost.com/ehost/search/basic?vid=0&sid=c2b523ee-3e40-4d5e-981b-afbfa2b5fa85%40sessionmgr4009

2. https://www.ssrn.com/en/

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Head of the Department Faculty of Management and Commerce M.S. Ramaish University of Applied Sciences

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	Component 1: CE (60% Weightage)	Component 2: Report (40% Weightage
Subcomponent	SC1	
Subcomponent Type	Presentation and Viva	40 Marks
Maximum Marks	60	
CO-1	X	X
CO-2	X	X
CO-3	X	X
CO-4	×	X
CO-5	X	X

The Course Leader assigned to the course, in consultation with the Head of the Department, shall provide the focus of COs in each component of assessment in the above template at the beginning of the semester.

Course reassessment policies are presented in the Academic Regulations document/Programme Specifications document.

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Unit 6: Recommending appropriate suggestions from the analysed results

Unit 7: Demonstration to the defined audience and making a presentation to the assessing team

#### 5. Course Map (CO-PO-PSO Map)

					Pr	ogram	me Ou	tcome	es (PO	s)				Progra Outco		Specific 'SOs)	
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PO-12	PO-13	PSO-1	PSO-2	PSO-3	PSO-4
CO-1						1								2			
CO-2				2	3									3			
CO-3					3										2		
CO-4	1	2		2	2		1	2	2	2					2	2	
CO-5			/	2	3												3

#### 6. Course Teaching and Learning Methods

Teaching and Learning Methods	Approximate Duration in Hours
Collection of relevant literature and review of literature	150
Research problem identification Defining aim and objectives of the study	150
Selection of tools, techniques and learning on how to use them	70
Evaluation, Verification of results	100
Recommending appropriate suggestions from the analysed results	40
Demonstration, Presentation and Technical Report Writing	120
Total Duration in Hours	630

#### 7. Course Assessment and Reassessment

The details of the components and subcomponents of course assessment are presented in the Programme Specifications document pertaining to the B.Com (Hons) Programme. The procedure to determine the final course marks is also presented in the Programme Specifications document.

The evaluation questions are set to measure the attainment of the COs. In either component (CE or SEE) or subcomponent of CE (SC1 and SC2), COs are assessed as illustrated in the following Table.





#### Course Specifications: Research Project

Course Title	Research Project
Course Code	COC402A
Course Type	Discipline Elective Course
Department	Commerce
Faculty	Management and Commerce

#### 1. Course Summary

This course is intended to give an insight to the students on application of principles of research methodology, preparation of project proposal, project management, execution of project and effective technical communication and presentation. It also emphasises the need and the relevance of a structured approach to identify a research topic and undertake project. This course provides an opportunity for students to apply theories and principles learnt during course work. It involves in-depth work in the chosen area of study.

#### 2. Course Size and Credits:

Number of Credits	21
Credit Structure (Lecture: Tutorial: Practical)	0:0:42
Total Hours of Interaction	630
Number of Weeks in a Semester	15
Department Responsible	Commerce
Total Course Marks	100
Pass Criterion	As per the Academic Regulations/Program Specifications
Attendance Requirement	As per the Academic Regulations/Program Specifications

#### 3. Course Outcomes (COs)

After the successful completion of this course, the student will be able to:

- CO-1. Critically review literature collected from various sources for the project purposed and formulate a research problem
- CO-2. Prepare and present a research proposal
- CO-3. Define aim, objectives and methodology for solving the identified research problem
- CO-4. Perform questionnaire design and data collection
- CO-5. Analyse the data and make appropriate recommendations and suggestions and Develop and present a technical report

#### 4. Course Contents

Unit 1: Collection of relevant literature and review of literature

Unit 2: Research problem identification

Unit 3: Defining aim and objectives of the study

Unit 4: Data collection through questionnaire and other forms of interviews

Unit 5: Analysing the collected data through appropriate tools

Faculty of Management and Commerce

## **Participative Learning**

## Course Specifications: Practical I: Cell Biology & Molecular Genetics

Course Title	Practical I: Cell Biology & Molecular Genetics
Course Code	CBL501A
Department	Biotechnology
Faculty	Life and Allied Health Sciences

#### 1. Course Summary

The aim of the course is to train students to perform experiments to decipher cellular processes at the molecular level.

Students will be able to carry out basic cell biology and molecular biology experiments. The student will be able to utilize these experiments to further their understanding of basic cell biology and molecular genetics. Students will be familiarized with experimental methods and techniques applied in genetics and cell biology research.

#### 2. Course Size and Credits:

Number of credits	04
Total Hours of Classroom Interaction	120
Number of tutorial hours	00
Number of semester weeks	16
Department responsible	Biotechnology
Pass Requirement	As per the Academic Regulations
Attendance Requirement	As per the Academic Regulations

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#### Teaching, Learning and Assessment

#### 3. Course Outcomes

After undergoing this course students will be able to:

- CO 1. Describe and carry out basic cell culture and microscopy
- CO 2. Evaluate cellular processes that occur in and between cells
- CO 3. Describe and explain processes for the characteristics of living organisms.
- CO 4. Explain cell-based methods used to expand understanding of cell biology
- CO 5. Experiment with model organisms (Drosophila) in genetics
- CO 6. Demonstrate significant genetic concepts via experimentation

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Faculty of Life & Allied Health Sciences

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#### 4. Course Content

- 1. Study of mitosis and meiosis in plants and animals
- 2. Preparation of mitotic chromosomes and karyotyping
- 3. Staining techniques: Staining blood cells, total count and differential count.
- 4. Isolation of chloroplasts and determining the purity of chlorophyll a and b.
- Isolation of mitochondria from animal cell and determining the activity of SDH (succinate dehydrogenase)
- 6. Study of muscle activity: determination of ATPase activity
- 7. Study of brain cell activity: determination of acetyl choline esterase activity
- 8. Cell membrane permeability assay
- 9. Cell viability assay
- 10. MTT assay
- 11. Morphological features of Drosophila
- 12. Mounting genital plate and sex comb in Drosophila
- 13. Isolation and staining of salivary gland chromosomes in Drosophila
- 14. Mutants of Drosophila
- 15. Micronucleus test in mice
- 16. Banding techniques and karyotyping
- 17. Demonstration of Barr bodies in buccal cells
- 18. Study of human blood groups
- 19. Chromatographic separation of eye pigments in Drosophila

#### 5. CO-PO-PSO mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
CO-1	3	3								3	100	
CO-2		3								3		
CO-3		3								3		
CO-4		3					2					3
CO-5		2					2					3
60-6		2	1 1	7			2					3

3) High Influence, 2: Moderate Influence, 1: Low Influence

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#### 6. Course Teaching and Learning Methods

Teaching and Learning Methods	Duration in hours	Total Duration in Hours
Face to Face Lectures		
Demonstrations		
Demonstration using Videos	10	
<ol><li>Demonstration using Physical Models/Systems</li></ol>		10
3. Demonstration on a Computer		
Numeracy		
Solving Numerical Problems		
Practical Work		
Course Laboratory	110	
2. Computer Laboratory		100
<ol><li>Engineering Workshop/Course</li></ol>		100
4. Clinical Laboratory		
5. Hospital		
Model Studio		
Others		
Case Study Presentation		
Guest Lecture		
<ol><li>Industry/Field Visit</li></ol>		
4. Brain Storming Sessions		
5. Group Discussions		
6. Discussing Possible Innovations		
Laboratory Examination		10
Total Duration in Hours		120

#### 7. Course Assessment and Reassessment

The components and subcomponents of course assessment are presented in the Academic Regulations document pertaining to the Programme. The procedure to determine the final course marks is also presented in the Academic Regulations document as well.

The assessment questions are set to test the course learning outcomes. In each component or subcomponent, certain Course Outcomes are assessed as illustrated in the following Table.

	CE (50% W	eightage)	SEE /FOS/ Moightogo
	SC1	SC2	SEE (50% Weightage)
	25 Marks	25 Marks	100 Marks
CO-1	0	0	0
CO-2	0	0	0
CO-3	0	0	0
CO-4	0	0	0
CO-5	0	0	0
CO-6	0	0	0

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Faculty of Life & Allied Health Sciences M.S. RAMAIAH UNIVERSITY OF APPLIED SCIENCES BANGALORE-560 054

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The Course Leader assigned to the course, in consultation with the Head of the Department, shall provide the focus of course outcomes in each component assessed in the above template at the beginning of the semester.

Course reassessment policies are also presented in the Academic Regulations document.

#### 8. Achieving Course Learning Outcomes

The following skills are directly or indirectly imparted to the students in the following teaching and learning methods:

S. No	Curriculum and Capabilities Skills	How imparted during the course
1.	Knowledge	Classroom lectures
2.	Understanding	Classroom lectures, self-study
3.	Critical Skills	Assignment
4.	Analytical Skills	Assignment
5.	Problem Solving Skills	Assignment, Examination
6.	Practical Skills	Assignment
7.	Group Work	
8.	Self-Learning	Self-study
9.	Written Communication Skills	Assignment, examination
10.	Verbal Communication Skills	-
11.	Presentation Skills	-
12.	Behavioral Skills	
13.	Information Management	Assignment
14.	Personal Management	
15.	Leadership Skills	-

#### 9. Course Resources

#### a. References

Lab Manual

#### b. Magazines and Journals

- https://www.jove.com/science-education-library/2/basic-methods-in-cellular-and-molecular-biology
- 2. https://ocw.mit.edu/courses/biology/7-15-experimental-molecular-genetics-spring-2015/
- https://bio.libretexts.org/Bookshelves/Genetics/Book%3A Online Open Genetics (Nickle and Barrette-Ng)/08%3A Techniques of Molecular Genetics
- 4. https://www.cshlpress.com/default.tpl?action=full&--egskudatarg=399
- https://pdfs.semanticscholar.org/ef50/4810a6318ccad1bb5ca52c630f3a9e4fcf1a.pdf

#### 10. Course Organization

CBL501A						
Practical I: Cell Biology & Molecular Genetics						
/s Name	As per tin	ne table				
	Phone:	08045366666				
Contact Details	E-mail:	hod.bt.ls@msruas.ac.in				
cations Approval Date	Aug 2019					
pecifications Review Date:	June 2021					
		Practical I: Cell Biology & Molecular Gen  /s Name				

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#### Course Specifications: Practical III: Molecular Biology & Immunology

Course Title	Practical III: Molecular Biology & Immunology	
Course Code	BTL503A	
Department	Biotechnology	
Faculty	Life and Allied Health Sciences	

#### 1. Course Summary

The course aims to facilitate students on practical aspects of experimental knowledge in molecular biology, genetic engineering and Immunology. The students will be able to execute the experimental design and basic techniques commonly used in molecular biology and immunology laboratories. Students will be able to gain hands-on experience on gene cloning, protein expression and purification that enable them to begin a career in genetic engineering as well as in fundamental research.

#### 2. Course Size and Credits:

Number of credits	04
Total Hours of Classroom Interaction	120
Number of tutorial hours	00
Number of semester weeks	16
Department responsible	Biotechnology
Pass Requirement	As per the Academic Regulations
Attendance Requirement	As per the Academic Regulations
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#### Teaching, Learning and Assessment

#### 3. Course Outcomes

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After undergoing this course students will be able to:

- Isolate and characterize DNA and Plasmids for molecular weight, restriction and ligation
- Expertize in PCR and RAPD techniques for quantification of DNA CO 2.
- Acquire hands-on experience on gene cloning, protein expression and detection. CO 3.
- CO 4. Perform cell culture and counting of immune cells and comment
- CO 5. Perform assays to assess the interaction and quantification of antigen and antibody

Perform experiments used to purify immunoglobulins from serum sample

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#### 2. Course Contents

- 1. Isolation, quantification and characterization of genomic DNA from bacteria (E. coli)
- 2. Isolation, quantification and characterization of plasmid DNA from bacteria.
- 3. Restriction digestion and ligation of DNA.
- 4. Determination of molecular weight and quantification of DNA and Protein
- 5. Preparation of competent cells, transformation of E.coli and screening of transformants
- 6. Cloning and expression of GFP gene in E.coli
- 7. Amplification of desirable gene by Polymerase chain reaction.
- 8. Random amplification of polymorphic DNA
- 9. Western blotting
- 10. Purification of His-Tagged protein on Ni-NTA columns.
- Selection of animals, preparation of antigens, immunization and methods of blood collection, serum separation and storage.
- 12. Antibody titre by ELISA method
- 13. Double diffusion, Immuno-electrophoresis and Radial Immuno diffusion
- 14. Complement fixation test
- 15. Isolation and purification of IgG from serum
- 16. SDS-PAGE, Immunoblotting, Dot blot assays.
- 17. Blood smear identification of leucocytes by Giemsa stain.
- 18. Separation of leucocytes by dextran method.
- 19. Separation of mononuclear cells by Ficoll-Hypaque and their cryopreservation
- 20. Lymphocyte Culture

5. CO-PO-PSO mapping

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	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	Bangalo	PSO4 e - 560 0
CO-1	3	2							3			
CO-2	3	2								3		
CO-3				2							3	
CO-4					2						3	
CO-5							3			-		3
ÇO-6	10			3								3
~	~	3:	High Inf	luence	2: Mo	derate I	nflueno	e, 1: Lo	w Influe	ence		

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### 6. Course Teaching and Learning Methods

Teaching and Learning Methods	Duration in hours	Total Duration in Hours
Face to Face Lectures		
Demonstrations		
Demonstration using Videos		
<ol><li>Demonstration using Physical Models/Systems</li></ol>		10
3. Demonstration on a Computer		
Numeracy		
Solving Numerical Problems		
Practical Work		
Course Laboratory	110	
2. Computer Laboratory		222
<ol><li>Engineering Workshop/Course</li></ol>		100
4. Clinical Laboratory		
5. Hospital		
6. Model Studio		
Others		
Case Study Presentation		
Guest Lecture		
<ol><li>Industry/Field Visit</li></ol>		
Brain Storming Sessions		
5. Group Discussions		
6. Discussing Possible Innovations		
Laboratory Examination		10
Total Duration in Hours		120

### 7. Course Assessment and Reassessment

The components and subcomponents of course assessment are presented in the Academic Regulations document pertaining to the Programme. The procedure to determine the final course marks is also presented in the Academic Regulations document as well.

The assessment questions are set to test the course learning outcomes. In each component or subcomponent, certain Course Outcomes are assessed as illustrated in the following Table.

	CE (50% W	eightage)	CEE (E09/ Weightage)
	SC1	SC2	SEE (50% Weightage)
	25 Marks	25 Marks	100 Marks
CO-1	×	×	×
CO-2	×	×	×
CO-3	×	×	×
CO-4	×	×	×
CO-5	×	×	×
CO-6	×	×	×

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The Course Leader assigned to the course, in consultation with the Head of the Department, shall provide the focus of course outcomes in each component assessed in the above template at the beginning of the semester.

Course reassessment policies are also presented in the Academic Regulations document.

#### 8. Achieving Course Learning Outcomes

The following skills are directly or indirectly imparted to the students in the following teaching and learning methods:

S. No	Curriculum and Capabilities Skills	How imparted during the course		
1.	Knowledge	Classroom lectures		
2.	Understanding	Classroom lectures, self-study		
3.	Critical Skills	Assignment		
4.	Analytical Skills	Assignment		
5.	Problem Solving Skills	Assignment, Examination		
6. Practical Skills		Assignment		
7.	Group Work			
8.	Self-Learning	Self-study		
9.	Written Communication Skills	Assignment, examination		
10.	Verbal Communication Skills			
11.	Presentation Skills			
12. Behavioral Skills				
13. Information Management		Assignment		
14.	Personal Management			
15.	Leadership Skills			

#### 9. Course Resources

#### a. References

Lab Manual

#### b. Essential Reading

- Sambrook, J., Russel, D., "Molecular Cloninga Lab Manual" Vol. I, II and III, 3rd Edition, Cold spring harber lab press.
- Walker, J.M. and Rapley, R. "Molecular Biology and Bio Technology" 4th Edition, Panima Publishing Corporation

#### b. Magazines and Journals

- https://www.elsevier.com/life-sciences/biochemistry-genetics-and-molecular-biology
- https://www.cell.com/trends/genetics/fulltext/

#### 10. Course Organization

Course Code	BTL503A		
Course Title	Practical III: Molecular Bi	ology & Imn	nunology
Course Leader/	s Name	As per ti	me table
		Phone:	08045366666
Course Leader (	Contact Details	E-mail:	hod.bt.bl@msruas.com
Course Specifica	ations Approval Date	Aug 201	9 Registrar
Next Course Spe	ecifications Review Date:	June 202	1 M.S. Ramaiah University of A

Approved by the Academic Council at its 26th meeting held on 14th July 2022 Faculty of Life & Allied Health Sciences

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## **Problem Solving Method**

#### Course Specifications: Numerical Analysis - 1

Course Title	Numerical Analysis – 1	
Course Code	MTC514A	
Course Type	Core Theory	
Department	Mathematics and Statistics	
Faculty	Mathematical and Physical Sciences	

#### 1. Course Summary

The course aims at training students in handling various aspects numerical computations. In this course, the students learn the basics of numerical methods to solve linear and non-linear equations. The course describes the different numerical techniques of numerical linear algebra, interpolation, numerical integration and differentiation.

#### 2. Course Size and Credits:

Number of Credits	03
Credit Structure (Lecture: Tutorial: Practical)	2:1:0
Total Hours of Interaction	30
Number of Weeks in a Semester	15
Department Responsible	Mathematics and Statistics
Total Course Marks	100
Pass Criterion	As per the Academic Regulations
Attendance Requirement	As per the Academic Regulations

#### 3. Course Outcomes (COs)

After the successful completion of this course, the student will be able to:

- CO-1. Illustrate various methods of numerical solution to polynomial and transcendental equations, numerical solution to non-linear system, interpolation and numerical integration
- CO-2. State and prove theorems on convergence and stability of numerical algorithms
- CO-3. Solve simple problems of linear and non-linear root finding methods, system of linear equations, eigenvalues, interpolation methods and quadrature rules
- CO-4. Solve complex problems of linear and non-linear root finding methods, system of linear equations, eigenvalues, interpolation methods and quadrature rules
- CO-5. Solve complex real world problems associated with nonlinear equations, system of equations, interpolation and numerical integration

#### 4. Course Contents

#### Unit 1 (Solution of linear and Nonlinear Equations):

5 Hrs

Mathematical preliminary and error analysis. Numerical solutions of nonlinear algebraic equations: Bisection, Secant and Newton's method, fixed-point iteration.

Iterative methods for nonlinear system of equations: Newton-Raphson method.

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## Unit 2 (Numerical Linear Algebra):

10 Hrs

Direct methods for linear system of equations: LU decomposition and Cholesky methods. Iterative methods for linear system of equations: Matrix norms, Jacobi and Gauss-Siedel methods, relaxation methods.

Computation of eigenvalues and eigenvectors: Power method, Householder's method, QR algorithm.

## Unit 3 (Interpolation):

7 Hrs

Lagrange, Hermite and Cubic-spline interpolations with uniqueness and error term. Numerical differentiation using interpolation and method of undetermined coefficients

## Unit 4 (Numerical Integration):

8 Hrs

Methods based on interpolation. Gaussian quadrature, Gauss-Legendre, Gauss-Chebeshev, Gauss-Leguree, Gauss-Hermite integration rules. Integration over rectangular and general quadrilateral areas and multiple integration with variable limits.

## Course Map (CO-PO-PSO Map)

	PO-1	00.2			Outcome	AND			Programm	e Specific (PSOs)	Outcom
CO-1		PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PSO-1	PSO-2	PSO-3
CO-1	3	3							2		
CO-2	3	2							3		1
CO-3	1	2	- 2	-					3	3	1
		- 4	3	3	_	1	1	1	3		1
CO-4	2	2	2	3		1	1	1	2		
CO-5	1	2	2	2	-	-	-	1	3		1
	-	-	3	3	2	1	1	1	3	2	1

## 6. Course Teaching and Learning Methods

Teaching and Learning Methods	Duration in hours	Total Duration in Hours
Face to Face Lectures	30	
Demonstrations		30
Demonstration using Videos	00	
2. Demonstration using Physical Models / Systems		00
Demonstration on a Computer	00	-
Numeracy	00	
1. Solving Numerical Problems		15
Practical Work	15	13
1. Course Laboratory		
2. Computer Laboratory	00	(h)
Engineering Workshop / Course/Workshop /	00	
Kitchen / Kitchen	00 4400	Registrar
4. Clinical Laboratory	71.6.III	amaiah University of Applied Scie
5. Hospital		Bangalore - 560 054
6. Model Studio	00	
Others	00	
1. Case Study Presentation		
2. Guest Lecture	00	00
1.1	(Dean Acc	

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	al Duration in Hours	55
Term Tests, Laboratory Examination/Written Exam	mination, Presentations	10
6. Discussing Possible Innovations	00	
5. Group Discussions	00	
Brain Storming Sessions	00	
3. Industry / Field Visit 00		

#### 7. Course Assessment and Reassessment

The details of the components and subcomponents of course assessment are presented in the Programme Specifications document pertaining to the M. Sc. (Mathematics) Programme. The procedure to determine the final course marks is also presented in the Programme Specifications document.

The evaluation questions are set to measure the attainment of the COs. In either component (CE or SEE) or subcomponent of CE (TSC1, TSC2 or TSC3), COs are assessed as illustrated in the following Table.

	Compone	ent 1: CE (50% V	Weightage)	Component	
Subcomponent ▶	TSC1	TSC2	SC3	2: SEE (50% Weightage)	
Subcomponent Type ▶	Mid term /Term Test	Assignment	Innovative	100 Marks	
Maximum Marks	50	25	25		
CO-1	×	×		×	
CO-2	×	×		×	
CO-3	×	×	×	×	
CO-4			×	×	
CO-5			×	×	

The Course Leader assigned to the course, in consultation with the Head of the Department, shall provide the focus of COs in each component of assessment in the above template at the beginning of the semester. Course reassessment policies are presented in the Academic Regulations document.

#### 8. Achieving COs

The following skills are directly or indirectly imparted to the students in the following teaching and learning methods:

S. No	Curriculum and Capabilities Skills	How imparted during the course
1.	Knowledge	Classroom lectures, tutorials, Assignments
2.	Understanding	Classroom lectures, tutorials, Assignments
3.	Critical Skills	Classroom lectures, Assignment
4.	Analytical Skills	Assignment
5.	Problem Solving Skills	Assignment, Examination
6.	Practical Skills	
7.	Group Work	Assignment

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8.	Self-Learning	Self-study, Assignment
9.	Written Communication Skills	Assignment, Examination
10.	Verbal Communication Skills	
11.	Presentation Skills	-
12.	Behavioral Skills	Course work
13.	Information Management	Assignment, Examination
14.	Personal Management	Course work
15.	Leadership Skills	

### 9. Course Resources

#### a. Essential Reading

- 1. Class Notes
- Sastry, S.S., 1998, Introductory Methods of Numerical Analysis, Prentice-Hall of India.
- Jain, M.K., Iyengar, S.R.K. and Jain, R.K., 1993, Numerical Methods for Scientific and Engineering Computation, Wiley Eastern.
- 4. Demmel, J. W., 1997, Applied Numerical Linear Algebra, 1st Ed., SIAM.

### b. Recommended Reading

- Chapra, S.C. and Raymond, P.C., 2000, Numerical Methods for Engineers, Tata McGraw Hill.
- Burden, R.L. and Faires, J.D., 1989, Numerical Analysis, 4th Ed., P.W.S. Kent Publishing Company
- Golub, G. H. and Van Loan, C. F., 1996, Matrix Computations, 3rd Ed. Johns Hopkins University Press

#### c. Websites

- 1. https://swayam.gov.in
- 2. https://coursera.org
- 3. http://ocw.mit.edu

## d. Other Electronic Resources

## Course Organization

Course Code	MTC514A	MTC514A								
Course Title	Numerical Analysis – 1									
Course Leader		As per Tir	metable							
Course Leader's Contact Details		Phone:	+91-804-906-5555							
		E-mail:	hod.mt.mp@msruas.ac.in							
	cations Approval Date	July 2022								
Next Course S	pecifications Review Date	July 2024								

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Faculty of Mathematical and Physical Sciences

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## **Project Based Learning**

**Course Specification** 

	C	ourse Details									
Course Code	19AUC522A		Course								
Course Title	Group Project		Category								
Programme	M. Tech. in Automot	ive Engineering									
Department	Automotive and Aeronautical Engineering										
Faculty	Faculty of Engineerin	aculty of Engineering & Technology									
Course Approval Date	MAY -2019 Course Next Review Date MAY-202										
Department Responsible f	or Course Delivery										
1. Course Size and C	redits										
Number of Credits	10										
Duration (Hrs)	330										
Course Marks	200										
Attendance Requirement	As per M.Tech. Progr	ramme Academic Regulations									
Course Pass Criteria	As per M. Tech. Prog	ramme Specification Document (	Annexure-1)								
2. Course Summary											
Aim and Summary	learning from the responsibilities, to co system related to an a to project identificati teams and verbal ar synthesis stage, they to develop real life po	ded to provide student an opp earlier courses through wor neelving, designing and fabrication the student provides and the student provides and written communication. Dury will get an opportunity to a roduct and prototyping stage will into a working system through	king in a team, shari ng a working prototype o dents will learn skills related d execution, working ling design, analysis a apply theoretical knowled ill provide them experien								

#### 3. Teaching, Learning and Assessment

#### 3.1 Intended Learning Outcomes (ILO) and Mapping of Assessment

After undergoing this Course students will be able to:

S. No.	ILO	Report	Presentation	
1	Work in a team and undertake a project in their area of specialization	х	x	
2	Apply their knowledge of general and automotive engineering and application, develop a system for automotive application	x	x	
3	Apply appropriate research methodology while formulating a project	x	x	
4	Prepare specifications, design, analyse, synthesize, prototype and assess the system	x	×	
5	Prepare and present appropriate forms of audio-visual and verbal presentations, and written document, to describe the project, its execution and outcome	x	х	

IMPORTANT: Details of Component Weightages, Assessment and Re-assessment are indicated in M. Tech. Programme Speciation document for the given category of the Course.

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#### 3.2 Course Content

Team building, Team work and Leadership skills

Preparing design specifications, design, analysis and synthesis, design evaluation

Costing, Finance Management, Project management

Procurement, prototype building and related manufacturing methods

Preparing and presenting audio-visual and verbal presentations and preparing written documents

Topics	Teaching methods	Hours	
Critical Review, Problem Formulation and stating Objectives	Reading Journal papers , books and other relevant materials and problem formulation	20.00	
	Presentation to Reviewers	5.00	
System Design	Group work with supervisors guidance	30.00	
System Modelling, Simulation and Analysis	Group work with supervisors guidance	60.00	
Model Building, Instrumentation, Testing and Evaluation	Group work with supervisors guidance	100.00	
Verification/Validation	Group work with supervisors guidance	50.00	
Drawing Conclusions	Group work with supervisors guidance	10.00	
Video creation, Presentation	Presentation and Viva voce - Group	5.00	
Thesis/Report Writing and Viva Voce	Thesis/Report writing - Group	30.00	
	Project Exhibition and Video creation - Group	10.00	
	Tests/Examinations/Presentations	10.00	
	Total	330.00	

Note: The above time calculation is for each student and a group can consists of 4 students and total hours can be computed accordingly.

. The project chosen should justify the time allotted.





S.No	Curriculum and Capabilities Skills	Lectures	Theory Exam	Lab Sessions	Lab Exam	Assignment	Presentations	Tutorials	Report
1.	Knowledge						Х		X
2.	Understanding						X		Х
3.	Critical Skills						X		X
4.	Analytical Skills						Х		X
5.	Problem Solving Skills						Х		X
6.	Practical Skills						Х		X
7.	Group Work						Х		X
8.	Self-Learning						X		X
9.	Written Communication Skills						Х		х
10.	Verbal Communication Skills						Х		X
11.	Presentation Skills						Х		Х
12.	Behavioural Skills						X		X
13.	Information Management						Х		X
14.	Leadership Skills						X		X

	4. Course Re	sources
a.	Essential Reading	Assigned reading relevant to the group project

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# **Activity Based Learning**

#### **Course Specifications: Workshop Practice**

<b>Course Title</b>	Workshop Practice
<b>Course Code</b>	MEF104A
<b>Course Type</b>	Laboratory
Department	Mechanical and Manufacturing Engineering
Faculty	Engineering and Technology

#### 1. Course Summary

This laboratory deals with various workshop operations, tools and their applications. The students will be equipped with basic knowledge and understanding of various workshop tools, equipment and measuring instruments used for bench work. The student will be exposed to the practical application of fitting, welding, sheet metal and carpentry operations. In addition, the student will be trained to select and use suitable tools and processes required for metal fabrication.

#### 1. Course Size and Credits:

Number of Credits	01
Credit Structure (Lecture: Tutorial: Practical)	0:0:2
Total Hours of Interaction	30
Number of Weeks in a Semester	15
Department Responsible	Mechanical and Manufacturing Engineering
Total Course Marks	50
Pass Criterion	As per the Academic Regulations
Attendance Requirement	As per the Academic Regulations

#### 2. Course Outcomes (COs)

After the successful completion of this course, the student will be able to:

- **CO-1.** Perform operations and prepare physical models of metal fitting, carpentry wood model, sheet metal, pipe fitting and metal arc welded joint models as per given drawing
- **CO-2.** Draft the fitting, welding, pipe fitting and carpentry models, and development drawings for sheet metal models

#### 3. Course Contents

Unit 1: Introduction: Marking tools, workshop tools and their usage, safety precautions

Unit 2: Fitting Practice: V-joint, semi-circular joint, pipe fitting

Unit 3: Welding: Practice of welding joints

**Unit 4: Sheet metal fabrication**: Sheet metal joints, Development and creation of cylinder and cones

**Unit 5: Carpentry Practice**: – Wood Carving, Cutting, Planning and demonstration of wood turning operations

**Unit 6: Plumbing Practice**: – Internal and External Threading, Pipe fitting.

#### 4. Course Map (CO-PO-PSO Map)

	Programme ()utcomes (P()s)											Programme Specific Outcomes (PSOs)			
	PO-1 PO-2 PO-3 PO-4 PO-5 PO-6 PO-7 PO-8 PO-9 PO-10 PO-11 PO-12 PSO-1 P										PSO-2	PSO-3			
CO-1	3	1	3										1		3
CO-2	3	1	3			·		·		1			1		3
	3: Very Strong Contribution, 2: Strong Contribution, 1: Moderate Contribution														

#### 5. Course Teaching and Learning Methods

Teaching and Learning Methods	Duration in hours	Total Duration in Hours
Face to Face Lectures		00
Demonstrations		
1. Demonstration using Videos	00	- 00
2. Demonstration using Physical Models / Systems	00	
3. Demonstration on a Computer	00	
Numeracy		00
1. Solving Numerical Problems	00	] 00
Practical Work		
1. Course Laboratory	00	30
2. Computer Laboratory	00	
3. Engineering Workshop / Course/Workshop / Kitchen	30	
4. Clinical Laboratory	00	
5. Hospital	00	
6. Model Studio	00	
Others		
1. Case Study Presentation	00	00
2. Guest Lecture	00	
3. Industry / Field Visit	00	
4. Brain Storming Sessions	00	
5. Group Discussions	00	
6. Discussing Possible Innovations	00	
Term Tests, Laboratory Examination/Written Examination, Presentations		10
Total Duration in Hours		40

#### 6. Course Assessment and Reassessment

The details of the components and subcomponents of course assessment are presented in the Programme Specifications document pertaining to the B.Tech. (Mechanical

Engineering) Programme. The procedure to determine the final course marks is also presented in the Programme Specifications document.

The evaluation questions are set to measure the attainment of the COs. In either component (CE or SEE) or subcomponent of CE (TSC1, TSC2, TSC3 or TSC4), COs are assessed as illustrated in the following Table.

Focus of COs on each Component or Subcomponent of Evaluation				
	Component 1: CE (50% Weightage)		Weightage)	Component2: SEE (50% Weightage)
Subcomponent ►	SC1	SC2	SC3	
Subcomponent Type ►	Lab exercis e	Lab record	Term test	
Maximum Marks ▶	25	15	10	50 Marks
CO-1	Х	Х		X
CO-2	Х	Х	Х	X
CO-3	Х	Х	Х	X
The details of TSC1,T	SC2, TSC3 aı	re presented in	the Program	me Specifications Document

The Course Leader assigned to the course, in consultation with the Head of the Department, shall provide the focus of COs in each component of assessment in the above template at the beginning of the semester.

Course reassessment policies are presented in the Academic Regulations document.

#### 7. Achieving COs

The following skills are directly or indirectly imparted to the students in the following teaching and learning methods:

S. No	Curriculum and Capabilities Skills	How imparted during the course
1.	Knowledge	Classroom lectures
2.	Understanding	Classroom lectures, Self-study
3.	Critical Skills	Assignment
4.	Analytical Skills	Assignment
5.	Problem Solving Skills	Assignment, Examination
6.	Practical Skills	Assignment
7.	Group Work	
8.	Self-Learning	Self-study
9.	Written Communication Skills	Assignment, Examination
10.	Verbal Communication Skills	
11.	Presentation Skills	
12.	Behavioral Skills	
13.	Information Management	Assignment
14.	Personal Management	
15.	Leadership Skills	

#### 8. Course Resources

#### a. Essential Reading

- 1. Course notes
- 2. Hajra Choudhary S. K., Bose S. K., Hajra Choudhary A. K. and Roy Nirjha, (2007) Elements of Workshop Technology Volume No. II: Machine Tools, Media Promotors and Publishers Pvt. Limited

#### b. Recommended Reading

1. W. Chapman (2007) Workshop Technology, Part 2, Butterworth-Heinemann

#### c. Magazines and Journals

Mechanical Engineering Magazine ASME

#### d. Websites

www.toolstop.co.uk/workshop-toolsenglishwilleasy.com/english-through-pictures/things-english-throughpictures/workshop/

#### e. Other Electronic Resources

1. Electronic resources on the course area are available on MSRUAS library

#### 9. Course Organization

Course Code	MEF105A		
Course Title	Workshop Practice		
Course Leader's	Name	As per Time	table
Course Londow's	rse Leader's Contact Details Phone: +91-804-906-5555 E-mail: hod.me.et@msruas.a		+91-804-906-5555
Course Leader's			hod.me.et@msruas.ac.in
Course Specifica	tions Approval Date	July - 2023	
Next Course Spe	ecifications Review Date	June-2027	



### Field Based Learning

#### INTERNSHIP

Course Title	Internship
Course Code	CCI401A
Department	Allied Health Sciences
Faculty	Life and Allied health Sciences

#### Course Summary

#### Aim and Summary

This internship training deals with postings in various specialty units of the Cardiology department. The students are trained to acquire skills for the actual conduct of all the clinical services entrusted to them in the specialty units leading to the emergence of trained cardiac care technology.

#### 2. Course Size and Credits:

Number of credits	10
Total hours of internship in an academicsemester	290
Number of tutorial hours	NIL
Number of weeks per semester	29
Department responsible	Allied Health Sciences
Pass requirement	As per Academic Regulations
Attendance requirement	As per Academic Regulations

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#### II. Teaching, Learning an Assessment

#### 3. Course Outcomes (Cos)

After undergoing this internship, student will be able to:

No.	Course Outcomes
1	Describe the anatomy of heart, cardiac position, cardiac circulation
2	Discuss techniques of ECG recording, axis duration, and various rhythms
3	Explain principle of 2D imaging and echo views , basic principle of cath lab, radiation safety, vascular access, angiogram , device closure and its management
4	Diagnose and evaluate acute coronary syndrome, HF, arrhythimia and its management, cardiac emergency drugs and its uses
5	Evaluate Ischemic Heart disease, valvular Heart Disease, cardiomyopathy and other cardiac diseases
6	Describe clinical features of valvular Heart Disease and its complication

#### 4. Course Contents

Internship:

(1) Internship is a phase of training where in a student is expected to conduct actual practice and acquires skills under supervision so that he or she may become capable of functioning independently.

(2) Intern will rotate in the following areas for the duration mentioned in the following table.

SI. No.	Postings	Durationin weeks
1	ЕСНО	10
2	ECG	1
3	TMT	1
4	HOLTER MONITRING	1
5	DSE/TEE 3	2

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6	CCU	2
7	CATHLAB	4
8	WARDS	1

Practicals:

Non invasive Technology; ECG recording

basic ECHO evaluation basic

Preparation for treadmill test

Preparation for 24 hours Holter monitoring Preparation

for ABPM

Invasive Technology; Cardiac Cath right

Heart Cardiac Cath Left Heart

Cardiovascular AngiographyCardiac Pacing

Relevant instrumentation in Cath LabCardiac

Emergencies in Cath Lab

#### History taking

Clinical Examination: General Physical Examination and assessment of vital signsClinical

Examination: Basic Systemic

Examination

.Conversion between differentunits

Identifying the types of medical gas supply and its advantages/disadvantagesDevices:

Sphygmomanometer, thermometer, pulse oximeter,

simpleoxygen delivery devices.

Diagnosis of shunts

M.S. Romaish University of Evaluation of pulmonary hypertension Diagnosis of

pericardial constriction Diagnosis of peripheral and aortic

diseases Complications of cardiac catheterization

Complications and management of Contrast

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#### 5. Course Teaching and Learning Methods

Teaching and Learning Methods		Duration in Hours
Face to Face Lectures		
Demonstrations		
Demonstration using Videos		
Demonstration using Physical Models/Systems		
3. Demonstration on a Computer		
Numeracy or Tutorials	I.i.	
Solving Numerical Problems		
Practical Work		
1. Course Laboratory		
2. Computer Laboratory		
Engineering Workshop/Course Workshop/Kitchen     Clinical Laboratory		
5. Hospital	X	880
6. Model Studio		880
Others	- 17.	
Case Study Presentation	X	
2. Guest Lecture		
<ol><li>Industry/Field Visit</li></ol>		
4. Brain Storming Sessions		
5. Group Discussions		
6. Discussing Possible Innovations		
Total Duration in Hours		320

#### 6. Method of Assessment

Laboratory components CE	M.S. Ramaian Bangalore - Double	SEE
SC1(Formative laboratory performan	nceassessment/logbook)	SEE

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#### Achieving Learning Outcomes

The following skills are directly or indirectly imparted to the students in the following teaching and learning methods:

SI No	Curriculum and Capabilities	How imparted during the course
1.	Knowledge	
2.	Understanding	Clinical postings
3.	Critical Skills	Clinical postings
4.	Analytical Skills	Clinical postings
5.	Problem Solving Skills	Clinical postings
6.	Practical Skills	Clinical postings
7.	Group Work	Clinical postings
8.	Self-Learning	Clinical postings
9.	Written Communication Skills	Patient orders
10.	Verbal Communication Skills	Clinical postings
11.	Presentation Skills	
12.	Behavioral Skills	Clinical postings
13.	Information Management	
14.	Personal Management	Clinical postings
15.	Leadership Skills	Clinical postings

#### 7. Course Resources

#### a. Essential Reading:

- Class notes
- A Text book of Electrocardiography Goldberger.
- Registrar
- Nanda's A Text book of Echocardiography. M.S. Ramalah University of Applied Sciences
- A Text of Cardiac Catheterization & Interventions. Dr. W. Grossman's D. Baim

#### b. Recommended Reading:

- A Text book of Electrocardiography Goldberger. 2 Nanda's A Text book of Echocardiography.
- · A Text of Cardiac Catheterization & Interventions. Dr. W. Grossman's D. Baim.
- · A Text book of Cardiovascular Medicine. Dr. Bruanwald's.
- A Text book of Medicine. Davidsons.

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#### 8. Organization

Course Code	19CCT402A	
Course Title	INTERNSHIP	
Course Teacher/Name	As per the time table	
	Phone:	080-45366666
Course Teacher Contact Details	E-mail:	
Course Specifications Approval Date		
Next Course Specifications Review Date		

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### **Clinical Based Learning**

#### Course Specifications: Directed clinical education - 2

Course title	Directed clinical education - 2
Course Code	CCC206A
Department	Allied Health Sciences
Faculty	Life and Allied Health Sciences

#### I. Course Summary

#### Aim and Summary

To learn about the clinical aspects of cardiac care and implement the knowledge in cardiac care technology.

#### 2. Course Size and Credits

Number of credits	8
Total hours of class room interaction during the semester	00
Number of tutorial & Laboratory hours	256
Number of semester weeks	16
Department responsible	Allied Health Sciences
Total Course marks	100
Pass requirement	As per the Academic Regulations
Attendance requirement	As per the Academic Regulations

#### II. Teaching, Learning and Assessment

3. Course Outcomes (COs)

After the successful completion of this course, the student will be able to:

No.	Course Outcome
1.	Interpret the ECG features in various cardiac diseases
2.	Identify the structure & function of by Echocardiography
3.	Illustrate the hemodynamics of cardiac chambers by catheterization
4.	Discuss the diagnosis & complications of cardiac procedures

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#### 4. Course Contents

#### Unit-1

- ACS Clinical Examination, Physical Examination, Diagnosis & Management: clinical decision making, timing of surgery
- (Non Invasive Diagnostics: ECG):
- · ECG in Myocardial Ischemia & Infarction, ECG criteria of Myocardial Infarction, ECG in anterior wall, inferior wall, true posterior wall and sub endocardial infarction and RV MI
- ECG in Valvular heart diseases: ECG changes in rheumatic heart diseases in MS, AS, TS & PS, ECG changes in MR, AR, TR & PR
- ECG in Cardiomyopathies (Echocardiography)

#### Unit - 2 (Echocardiography)

- Echo in ischemic heart diseases: echo in acute MI, old MI and role of echo, complications of MI, role of echo in risk stratification and clinical decision making
- Echo in Valvular heart diseases: echo in mitral stenosis & incompetence, aorticstenosis & incompetence, Low flow low gradient AS, TS, TR & PS, PR and infective endocarditis
- Echo in Cardiomyopathies: DCM, HCM, RCM

#### Unit - 3 (Cardiac Cath & Intervention - I)

- Right Heart Catheterization
- Left Heart Catheterization
- Coronary Angiogram
- Pressure measurements
- Peripheral Angiogram

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#### 4. Course Mapping

		Programme Outcomes (POs)					277 CO. 1	amme S mes (P	pecific SOs)			
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PS O-1	PSO -2	PSO-3	PSO-
CO-1			1		3				2			
CO-2				1	3				2			
CO-3			1		3					2		
CO-4		1	1 /		3			,	2			

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CO-5	1	3	2
	3: Very St	rong Contribution, 2: Strong	Contribution, 1:
		Moderate Contributio	n

#### 5. Course Teaching and Learning Methods

Teaching and Learning Methods	Duration in hours	Total Duration in Hours
Face to Face Lectures		00
Demonstrations		
Demonstration using charts		
Demonstration using Physical     Models/Systems		00
Demonstration on a Computer		
Numeracy		
Solving Numerical Problems	-	
Practical Work		
1. Course Laboratory		
2. Pathology Laboratory		256
3. Clinical Laboratory		
4. Hospital		
5. Model Studio	•	
Others		
Case Study Presentation		
2. Guest Lecture		
3. Industry/Field Visit		00
4. Brain Storming Session/seminars		
5. Group Discussions		
6. Discussing Possible Innovations		
Term Test, written Exam & Lab Exam		00
Total Duration in Hours		256

#### 6. Method of Assessment

SC1 (Internal Viva )	SC2 (Logbook)	Bangalore - 550 054
50 Marks	50 Marks	

In Option 2, there shall be two subcomponents, each carrying 5 marks.

After the two subcomponents are evaluated, the CE component marks are consolidated to attain

100%Weightage.

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#### 7. Achieving learning outcomes

The following skills are directly or indirectly imparted to the students in the following teaching and learning methods:

L. No	Curriculum and Capabilities	How imparted during the course
1.	Knowledge	Lectures
2.	Understanding	Practicals, Tutorials and lectures
3.	Critical Skills	Tutorials, SGD and Assignment
4.	Analytical Skills	Practicals and Assignment
5.	Problem Solving Skills	SGD
6.	Practical Skills	Practicals, OSPE
7.	Group Work	Seminars and SGD
8.	Self-Learning	SDL, SGD and assignment
9.	Written Communication Skills	Term test, Assignments, Semesterexams
10.	Verbal Communication Skills	Seminars and SGD
11.	Presentation Skills	Seminars
12.	Behavioural Skills	SGD, Practicals
13.	Information Management	Assignment
14.	Personal Management	Course work
15.	Leadership Skills	SGD

#### 8. Course Resources

#### a. Essential Reading

Braunwald Heart Disease

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- Hurts Heart Disease
- Moss & Adams
- Vijay Raghavan
- Alagappans

b. Recommended Reading

Log Book

c. Journals:

Pubmed

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#### d. Websites:

- https://www.onlinejase.com/
- https://academic.oup.com/ehjcimaging

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# **ANNEXURE 21**



	Pass percentage of the final year students of last 5 years								
				Pas	s Percent	age			
SI.No	Programs	UG/PG	2018-19	2019-20	2020-21	2021-22	2022-23		
1	Bachelor of Hotel Management	UG	100	100	92.77	94.12	98.52		
2	Bachelor of Pharmacy	UG	81.66	97.9	53.39	98.72	96.55		
3	Bachelor of Design in Product Design	UG	95	88.64	92.31	100	100		
4	Bachelor of Design in Fashion Desing	UG	-	-	100	90.90	100		
5	Bachelor of Technology in Civil Eng.	UG	91.3	65.11	100	84.21	86.84		
6	Bachelor of Technology in Computer Sciences Eng.	UG	96	96.88	99.41	98.75	97.6		
7	Bachelor of Technology in Electric and Electronic Eng.	UG	98	87.23	96.55	100	100		
8	Bachelor of Technology in Electronics and Communication Eng.	UG	100	98.41	98.43	100	96.96		
9	Bachelor of Technology in Machanical Eng.	UG	98.36	100	94.11	89.83	94.91		
10	Bachelor of Technology in Aerospace Eng.	UG	-	-	98.21	97.91	100		
11	Bachelor of Technology in Automotive Eng.	UG	-	-	100	92.30	100		
12	Bachelor of Dental Surgery	UG	84.74	96.15	96.49	93.10	100		
13	Bachelor of Sciences (Hons) in Bio Technology	UG	-	-	96.22	94	98.07		
14	Bachelor of Sciences (Hons) in Food Processing and Technolog	UG	-	-	95.31	69.81	100		
15	Bachelor of Sciences (Hons) in DDT	UG	-	-	-	100	100		
16	Bachelor of Sciences (Hons) in MRIT	UG	-	-	-	100	86.66		
17	Bachelor of Sciences (Hons) in OTT	UG	-	-	-	100	94.73		
18	Bachelor of Sciences (Hons) in OPT	UG	-	1	-	-	100		
19	Bachelor of Sciences (Hons) in CCT	UG	-	-	-	-	68.96		
20	Bachelor of Business Administration	UG	-	1	97.43	83.51	88.18		
21	Bachelor of Commerce (Hons)	UG	-	-	100	98.03	100		
22	Bachelor of Scinces (Hons) in PCMS	UG	-	-	100	80.43	95.65		
23	Bachelor of Scinces (Hons) in CS	UG	-	-	-	80	100		
24	Bachelor of Vocation in Culinary Operations	UG	95.65	100	100	100	100		
25	Bachelor of Vocation in Mechatronics	UG	-	100	100	100	96.96		

26	Bachelor of Vocation in Post Harvest Technology	UG	-	-	-	-	100
27	Bachelor of Vocation in Product Design and Modelling	UG	100	94.52	94.66	91.89	95.77
28	PG Diploma in Railway Signalling and Telecommunication	UG	100	89.65	71.42	100	-

SI.No	Programs	UG/PG	2018-19	2019-20	2020-21	2021-22	2022-23
1	Master of Design in Product Design	PG	100	100	100	100	100
2	Master of Design in Fashion Desing	PG	-	-	-	75	100
3	Master of Dental Surgery in Pedodontics	PG	100	100	100	100	100
4	Master of Dental Surgery in Orthodontics	PG	100	100	100	100	100
5	Master of Dental Surgery in Oral Surgery	PG	100	100	100	100	100
6	Master of Dental Surgery in Periodontics	PG	100	100	100	100	100
7	Master of Dental Surgery in Prosthodontics	PG	100	100	100	100	100
8	Master of Dental Surgery in Conservative	PG	100	100	100	100	100
9	Master of Dental Surgery in PHD	PG	100	1	100	100	100
10	Master of Dental Surgery in Oral Medicine	PG	100	1	100	100	100
11	Master of Technology in Automotive Eng.	PG	55.56	71.42	85.7	100	100
12	Master of Technology in Aircraft Design	PG	54.55	80	100	1	1
13	Master of Technology in Automotive Product Design	PG	50	66.66	ı	ı	ı
14	Master of Technology in Turobomechinary Design	PG	100	33.33	100	-	-
15	Master of Technology in Constucation Eng. Managemen	PG	77.78	62.5	100	100	100
16	Master of Technology in Civil Structral Design	PG	77.78	80.95	100	-	-
17	Master of Technology in Sanitation and Weast Managen	PG	100	60	50	1	1
18	Master of Technology in Transportation Eng.	PG	1	92.85	100	100	100
19	Master of Technology in Computer Science Networking	PG	100	100	1	-	1
20	Master of Technology in Automotive Electronics	PG	1	100	1	1	1
21	Master of Technology in Real Time Embaded System	PG	100	100	1	1	1
22	Master of Technology in Mechine Learning and Intaligen	PG	100	93.75	100	-	-
23	Master of Technology in Signal Processing and Technolo	PG	-	100	-	-	-
24	Master of Technology in VLSI	PG	63.64	100	11.1	-	1
25	Master of Technology in Bio Medical Eng.	PG	100	50	-	-	-
26	Master of Technology in Sensor Control and System Eng	PG	100	100	-	-	-

27	Master of Technology in Electronics System Design Eng.	PG	100	-	-	-	-
28	Master of Technology in Electrical Mechine Desing	PG	100	100	-	-	-
29	Master of Technology in Engineering and Manufractruin	PG	50	100	-	-	-
30	Master of Technology in Advanced Mechinary Design	PG	71.43	85.71	80	100	
31	Master of Technology in Advanced Manufactruing Techr	PG	100	100	-	-	-
32	Master of Technology in Robotic Eng.	PG	75	100	85.7	100	75
33	Master of Technology in VLSI NanoTechnology	PG	-	-	100	80	100
34	Master of Technology in Structural Engineering	PG	-	-	60	100	100
35	Master of Technology in Environmental Engineering & N	PG	100	-	-	100	71.43
36	Master of Technology in Data Science Eng.	PG	-	-	87.5	100	88.89
37	Master of Technology in Artifical Intaligent and Mangem	PG	-	-	-	100	92.86
38	Master of Technology in Manufacturing Technologies ar	PG	-	-	-	100	100
39	Master of Technology in Aerospace Eng	PG	-	-	1	100	100
40	Master of Technology in Power Electronics and Drives	PG	100		87.5	100	100
41	Master of Business Administration in Financial Management	PG	100	100	97.73	100	94.52
42	Master of Business Administration in Human Resource and M	PG	100	100	100	96.3	91.42
43	Master of Business Administration in Marketing Managemen	PG	90	90	87.47	96.67	94.28
44	Master of Business Administration in Operation Management	PG	100	100	100	94.44	100
45	Master of Business Administration in BSF	PG	-	-	100	100	-
46	Master of Business Administration in Business Analytics	PG	-	-	92.31	97.14	93.61
47	Master of Business Administration in Hotel Management	PG	100	100	100	100	100
48	Master of Business Administration in Pharma	PG	75	100	100	100	87.5
49	Master of Commerce in ACT	PG	100	100	100	100	88.88
50	Master of Commerce in BAF	PG	100	100	100	100	-
51	Master of Science in Applied Mathematics	PG	75	62.5	100	100	100
52	Master of Science in Industrial Chemistry	PG	72.72	100	100	100	-
53	Master of Science in NPT	PG	-	100	100	100	-
54	Master of Science in Organic Chemistry	PG	-	-	100	100	88.23
55	Master of Science in Analytical Chemistry	PG	100	100	100	100	90
56	Master of Science in ASP(Physics)	PG	25	100	85.71	85.71	72.72
57	Doctor of Pharmacy	PG	-	90	100	100	96.42
58	M Pharm in Pharmaceutical Chemistry	PG	100	100	100	100	92.3
59	M Pharm in Pharmaceutics	PG	77.77	100	100	100	100

60	M Pharm in Pharmacology	PG	80	92.85	90	100	100
61	M Pharm in Pharmacognosy	PG	-	1	100	-	
62	M Pharm in Pharmacy Practice	PG	-	100	100	100	100
63	Master of Science in Bio Technology	PG	-	-	100	100	100
64	Master of Science in Food Processing and Technology	PG	-	1	100	96.67	100
65	Molecular and Celulor Biology	PG	-	-	100	100	96.3
66	Master of Public Health	PG	-	-	-	95	96.3
67	Master of Hospital Administration	PG	95.23	100	95.45	100	96.15
68	Master of Arts in Public Policy	PG	-	-	-	100	100

# **ANNEXURE 22**

### Annexure - 01

SI.No	Year	2019-20	2020-21	2021-22	2022-23	2023-24	Total
1	No. of Patents filed	27	20	20	25	26	118
2	No. of Patents Published	20	28	16	21	02	87
3	No. of Patents Awarded	1	7	17	19	67	111
4	No. of Patents Commercialised	0	0	0	0	0	0

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Number of Patents awarded during the last five years 3.4.2.1: Total number of Patents awarded year-wise during the last five years 3.4.2

	Name of the Faculty/student author of the patent	Patent Number	Date of Award	Patent Awarding Agency
Granted	Govind, R. Kadambi, Rinki Sharma and Shiva Kumar, P.	EP 2661816 B1	29th Aug 2018	Europe
	Raja, R., Mithun, S. K. and Manoj, R.	303770	20th Mar 2019	Indian
	S. Bharath and Patel Nilesh Jasvant Bhai	336736	12-05-2020	Indian
	Sachin S. Bhat, Dhrubojyothi Mukherjee and Anita Murali	353786	16/12/2020	Indian
	S. Bharath and Manoj B. Kufkarni	357867	05-02-2021	Indian
-	Judy Jays and K. Raju	360017	03-03-2021	Indian
	Roopa S. Rao, Shankargouda Patil and Ganavi B.	355494	7th Jan 2021	Indian
	Shruthi N., Dakshath Prasad Jembige and Shwetha V.	325296-001	1st Jan 2021	Indian
	Sindhu Abraham, V. V. N. R Sirisha, S. Shrinivasan, Mohammad Azamthulla and Chethu 365983	iii 365983	03-05-2021	Indian
	Bharath, S. and Raksha, S.	374071	09-08-2021	Indian
	Deveswaran, R., Pooja R. Karadi, Anbu, J. and Shrinivasan, S.	377903	27/09/2021	Indian
	Shwetha, K., Deveswaran, R., Sudarsanam Guru Goutham Sri Harsha, Enjam Chandana I 380409	1 380409	27/10/2021	Indian
	Lohit, H. S., Sourabh, P.N., Suraj Kumar, A. and Bolisettty Soumya Durga	377803	September 24, 2021	Indian
	Q. H. Nagpurwala, Vijay kumar Jain, Abdul Nassar	38474	21/12/2021	Indian
	Bharath Srinivasan, Sharon Caroline Furtado and Asma Tabassum	388487	04-02-2022	Indian
	Punithavathi Duraiswamy, Divya Kiran and Naveen R.	387343	7th Jan 2022	Indian
	Kancheti Upendra Babu, Venna Hima Kiran Vithal and Narasimha Murthy K.R.	386201	1st Jan 2021	Indian
	Yerragudi, V. S., Neha, B. S., Hari Krishna, S. M., Md. Ilyaz and Raghavendra V. Kulkari 389226	III 389226	15th Feb 2022	Indian
	Mahendra Babu, N. C., Manjunath M. Ullegaddi and Nagarjun, M. A.	390146	23rd Feb 2022	Indian
	R. Deveswaran, J. Anbu, and Kavitha B	404047	22/08/2022	Indian
	Nandyala Dhani Gangadhar, Shikha M. Popali, V. S. Yerragudi	408515	06-10-2022	Indian
	Sanket Dessai and Govind R Kadambi	408577	07-10-2022	Indian
	Z Tracy Austina and M Manoj	408572	07-10-2022	Indian
	K. Ranganath	415414	26/12/2022	Indian
	Varun, D., Dipayan Mazumdar and Govind R. Kadambi	398355	1st June 2022	Indian
	Deshpande D. Mohan, Sivapragasam, M. and Umesh, S.	399213	15th June 2022	Indian
	Priyanka, K. P. and Thomas Varghese	391668	10-03-2022	Indian
	Shrinivasan, S., Basavaraj, B. V., Chethana, R. and Keerthana Kunchakuri	395891	29/04/2022	Indian
	Tanmoy Ghosh, Radhika, M. N., Lingutla Ramya, Komala, M. and Devanand. Kamnoore 397852	e 397852	27/05/2022	Indian
	S Bharath, Dhrubojyoti Mukherjee	409090	17/10/2022	Indian
	Sandhya KV, Sumedha Kulkarni, Bobby C	2021104837	23/03/2022	Australian Innovation Patent
	Dr. Vinayak A, Dr. Ganghadhar B, Dr. Sheethal R B, Diddapur RM, Dr. Santhosh Subh GR20 2022 105 325	n GR20 2022 105 325	06-10-2022	German
	Dr. Vinayak A, Dr. Sheethal B, Dr.Bhargavi D, Dr. Santhosh Subhash N, Nikhila GR, D GR 20 2022 105 336	O GR 20 2022 105 336	10-10-2022	German
	Bharath Srinivasan, Dhrubojyothi Mukherjee	409662	21/10/2022	Indian
	S. Bharath, J. Anbu, Hithesh B	411699	17/11/2022	Indian
	Govind R Kadamki Vamin D B D Vauthilosom Condhen Objlidami	412740	200000	: +

Delimies will Cillysalis Fibers	201841048758, December 22, 2018	26/06/2020	India
uture"	201841048759, December 22, 2018	26/06/2020	India
"Method and Composition to Improve Antibacterial Activity and Surface Micro- Hi	Micro- H. 201841049190, December 26, 2018	07-Mar-2020	India
gth in Endodontics",	201841049192, December 26, 2018	07-Mar-2020	India
"Intraoral Liquid Bandage for Sustained Drug Delivery"	201841050035, December 31, 2018	07-Mar-2020	India
"A Non-electric Water Purifying Filter",	201841048760, December 22, 2018	26/06/2020	India
	201841050040, December 31, 2018	07-Mar-2020	India
"Method, System and Apparatus to Extend Discharge Time of Battery Using Two- Chop (	sing Two- Chop 1201841048761, December 22, 2018	26/06/2020	India
"Compact Pomegranate Aril Remover"	201841049193, December 26, 2018	07-Mar-2020	India
"Method, System and Apparatus for Phase Shift Correction in Direct Digital Synthesis-Ph 201841049194, December 26, 2018	201841049194, December 26, 2018	07-Mar-2020	India
"Mini Sugarcane Harvester"	201841049195, December 26, 2018	07-Mar-2020	India
"Universal Demodulator Employing Probabilistic Neural Network"	201841049196, December 26, 2018	07-Mar-2020	India
"Method, System and Apparatus for In-line Pipe Inspection"	201841049197, December 26, 2018	07-Mar-2020	India
"A Method and Device for Composite Filament Winding"	201841050039, December 31, 2018	07-Mar-2020	India
"Intelligent Dustbin"	201941006264, February 18, 2019	05-Jul-2021	India
"Herbosomal Drug Delivery System", Indian Patent Application:	201941054070, December 26,	07-Feb-2021	India
"Nanocomposite Functionalized Polymeric Scaffold for Skin Tissue", Indian Patent Appli 201941054263, December 27, 2019	201941054263, December 27, 2019	07-Feb-2021	India
"Antifungal Tranungual Nanomiemgel for Onychomycosis"	201941054265, December 27, 2019	07-Feb-2021	India
g Bisphosphonate Drug for Treatment of Osteoporo	201941054262, December 27, 2019	07-Feb-2021	India
"An Adaptive Self Lacing Footwear",	201941054267, December 27, 2019	07-Feb-2021	India
"Local Anaesthesisa Dispenser A Portable Delivery System without an Aide"	201941053790, December 24, 2019	25/06/2021	India
	201941054069, December 24, 2019	07-Feb-2021	India
iming Rings for Imaging",	201941054072, December 26, 2019	07-Feb-2021	India
	201941054071, December 26, 2019	07-Feb-2021	India
Surgery",	201941054268, December 27, 2019	07-Feb-2021	India
entulous Patients"	201941054264, December 27, 2019	07-Feb-2021	India
line Dispenser"	201941054266, December 27, 2019	07-Feb-2021	India
	201941053800, December 24, 2019	25/06/2021	India
	201941053797, December 24, 2019	25/06/2021	India
atic Text Summarization",	201941053791, December 24, 2019	25/06/2021	India
"Window Glass Panel Cleaning Robot",	201941053795, December 24, 2019	25/06/2021	India
"Disposable-Syringe Recycler"	201941053799, December 24, 2019	25/06/2021	India
g Machine"	201941053792, December 24, 2019	25/06/2021	India
"Electronic Seed Metering System",	201941053796, December 24, 2019	25/06/2021	India
	201941053793, December 24, 2019	25/06/2021	India
"Remote controlled Ornithopter with Improved Aerodynamics and Control"	201941053798, December 24, 2019	25/06/2021	India
	202041002391, January 01, 2020	23/07/2021	India
m of Laplace Transform"	202041002392, January 01, 2020	23/07/2021	India
	201941054270, December 27, 2019	07-Feb-2021	India
	202041055909, December 22, 2020	24/06/2022	India
"Enhanced Brain Permeation of Thiolated Chitosan- Centella Hybrid Nanocomposite"	202041055907, December 22, 2020	24/06/2022	India

Nandyala Dhani Gangadhar, M. S. Supriya	418499	18/01/2023	Indian	-
Kaustubh Uday Nabar, Govind R Kadambi	422996	24/02/2023	Indian	1
Dhrubojyoti Mukherjee, Kamnoore Devanand Jagannath, Damodar Nayak, Parsuraman P 429773	429773	24/4/2023	Indian	т
S.R. Shankpal	433458	31/05/2023	Indian	T
Shrinivasan S, Chethana R, Sindhu Abraham	433784	06-06-2023	Indian	Ť
Rohit Manjunath Pattan, Monish Gowda M.H., Narasimha Murthy K.R	441847	31/07/2023	Indian	î-
Pushpalatha C, Srikari S, Deveswaran Rajamanickam	441872	31/07/2023	Indian	1
Lohit, H. S., Bala Vignesh and Ruthwik, S. Rao	325295-001, 18/2022	06-05-2022	Indian	-
Karthik PM, Arjun N, Santhosh MP, AKshayraj N, Nikhil A, Harshitha D, V. Mallikarjun 337574-001, 27/2023	337574-001, 27/2023	07-07-2023	Indian	-
Dr. Rajiv Mishra, Dr. Vikas Singh, Dr. Ankita Sharma, Vanishree, Vinita Kumari, Dr. M. 6296819	6296819	23/07/2023	I.IK Design Patent	T

Title of the Patent application	Application No and Date of Filing	Date of Publication	Patent Awarding Agency
A Wireless Sensor Network-MANET- Internet Based Symbiotic Application Scenario	201641044478 27/12/2016	15/03/2019	India
Method, System and Apparatus for CORDIC Programmable QAM and Efficient Viterbi II 201741046737 27/12/2017	201741046737 27/12/2017	07-May-2019	India
Method and System for Continuous Power Supply System from Multiple Energy Source II 201741046744, 27/12/2017	201741046744, 27/12/2017	07-May-2019	India
Method and System for Dynamic Password Generation	201741046752 27/12/2017	07-May-2019	India
Automatic Vehicle Load Estimation for Controlling Engine Power	201741046745 27/12/2017	07-May-2019	India
Driver Monitoring System for Harsh Acceleration and Deceleration Performance	201741046748, 27/12/2017	07-May-2019	India
A Dual-Band Dual Polaraized Antenna with Beam Steering	201741046750 27/12/2017	07-May-2019	India
RF Based Agribot for Multi Seed Sowing and Fertilization Spraying	201741046751, 27/12/2017	07-May-2019	India
IoT Based Walking Stick for Elderly and Vision Impaired, Physically Disabled	201741046753, 27/12/2017	07-May-2019	India
System with Dynamic Resource Allocation for SD-WAN	201741046755 27/12/2017	07-May-2019	India
Device and Apparatus for Non-Invasive Oral Cancer Screening	201741046756 27/12/2017	07-May-2019	India
Method and Apparatus for Thermoplastic Stock Trays with Custom Spacers for Edentulo 201741046741, 27/12/2017	201741046741, 27/12/2017	07-May-2019	India
A Slide-In Syringe for Covering a Needle-Stick	201741046754, 27/12/2017	07-May-2019	India
A Unified Power-Driven Medical Screw Fastener for Fixation of Bone Fractures	201741046757, 27/12/2017	07-May-2019	India
In-situ Cervix Plug as a Contraceptive Device	201741046738, 27/12/2017	07-May-2019	India
Bandage for Sustained Drug Delivery	201741046739, 27/12/2017	07-May-2019	India
Nano Calcium for Fortification to Augment Nutritional Value	201741046740, 27/12/2017	07-May-2019	India
Delignification of Coir Pith and Fortification with Nitrogen	201741046742 27/12/2017	07-May-2019	India
Thiolated Scaffold Based 5- Fluorouracil Loaded Nanoparticles	201741046743 27/12/2017	07-May-2019	India
Antimicrobial Lyophilized Wafers for Wound Healing	201741046746 27/12/2017	07-May-2019	India
Compression Coated Muco-adhesive Pamidronate Disodium Buccal Compacts for Improv	Compacts for Improv 201741046749 27/12/2017	07-May-2019	India
"An in-Situ Gel for Corneal Wound Healing"	201841048755, December 22, 2018	26/06/2020	India
"A Nano Calcium based in-Situ Gel for Wound Healing and Burns"	201841048757, December 22, 2018	26/06/2020	India
"Nano Drug Mediated Ocular Inserts for Eye Disorders"	201841049191, December 26, 2018	07-Mar-2020	India
"A Method and Composition for an Anti- Blemish Cream",	201841049866, December 31, 2018	07-Mar-2020	India
"A Method and Composition of a Pharmaceutical Excipient Using Calcium Carbonate",	201841049894, December 31, 2018	07-Mar-2020	India
"A Flexible Mirror with Dual Suction Tube",	201841048756, December 22, 2018	26/06/2020	India

"Phosphate Buffer Decalcifying Agent for Dissolution of Pulp Stones"	202041055629, December 21, 2020	24/06/2022	India
"Smart Bracket Positioner"	202041055628, December 21, 2020	24/06/2022	India
"Automation of Odontogenic Keratocysts and Non- Keratocysts based on Incisional Biop 202041055633, December 21, 2020	p 202041055633, December 21, 2020	24/06/2022	India
"Digital Up - Converter for Multiple Channels including Multistage Non-Blocking Switc 202041056805, December 29, 2020	c 202041056805, December 29, 2020	07-Jan-2022	India
"Permanent Magnet Switched Repulsive Motor for High Torque and Autonomous Mobile 202041055632, December 21, 2020	le 202041055632, December 21, 2020	24/06/2022	India
"A Novel Adaptive Information Extraction System using Deep learning Technique and Ne	Technique and N. 202041055908, December 22, 2020	24/06/2022	India
"Reconfigurable RF Receivers"	202041057287, December 30, 2020	07-Jan-2022	India
	202041055905, December 22, 2020	24/06/2022	India
"Conical Shaped Electromagnetic Energy Harvester"	202041055630, December 21, 2020	24/06/2022	India
unction Compensation"	202041056806, December 29, 2020	07-Jan-2022	India
"Method, Device and Apparatus for Quantification of Pavement Distress"	202041056119, December 23, 2020	24/06/2022	India
"Wideband Quadrature Power Divider"	202041055631, December 21, 2020	24/06/2022	India
	202041023875, June 08, 2020.	12-Oct-2021	India
	202041055904, December 22, 2020	16/06/2023	India
	202041056118, December 23, 2020	16/06/2023	India
Anti-Epileptic Drug"	202041056807, December 29, 2020	16/06/2023	India
=	202241003996, January 24, 2022	28/07/2023	India
ent of Bone Microarchi	hi 202241003992, January 24, 2022	28/07/2023	India
	202241004578, January 27, 2022	28/07/2023	India
l Healing"	202241004575, January 24, 2022	28/07/2023	India
nerany"	202241003994, January 24, 2022	28/07/2023	India
1",	$\neg$	28/07/2023	India
"Nano Calcium Incorporated Piscean Collagen Scaffolds as a Dressing Material for Burn	-	28/07/2023	India
"Reversible Vaginal Contraceptive"	202241003998, January 24, 2022	28/07/2023	India
ntra Oral Patch to Control Post Tooth Extraction Bleeding"	202241004580, January 27, 2022	28/07/2023	India
"Avulsion Storage Medium"	202241003997, January 24, 2022	28/07/2023	India
"Automation of Prognosis of Recurring and Non-Recurring Odontogenic Keratocyst and 202241004002, January 24, 2022	d 202241004002, January 24, 2022	28/07/2023	India
"Electric Field Excited Non Invasive Fluid Flow Measurement Device"	202241003999, January 24, 2022	28/07/2023	India
"Fusion of Horizontal and Vertical Movement Electromagnetic Energy Harvester"	202241003995, January 24, 2022	28/07/2023	India
"Cardiac Arrhythmia Classification using Machine Learning Techniques"	202241004577, January 27, 2022	28/07/2023	India
"Micro Motors for Robotic Applications"	202241004000, January 24, 2022	28/07/2023	India
"Hybrid Switching Controller for BLDC Motor Interfaced to Electric Vehicles"	202241004001, January 24, 2022	28/07/2023	India
"Modular Temporary Composite Bridge for Rescue Operations",	202241004581, January 27, 2022	28/07/2023	India
"Folded Core Composite Sheet", Indian Patent Application:	202241004576, January 27, 2022	28/07/2023	India
Title of the Patent application	Application No	Date of Filing	Patent Awarding Agency
"An in-Situ Gel for Corneal Wound Healing"	201841048755		India
"A Nano Calcium based in- Situ Gel for Wound Healing and Burns"	201841048757	7 22-Dec-18 India	India
"Nano Drug Mediated Ocular Inserts for Eye Disorders"	201841049191	. 26-Dec-18 India	India
"A Method and Composition for an Anti-Blemish Cream",	201841049866	31-Dec-18 India	India

"A Flexible Mirror with Dual Suction Tube", "Dentures with Chrysalis Fibers" "An Analgesic Coated Surgical Suture"	201841048756	22-Dec-18 India
"Dentures with Chrysalis Fibers"  "An Analgesic Coated Surgical Suture"		TOT TO THINK
"An Analgesic Coated Surgical Suture"	201841048758	22-Dec-18 India
	201841048759	22-Dec-18 India
"Method and Composition to Improve Antibacterial Activity and Surface Micro-Hardness	201841049190	26-Dec-18 India
"Oral X-ray Film Holder for Easy Determination of Working Length in Endodontics",	201841049192	26-Dec-18 India
"Intraoral Liquid Bandage for Sustained Drug Delivery"	201841050035	31-Dec-18 India
"A Non-electric Water Purifying Filter",	201841048760	22-Dec-18 India
"Airborne Floating Device for Commercial Applications"	201841050040	31-Dec-18 India
"Method, System and Apparatus to Extend Discharge Time of Battery Using Two-Chopp	201841048761	22-Dec-18 India
"Compact Pomegranate Aril Remover"	201841049193	26-Dec-18 India
"Method, System and Apparatus for Phase Shift Correction in Direct Digital Synthesis-Ph	201841049194	26-Dec-18 India
	201841049195	26-Dec-18 India
"Universal Demodulator Employing Probabilistic Neural Network"	201841049196	26-Dec-18 India
"Method, System and Apparatus for In-line Pipe Inspection"	201841049197 26-Dec-2018	8 India
"A Method and Device for Composite Filament Winding"	201841050039	31-Dec-18 India
"Intelligent Dustbin"	201941006264 February 18, 2019	, 2019 India
"Herbosomal Drug Delivery System", Indian Patent Application:	201941054070 December 26, 2019	6, 2019. India
"Nanocomposite Functionalized Polymeric Scaffold for Skin Tissue", Indian Patent Appli	201941054263 December 27, 2019	7, 2019 India
"Antifungal Tranungual Nanomiemgel for On chomycosis"	201941054265 December 27, 2019	7, 2019 India
"A Peroral Delivery System Containing Bisphosphonate Drug for Treatment of Osteoporo	201941054262 December 27, 2019	7, 2019 India
	201941054267 December 27, 2019	7, 2019 India
	5-1 December 27, 2019	7, 2019 India
"Styling of Innovative Faucet Design for Elite Indian Homes - QUEEN",	7-1 December 27, 2019	7, 2019 India
"Local Anaesthesisa Dispenser – A Portable Delivery System without an Aide"	201941053790 December 24, 2019.	4, 2019. India
"Blade Guard - Device to Safely Load and Unload a Surgical Scalpel",	201941054069 December 24, 2019.	4, 2019. India
"Dental Digital Image Receptor Holder with Dual Aiming Rings for Imaging",	201941054072 December 26, 2019.	6, 2019. India
"Novel Bio Active Theobromine Composite Resin",	201941054071 December 26, 2019.	6, 2019. India
"Retractor Providing Enhanced Protection to the Soft Tissue for Oral Surgery",	201941054268 December 27, 2019.	7, 2019. India
"Esthetic Strips for Selection Anterior Teeth in Edentulous Patients"	201941054264 December 27, 2019.	7, 2019. India
"Electrically Driven Automated Saline Dispenser"	201941054266 December 27, 2019.	7, 2019. India
"A Cement Dispenser with Accurate Powder Liquid Ratios"		7, 2019. India
"Group/Troupe Tracking System",	201941053800 December 24, 2019.	4, 2019. India
"Heart Disease Prediction System using Machine Learning"	201941053797 December 24, 2019	4, 2019. India
"System, Method and Device for Automatic Text Summarization".	201941053791 December 24, 2019.	4, 2019. India
"Window Glass Panel Cleaning Robot",	201941053795 December 24, 2019	4, 2019. India
"Disposable-Syringe Recycler"	201941053799 December 24, 2019.	4, 2019. India
"Compact Foxtail Millet Deshelling Machine"	201941053792 December 24, 2019.	4, 2019. India
"Electronic Seed Metering System",	201941053796 December 24, 2019.	4, 2019. India
"Spherical Spy Robot for Surveillance Operations",	201941053793 December 24, 2019.	4, 2019. India
"Remote controlled Ornithopter with Improved Aerodynamics and Control"	201941053798 December 24, 2019.	4, 2019. India

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"Hybrid Switching Controller for BLDC Motor Interfaced to Electric Vehicles"	2022. India

"Modular Temporary Composite Bridge for Rescue Operations",	202241004581	202241004581 January 27, 2022. India	
"Folded Core Composite Sheet", Indian Patent Application:	202241004576	27-Jan-22 India	
Method, System and Apparatus for Early Detection of Breast Cancer Using Multi modal II	202341004838	25-Jan-23 India	
Exoskeleton Arm for Rehabilitation	202341004837	25-Jan-23 India	
Vertical Coil-Magnet Stack Electromagnetic Energy Harvester	202341004839	25-Jan-23 India	
Emission Reduction Using Metallic Sintered Filters	202341004840	25-Jan-23 India	
Bathroom Commode for Arthritis Patients and Old Age People	202341005278	27-Jan-23 India	
Mulberry Leaves Separation and Chopping Machine	202341005353	27-Jan-23 India	
Intranasal In-Situ Gelling Drug Delivery System Targeting Brain for Treatment of Motion	202341005280	27-Jan-23 India	
Gel Based Delivery System Containing Lignin and Tannin for Wound Healing	202341005355	27-Jan-23 India	
Nanostructured Lipid Carrier Based Gel of Tamanu Oil for Management of Psoriasis	202341005274	27-Jan-23 India	
Rutin in Situ Gel for Conjunctivitis	202341005275	27-Jan-23 India	
Oral Suspension of Diosmin Microparticle for the Treatment of Angina Pectoris	202341005351	27-Jan-23 India	
Rutin Entangled Folic Acid Conjugated Carboxyl Functionalized Multi -Walled Carbon N	202341005276	27-Jan-23 India	
Novel Composition for Oral Care and Other Applications	202341005360	27-Jan-23 India	
Topical Formulation Loaded with Pomegranate Seed Oil for the Treatment of Psoriasis	202341005352	27-Jan-23 India	
Enriched Topical Formulation for Hair Re-growth and Vitality	202341004836	27-Jan-23 India	
A pH Sensitive, Psyllium based Superporous Hydrogels for Smart Drug Delivery	202341005272	27-Jan-23 India	
Disinfectant Tablet for Promotion of Public Health	202341005279	27-Jan-23 India	
Drug loaded Nano sponge	202341005281	27-Jan-23 India	
A Local Drug Delivery System for Endodontic Disinfection	202341005273	27-Jan-23 India	
A Novel Tissue Expander for Maxillofacial Regions	202341005356	27-Jan-23 India	
Proanthocyanidin Based Dentifrice for Patients with Chronic Periodontitis and type 2 Dia	202341005359	27-Jan-23 India	
Versatile Device for Intra-oral and Extra-oral Measurements	202341005357	27-Jan-23 India	
A Portable Electrolytic Device for Rapid Decalcification of Oral Hard Tissue	202341005358	27-Jan-23 India	
An Oral Muco-Adhesive Patch Incorporating Amla Bark and Fruit Extract for Wound He	202341005277	27-Jan-23 India	
Mucoadhesive Aceclofenac Microspheres for Post Operative Pain Relief in Surgically Imp	202341005354	27-Jan-23 India	

## **ANNEXURE 23**



#### **b.** Funded Research Projects

#### i. External Funded Projects (in Lakhs)

S.No	Title of the Research Project	Funding Agency	2020-21	2021-22	2022-23	Total (in lakhs)
1	Development of Thermal Conductive Elastomeric Composites for Liquid Cooled Garments to Mitigate Thermal Stress.	Life Science Research Board	70.00			
2	Indigenous Development of HPRF CW Adaptor FWD and AFT	Indian Air Force	15.81			
3	Generation of Drawings and Material Testing Specifications of Ram Air Temperature Sensor for ELTA ASPJ System	Indian Air Force	0.21			
4	Development of AI Based Predictive Algorithms for Bionic Hand Action Recognitions	Life Science Research Board	48.49			
5	Arecanut Research and Development Foundation	Task force on Arecanut, Dept.of Horticulture, Govt. of Karnataka	31.80			
6	Study of Ubiquitin Mediated Telomerase Regulation in Breast Cancer Stem Cells	DBT-Ramalingaswami Re-entry fellowship	113.60			
7	Inorganic-Organic Hybrid Material for Anti- Counterfeiting Applications	SERB	32.07			

S.No	Title of the Research Project	Funding Agency	2020-21	2021-22	2022-23	Total (in lakhs)
8	Proteomic characterization of induced blood obtained during revascularization procedure and co-relation with the regenerative outcome: A proof-of-concept study	IACDE	0.50			
9	Study on Nuts about Cheese	Xinova	3.75			
10	Designing the New Potential Catalysts Using High throughput DFT and Machine Learning Techniques	SERB	37.76			
11	Development of Li-Fi Enabled Indoor Data Connectivity	Teachers Associateship for Research Excellence (TARE) - SERB	18.30			
12	To develop Computer-Aided Diagnosis and risk stratification of Odontogenic Keratocysts from histopathological images of incisional biopsies	SERB Power	19.98			
13	Provision of Low Speed Wind Tunnel Test Facility to perform Experimental study of Wind Turbine	Minebea Mitsumi Tech Centre India (MTCI)	0.53			
14	Clinical trial network for hospital-based trial in Diabetology	BIRAC	229.92			
	Total					622.72
15	Early preparation to a safe and healthy motherhood: understanding delays and opportunities in delivery and access to preconception nutrition	Karnataka Health Promotion Trust		1.83		
16	A Comparative Study of COVID-19 Vaccine Rollout Experiences in India, Chile, and the USA	ICMR		7.56		

S.No	Title of the Research Project	Funding Agency	2020-21	2021-22	2022-23	Total (in lakhs)
17	Design, Development and Analysis for conversion of Domestic Food Waste to hydro char using Hydrothermal Carbonization	KSCST		0.07		
18	Development of Personal cooling unit for thermal comfort beneath the PPE kit for hospital staff working for COVID 19	KSCST		0.06		
19	Development of advanced microbial fuel cells for domestic waste management and for electricity generation	KSCST		0.08		
20	A novel immune boosting synbiotic formulation for the effective management of covid-19	KSCST		0.08		
21	Enhancing capacity for conduct of Human clinical trials for COVID-19 vaccine candidates at Ramaiah Medical College and Hospitals	BIRAC		146.73		
	Total					156.41
22	One pot synthesis of thiophene, analogues for photovoltaic cell application	KSTA			0.25	
23	Giant pL enhancement via Bismuth replaced coped BaSrY4O8 with Eu3+ nanophosphor for WLED and ant counterfeit application	KSTA			0.25	
24	Synthesis and characterization of polyphenol derivatives comprising stilbene unit as novel drug candidates to evaluate their anti-breast cancer activiQr	KSTA			0.25	

S.No	Title of the Research Project	Funding Agency	2020-21	2021-22	2022-23	Total (in lakhs)
25	Synthesis and characterization of hetero	KSTA			0.50	
	atom-based novel curcumin derivatives to evaluate their anticancer activity on PANC1					
	cell line					
26	Green synthesis of Zinc-oxide (ZnO)	KSTA			0.25	
	nanoparticle using vegetable peel extract,					
	their characterization and evaluation of their					
27	antioxidant activit  Development Of One Time Multi-Color Chart	KSCST			0.10	
27	Detection Of Dengue Virus Using Mobile	NSCST			0.10	
	Camera Analysis Via Dna Label Free Probe					
	,					
28	, '	KSCST			0.10	
	Based Bricks For Its Microstructural And					
	Mechanical Properties Under Different Curing					
	Conditions					
29	Formation And Control In Fly Robots For	KSCST			0.08	
	Border Security					
30	Bio-Protectant Efficacy Of Novel Antibiotics	KSCST			0.10	
	Produced By Azotobacter Species For The					
	Management Of Mycotoxin Contamination Occurring In Cereals					
	occurring in Cereais					
31	Design And Development Of Hydrogen Based	KSCST			0.10	
	Dual Fuel Si Engine					
32	Development Of An Effective Battery Thermal	KSCST			0.08	
	Management System Using Evaporative					
	Cooling Technique					

S.No	Title of the Research Project	Funding Agency	2020-21	2021-22	2022-23	Total (in lakhs)
33	Comparative Proteomic Analysis Of The Varied Plants Co-Cultivated With Acetobacter Diazotrohicus And/Or Its Homology Related Bacteria	KSCST			0.12	
34	Nasopharyngeal Carriage of Streptococcus Pneumoniae Serotypes among Children and their Cohabiting Relatives in South India: A Cross-Sectional Study	ICMR			10.02	
35	Development of Molybdenum Based Chalcogenides Thin Film Sensors for Room Temperature Ammonia Gas Sensors	BRNS			27.34	
36	Investigation of Janus monolayer for flexible transistor, thermoelectric and optoelectronic device applications using first-principles and data-driven machine learning approaches	DST-SERB-CRG			37.15	
37	Development and characterization of novel phytosome based mucoadhesive drug delivery system for management of symptomatic oral lichen planusunder	ICMR			9.98	
38	Quality of life in post menopausal women and its association with sarcopenia	Endocrine Society			0.13	
39	Study of sex hormone levels and sexual dysfunction in primary hypothyroidism pretreatment and post treatment with levothyroxine	Endocrine Society			0.99	
40	Strengthening of Medical Certification of cause of death	ICMR			7.40	
41	NTEP	ICMR			10.57	

S.No	Title of the Research Project	Funding Agency	2020-21	2021-22	2022-23	Total (in lakhs)
42	RBSK-NTEP	ICMR			10.86	
43	Sarcopenia among children and adolescents	Physiotherapy			0.25	
	with nephrotic syndrome: A Cross sectional					
	study .					
44	The Univesity of Deusto	EURO Funding- Deusto			3.71	
		University				
45	TB Preventive	ICMR			15.79	
46	Registry of COVID 19	ICMR			19.55	
47	Enviornmentally Sound Management of	UNIDO			65.00	
	Medical Waste in India					
61	Muscle strength, body composition and	Endocrine Society			0.98	
	serum Irisin levels following gender affirming					
	treatment in transgender individuals					
62	Sedentary time & its correlation among child	RGUHS			2.60	
	and adolescents with disability					
63	TB Among Construction workers	ICMR Share India			2.77	
64	Development of EEG based biometric system	LSRB			56.94	
	to identify friend and foe in defense					
	appplication					
65	Meghalaya health system strengthening	Govt. of Meghalaya			66.82	
	project					
66	Development of tellurium free low cost	SERB-TARE			6.10	
	binary metal chalcogenides for thermo					
	electric applications					
67	Design and Development of Transition Metal	SERB-TARE			2.75	
	Oxide Based Synaptic Devices for Brain-					
	Inspired Neuromorphic Computing					
	Applications					
68	CSR-ABC-Stop the bleeding project	University of Pennyslavania, USA			24.17	

S.No	Title of the Research Project	Funding Agency	2020-21	2021-22	2022-23	Total (in lakhs)
69	A customizable and intelligent artificial pancreas for type-I diabetic patients of India	Sree Padmavathi Venkateshwara Foundataion			150.00	
70	Evaluation of host based biomarkers for diagnosis and determining the progress of treatment in TB patients	Healthseq Precision Medicine Pvt.Ltd			0.89	
71	Data Collection for High Hemoglobin Range with Bosch Hemoglobin monitor	Bosch Ltd			6.30	
72	An Intelligent Artificial Pancreas System for Type-1 Diabetic Patients of India	Scheme fpr transformational and advanced research in sciences, Ministry of Education, IISc			93.00	
73	Development of a novel mica based oral film for prevention of dental caries with antibacterial and remineralizing properties	ICMR			7.75	
74	Karyashala on Mechantronics- Recent trends and future prospects	SERB			5.00	
	Total					646.98

### **ANNEXURE 24**



#### **University Funded Projects**

SI No	Name of the PI	Project Title	2020-21	2021-22	2022-23
1	Varun D	RATS Sensor	1,607		
2	Manikanda Prabhu N	Research project titled Photocatalytic and antimicrobial study of BiVO4 Based catalysts	29,471		
3	Sumy Joseph	Research Project titled Crystal Morphologycal Studies of Chaclones	15,855		
4	Chennappa Gurikar	Research project on Development of Microbial Fuel Cells	30,000		
5	Jineesh A G	Research Project on Development of Flexible bio based polyurethane nanocellulose composite for waste water	10,060		
6	Jyotsna Kumar	Research Project Development of Nano Composite using Brassica Gongy and its Anti-Oxidant Studies.	31,478		
7	Manjunath S O	Research project on Studies on NA Doped, Pervoskite	33,510		
8	Ravi B	Research project Synthesis, Characterization and Photoluminescence studies of chromium doped zinc aluminates	36,984		
9	Premkumar H	Research project on Studies on NA Doped Lao.8Ca0.2-x Pervoskite Manganites	38,467		
10	Swati Sinha			4,720	
11	Chennappa Gurikar			39,123	
12	Swati Sinha			23,152	
13	Tushar Shaw			4,663	
14	Tushar Shaw			14,504	
15	Tushar Shaw			13,797	
16	Swati Sinha			7,980	
17	Swati Sinha			6,453	
18	Mallikarjunaiah K J			2,120	
19	Swati Sinha			41,306	

20	G Devakumar	Development of Model to Explore the impact of destination	300,000
		branding with respect to consumer based brand equity: An	
		Exploratory Study on Community based Tourism at Kaiwara,	
		Karnataka	
21	H S Srivatsa	Modelling Factors influencing Human Organ donation	300,000
22	Shilpa R G	Benchmarking of Smart Library Management System in Higher	300,000
		Education Institutions	
23	Prasanthi	Exploring the Role of DUBs in Chemoresistance	450,000
24	Soma Chaki	Development and Characterization of patient derived cell	475,000
		culture model system from oral cancer patients	
25	M Rajadurai	Development of fermented millet-based health beverage with	490,000
		improved antioxidant and pharmacological activities	
26	Hanumantharaju K N	Development of Edible Biopolymer Packaging material for	458,000
		primary packaging of food	
27	Rohini Keshava	Screening and Evaluation of common Poaceae Species for	450,000
		potent anticancer therapeutics	
28	Chennappa Gurikar	Development of Azotobacter Sp. Based Anti-Mycotic Product for	260,000
		the Management of Mycotoxingenic Fungal Contamination in	
		Cereals	
29	Tushar Shaw	Development and Evaluation of a Loop-Mediated Isothermal	300,000
		Amplification Combined with a Lateral Flow Assay for Rapid	
		Detection of Carbapenem Resistant Enterobacteriaceae	
30	Ms Yogitha Bhat	Influence of Processing on Protein Digestibility and Mineral	200,000
		Bioaccessibility with Special Emphasis on Preconception	
		Nutrition	
31	Ausha M B	Formulation of Ready to Cook Composite Mix for Rural Women	210,000
		to Aid Preconception Nutrition	
32	David H E	Development of Novel Synbiotic Formulation targeting	265,000
		Improved Bioavailability of Calcium in Young Women	
33	Sandhya Sankaran	Bioinformatics Approaches to identify and Predict Functional	321,000
		Residues of Toxin-antitoxin System in Pathogenic Bacteria	

34	Swati Sinha	Identification of Drug Targets and Analysis of Small Molecules for Amelioration of Apoptosis Resistant Cancers	300,000
35	Debsish Kar	Molecular Characterization of Putative DD-Carboxypeptidases of Klebsiella Pneumoniae	300,000
36	Sandhya K V	"Repurposed Drug loaded Metal Organic Framework (MOF) nanoparticle targeting aGPCR against breast cancer metastasis"	250,000
37	R Deveswaran	"Effect of Timolol on Retinal Ganglion Cells and Muller Cells in increased Intraocular Pressure - A Glaucoma Rat Model"	280,000
38	Damodar Nayak	"Exploring Principles of Marine Algae as a Radio protector in Cancer Treatment"	258,000
39	Sharon Furtado	"Development of Toothpaste Containing Proanthocyanidin for Diabetic Population"	250,000
40	Parasuraman P	Folate receptor targeted bovine serum albumin / polyethylenimine grafted nanoparticles for co-delivery of siRNA and Chloropyrimidin-4-amine derivative for treatment of Breast Cancer	299,000
41	Aswathi R Hegde	Formulation Development and Performance Evalucation of Novel Sunscreen Creams containing Hesperidin Lipsomes	250,000
42	N Rakesh	"Comparative Analysis of Salivary Volatile Organic Compounds in Patients with Chronic Liver Disease and Healthy Individuals"	137,000
43	Sylvia Mathew	"Development and Characterization of a Local Drug Delivery System for disinfection and regeneration in Endodontics"	300,000
44	Indiresha H Narayana	"Comparative Study of Proliferative Effect of Human Adult Peripheral and Umbilical Cord Blood Platelet Rich Fibrin enhanced with Gold Nanoparticles on Human Dental Pulp Stem Cells"	91,892
45	Chatura Mohan	"Assessment of the biocompatibility and anti-xidant property of a Cissus quadrangularis-based novel intracanal medicament"	180,000

46	Kora Ramya Reddy	"Evaluation of antimicrobial property of Natural C-Dots in	220,000
		extraction sockets"	
47	Bhavya B	"Assessment of a novel Plant ago Ovata muco adhesive	200,000
		mucilage dressing for wound healing"	
48	Sowmya S V	"Evaluation of protein and gene expression of CADM1 and	300,000
		CRTAM in metastatic oral squamous cell carcinoma arising from	
		gingivobuccal sulcus of smokeless tobacco chewers"	
49	Greeshma C	"Development of a novel biopolymeric nano micelle for targeted	250,000
		drug delivery-an in-vitro study"	
50	Kavitha Prasad	Estimation of Protein and Gene expression of HOXD-10 and	320,000
		DACT-2 for Oral Squamous Cell Carcinoma (OSCC) related to	
		smokeless tobacco consumption and there clinicopathological	
		correlation	
51	Veena Kiran Nambiar	"Effect of Exercise Based-Cardiac Rehabilitation on Heart rate	658,000
		variability, Functional Exercise Capacity and Quality of Life in	
		patients with Chronic Heart Failure"	
52	Soni Srikanth	"Association between Autonomic Status and Pain Variables in	54,125
		Individuals with non-specfic neck pain"	
53	V Sudar Kumar	"Effect of Morning Versus Evening Exercise on Fat Oxidation	287,000
		during Moderate Intensity Aerobic Exercise: A Randomized	
		Crossover Trail"	
54	Nanda Kumar S	"To assess muscle strength among pre-menopausal, peri-	371,000
		menopausal and post-menopausal women in Urban Bangalore"	
55	Kirti Joshi	"Translating evidence into practice: Feasibility, acceptance and	332,000
		efficany of pelvic floor training program for Urinary	
		Incontinence in middle-aged women"	
56	Diana Rodrigues	"A Study of quadriceps muscle strength with select biomarkers	455,000
		among individuals with obstructive airway disease"	
57	Latha U S	"Effect of Breast feeding Peer Counselling program to elderly	60,000
		women on Breast Feeding Practices of mothers and growth of	
		infants"	

58	Kusum Gurung	"Efficacy of one session brief intervention and telephonic contact for suicide prevention"	55,000
59	Sonali Jadhav	"Identification of risk factors mitigation for Non-Communicable Disease (NCD) prevention among pre-school children"	170,000
60	Yogeendra Babu	"Evaluation of the implementation of nursing process by the Nurses at Ramaiah Hospitals, In a view to develop a training module."	150,000
61	Ganga Prasad	"Effect of Yoga Practice on primary dysmenorrhea among adolescent girls"	50,000
62	Sunayana Ghosh	"Effectiveness of structured teaching programme on knowledge and practice regarding Breast Self-Examination (BSE) among adolescent girls in selected colleges," Bangalore	80,000
63	Anupama V Hegde	"Clinical and Genetic Correlation of Patients with Long COVID having Cardiovascular Complications"	449,000
64	Deena Patil	"Androgen Gene Polymorphism and its Phenotypic expression in premature androgenic alopecia"	500,000
65	Prarthana Karumbaiah	"Effect of Music Therapy on Cognitive and Emotional Development of Preterm Infants"	255,000
66	D Pragati Rao	"Clinico - Epidemiological correlation with genetic determinants for long COVID with respective pulmonary complication"	455,000
67	Shivaraj NS	"Leveraging Geographical Information Systems for Health Research in Non-Communicable Diseases Among Urban and Rural Communities"	373,000
68	Thanuja G Pradeep	"An epidemiological study of the prevalence of eye diseases in rural india and exploration of the feasibility of a teleophthalmology model to deliver eye care services to the rural population"	420,000
69	M S Venkatesh	"Tissue Oxygen Saturation Flap Monitoring Device"	180,000
70	Ananth Bhardary	"Genetic Polymorphisms of LOXLI and their Association with changes in Aqueous Proteomics in cases with and without Psedoexfoliation"	300,000

71	Lohit HS	"Design and Development of Portable Oral Examination System"	261,000
72	Mamatha G Hegde	"Rejuvenation of traditional Handloom Weaving and Development of Innovative Contemporary Loom for Narrow width fabric manufacturing"	500,000
73	Ravikumar B S	"Exploration of novel hybrid nanostructure materials towards gas sensing applications"	500,000
74	Vikas M Shelar	"Spectroscopic Characterization of Plasma Plume for hall thruster applications"	470,000
75	Manikanda Prabhu N	"Phytogenic Synthesis and Functionalization of Iron Oxide Nano Particles Prepared Using Bio-Waste / Chemical Agents for the treatment of Environmental Contaminants"	500,000
76	Jyotsna Kumar	"Synthesis of Novel Stillbenoid Derivatives to Evaluate their Anti- Breast Cancer Activity: Their Designing and In Silico Studies"	500,000
77	Sheetal Bhatkurki	Synthesis of Heterobimetallic based Metal Organic Framework (Pd@Cu BZT-H2ATA MOF) for Suzuki–Miyaura Cross Coupling Reaction	500,000
78	Prabhu Tej	"Enhanced Absorption spectroscopy using single mode non- classical light"	255,000
79	Anitha Kumari	"Experimental Studies on modified soil Using bagasse ash and fly ash in pavement subgrade"	500,000
80	Chethan Gowda	"Gamma Radiation Shielding and Thermal Properties of High Density Conventional and Geopolymer Concrete"	500,000
81	Harshad R Parate	"Porous Asphalt Concrete for Sustainable Infrastructure"	300,000
82	Jayahar Sivasubramaian	"Experimental and Theoretical Investigation of Hypersonic Ablation"	500,000
83	Mahesh k Varpe	"Experimental Investigation of a Passive Flow Control (Protuberance) on the Aerodynamic Performance of a Blade"	500,000
84	Manickavasagam	"Design and Development of a Miniaturized Conical Shaped Electromagnetic Energy Harvester"	399,000

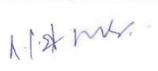
85	Manickavasagam	"Design and Development of a Wireless Power Transmission	269,00
		System using High frequency Power Converter"	
86	Nayana Patil	"Evaluation of strength, durability characteristics with micro-	225,00
		structural analysis of self-healing self-consolidating geopolymer	
		concrete"	
87	Raja R	"Design and Development of Race Vehicle for SUPRA SAE 2023	500,00
		Competition"	
88	Shashank Vadlamani	"Stochastic Modelling and Analysis of Functionally Graded	350,00
		Beams"	
89	Shreyanka Subbarayappa	"Development and Analysis of Social Internet of Things (SIoT)	428,00
		using extended Gossip protocol and Direct Acyclic Graphs for	
		Computational offloading"	
90	Sivapragasam	"Large Eddy Simulation of Transitional Flow over an airfoil at	350,00
		low reynolds numbers"	
91	A T Sirram	"Development and Demonstration of Hall Thruster"	500,00
92	Sunil Y	"Designing the wireless EPG to monitor articulatory defects in	500,00
		kannada speakers – AAC"	
93	Bhargav	" Mode-1 Delamination Growth Behaviour in CFRP"	219,00
94	Rashmi B J	Synthesis and Characterization of Thermoplastic Starch Based	160,00
		Nanocomposite Films for Active Food Packaging Applications	
95	Priyanka K P	Synthesis and Characterization of Engineered Nano Titania as	140,00
		an Additive in Coating Applications	
96	Mallikarjunaiah K J	Synthesis and Study of Technologically Important Magnetic	300,00
		Materials and Design and Fabrication of the Internal Field	
		Nuclear Magnetic Resonance (IFNMR) Spectrometer	
97	Shivanand Madolappa	Lead Free ABO3 Perovskite Materials for Energy Storage	98,00
		Application	
98	Raju Kumar Biswas	Exploring Carrier Transport Properties of WSe2(1-x)Te2x	340,00
		Superlattices for thermoelectric and optoelectronic applications	
		through first-principles approach and Boltzmann Transport	
		theory	

99	Darshan G P	Photocataltic Strategy of Single-atom Loaded Bismuth based			250,000
		complex Systems for Degradation of Organic Pollutants and			
		Water Splitting			
100	Gopalakrishna	Design, Development and Commission of the Open Jet Facilities			271,000
101	Patent Expenses		2,437,313	1,664,672	3,169,956
102	Research Centre Expenses		1,170,556	43,656	805,590
			227,432	157,818	29,679,563

# **ANNEXURE 25**

#### iii. No of JRFs, SRFs, PDFs, Research Associates

Year	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Total No Of JRF/SRF	4	4	1	32	11	52



S.No	Year of award	Period of award (in years)	Name of the Scholar	Specify the grants viz JRF/SRF/PDF/RA/et c	Awarding agency
1	2019-20	3 Year	Mr. Adarsha M.	Junior Research Fellowship	Ministry of Tribal Affairs, Gol
2	2019-20	1 Year	Ms. Razmi Das	Junior Research Fellowship	Board of Research in Nuclear Sciences
3	2019-20	1 Year	Ms. Sharika S.	Senior Research Fellowship	Atomic Energy Research Board
4	2019-20	1 Year	Mr. Shashanka H.M.	Junior Research Fellowship	Science and Engineering Research Board



S.No	Year of award	Period of award (in years)	Name of the Scholar	Specify the grants viz JRF/SRF/PDF/RA/et	Awarding agency
1	2020-21	1 Year	Ms. Akshatha Chandrashekar	Junior Research Fellowship	Life Science Research Board
2	2020-21	1 Year	Ms. Madhushree Hegde	Junior Research Fellowship	Life Science Research Board
3	2020-21	1 Year	Ms. Hamsaveni M.	Junior Research Fellowship	Life Science Research Board
4	2020-21	1 Year	Mr. Deeksha Ramamurthy	Junior Research Fellowship	Science and Engineering Researc Board

1.1.4vv.

S.No	Year of award	Period of award (in years)	Name of the Scholar	Specify the grants viz JRF/SRF/PDF/RA/et	Awarding agency
1	2021-22	1 Year	Mr. Akshay Arjun	Junior Research	Science and Engineering Research
				Fellowship	Board

N. I. A. P.

S.No	Year of award	Period of award (in years)	Name of the Scholar	Specify the grants viz JRF/SRF/PDF/RA/et	Awarding agency
1	2022-23	1 Year	Ms. Tanu Choudhary	Junior Research Fellowship	M S Ramaiah University of Applie Sciences
2	2022-23	1 Year	Ms. Lasubon Syrti	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
3	2022-23	1 Year	Mr. Ajay S.	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
4	2022-23	1 Year	Ms. Eliza Ahmed	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
5	2022-23	1 Year	Mr. Pranay	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
6	2022-23	1 Year	Ms. Adrita Banerjee	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
7	2022-23	1 Year	Ms. Dipika Bumb	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
8	2022-23	1 Year	Ms. Veena B. P.	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
9	2022-23	1 Year	Mr. Shashanka H. M.	Senior Research Fellowship	M S Ramaiah University of Applied Sciences
10	2022-23	1 Year	Dr. Rachita Gururaj	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
11	2022-23	1 Year	Ms. Gouri R. Javali	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
12	2022-23	1 Year	Dr. Mayank Khandelwal	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
13	2022-23	1 Year	Dr. Vikash Sharma	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
14	2022-23	1 Year	Mr. Hemanth Kumar	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
15	2022-23	1 Year	Mr. Syed Mohsin	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
16	2022-23	1 Year	Ms. Sukeerthi Dasharathy	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
17	2022-23	1 Year	Ms. Sugandha B. K.	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
18	2022-23	1 Year	Mr. Jipin P. M.	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
19	2022-23	1 Year	Ms. Varshaa O Arer	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
20	2022-23	1 Year	Ms. Chaitradeepa G. Mestri	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
21	2022-23	1 Year	Mr. Adarsha M	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
22	2022-23	1 Year	Ms. Nandana Narayana	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
23	2022-23	1 Year	Ms. Shivanjali Esther Arland	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
24	2022-23	1 Year	Ms. Pooja Gour	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
25	2022-23	1 Year	Ms. Lairikyengbam Deepti Roy	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
26	2022-23	1 Year	Ms. Pooja M Eranna	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
27	2022-23	1 Year	Ms. Lekhana S. M.	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
28	2022-23	1 Year	Ms. Soujanya Jagadish Vastrad	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
29	2022-23	1 Year	Mr. Amith Bounsle N G	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
30	2022-23	1 Year	Dr. Manisha Devi	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
31	2022-23	1 Year	Mr. Jithu Jerin James	Junior Research Fellowship	M S Ramaiah University of Applied Sciences
32	2022-23	1 year	Deeksha Ramamurthy	Senior Research Fellowship	Science and Engineering Research Board
					Page 2



### JAN-2023-24

SI. No	Name of the Scholar	Faculty/ Department	JRF	CGPA Secured in PG Programme	Status
1	Prasanna S Benakannavar	FMPS – Chemistry	JRF	8.58	Recommended for award of JRF
2	Prashant Rakaraddi	FMPS – Chemistry	JRF	7.26	Recommended for award of JRF
3	Nayana Ravindra Jawale	FPH – Pharmaceutical Chemistry	JRF	8.67	Recommended for award of JRF
4	M Sushma	FPH – Pharmaceutical Chemistry	JRF	8.67	Recommended for award of JRF
5	C. Sangavi	FPH- Pharmaceutical Chemistry	JRF	7	Recommended for award of JRF
6	Harshitha R	FMPS – Mathematics	JRF	8.55	Recommended for award of JRF
7	Madan	FMPS – Mathematics	JRF	7.134	Recommended for award of JRF
8	Deepika Purohit	FMPS – Mathematics	JRF	7.43	Recommended for award of JRF
9	Pushya Pradeep	FLAHS- Biotechnology	JRF	8.9	Recommended for award of JRF
10	Rutuja Girish	FMC - MBA	JRF	8	Recommended for award of JR
11	Milind P S	FMC - MBA	JRF	803	Recommended for award of JR

ror award of JRF

## **ANNEXURE 26**



### Details of Workshops/ Seminars/ Conferences/ Symposia, etc organized by the University

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
		2022-23		
30.05.2022 &	international symposium on design, Modelling and simulation	S Srikari	5,000	Registration
31.05.2022				
30.05.2022 &	international symposium on design, Modelling and simulation	A T Sriram	5,000	Registration
31.05.2022				
30.05.2022 &	international symposium on design, Modelling and simulation	S Umesh	5,000	Registration
31.05.2022				
30.05.2022 &	international symposium on design, Modelling and simulation	M Sivapragasam	5,000	Registration
31.05.2022				
30.05.2022 &	international symposium on design, Modelling and simulation	Ananthesha	5,000	Registration
31.05.2022				
30.05.2022 &	international symposium on design, Modelling and simulation	M H Monish Gowda	5,000	Registration
31.05.2022				
30.05.2022 &	international symposium on design, Modelling and simulation	S Subbaramu	5,000	Registration
31.05.2022				
30.05.2022 &	international symposium on design, Modelling and simulation	V R Kiran	5,000	Registration
31.05.2022				
30.05.2022 &	international symposium on design, Modelling and simulation	Nayana N Patil	5,000	Registration
31.05.2022				
30.05.2022 &	international symposium on design, Modelling and simulation	B S Dayananda	5,000	Registration
31.05.2022				
30.05.2022 &	international symposium on design, Modelling and simulation	Rahul M Cadambi	5,000	Registration
31.05.2022				
30.05.2022 &	international symposium on design, Modelling and simulation	Balappa B U	5,000	Registration
31.05.2022				
30.05.2022 &	international symposium on design, Modelling and simulation	Sandeep N	5,000	Registration
31.05.2022				
30.05.2022 &	international symposium on design, Modelling and simulation	Vijaya Kumar S	5,000	Registration
31.05.2022				

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Nithin Venkataram	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Arun Karthik S	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Arun Ravindra	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Srikrishna M Badiger	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Chethan Gowda R K	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Divakar L	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	T N Srikantha Dath	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	S D Anitha Kumari	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Mahesh K Varpe	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Raja R	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Murugesh M C	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Ananth S Iyengar	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Manjunath Nayaka C H	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	N C Mahendra Babu	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Harshad Rameshwar Parate	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Yateen Lokesh	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	R Suresh	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Nikhil T R	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Manish Haveri	5,000	Registration Page 289

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Akshayakumar V Hanagodimath	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Eshwar Reddy H N	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Pritam Bhat	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Naveen Kumar H S	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Manjunath M Ullegaddi	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Bhargav	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	N S Chandanshree	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Praveen Kittali	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Naveen Kumar K H	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Shivaramu L	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Abhilash N	5,000	Registration
30.05.2022 & 31.05.2022	international symposium on design, Modelling and simulation	Pavan Kumar Reddy	5,000	Registration
29.07.2022 & 30.07.2022	International Symposium on Futuristic trends in Civil Engineering for Sustainable Development	Nayana N Patil	5,000	Registration
29.07.2022 & 30.07.2022	International Symposium on Futuristic trends in Civil Engineering for Sustainable Development	B S Dayananda	5,000	Registration
29.07.2022 & 30.07.2022	International Symposium on Futuristic trends in Civil Engineering for Sustainable Development	Rahul M Cadambi	5,000	Registration
29.07.2022 & 30.07.2022	International Symposium on Futuristic trends in Civil Engineering for Sustainable Development	Balappa B U	5,000	Registration
29.07.2022 & 30.07.2022	International Symposium on Futuristic trends in Civil Engineering for Sustainable Development	Sandeep N	5,000	Registration
29.07.2022 & 30.07.2022	International Symposium on Futuristic trends in Civil Engineering for Sustainable Development	Vijaya Kumar S	5,000	Registration
29.07.2022 & 30.07.2022	International Symposium on Futuristic trends in Civil Engineering for Sustainable Development	Nithin Venkataram	5,000	Registration Page 290

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
29.07.2022 &	International Symposium on Futuristic trends in Civil	Arun Karthik S	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Arun Ravindra	5,000	Registration
	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Srikrishna M Badiger	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Chethan Gowda R K	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Divakar L	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	T N Srikantha Dath	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	S D Anitha Kumari	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Murugesh M C	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Ananth S Iyengar	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Manjunath Nayaka C H	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	N C Mahendra Babu	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Harshad Rameshwar Parate	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Yateen Lokesh	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	R Suresh	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Nikhil T R	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Manish Haveri	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Akshayakumar V Hanagodimath	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Eshwar Reddy H N	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Pritam Bhat	5,000	
30.07.2022	Engineering for Sustainable Development			Page 29 <sup>-</sup>

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
29.07.2022 &	International Symposium on Futuristic trends in Civil	Naveen Kumar H S	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Manjunath M Ullegaddi	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Bhargav	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	N S Chandanshree	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Praveen Kittali	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Naveen Kumar K H	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Shivaramu L	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Abhilash N	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Pavan Kumar Reddy	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Sushma R	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	S P Sreenivas Padala	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Grace Sharon C Harigal	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Florence Falguni Joseph	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
29.07.2022 &	International Symposium on Futuristic trends in Civil	Dilip Kumar Mahanty	5,000	Registration
30.07.2022	Engineering for Sustainable Development			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	B S Dayananda	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Rahul M Cadambi	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Balappa B U	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Sandeep N	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Vijaya Kumar S	5,000	Registration
17.09.2022	industry			Page 292

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Nithin Venkataram	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Arun Karthik S	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Arun Ravindra	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Srikrishna M Badiger	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	T N Srikantha Dath	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Murugesh M C	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Ananth S Iyengar	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Manjunath Nayaka C H	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	N C Mahendra Babu	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	R Suresh	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Pritam Bhat	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Manjunath M Ullegaddi	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Bhargav	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Praveen Kittali	5,000	Registration
17.09.2022	industry			
	Sympsium on Engineering Analysis for Product Development -	Naveen Kumar K H	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Shivaramu L	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Abhilash N	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Pavan Kumar Reddy	5,000	Registration
17.09.2022	industry			
16.09.2022 &	Sympsium on Engineering Analysis for Product Development -	Dilip Kumar Mahanty	5,000	
17.09.2022	industry			Page 293

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
Nov-22	NAFEMS Symposium workshop	Eshwar Reddy H N	5,000	Registration
Nov-22	NAFEMS Symposium workshop	Naveen Kumar H S	5,000	Registration
Nov-22	NAFEMS Symposium workshop	N S Chandanshree	5,000	Registration
Nov-22	NAFEMS Symposium workshop	Sushma R	5,000	Registration
Nov-22	NAFEMS Symposium workshop	S P Sreenivas Padala	5,000	Registration
Nov-22	NAFEMS Symposium workshop	Grace Sharon C Harigal	5,000	Registration
Nov-22	NAFEMS Symposium workshop	Florence Falguni Joseph	5,000	Registration
07.12.2022	MDP Certificate programme on Technology & Innovation Management for Corporates in association with IEEE TEMS	Uday Kumar Jagannathan	5,000	Registration
07.12.2022	MDP Certificate programme on Technology & Innovation Management for Corporates in association with IEEE TEMS	Shilpa R G	5,000	Registration
07.12.2022	MDP Certificate programme on Technology & Innovation Management for Corporates in association with IEEE TEMS	H S Srivatsa	5,000	Registration
07.12.2022	MDP Certificate programme on Technology & Innovation Management for Corporates in association with IEEE TEMS	Usha J C	5,000	Registration
07.12.2022	MDP Certificate programme on Technology & Innovation Management for Corporates in association with IEEE TEMS	Chandra Sen Muzumdar	5,000	Registration
07.12.2022	MDP Certificate programme on Technology & Innovation Management for Corporates in association with IEEE TEMS	Rashmi R	5,000	Registration
07.12.2022	MDP Certificate programme on Technology & Innovation Management for Corporates in association with IEEE TEMS	Rajeev Prasad P	5,000	Registration
07.12.2022	MDP Certificate programme on Technology & Innovation Management for Corporates in association with IEEE TEMS	Reshma K J	5,000	Registration
07.12.2022	MDP Certificate programme on Technology & Innovation Management for Corporates in association with IEEE TEMS	Ajay R	5,000	Registration
07.12.2022	MDP Certificate programme on Technology & Innovation Management for Corporates in association with IEEE TEMS	Savitha Kulkarni	5,000	Registration

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
07.12.2022	MDP Certificate programme on Technology & Innovation Management for Corporates in association with IEEE TEMS	Vanishree K	5,000	Registration
07.12.2022	MDP Certificate programme on Technology & Innovation Management for Corporates in association with IEEE TEMS	Sushma B S	5,000	Registration
07.12.2022	MDP Certificate programme on Technology & Innovation Management for Corporates in association with IEEE TEMS	Chandrakala D P	5,000	Registration
07.12.2022	MDP Certificate programme on Technology & Innovation Management for Corporates in association with IEEE TEMS	K M Sharath Kumar	5,000	Registration
07.12.2022	MDP Certificate programme on Technology & Innovation Management for Corporates in association with IEEE TEMS	Usha N	5,000	Registration
07.12.2022	MDP Certificate programme on Technology & Innovation Management for Corporates in association with IEEE TEMS	Anicar D Manavi	5,000	Registration
06.03.2023 to 08.03.3023	Dentcon Conference	Sylvia Mathew	5,000	Registration
06.03.2023 to 08.03.3023	Dentcon Conference	Swaroop Hegde	5,000	Registration
06.03.2023 to 08.03.3023	Dentcon Conference	Shruthi N	5,000	Registration
06.03.2023 to 08.03.3023	Dentcon Conference	Indiresha H N	5,000	Registration
06.03.2023 to 08.03.3023	Dentcon Conference	Dinesh K	5,000	Registration
06.03.2023 to 08.03.3023	Dentcon Conference	Kavitha Prasad	5,000	Registration
06.03.2023 to 08.03.3023	Dentcon Conference	K Ranganath	5,000	Registration
06.03.2023 to 08.03.3023	Dentcon Conference	K Vineet Kumar	5,000	Registration
06.03.2023 to 08.03.3023	Dentcon Conference	Parimala Sagar	5,000	Registration
06.03.2023 to 08.03.3023	Dentcon Conference	Rajanikanth B R	5,000	Registration Page 29

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
06.03.2023 to	Dentcon Conference	Sejal K M	5,000	Registration
08.03.3023				
06.03.2023 to	Dentcon Conference	Prathibha G	5,000	Registration
08.03.3023				
06.03.2023 to	Dentcon Conference	Sujatha S	5,000	Registration
08.03.3023				
06.03.2023 to	Dentcon Conference	Rakesh N	5,000	Registration
08.03.3023				
06.03.2023 to	Dentcon Conference	Shwetha V	5,000	Registration
08.03.3023				
06.03.2023 to	Dentcon Conference	Roopa S Rao	5,000	Registration
08.03.3023				
06.03.2023 to	Dentcon Conference	Sowmya S V	5,000	Registration
08.03.3023				
06.03.2023 to	Dentcon Conference	Silju Mathew	5,000	Registration
08.03.3023				
06.03.2023 to	Dentcon Conference	Prashantha G S	5,000	Registration
08.03.3023				
06.03.2023 to	Dentcon Conference	Sunil Kumar M	5,000	Registration
08.03.3023				
06.03.2023 to	Dentcon Conference	Roshan M Sagarkar	5,000	Registration
08.03.3023				
06.03.2023 to	Dentcon Conference	Pushpalatha G	5,000	Registration
08.03.3023			5.000	
06.03.2023 to	Dentcon Conference	Ashmitha Shetty	5,000	Registration
08.03.3023			5.000	
06.03.2023 to	Dentcon Conference	Kranthi K	5,000	Registration
08.03.3023	Deutee Conference	Ash. 1st C	F 000	Danistustiau
06.03.2023 to	Dentcon Conference	Ashwini S	5,000	Registration
08.03.3023	Dantson Conference	Pharaga	F 000	Dogistration
06.03.2023 to	Dentcon Conference	Bhavya	5,000	Registration
08.03.3023 06.03.2023 to	Dentcon Conference	Mahanthesha S	E 000	Pogistration
08.03.3023	Denicon comerence	iviarialitilesila 3	5,000	Registration
06.03.2023 to	Dentcon Conference	Lavanya R	5,000	Registration
08.03.3023	Denicon comercine	Lavaliya N	3,000	เกอสารเกิดเกิดเกิดเกิดเกิดเกิดเกิดเกิดเกิดเกิด
06.03.2023 to	Dentcon Conference	Suma	5,000	Registration
08.03.3023	Deficed Conference	Junia	3,000	Page 296

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
06.03.2023 to	Dentcon Conference	Ravi Shankar K	5,000	Registration
08.03.3023				
06.03.2023 to	Dentcon Conference	Shivaranjani Gali	5,000	Registration
08.03.3023				
06.03.2023 to	Dentcon Conference	Harshitha Gowda	5,000	Registration
08.03.3023	Doubles Confessor	Valabali IZ	F 000	Desistantina
06.03.2023 to 08.03.3023	Dentcon Conference	Vaishali K	5,000	Registration
06.03.2023 to	Dentcon Conference	Baba Shankar Alva	5,000	Registration
08.03.3023	Defice of Conference	Baba Shankar Alva	3,000	Registration
06.03.2023 to	Dentcon Conference	Shwetha K M	5,000	Registration
08.03.3023				o .
06.03.2023 to	Dentcon Conference	Anitha R Sagarkar	5,000	Registration
08.03.3023				
06.03.2023 to	Dentcon Conference	Rohit Prasad	5,000	Registration
08.03.3023				
06.03.2023 to	Dentcon Conference	Pavan Kumar T	5,000	Registration
08.03.3023			5.000	
06.03.2023 to	Dentcon Conference	Gayathri Devi	5,000	Registration
08.03.3023	Dentcon Conference	Dominic Augustino	E 000	Pogistration
06.03.2023 to 08.03.3023	Defittion Conference	Dominic Augustine	5,000	Registration
06.03.2023 to	Dentcon Conference	Rashmi B M	5,000	Registration
08.03.3023	Democrit Comercine	nasının 5 ivi	3,000	riegistration
06.03.2023 to	Dentcon Conference	Dhananjaya G	5,000	Registration
08.03.3023		- ,		_
31.03.2023	NAMSCON 2023	Shivaraj N S	5,000	Registration
31.03.2023	NAMSCON 2023	E Mahesh	5,000	Registration
31.03.2023	NAMSCON 2023	Krishnamurthy U	5,000	Registration
31.03.2023	NAMSCON 2023	Virupaksha HS	5,000	Registration
31.03.2023	NAMSCON 2023	Tharun Dilip Javali	5,000	Registration
31.03.2023	NAMSCON 2023	D Ramesh	5,000	Registration
	NAMSCON 2023	Prasad Mylarappa	5,000	Registration
	NAMSCON 2023	Pavvada Sandeep	5,000	Registration
	NAMSCON 2023	Manasa T	5,000	Registration
	NAMSCON 2023	Abhishek Kulkarni	5,000	- Page 20

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
31.03.2023	NAMSCON 2023	Afshan Zainab Hasan	5,000	Registration
31.03.2023	NAMSCON 2023	A S Kirthi Koushik	5,000	Registration
31.03.2023	NAMSCON 2023	Pavithra Cheluvaraj	5,000	Registration
31.03.2023	NAMSCON 2023	Rajendra Prasad	5,000	Registration
31.03.2023	NAMSCON 2023	Arjunan Isaac	5,000	Registration
31.03.2023	NAMSCON 2023	Ashwin Kulkarni	5,000	Registration
31.03.2023	NAMSCON 2023	Navikala K	5,000	Registration
31.03.2023	NAMSCON 2023	Usha M	5,000	Registration
31.03.2023	NAMSCON 2023	Rashmi K	5,000	Registration
31.03.2023	NAMSCON 2023	Ashwini KT	5,000	Registration
31.03.2023	NAMSCON 2023	Seema Anandtheerth Umarji	5,000	Registration
31.03.2023	NAMSCON 2023	Clement Wilfred Devadass	5,000	Registration
31.03.2023	NAMSCON 2023	Padma Priya Kasukurti	5,000	Registration
31.03.2023	NAMSCON 2023	Sulata M Kamath	5,000	Registration
31.03.2023	NAMSCON 2023	Sudha H M	5,000	Registration
31.03.2023	NAMSCON 2023	Shailaja Shetty	5,000	Registration
31.03.2023	NAMSCON 2023	Vineetha J Malayil	5,000	Registration
31.03.2023	NAMSCON 2023	Chandrika Rao	5,000	Registration
31.03.2023	NAMSCON 2023	Jyothi G S	5,000	Registration
31.03.2023	NAMSCON 2023	LITHIKA LAVANYA	5,000	Registration
31.03.2023	NAMSCON 2023	Nivedita Kumar	5,000	Registration
31.03.2023	NAMSCON 2023	Aruna C Ramesh	5,000	Registration
31.03.2023	NAMSCON 2023	Vinayak V Maka	5,000	Registration
31.03.2023	NAMSCON 2023	Santhosh Kumar Devadas	5,000	Registration
31.03.2023	NAMSCON 2023	Rasmi Palassary	5,000	Registration
31.03.2023	NAMSCON 2023	Rajitha Alva	5,000	Registration
31.03.2023	NAMSCON 2023	Jyothi S	5,000	Registration
31.03.2023	NAMSCON 2023	Keshava Murthy M R	5,000	Registration
31.03.2023	NAMSCON 2023	Basavaraj V Savadi	5,000	Registration
31.03.2023	NAMSCON 2023	Ms. S Renukadevi	5,000	Registration Page 298

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
31.03.2023	NAMSCON 2023	Dinesh Rajaram	5,000	Registration
31.03.2023	NAMSCON 2023	Manjunath KN	5,000	Registration
31.03.2023	NAMSCON 2023	Ramesh H Kamath	5,000	Registration
31.03.2023	NAMSCON 2023	Hemalatha	5,000	Registration
31.03.2023	NAMSCON 2023	Blessy Babu	2,000	Registration
31.03.2023	NAMSCON 2023	Deena Patil	6,500	Registration
31.03.2023	NAMSCON 2023	Pramila Kalra	6,000	Registration
31.03.2023	NAMSCON 2023	Megha Reddy	6,500	Registration
31.03.2023	NAMSCON 2023	Srikanth N	6,500	Registration
31.03.2023	NAMSCON 2023	Sunil Kumar M	2,000	Registration
31.03.2023	NAMSCON 2023	Sumitra Reddy	2,000	Registration
31.03.2023	NAMSCON 2023	Pottem Nagarjuna	2,000	Registration
31.03.2023	NAMSCON 2023	Chaitanya Ram Kandregula	2,000	Registration
31.03.2023	NAMSCON 2023	Karthik S	5,500	Registration
31.03.2023	NAMSCON 2023	Rajeswary Kumar	2,000	Registration
31.03.2023	NAMSCON 2023	Ravishankar Balasundaram	2,000	Registration
31.03.2023	NAMSCON 2023	Kalaivani S	2,000	Registration
31.03.2023	NAMSCON 2023	Reena Ranjit Kumar	3,500	Registration
31.03.2023	NAMSCON 2023	Manisha Yadav	3,500	Registration
31.03.2023	NAMSCON 2023	Rajat Mitra	2,000	Registration
31.03.2023	NAMSCON 2023	Aarcha S Kumar	2,000	Registration
31.03.2023	NAMSCON 2023	Padmapriya S	2,000	Registration
31.03.2023	NAMSCON 2023	Kavitha Prasad	2,000	Registration
31.03.2023	NAMSCON 2023	Ashwini Honnatti	2,000	Registration
31.03.2023	NAMSCON 2023	Dr.Anitha R.Sagarkar	4,500	Registration
31.03.2023	NAMSCON 2023	Poornima Ramesh	2,000	Registration
31.03.2023	NAMSCON 2023	G Dhananjaya	2,000	Registration
31.03.2023	NAMSCON 2023	Lalitha S Jairam	2,000	Registration
31.03.2023	NAMSCON 2023	Greeshma C	2,000	Registration
31.03.2023	NAMSCON 2023	Shruthi Nagaraja	2,000	Registration Page 299

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
31.03.2023	NAMSCON 2023	Swaroop Hegde	2,000	Registration
31.03.2023	NAMSCON 2023	Shaswat Verma	7,850	Registration
31.03.2023	NAMSCON 2023	Nanda Kumar	5,850	Registration
31.03.2023	NAMSCON 2023	Sundar Kumar Veluswamy	5,850	Registration
31.03.2023	NAMSCON 2023	Kirti Joshi	2,000	Registration
31.03.2023	NAMSCON 2023	Savita Ravindra	5,850	Registration
31.03.2023	NAMSCON 2023	Ruth Boyle	5,850	Registration
31.03.2023	NAMSCON 2023	Betty Thomas	2,000	Registration
31.03.2023	NAMSCON 2023	Suchitha S Rao	2,000	Registration
31.03.2023	NAMSCON 2023	Sukrutha Nagaraj	2,000	Registration
31.03.2023	NAMSCON 2023	Diana Rodrigues	3,500	Registration
31.03.2023	NAMSCON 2023	Vinay Sharda	3,500	Registration
31.03.2023	NAMSCON 2023	Veena Kiran Nambiar	3,500	Registration
31.03.2023	NAMSCON 2023	Susha Mary Roy	3,000	Registration
31.03.2023	NAMSCON 2023	Sangeetha X	3,000	Registration
31.03.2023	NAMSCON 2023	Kusum Gurung	3,000	Registration
31.03.2023	NAMSCON 2023	Vanihta N	3,000	Registration
31.03.2023	NAMSCON 2023	Nagalakshmi K	3,000	Registration
31.03.2023	NAMSCON 2023	Juliet Vino J	3,000	Registration
31.03.2023	NAMSCON 2023	Merilyn Nangsha	3,000	Registration
31.03.2023	NAMSCON 2023	Usha Pavan	3,000	Registration
31.03.2023	NAMSCON 2023	Ramya Sathya narayanan	3,000	Registration
31.03.2023	NAMSCON 2023	Arul Shanthi	3,000	Registration
31.03.2023	NAMSCON 2023	Yogeendra Prabhu	3,000	Registration
31.03.2023	NAMSCON 2023	Chandni Roy Singh	3,500	Registration
31.03.2023	NAMSCON 2023	Radha M.S	3,000	Registration
31.03.2023	NAMSCON 2023	Manjunatha K	3,000	Registration
31.03.2023	NAMSCON 2023	Salome P	3,000	Registration
31.03.2023	NAMSCON 2023	GAYATHRI.M	3,000	Registration
31.03.2023	NAMSCON 2023	KUSUM GURUNG	3,000	Registration Page 300

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
31.03.2023	NAMSCON 2023	Malathi	3,000	Registration
31.03.2023	NAMSCON 2023	Krishnamurthy Jayanna	3,000	Registration
31.03.2023	NAMSCON 2023	Soma Chaki	3,000	Registration
31.03.2023	NAMSCON 2023	Lokesh	3,000	Registration
31.03.2023	NAMSCON 2023	Beena	3,000	Registration
31.03.2023	NAMSCON 2023	Naik Shalini Ashok	3,000	Registration
31.03.2023	NAMSCON 2023	Banashankari.G.S	3,000	Registration
31.03.2023	NAMSCON 2023	Shaikh Mohammed Aslam.S	3,000	Registration
31.03.2023	NAMSCON 2023	Rudresh.H.K	3,000	Registration
31.03.2023	NAMSCON 2023	Sujani.B.K	3,000	Registration
31.03.2023	NAMSCON 2023	Somashekar.A.R	3,000	Registration
31.03.2023	NAMSCON 2023	Ashok Kumar	3,000	Registration
31.03.2023	NAMSCON 2023	Deepak.T.S	3,000	Registration
31.03.2023	NAMSCON 2023	Aruna.C.Ramesh	3,000	Registration
31.03.2023	NAMSCON 2023	Pragati Rao	3,000	Registration
31.03.2023	NAMSCON 2023	Sumathy.TK	3,000	Registration
31.03.2023	NAMSCON 2023	Chandra Kiran.C	3,000	Registration
31.03.2023	NAMSCON 2023	S. Ananth Bhandary	3,000	Registration
31.03.2023	NAMSCON 2023	T.Murali	3,000	Registration
31.03.2023	NAMSCON 2023	Kirthi Koushik.A.S	3,000	Registration
31.03.2023	NAMSCON 2023	Satyashankar.P	3,000	Registration
31.03.2023	NAMSCON 2023	Mahendra.J.V	3,000	Registration
31.03.2023	NAMSCON 2023	Sunil Valentine Furtado	3,000	Registration
31.03.2023	NAMSCON 2023	Mahesh.E	3,000	Registration
31.03.2023	NAMSCON 2023	Venkatesh.M.S	3,000	Registration
31.03.2023	NAMSCON 2023	Padhmalatha.S.Kadamba	3,000	Registration
31.03.2023	NAMSCON 2023	B.Avinash	3,000	Registration
31.03.2023	NAMSCON 2023	Megha Reddy	3,000	Registration
31.03.2023	NAMSCON 2023	Jyothi K C	3,000	Registration
31.03.2023	NAMSCON 2023	Sulatha M Kamath	3,000	Registration Page 301

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)	
31.03.2023	NAMSCON 2023	Vara Prasad B M	3,000	Registration	
	305	<u> </u>	1,364,750		
		2021-22			
Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)	
27.10.2021 &	Workshop on Ëthics & Professionalism	Vanishri C Haragannavar	5,000	Registration	
27.10.2021 &	Workshop on Ëthics & Professionalism	Poornima Ramesh	5,000	Registration	
27.10.2021 &	Workshop on Ëthics & Professionalism	Akshatha Raj	5,000	Registration	
27.10.2021 &	Workshop on Ëthics & Professionalism	Lalitha S Jairam	5,000	Registration	
Jan-22	Workshop on Dental Photography	Dhananjaya G	5,000	Registration	
Jan-22	Workshop on Dental Photography	Madhavi Naidu	5,000	Registration	
Jan-22	Workshop on Dental Photography	Sharanya Sabrish	5,000	Registration	
Jan-22	Workshop on Dental Photography	Shwetha G	5,000	Registration	
Jan-22	Workshop on Dental Photography	Vanishri C Haragannavar	5,000	Registration	
Jan-22	Workshop on Dental Photography	Poornima Ramesh	5,000	Registration	
Jan-22	Workshop on Dental Photography	Akshatha Raj	5,000	Registration	
Jan-22	Workshop on Dental Photography	Lalitha S Jairam	5,000	Registration	
Jan-22	Workshop on Dental Photography	Sathyashree	5,000	Registration	
Jan-22	Workshop on Dental Photography	Nithin Kumar Shetty	5,000	Registration	
Jan-22	Workshop on Dental Photography	Karishma Jagadeesh	5,000	Registration	
Jan-22	Workshop on Dental Photography	Vibha Shetty	5,000	Registration	
	16		80,000		
2020-21					
Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)	
2020-21	2nd International Conference on Innovative Mechanisms for Industry Application ( ICIMIA)	Anusha Vadde	5,000	Registration	

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
2020-21	2nd International Conference on Innovative Mechanisms for Industry Application ( ICIMIA)	Prajwal K T	5,000	Registration
2020-21	IEEE Global Conference For Advancement In Technology	Sudha B	5,000	Registration
2020-21	1st International Conference on Electrical Energy & Power Engg (ICEEPE 2020) on 27-28 Oct 2020	Pritam Bhat	5,000	Registration
2020-21	IEEE International Conference on Recent advances and innovations in engineering (ICRAIE 2020)	Ambresh G	5,000	Registration
2020-21	2nd International Conference On Sustainable Urban Development, Resource Conservation And Food Security	Akshayakumar V Hanagodimath	5,000	Registration
2020-21	2nd International conference on Sustainable urban development, resource conservation and Food security	Chethan Gowda R K	5,000	Registration
28.01.2021 & 29.01.2021	2-days workshop on Quantum computation and quantum machine learning by research	Shivanand Madolappa	5,000	Registration
28.01.2021 & 29.01.2021	2-days workshop on Quantum computation and quantum machine learning by research	Deepak A S	5,000	Registration
28.01.2021 & 29.01.2021	2-days workshop on Quantum computation and quantum machine learning by research	Chandan Kumar S	5,000	Registration
28.01.2021 & 29.01.2021	2-days workshop on Quantum computation and quantum machine learning by research	Shekar M	5,000	Registration
28.01.2021 & 29.01.2021	2-days workshop on Quantum computation and quantum machine learning by research	Somashekhara G	5,000	Registration
28.01.2021 & 29.01.2021	2-days workshop on Quantum computation and quantum machine learning by research	Vikas M Shelar	5,000	Registration
28.01.2021 & 29.01.2021	2-days workshop on Quantum computation and quantum machine learning by research	Manjunatha S O	5,000	Registration
28.01.2021 & 29.01.2021	2-days workshop on Quantum computation and quantum machine learning by research	Hemanth Kumar B	5,000	Registration
Mar-21	Digital Advances in Dentistry	Swaroop Hegde	5,000	Registration
Mar-21	Digital Advances in Dentistry	Shruthi N	5,000	•
Mar-21	Digital Advances in Dentistry	Dinesh K	5,000	
Mar-21	Digital Advances in Dentistry	Kavitha Prasad	5,000	
Mar-21	Digital Advances in Dentistry	K Ranganath	5,000	
Mar-21	Digital Advances in Dentistry	K Vineet Kumar	5,000	Registration
Mar-21	Digital Advances in Dentistry	Parimala Sagar	5,000	Registration
Mar-21	Digital Advances in Dentistry	Rajanikanth B R	5,000	Registration
Mar-21	Digital Advances in Dentistry	Sejal K M	5,000	Registration
Mar-21	Digital Advances in Dentistry	Prathibha G	5,000	
Mar-21	Digital Advances in Dentistry	Sujatha S	5,000	Regist <b>Ræge 30</b> 3

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
Mar-21	Digital Advances in Dentistry	Rakesh N	5,000	Registration
16.03.2021	Workshop on " Startsups and Entrepreneurship	Renee Namratha	5,000	Registration
16.03.2021	Workshop on " Startsups and Entrepreneurship	Suresh N	5,000	Registration
16.03.2021	Workshop on " Startsups and Entrepreneurship	Nagesha H N	5,000	Registration
16.03.2021	Workshop on " Startsups and Entrepreneurship	V Nagendra	5,000	Registration
16.03.2021	Workshop on " Startsups and Entrepreneurship	G Devakumar	5,000	Registration
16.03.2021	Workshop on " Startsups and Entrepreneurship	Uday Kumar Jagannathan	5,000	Registration
	33		165,000	

# **ANNEXURE 27**



### **Details of faculty members attending Conferences/Workshops**

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
	20	22-23		
2022-23	Fetishism And Fashion : The Case Of Jewellery Consumption In Everyday Life	Syliva Raha	11,099	Registration
2022-23	Industrial Engineering & Operation Management Organized By IEOM Society	Chandra Sen	8,334	Registration
2022-23	IEOM Conference 2022 at NIT Warangal Publication	Uday Kumar Jagannathan	3,988	Registration
2022-23	Trainer certification program for POSH	Reema Chaudhury	2,300	Registration
2022-23	Production & Characterization of Hydrochar of Yard Waste From Tectona Grandis Using Hydrothermal Carbonization	Pritam Bha	5,000	Registration
2022-23	Multidisciplinary Design, Analysis And Optimization Indian Institute Of Technology Bombay	M Sivapragasam	5,000	Registration
2022-23	South East Asian Association For Dental Eduaction (SEAADE) International Conference Held In Siem Reap, Thailand	Lalitha Jairam	80,498	Regsitration/ Travel
2022-23	International Webinar On Cosmetology And Plastic Surgery	H S Srivatsa	4,209	Registration
2022-23	IESA Vision Submit-2022	Sunil Y	2,000	Registration
2022-23	State Conference Organized By ISRT	Rajitha D	3,766	Registration
2022-23	Integrative Health & Wellbeing Conference 2022	Tejaswini B D	5,000	Registration
2022-23	TRAI Seminar on Telecom Infrastructure Development -Issues And Challenge	Ugra Mohan Roy	773	Registration
2022-23	Structural Equation Modeling Using Smart PLS 4	Aileen J	1,250	Registration
2022-23	MBU 50 Symposium at the India Institute of Science Blr.	Sandhya Sankaran	8,000	Registration
2022-23	9th International Patient Safety Conference	Aileen J	5,000	Registration
2022-23	Indian Mathematical Society (IMS)	Shekar M	2,000	Registration
2022-23	Vellore Institute of Technology	A T Sriram	5,000	Registration
2022-23	International conference on Business Innovation and Sustainability-A Road Map for business Excellence	Savitha Kulkarni	3,517	Registration
2022-23	Conference (ICARES 2022) held on 24th & 25th Nov 2022	Mallikarjuna K J	2,000	Registration

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
2022-23	8th International Conference on Convergence of Technology (IEEE Conference 2022)	Hari Krishna S M	5,000	Registration
2022-23	IEEE Conference Nov 22	Varun D	5,000	Registration
2022-23	IEEE Bombay Section Organised Conference 12CT	Sagar D	5,000	Registration
2022-23	International e-conference on Biopolymers organize by Asian Polymer Association & Indian Chitin & Chitosan Society	Sindhu Abraham	5,000	Registration
2022-23	Current trends in Drug Discovery Development and Delivery", "Think beyond COVID-19" & E-Symposium on "Integrated approaches to drug discovery & Development.	Judy Jays	5,000	Registration
	24		183,734	
	20	)21-22		
Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
	26th World Congress Of Political Science	Chetan Singai	5,000	Registration
	International Conference On Electrical Energy And Power Engineering	Shreyanka Subbarayappa	5,000	Registration
	3rd International Conference on Recent Advances In Materials And Manufacturing (ICRAMM 2021)	Tanmoy Ghosh	5,000	Registration
	5th International Conference on Electronics, Communication & Aerospace Technology	Prajwal K T	5,000	Registration
		Sudha B	5,000	Registration
	5		25,000	
	20	20-21		
Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
2020-21	2nd International Conference on Innovative Mechanisms for Industry Application ( ICIMIA)	Anusha Vadde	5,000	Registration Page 306

Dates (from-to) (DD- MM-YYYY)	Title of the conference/ workshops/ name of the professional body	Name of the teacher	Amount provided by the HEI	Purpose (Membershiop fee/ travel and other expenses/ Registration fee)
2020-21	2nd International Conference on Innovative Mechanisms for Industry Application ( ICIMIA)	Prajwal K T	5,000	Registration
2020-21	IEEE Global Conference For Advancement In Technology	Sudha B	5,000	Registration
2020-21	1st International Conference on Electrical Energy & Power Engg (ICEEPE 2020) on 27-28 Oct 2020	Pritam Bhat	5,000	Registration
	IEEE International Conference on Recent advances and innovations in engineering (ICRAIE 2020)	Ambresh G	5,000	Registration
	5		25,000	

# **ANNEXURE 28**

### iii. Awards / Rewards / Recognitions received for Research and Innovation-

Year	2019-20	2020-21	2021-22	2022-23	2023-24	Total
No Of Awards	25	21	11	55	28	140

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- 1		
SLNO Name of the	Name of the sward	Name of the awarding body
1 B.V.Suma 2 Kesha Decai	Adarsh VI a Saraswati Rashtriya Puraskan Young Bassarchad la Bharmanni	Global Management Council
Mr. Shashanka H. M.	Best Poster	rembirity control of the control of Science Narotechnology - A Boon for Markini, held during 18-19 September 2018 at Garden City University, Bangalore
Ms. Akshatha     SamyuKhta Alwar	Certificate of Excellence Recipe Contest	Manipal Institute of Technol. 2019  Rendels Execution Consideration Association of Indisable Nation (Association Consideration Association of
6 Rohit fal Kumar	Jev Contours	Process now according Levergorment, Association of India PHANAII ACADS Welcon cross Serial According Association of India PHANAII ACADS Welcon cross Serial According Association of India PHANAII ACADS
Sudha B	Enhancement of Efficiency For Wireless Power Transfer System Using Wireless Unk	Smart Orld and Renewable Energy Technology at the IEEE International Conference on Circults and Systems in Digital Enterprise Technology (ICCSDET - 2018)-2018
Ms. Nimm	Analysis of Irr—ular Structures under Earthquake Loads	
9 Dr. Monika Si <sub>illi</sub> h	Awarded for Sport Hi hest Marks from Indian Prosthodontics Socie	Indian Prosthodontics Society-2018
	Best Paper Best Paper	40 th National Conference of Indian Social of Pedadophysis and Preventine Designation 100.
12 Dr. Megha Shrivastava and Dr. Chaya Kumar	Best Poster	AUTH NATIONAL COMPRENENCE OF INCASE YOUR PERCENCIPIES AND EAST AND AUTHORITIES
Ms. Kushall Savia	Awarded the Scholarship from Falmer Foundation	Scholauhlo from Falmer Foundation
Ш	Best Poster Award	IACDE Conference-2018
16 Dr. A. Lava. a	Best Paper	NALLE CONTERPRE, 2018 National Triple (*) Symposium 2018
Ш	Best Paper	National Triple 'O' Symposium 2015
ш	Best Paper	National Triple O' Symposium 2018
4	E-Poster Competition E-Poster Competition	IDA-Conference held at the Coo   Institute of Dental Sciences-7018
21 Mr. Akriti Si hania and Mr. Adi Jang	E-Poster Competition	LUA LORIERIEG RIPO AT DIE LOUR INSTILLE OF LORIENT SCHERE SAULS  LIDA-CONTERNE DE DIE AUSTRUME OF LORIENT SCHERE SAULS  LIDA-CONTERNE DE DIE AUSTRUME OF LORIENT SCHERE SAULS
Ш	E-Poster Competition	IDA-Conference held at the Coo.   Institute of Dental Sciences 2018
4	BEST V EI	3rd Annual National Conference of Indian Society for Study of Paris, held at New Delhi
Angicha vijayan	Analysis of Structures Subjected to Growd Loads	2nd International Structural Integrity Conference and Exhibition, Hyderabad
25 RUAS	PACE- Judges special perseverence award	PACE Annual forum - 2018
26 Dr. Mamatha Hogde	Appreciation Letter Received by Asian Textile	Arian textile fournat, Mambas, India
27 Ms Afshaar	Conmon Entrance Evany for Davigs 2019 2nd Bank (CEED Stone	T Rombar2016
ш.	Rest Paner	Laborational Conference on Ricmaterial. Richas Lensel Land Biothermonator, 2018
29 Dr. Rakesh N.	Outstanding Scientist in Oral Medicine and Radiol	Venue international Research Awarder 2018.
ш	Member of the prestitious "Confederation of Elite Academicians of HCDC	Texas Instruments
31 Dr. Mamatha Hegde	Certificate of Excellence in reviewing the article for Journal of Material Science Research and Reviews	Science Domain International 7019, Wiss Bengal , India
32 Dr.V.Madhavan	Best Professor in Pharmac Ings Studies	Deviang Mehta National Education Avgards, Mumbal
1	Research Peace Award	RUA AWARDS powered by World Research Council and United Medical Council.
35 Parasuraman P	Best researcher	Lionic Albrewer Council
36 Ms. Sweta Girl	Enhancing the gas sensing properties of Nanocrystalline Co3O4 by replacing Co by	International Conference on "Recent Advances in Apollind Sciences" held at Rawa University. Banesines on 17th and 18th October 2019
ш	Décar lo Adore	11.5
38 Alex G	Eden in Glass	KLE N'al I a La Coli e
39 Samyukhta Alwar	Deconstructed - de Pie ste Box	RECOL e di Hotel Man l'ementand Cateri - Technol I y
40 Sahadev Patel	Bangalore to Gublbande Fort-Bl. de Destination	AIMS School of Hospitality and Tourism
41 Shriti Si h	Ba lafore to Gubibande Fort-Bl. de Destination	AIMS School of Hospitalii and Tourism
	Immovative Wine Labels and Menu Planning - Restaurant Service Skills	Welco ura   Graduate School of Hotel Administration (WGSHA)
43 Godwin	Miniature Landscaping	AMAS School of Hospitality and Tourism
ш	Award of Honor	neign actions or regulated a feet required to a feet of the feet o
46 Dr. Dominic Augustine	Bost Paper	2nd World Cancer Congress & 2nd World Co. ness on D. Discove. and Devel. ment <sup>il.</sup> Bat. alone
	Paper Presentation	2) National Triple O.S. postum  AMAS Chord of the Tractern  AMAS Chord of the Tractern
49 Shwetha Hooli	Best Paper	
	Best Paper	
4	Certificate of Excellence in Reviewing Article for Journal of Scientific Research and	POUTO MICHIGANI CORRECTOR OR REGISTRO THERSANDAD I ELH ZULY", PAS IA - Centre Icy Road Fection - VOLVO CE Campus, Benzaluru
	Reports 2020	Science Domain International 2019, West Berngal , India
53 Or. Shwetha V.	Certificate of Merit	13th National Traile G S = colum
55 Or.Latha Anandakrishna	Certificate of Merit Distinguished Women	Indianated energy of Ord I along also
		Internal of Territors and in Institute of America
1	Academic Excellence in Textiles 2020	John Ball Columb Science
	Certificate of Excellence in Reviewi Volunteers in war against Covid-19	Certificate of Excellence in Reviews — the article for Shorth Kosh- Journal of Visual and Performs—Arts—21 July 2023.
S9 Or, Anju James	Volunteers in war mainst Covid-20	G A
ш	Volunteers in war =ainst Covid-21	Gok :
4	Poster Co etitlon	Army Dental Collule of Dental Sciences
-	Smile Brillht with habits right - every child deserves it	Arm Dental College of Dental Sciences The network Foreign Sub-in Contract of
64 Dr. Alshwa ia Sridhar	Best Student Project for Health	FEFW and FAMER AUT TO LICENSE
65 Dr. A. u James	Public Health for the future of Humani . Anal i Advoca and Action	World Congress on Public Health
	Smile Across Generations	World Coll reason Public Health
-	Poster presentation	SSPM Donal College, Nagpur  Ann 2000
ы	Best American Chemical Socie   Oral Presentation	Catalisis Seciety of India
70 Ms. Gayatri Malhotra Or Pinithauethi n	Best Paper Award	7th Intermational Conference on Electronics, Computing and Communication Technologies, IEEE CONECCT
	Scholarship	utic Risk Man
72 Ms. N. Hemasree	International Fellowship	rnational Conference (AAIC) - 2021, Denver, USA
	Best Oral Presentation	Optionally Council of India  Trends and Fature Pro. pris. University of April of Special Visioness.
74 Or Kavitha Ban Samenalli		ancing and protection of the following o

IAOMR- National PG Cowention conference at just	Beat paper award	4
(AAMS: National PG Cinvention conference Jalour	Best aper award	
	Best aper award	Ш
		Ц
International Conference on Applied Research and E. General, 1(ARRS-200). RIT Be. plurit-552054		
90.	Best Paper	
Det. GOI For sociation among the to 100 millar colonies stocks under the extension of	Ws. Deedt Roy  Wis Libert Roy  AWSAR & Mennix Wift Salis for Articulation Research	4
		1
141 for National Psychogenetics, M. acce.	Bost poster award	123 Dr.Shazia Faruk
international penual contende 2323 haid at international Medical University, Majaysid	Bast potter award	122 Dr. Rithylk
Maniau Dental Conference 2023 held at Manipal on 10th & 11th August 2023		L
Manipal Dental Conference 2023 held at Manipal on 10th & 11th A sets 2023		1
2nd Global Conference on Recent Advances in sustaible materials - GC RASM-2022, July 2022, Mangatore		1
ent Certificate of Merit Award  Pierre Fauchard International Senior Student Certificate of Merit Award for Undergraduate students for the Academic Year 2021-22	Pierre Fauchard International Senior Student Certificate of Merit Award	4
ion.	best Private University in India for Applied Scient - Research & Innovation	1
	Best loster Presentation	Ш
Professional Surject of the Cost of Industries and Commerce Karnalask p., ect of Ramaliah Intellectual P. R. hts Cell perfairling "Study into the Feesbilling of applying for Ge. raphical Indication. For P. Reasearch Impact award		1
Certificate of Excellence in Newspay the article for Shooth Kosh- Journal of Visual and performing Arts 21 July 2023.		Τ
BEST TOP AWARD TOTAL THE CRUITION TO ANALYSIS OF PERFORMENCE OF MACHINE ASTRONOMY OF THE WAST.	ress Aria - M. and Shipa N.G.	L
international contenence on Environmental Social and Governance LSG b. Hamalan institute of Management with BCIC		Ш
international Research Conterence on Eme   Technol   les in Business Man   men		Nagarithan,
	Best Rescaren Paper Award-2023	TO MINISTER CO.
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enter 2023 International Research Conference on Erre. Ing Technologies in Business Managemen. Universit of Mumbal Mumbal Education Trust. Bhu bai Knowle. e. Ci., ACTE sponsored)		1
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FORE School of Man. Impert		Changra sen Mazumo
		N APPL
Third possion in Clinical Case Presentation in Wed-camentum - the national level undergraduate medical conference	best poster award	MACHINA ARILINA
won last place at CMC Vellore - Pre and Paraclinical aulz	HISE Price paper	alking Lichard
Won second place in case presentation at V = us 2022	Best poster award	Manya Jagadish
won the consolation prize at the INDIA EVALUATION CASE COMPETITION 2025	consolation rize	O SNIKA
won the consolation prize at the INDIA EVALUATION CASE COMPETITION 2024	Best paper award	98 Chandana
Best oral paper presentation in state level anatomy conference	Best poster award	Ц
Third lace in Poster a resentation in Emergency Medicine Association – Kerala State Chapter Conference 2022	Best_aper award	L
First Place in Best Pos I raduate Paper Presentation) in KAPRASCON 2022	Best aper award	Ш
1" prize in poster presentation in Eme sency Medicine Association. Kerala state ch. iter conference 2022	Best paper award	Dr. Nanui sain
Hunner-up in Poster Presentation in 22KCACON 2022, Hassan institute of Medical Sciences, Hassan,		1
		93 Or Prathan Krimar I
Best apper award in the conference KAPICON 2022	Best aper award	L
Second Place in Research Paper Presentation of V - us 202 - M - ore Medical College	Drewe Jacke Jacke Best Danes	L
Third liface in the conterence BSOG 2022, March		
Hist Made in BOSCON 2022, Ba alone	best paper award	Di Asiiciai giiang
Second place in IFASCON 2022, Goa		Di. Adlichal briatia
A STATE OF THE PROPERTY OF THE		
Getting contributed to the pression and MENT SECRETARY SECRETARY And SECRETARY And SECRETARY SEC		Dr. Murali T Joth,
Bot and of the 32 family arross locks had been entitled as regional family for B. ACTS and DALS b. American the		Or. Aruna C Ramesh
Winn the best case resonation as Indian School of Hupertension National Conference held		Or, Tharanath S
Awarded Member of Academy of Medical Sciences Award Instituted by National Academy of Medical Sciences (NAMS) (Indi-		Dr. Hemendra Singh,
Surgical Strike 3.0 battle of You. Su cons an Under reducine Conference conducted by KRM dental college. Chennai		Dr. Sonia Prabhu
1st International Side Seminar conducted online by FD. Sri Ramachandra Institute of Higher Education and Research. Chann	Best paper award	Dr Diya Jayanth
Student Outreach, Engagement and ArdorComm Media Group, Pune, Maharashtra	Resign Certificate of Recognition for Excellence in Student Outreach, Engagement and Digital linnovation 2022	80 Dept. of Fashion Design
Letinicate in Appreciation for yearbase and exemptary communition to the Education Community under died is fine expression on "NEW MORNAL-EDUCATION Ardio-Comm Media Group, Pure, Mehrarathra Letinicases of Sunhait 8 a AMARDS 2022- ELSA2022		79 Dept. of Fashlon Design
+=		MS. AKSTIATINA CHANGITASTICKAT
13th National Women's Science Co. ress	ndrashekar Student Best Paper	L
rece antimos faction	2021	The state of the s

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# **ANNEXURE 29**

#### Collaborations and MoUs

Total active MoUs	National / International	Academia	Industry	Total	Overall year wise
	National	1	20	21	
2018-2019					31
	International	6	4	10	
2040 2020	National	0	8	8	18
2019-2020	International	10	0	10	10
2022 2024	National	0	9	9	- 12
2020-2021	International	2	1	3	12
2021-2022	National	1	18	19	- 21
	International	1	1	2	
2022-2023	National	0	7	7	00
	International	0	1	1	08
	National	01	06	07	
2023-2024	International	01	01	02	09
	99				

KIAMY.

Year of signing MoU	Name of the organization with whom MOU/Collaboration being signed	Duration	Purpose of MOU/Collaboration	Lest the actual activities under each MOU year-wise
2014-15	Ghana Technology University, GTUC, PMB 100, Accra North, Ghana	5 years	Ph D Programme, Under graduate and Post graduate programme	PhD students registered in the university 2015-16: 10 students 2016-17: 9 students
2014-15	St. Petersburg State University of Industrial Technologies and Design	5 years	3 weeks Study Abroad Program — RUAS PG Students at SUITO; Faculty Exchange from RUAS to SUITO: academic research collaboration in Product Design of 12.1	*3 weeks Study Abroad Program for RUAS PG Students at SUITD (3 PG Students (RUAS, M.Des, Faruity of Art&Design "Desi n: Interior Furniture and E uir ment Desi n
2014-15	St. Petersburg State University of Architecture and Civil Engineering	No duration	collaboration in aspects of modern civil engineering. 3 weeks Study Abroad Program for UG Students from SPSUACE at RUAS	Faculty Exchange from SPSUACE to RUAS: Academic collaboration in aspects of modern civil engineering. 3 weeks Study Abroad Program for UG Students from
2015-16	Kazan National Research Technical University	5 years	Short term UG and PG student internship Split PhD ; Collaborative research and development works	2018-19  * January 2018: Joint Application for BRICS grant: Joint Application for BRICS grant has been submitted (RUAS,
2017-18	Peter the Great St. Petersburg Polytechnic University	5 years	Joint courses and programmes; research collaborations, Joint applications for funding, Exchange arrogramme	
18-19	Ural Federal University,	3 years	Stu ents participation in the International on line Hackathon     Faculty participation as mentor and Jury member in	Fashion Design Students won Prize in HACKATHON ""POSTINDUSTRIAL DESIGN"" on 17 December, 2020. • Mr. Lohit H. S, Associate Dean and Dr. Mamatha Hegde,
2015-16	Intel Corporation	5 years	Cornerate Non disclosure reement	
2015-17	Indo Euro Jean Education Foundation Warsaw, Poland	5 years	Academic Non-academic and Cor crate collaboration	
2017-18	Interuniversitiair MicroElectronica Centrum, Ka_eldreef 75. Be_ium	3 years	Non Discipure reement	Design kit sillcon Photonics
2018-19	N 301, 3rd Floor, World Trade Center, Brigade Gateway Campus, 26/1 Dr Rajkumar Road, Malleswaram, Bangalore 560055, India Phone:+91 8023256515	1 year	RUAS Organized an International Conference on Drug Design & Discovery Technologies-2019 (CDDT-2019) in association with Royal Society of Chemistry (RSC), UK	2019-20 Published papers presented on International Conference or Dru Oesi n & Discove Technologies
2016-17	Maratha Mandal's Nathajirao G Halgekar Institute of Dental Sciences and Research Centre, Belljavi Karnateka	No duration	projects, research proposal development, organize symposium, exchange programs for postgraduate students	
2014-15	Paladion Networks Private Ltd., JP Na ar. 3rd Phase, Ban, slore	5 years	Partnering in offering M Tech course in Cyber security and Information Assurance	
2015-16	phase, Peenya Industrial Area, Bangalore - 560058 Phone: +91 (80) 4020 7100 E-Mail: office.india mann-hummel.com	5 years	Non Disclosure   reement	2020-21 Collaborative research work on numerical approach to determine the dust holdin   ca   aci   of air filter elements
2015-16	ABB India Limited, World Trade Centre, Rajkumar Road, Bangalore	5 years	Non Disclosure Agreement, Research and Development; Provide scholarships to research students	2018-19 Collaborative research on Thermal Analysis of LV motors
2016-17	Faurecia Emissions Control Technologies Technical Center India Pvt Ltd	3 years	Non Discloure a reement	
2016-17	Foundation for Neglected Disease Research, Krishnadevaraya Research Centre, Sir MVIT, Bangalore	3 years	Non Disclosure reement	
2016-17	Prakruti Products, Sar er Com Tex. Karvaar	3 years	Non Disclosureement	Collaborative research work on morin, a leaves with FPH
2017-18	Centre for Study of Science Technology and Pollsy, Bangalore	5 years	Collaborative programmes, internships to students	2018-19 UG students ot internship in CSTEP
2017-18	Arokare India Private Ltd, San alore	S years	Non Disclosure areement	Research proposal submitted on Probiotics suspensions in cancer are hylaxis and therap : Formulation and Evaluation
2017-18	Stevia World	3 Years	* Reci e Develo ment	Substitution of su ar with Stevia for Indian sweets
2017-18	Sonia Gandhi Nagar Extn Near Mettupalayam Ind. Estate, Mettupalayam, Puducherry, 605009Mobilo : +91 90420 29296 Email: lifecareformulations@ mail.com	5 years	* Improvement of Dissolution Rate For Metformin Sr (500 Mg) and Glimipiride Ir Bilayertablets (1 Mg)	Sponsored for Research Project
2018-19	Bharat Electronics Ltd, Najavara Baillailore	No duration	Non Disclosure A <sub>ll</sub> reement	2020-21 Collaborative work on FEM analysis
2018-19	Diva Enterprises Pvt. Ltd., 8-9, Basement, Block A, Naraina Vihar, New Delhi 110028, Phone: +91-11-45055500	5 Years	* Publishin. Marketin, and Distribution of Journal	2020-21 Listing SASTech and JDOR Journals in Indian Journal Websi
2018-19	HCG Enterprises Pvt.Ltd. HCG Hospital . HCG Towers, No.8 Kalinga Rao Road, Sampangi Ram Nagar, Ben Jaluru 560 027.	3 years	* Resource persons with domain expertise for Module I	2020-21 Certificate Course on Applications of Advanced Genomics Technologies in Healthcare 2020-21
2018-19	Merlin Aeronautics Manufacturing Pvt Ltd., 2nd Floor, Sona Tower, No. 71/2, Millers Road, Vasanthna, ar. Banjalore - 560052	5 Years	* Industrial Design of Mobile Dental Kit	Design a Mobile Dental Kit focusing on ergonomics, functionality, and safety
2018-19	Central Manufacturing Technology Institute, Tumkur Road, Bangloare 560 022	3 Years	* Academic and Research Collaborations, Share their Facilities and Resources for Research and other Mutual Benefits	Guest Lecture on "Product Innovation in India: The Role of Education and Youth." by Dr. Nagananumaiah, Director, Central Manufacturin Technolo Institute 2018-19
2018-19	ICRISAT	3 Years	<ul> <li>Product Development and Nutritional Analysis National Webiner on Nutrition, Nutraceuticals, Health and Wellness</li> </ul>	Promotion of Millets and Health Benefits Organized 'Smart Food Culinary Challenge for Young Chefs
2018-19	Nandu Chemicals Pvt. Ltd, Hubli: N-12, Industrial Estate, Hubli, Karnataka 580030	3 ears	* Development of Directly Compressible Pharmaceutical Excli ients for Dru Delive	* Formulate pharmaceutical excipients which can be used for direct compression of tablets and to evaluate their compatibility, solubility compressibility
2018-19	Jubilant Bios is Limited, Yeshwantpura, Bangalore	5 years	Non Disclosure Apreement	Collaborative research work on moringa leaves with FPH
2018-19	D. Coc., Ist Phase, Kumbalgodu Industrial Ares, Mysore Road, Kumbalgodu, Bengaluru, Karnataka 560074 Phone: +91-80-2843 7115	5 ears	Development of Directly compressible Calcium     Carbonate DCCC for tablet manufacturin	* Sponsored for Research Project: Development of Directle compressible Calcium Carbonate (DCCC) for tablet manufacturin 2019-20
2018-19	Technology Information Forecasting and Assessment Council (TIFAC), Delhi	10 months	Collaborative research	2019-20 Sponsored research on Technology Gap Analysis study for the Channapattana Toys Cluster, Ramanagara District,  * December 2019: Distinguished Guest Lecture by Prof.
2019-20	Viterbi School of Engineering, University of Southern California 3650 McClintock Ave, Los Angeles, CA 90089, United States Phone: +1 213-740-4530	3 years	Joint educational and research activities, Exchange of visiting scholars, UG and PG students	* December 2019: Distinguished Guest Lecture by Prof.  Yannis Yortsos, Dean of Viterbil School of Engineering, on t topic "Engineering a Better World for All Humanity"

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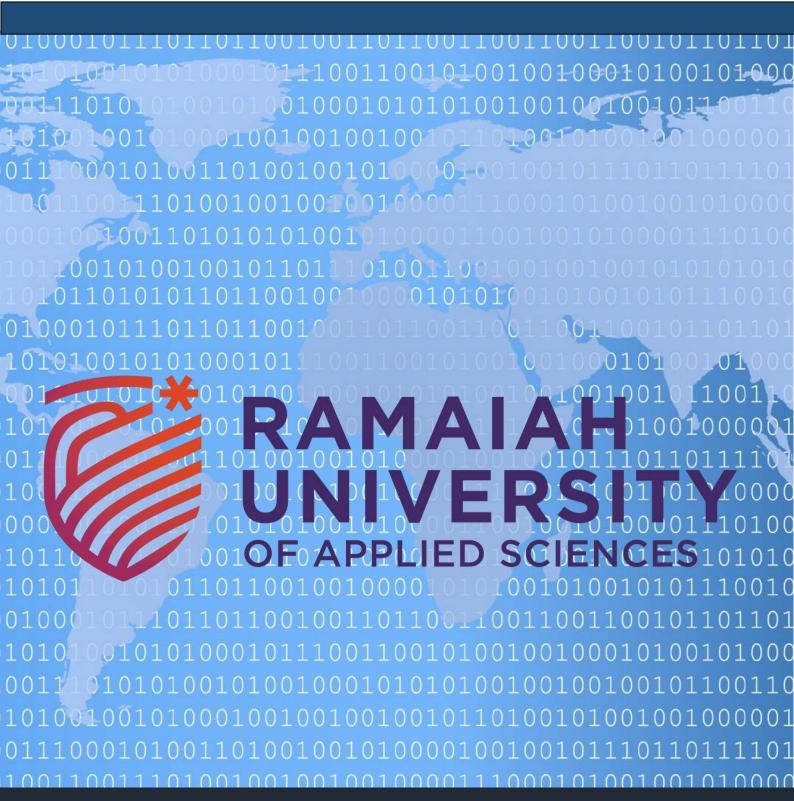
2019-20	University of Illinois, Chicago	3.5 years	Joint academic programs and collaborative research	Distinguished Guest Lecture by Dr. Jeffrey A. Loeb on " Data of the Human Epileptic Brain" Distinguished Guest Lecture by Prof. Anthon, Faiola on
2019-20	77 Massachusetts Avenue Cambridge, MA 02139, USA Phone: 617-253-1000	No duration	* MicroMasters Certificate Programme	MicroMasters Program Courses in Supply Chain     Mana_ement
		HO CONTION	* Prospective Students for Graduate Studies	2020-21
2019-20	University of Memphis 3720 Alumni Ave, Memphis, TN 38152, United States Phane: +1 901-578-2000	5 rears	University of Memphis (USA): Master Degree Programs Weblnar for Final Year and 3rd Year RUAS	Master Degree Programs Webinar for Final Year and 3rd RUAS UG Students on April 27, 2021
2019-20	Arizona State University (ASU), USA Tempe, AZ 85281, United States Phone: +1 855-278-5080	5 rears	* Establishing Cultural, Scientific and Didactic Relationships, Facilitate the Development of Specific Bilateral Programs of Collaboration	<ul> <li>Distinguished Lecture by Professor Harindra J. Fernands the topic entitled "Monsoon Intraseasonal Oscillations in Enuatorial Atmosphere and Oceans"</li> </ul>
2019-20	University of Applied Sciences Europe  Museumstraße 39, 22765 Hamburg, Germany	•	* Student Exchange, Organizing Joint Symosia/	
	Phone: +49 40 181300210  Texas A&M University	8 Hars	Conference	Joint Pro-rame offerin  Laminated Composite and Functionally Graded Structure
2019-20	400 Bizzell St, College Station, TX 77843, United States Phone: +1 979-845-3211	5 mars	Exchange of faculty, Strengthening partnership and furtherin academic excellence between US and India	* Academic teaching collaboration * Semester Abroad 3+1+1
	701 South Nedderman Drive Arlington, TX, 76019			Karbhari, President on "Education and Future of the Workforce in an Era of Technology Convergence" (August
2019-20	Phone: 817-272-2011	5 ears	Promote academic collaboration	2019 and Dr. Pranesh Aswath 3+1+1 for B.Tech Com. ut
2019-20	Keller Hall, 300 College Park, Dayton, OH 45459-2772 Phone: 937-229-1000 Email: Info uda in n.edu	5 ears	Admissions, Exchange of Scientific Materials and information  * Value added rougants for Law Students	* Additional Bridge Course on Law is being offered
2019-20	Wright State University 3640 Colonel Glenn Hwy, Dayton, OH 45435, United States		* Exchange of Scholars, Joint Research Programmes	
	Phone: +1 937-775-1000	3 ears	and Other Academic Exchan es	* Collaborative Research .
2019-20	Air Force	1 Year	* Indigenous Development of HPRE CW Adaptor FWD and AFT	* Technolo Transfer of HPRF Ado ter and RATS Senso
2019-20	Ajax Engineering Pvt Ltd., 253/1, 11th main, 3rd Phase, Peenya Industrail Area, Bangalore 560058			* Consultany Project title on 3D Scanning of Mixing &
	Phone: 1800 419 0628	1 Year	* 3D Scannin of Mixin & SCRAPER ARM C D Children	SCRAPER ARM
2019-20	The Akshaya Patra Foundation	3 Years	Menu planning for midday meal programme     Coducting oint workshops and seminars	Stude on Nutrition And pairs of Mid Day Meals
2019-20	Apollo Tyres Ltd 3rd Floor, Areekal Mansion, Panam iili Najiar Kochi- 682036	2 years	Non disclosure A recement	
2013-20	Mazumdhar Shaw Medical Centre, 258/A, NH Health City, Bommasandra,	Licano	* Collaboration, Cooperation and Mutual Interaction	Joint Proposal Submission: "Towards Point of Care Diag
2019-20	Bengalore - 560099 Phone: 080675 06870	3 Years	for the development, Promition of Joint Activities to address issues of mutual interest	and Prognostication of Oral Cancer Using deep - Learnin Enabled Low-Cost Device"
2019-20	Bangalore Analytical Research Center Private Limited: #37/143, 1st Floor,		o	Environmental, Pharma, Microbiology and Chemical
2019-20	9th Main Road, 3rd Phase, Peenya, Bangalore – 560 058 Phone: 080 4171 1185	3 Years	* Dissemination of academic information	Dissemination of academic information
2019-20	Phone: 080-25233050/25087002 Siddi Vinnayaka industries: No. 4. 1 9th cross, Ganapathinagar, Peenya Industrial Area, Ban Jalore - 560058	5 Years	* Design and Development of Engine Inlet Distortion Measurement Rake Unit	* Develorment of Excandeable Pin for Aircraft Audicati
2019-20				
	Nobel BioCare India Limited, Mumbai, Maharashtra	2 mars	Advance skill training and research	Develoment of skills for advancement in orthodontic ca
2020-21	Moscow State University of Civil Engineering - Federal State Budget Educational Institution of Higher Education	5 ars	Joint research teams, Student and faculty exchange, joint educational joo rams	2020-21 Student and facult exchange
2020-21	George Mason University 4400 University Dr., Fairfax, VA 22030, United States Phone: +1 703-993-1000	3 уеаг	Educational Intercultural Activities	* Offering Certification Programmes in Social Sciences
2020-21	MOOG Inc, Jamison Road, NewYork	10 years	Non disclosure Agreement	Non disclosure Agreement
2020-21	Kamataka Rajya Adike Sahakara Sanghagala Sahakara Mahamandala			2020-21 * Sponsored project on Phytochemical Analysis and the
	Ni amita, Shivamo, ya	1.5 Years	Carceno enic Studies on Arecanut	effect of consumation of Arecanut on human health
2020-21	Karnataka Health Promotion Trust, Rajajinagar, Bangalore	3 ears	Collaboration to health research and community health intervention expertise, student and faculty exchange, nurse mentorin	Research proposal on Early preparation to a safe and he motherhood: Understanding delays and opportunities in delively and access to preconcertion nutrition
2020-21			A.B	* Culturalized and again to BIDAC
2020-21	Borne Technologies Pvt. Ltd.	3 Years	Develo ment of roducts usin maited millets	* Submitted ro osal to BIRAC
2020721	Star Health and Allied Insurance Compan Ltd.	1 ar	Collaboration for research - rolects	
2020-21	Docplexus Online Services Pvt. Ltd	3 Years	Medical Education Programme Partnership for healthcare professionals	2020-21 * Online CME Programmes
2020-21				
	Bharat Electronics Ltd, Na avara Ban alore	5 ears	FEM and CFD Analysis	Consultan rolect on FEM and CFD Analy is
2020-21	Ooble Innovations Pvt. Ltd.	No duration	Structural Analysis of Edible Straws with Multiple Flavours	2020-21 Product Evaluation of Edible Straws
2020-21	UCAM Pvt Limited, Peen a. Ban Jaloro	3 years	Dissemination of Academic information, Joint workshops collaborative research	
2020-21	Wipro Life Sciences Lab: Doddakannelli, Sarjapur Road, Bangalore 560035	52	Callaborate and share information on R&D Programs,	* Joint Protince Sthmicsion - Handbook Decklor
2021-22	Phone: 080 28440011  Faculty of Fashion Studies, BGMEA University of Fashion & Technology  [8] ICTI Disays Baneladoch	3 years	lectures in latest technologies, project internships  Callaborative research, workshop, seminars, students exchange and publications	* Joint Pro Josal Submission - Handi Jodu Project  Mr. Rayed Barket, Asst. Prof Dept. of Fashion Studies participated in panel discussion related to theme "Textili
	(BUFT) , Dhaka, Bangladesh			A arel and Fashion for Holistic Human livin on Earth a
2021-22	Towards Unit   for Health   TUFH   Market Street, Philadel   hla   USA	3 years	Active institutional member of the network TUFH, review student community projects	
2021-22	BLDEA's Shri BM Patil institute of nursin sciences, VI a a ur Karnataka	5 Years	Collaborative research	RINER
2021-22				
444	SPI Pharma	3 ears	Non disclosure a reement	

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2021-22	Huemn Interactive Private Limited	3 years	Industry Callaboration ,Internship and placements	Interactive Private Limited, Hyderabad participated as on the National Judge for the International Fashion Hackatho 2022- Intuitive Fashion Desi, nin- for Current Problems a
2021-22	Leisure Loom INC	3 ars	Indust - Collaboration , Internshi and viacements	One student did internshi
2021-22	Immact Guru Foundation, New Delhi	2 ars	U skiili pro ramme for nursin staff	Endosco i nursin course
2021-22	ETA Technology, Peen a Banyalore	3 years	Collaborate and share information on R&D Programs, lectures in latest technologies	
2021-22	Indian Plywood Industries Research and Training Institute, Yeshwantpur, Banjalore	3 years	Collaborate and share information on R&D Programs, lectures in latest technologies	Collaborative project work on On-line thickness measurement Equipment for wood veneers Develorment of machine for screading resin on veneer
2021-22	Bangalore Machine Tools Manufacturers Network C/o M/S Ducom Instruments Pvt. Ltd. 477/A, 12th Cross, 4th Phase, Peenya Industrial Area, Bangalore – 560058	3 Years	Conducting joint Workshop/Seminar on Topics of Engineering, Technology and Management     Collaborative research and projects in the area of	
2021-22	Intellocopia IP Services 14 Dr Rajkumar Rd. 1st Block, Rajajinajar, Banjalore. 560010	3 Years	Dissemination of Academic Information pertaining to varied Areas of Intellectual Property Rights (IPR)     Technolo, Transfer and IP Licensin     Technolo, Transfer and IP Licensin     Technolo, Transfer and IP Licensin	Dissemination of Academic Information pertaining to va Areas of Intellectual Property Rights (IPR)     Technolo Transfer and IP Licensin
2021-22	Remidio Innovative Solutions Pvt. Ltd. No. 1-51-2/12, Il Floor, Vacuum Techniques Compound, 1st Cross Road, Phase – 1. Pean   Ben   Iluru -560058	3 Years	Conducting Joint Workshop / Seminar     Collaborative research work and projects in the area of or hthalmologi and or omet screeni dia nosis.	-Conducting Joint Workshop / Seminar -Collaborative research work and projects in the area of a hthalmolo and a tomet screenin dia nosis and
2021-22	Task Force on Arecanut, GoKBan plore 560004	1.5 years	reement on research collaboration	Sponsored the project "Assessment of Phytochemical an Pesticide Components for Arecanut – Measurement of Health, Safety and Efficacy"
2021-22	Prayıti Defence Systems Pvt Ltd. Bilasyur	5 ars	Non disclosure reement	
2021-22	Shree Electronics, Mysore	5 mars	Non disclosure	
2021-22	Syne gies Cassinys Etd Vishakha atamam	No duration	Non disclosure A reement	
2021-22	Zeus Hulia Life Sciences Pvt Ltd, Hullerabad	5 /ears	Non disclosure A eeement	
2021-22	Nyro Research India Pvt Ltd Valamkottil Towers, #6/858-M, Suite #826, Il Floor, Judgemukku, Thrikkakara, PO, Kochl, Kerala 682021	3 Years	•Collaborative Research	•Collaborative Rescarch
2021-22	Office of the Technology Transfer Centre for Cellular and Molecular Platforms NCBS-TIFR GKVK Post, Bella Rd, Benji luru. Karnataka 560065	2 Years	Primer on IP and Licensing in Health Sciences     Facilitate IP Licensin and Tachnolo. Transfer     aim at pervent COU = on	Primer on IP and Licensing in Health Sciences     Facilitate IP Licensin and Technolo Transfer
2021-22	Project Management Associates FC-33, Plot No 18 2, , Periyar Centre, 3rd Floor, Institutional Area, Jasola, New Delhi 110025	5 Years	Project Management for Post Graduate Students of RUAS from the academic year 2022-2023. At the end of the Course, the students have the ortion to obtain	PM made mandatory in UG Programme  • 13 PG Students enrolled — VAC
2021-22	Schevaran Cleanfix Academy of Cleaning Sciences Pvt. Ltd. No. 427/B, Hebbal Industrial Area, Mysore – 570016	5 Years	•PG Dì Ioma in Facili Mana ment	•PG Di loma in Facilit Mana ement
2022-23	AICRAFT PILLtd. South Australia	5 ears	Non disclosure reeement	
2022-23	Centre for Study of Science Technology and Polity Banyalore	5 years	Collaborative ro rammes internshi s to students	2022-23 Interaction with CSTEP people to install air quality monitoring station
2022-23	IEEE Technology and Engineering Management Society –INDIA, #501, 5th Floor, WTC-Brigade Gateway, #26/1, Dr. Rajkumar Road, Malleshwaram West. Ben "Iluru – 560 055	5 Years	Certification program on Technology and Innovation Management for Industry delegates	2022-23 • 15 Dele ates in Cohort-1 for the certificate are ram
2022-23	Indian Technology Congress Association (ICTA) – TSC Technologies (TSC), Benjaluru	2 Years	celebrations of Dr. M. S. Ramaiah  *The proposed Satellite contributes to the National Mission — Azadi Ka Amrit Mahotsav of Launchin 75	2022-23 Satellite round station is ina urated
2022-23	L.&. T Technology Services Ltd, L&T Special Economic Zone, Bangalore Campus, L3 Building, Manyata Embass, Busingss Park, Najlawara Hobil: Bangalore Karnataka ~ 550045	3 Years	using Laboratory  • Joint Design and Development of Higher Education Programs	Dept. of Computer Science and Engineering: Student completed their internship and got selected in I Technolog Services Ltd and .
2022-23	Army 51 Headquarters Army Training Command (hereinafter referred to as HQ ARTRAC) Shimla	5 Years	•Collaborative Research and Indigenous Development	4 PG Students completed project work
2022-23	ISDC Projects India Pvr. Ltd. Regional Office, Lakshmi Narayan Complex, Palace Road, Vasanth Nagar, Bengialuru, Kamataka – 560052	3 Years	Offering ACCA Certificate for B.Com Honor Students     Offering CMA Certificate for BBA Students	2022-23  *Offering ACCA Certificate for B.Com Honor Students  *Offerin: CMA Certificate for BBA Students
2022-23	Mr. Solkar Ghosh Moulic Associate Director – Technical & Quality Systems	5 Years	Human Subjects facilitation for Bionic Arm Project     Natidation for Collaborative Project	2022-23  -Buman Subjects facilitation for Blonic Arm Project -Validation for Collaborative Project

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# **ANNEXURE 30**



# Research Facilities



### **Research Facilities at RUAS**

By Research Division

#### Research @ RUAS

Ramaiah University of Applied Sciences (RUAS) vision is to be a premier Research and Innovation University of International Stature in the coming decade with the proven Global educational practices. We believe that "Research is Neither a First Step nor a Last Step but it is only a Next Step". The University has a well-defined Research Promotion Policy since its inception. Recently, the Research Promotion Policy was revised and approved by Board of Governors (BoG) on 31 Mar. 2021. The Faculty Members are intensely involved in updating the Research Facilities in various innovative disciplines. RUAS has the following categories of Research Facilities:

- 1. Central Instrumentation Facility
- 2. Animal House
- 3. Media Laboratory/Studios
- 4. Business Lab
- 5. Museum

Central Instrumentation Facility is predominantly utilized for carrying out high-end research work by the Faculty Members and the Students. Currently, the equipment is being added through the Grants obtained from funding agencies. The Department of Pharmacology, Faculty of Pharmacy is a CPCSEA approved unit and licensed for breeding and conduct of animal experiments (CPCSEA Registration No: 220/PO/ReBi/S/2000/CPCSEA/02.05.2016). The Animal House support experiments on small laboratory animals like guinea-pigs, rabbits, rats and mice. The Media Laboratory and Studios are envisaged to create e-contents across all Faculties/Schools and Departments of the University. This has led to the preparation of more than 4,000 e-resources in the form of Learning Management System (LMS) and videos on Laboratory Demonstration. In particular, the Media Laboratory and Studios have expertise in Videography, Photography, Audiography, Model Making and Prototype Development. The Mission of Business Lab is to facilitate data-driven decision-making and Management research for Business and Commerce Students in particular and University Students as a whole. The Faculty of Dental Sciences of RUAS has set up an Oral Pathology Museum which is a combination of both Art and Science by showcasing Oral Specimens for the benefit of student community.

RUAS has created research facilities to imbibe intellectual culture among all the stakeholders within the University ecosystem. In particular, the University consists of state-of-art facilities for research, training as well as teaching purposes. However, the utilization of equipment and testing facilities are cross-disciplinary where all Faculty Members and Students of RUAS are eligible to carry out research. Moreover, the equipment can be extended to outside researchers/industries on a chargeable basis.

### **Research Facilities at RUAS**

#### **Scanning Electron Microscope with EDX Facility**



- The SEM is a COXEM (EM-30) table top model (South Korea)
- SEM with EDX facility
- The SEM has magnification up to 1,00,000x
- Spatial Resolution < 5nm at 30 kV</li>
- Acceleration voltage for SEM is 1-30 kV
- Samples size up to 70 mm (W) x 45 mm
   (H) can be used for detection with SED
   (DP) as the detector
- The X-Y/T Transverse movement is 35x35 mm/0-45□

### **Coordinate Measuring Machine**

- Mitutoyo
- Bridge Type
- X axis 500 mm, Y axis 400 mm, Z axis 300 mm
- Maximum measuring speed 8 mm/s
- Resolution 0.0005 mm
- Maximum measurable height 545 mm
- Maximum table loading 180 kg



#### **Low Speed Wind Tunnel**



- Wind tunnel type- Suction
- Test section size- 0.6 m × 0.6 m × 2.0 m
- Fan maximum speed- 900 rpm
- Maximum air flow velocity- 35 m/s



#### **Supersonic Wind Tunnel**

Wind tunnel type: Blow down
 Test section size: 50 mm × 50 mm

• Test Mach number: 3.6

Test time: 30 sec

Air storage tank volume: 5 m3

Maximum air storage tank pressure: 12 bar

Schlieren flow visualization



#### **CNC Vertical Machining Center Model Winner**



- Brand Ace Micromatic
- Table Longitudinal Travel: 400 mm
- Rapid Traverse: 32 / 32 / 32 40 / 40 / 40
- Feed Rate :1 10000 mm / min
- Tool Storage Capacity: 12 Nos.
- Max Tool Dia with All pockets Full :125 mm
- Table Cross Travel:350 mm
- Headstock travel :320 mm
- Spindle Nose Face to Table Top :135-455
- Table Height from Floor :830 mm
- Table size :650 x 350 mm
- Max load on Table Standard :200 / 400
   kgf
- Spindle Speed: 60 6000 rpmSpindle power Std: 5.5 / 3.7 kW

#### Slant Bed CNC lathe "Jobber XL"

- Swing Over Carriage 260 mm
- Distance Between Centres 425 mm
- Maximum Turning Length 400 mm
- Spindle Size A2-5, Bore through Spindle - 53 mm, Spindle Speed - 4000 rpm, Spindle Motor Power (Cont / 15 min) - 5.5/7.5 kW
- X-Axis stroke 165 mm, Z-Axis stroke -400 mm, X & Z axes rapid - 20 m/min
- No of Tools 8
- OD Turning tool size 25 x 25





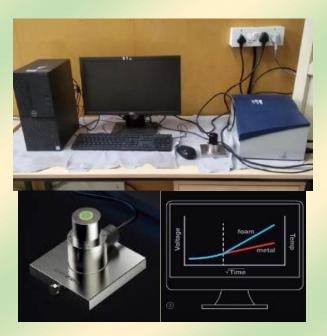
#### **Cone Beam Computer Tomography**



- Sectional: 5x5 FOV, 1144 MGy/cm2
- Maxilla/ Mandible: 10x5 FOV, 612 MGy/cm2
- Full mouth: 10x10 FOV, 1070 MGy/cm2
- Full Skull: 17x 13.5 FOV, 2497 MGy/cm2
- A Panaromic image can be constructed from a CBCT full mouth or full skull scan
- Carestream CS 9300 has a true Panaromic imaging and Cephalometric capabilities that allows us to take the required scans as desired

#### **Thermal Conductivity Analyzer**

- Conforms to ASTM D7984
- Thermal Conductivity Range: 0.03 to 10 W/m.K;
- Temperature Range: Room Temperature to 250 °C
- Modified Transient Plane Source (MTPS)
- The MTPS method employs a singlesided sensor to directly measure thermal conductivity and effusivity of materials. The MTPS method has the highest precision, highest sensitivity, shortest test time, and is the easiest to use among all three techniques.
- Solids/Polymers/Composites, Pastes, Liquids and Nano fluids can be measured



#### **Electrophoresis Unit, Submarine**

- Midi submarine gel unit has a compact tank reduces the buffer volume required to cover the gel
- The UV-transparent running tray allows the user to image the gel without risk of damage due to handling
- The unit includes buffer chamber, safety lid with cables, UV transparent tray and one each 1.5 mm thick 15 and 20 well comb.





#### **Vertical Electrophoresis Unit**

- Cleaver Scientific provides the omniPAGE range comprises three sizes of gel chamber, Mini 10 x 10cm, Mini Wide 20 x 10cm and WAVE Maxi 20 x 20cm
- Each system have a guaranteed leak proof seal resulting in trouble free and rapid gel casting
- These systems are ideal for running precast or hand cast poly-acrylamide gels for SDS-PAGE or Native PAGE
- Each gel tank system includes a leak free casting option to cast your own polyacrylamide gels and the omniPAGE mini can utilize a wide variety of commercially available precast gels from all major manufacturers



#### Minus 80 Freezer



- Thermo Scientific -80°C lab freezers are designed to protect samples
- They're also designed to maximize storage capacity by offering a range of upright and chest models to accommodate a variety of laboratory footprint requirements
- Additional features include energysavings models that meet today's sustainability demands
- Protect samples with the right, energyefficient ultra-low temperature freezers
- Choose from our TSX, Standard Performance (STP) or Performance platforms

#### Thermal Cycler

- Single Aluminium alloy block of 32 wells compatible for 0.2ml PCR tubes & strips
- Gradient set up feature is available. Gradient temperature is from range 30- 100°C
- 5" TFT color touch screen with graphical display provides easy use for setting up and monitoring
- Automatic restart after power failure
- USB drive available for transfer of data and software updating
- Heating Rate: 5°C/sec; Cooling rate: 4°C/sec
- Control Accuracy : ± 0.2°C (30 99.9°C)
- Wifi enabled



#### **MINI Electroblotter Units**



- The Mini Gel Tank is a vertical mini-gel electrophoresis system with a unique tank design that has convenient sideby-side gel loading and enhanced viewing during use
- The tank can accommodate up to two gels per run with each gel run in its own separate chamber, making it easy to run just one gel and enabling the use of just enough buffer for one gel
- The tank is compatible with all Invitrogen pre-cast mini gels and SureCast handcast gels
- The Mini Gel Tank can be used for wet tank transfers using the Mini Blot Module
- Two Mini Blot Modules fit into the Mini Gel Tank to allow transfer of two gels at a time. The unique design of the blot module allows for the use of less transfer buffer (only 220 mL per gel)
- This lower buffer requirement keeps the amount of methanol needed to a minimum.

#### Microtitre Plate Reader

- The modular and upgradeable Thermo Scientific Varioskan LUX multimode reader offers up to five measurement technologies, including Absorbance, Fluorescence Intensity, Luminescence, AlphaScreen, QuantiGene SinglePlex, and Time-Resolved Fluorescence
- It offers features to help you save time and reduce common errors in the lab—including automated dynamic range selection, which adjusts the optimal reading range based on signal intensities, and built-in safety controls



### **Biosafety Cabinet Class II - Type A2**



- Perform daily applications safely and efficiently with simple-to-order Thermo Scientific™ 1300 Series Class II, Type A2 Biological Safety Cabinet Packages
- Package includes cabinet; manual, adjustable height stand; factory-installed UV light; and one set of armrests
- These safety cabinets deliver exceptional design and technology advancements such as: superior protection with proprietary airflow design, exceptional ergonomics for a safe and comfortable environment, and outstanding energy efficiency for operational cost savings

## **CO<sub>2</sub> Incubator**

- The Thermo Scientific CO2 incubators offer multiple large capacity solutions for higher volume and throughput scale up applications
- The Heracell VIOS 250i CO2 incubators provide a premium clean room compatible solution where cultures can grow in a controlled, protected environment
- Optional variable oxygen control allows for precise control of the culture environment which is critical particularly with more sensitive cells
- ISO Class 5 HEPA filtration for airborne contamination protection as well as proven, overnight 180°C sterilization cycle keep the environment protected against contamination





## **Cryopreservation Unit**



- Store cells, tissues and biologicals in an economical and biological manner with Thermo Scientific™ Bio-Cane™ Cane and Canister Systems
- Available in four sizes, the system can safely hold samples for up to seven months without replenishing LN<sub>2</sub>

### **Inverted Phase Contrast Microscope**

- Cell culture analytics, In Vitro Fertilization (IVF) work, and imaging fluorescence stains are made easy with the TCM 400 and a host of accessories that make the modular system a researchers favorite tool
- High-performance optics configured and a durable, compact footprint make the TCM 400 ideal for modern workstations



#### **Horizontal Laminar Air Flow Cabinet**



- Laminar air flow cabinets (also known as laminar clean bench, laminar flow hood, laminar air flow bench) provide an aseptic space to work with a product or specimen, without contaminating it with particulates such as microorganisms
- Air is drawn through a HEPA filter in the laminar flow equipment and blown in a smooth laminar flow towards the user
- Hence the name, laminar flow hood (laminar clean bench, laminar air flow chamber, laminar hood etc)
- For user protection, where chemically hazardous or infectious materials are going to be used in the laminar flow equipment, a biological safety cabinet is required.

### **Spectrophotometer**

- Micro controller based, standalone unit
- 20 X 4 alphanumeric LCD display
- Automatic source optimisation
- 200 1100 nm range
- 1nm bandwidth
- %T, ABS, CONC measuring modes
- Single / Multi wavelength and Spectrum / Time Scan operating modes
- Data processing (Stand alone) Peak pick,
   1st derivative
- Date processing (through optional PC) Peakpick, Point-pick, Expansion / Overlaying /
  Averaging / Subtraction / 1st to 4th derivatives of spectra, besides storage and retrieval of data
- Automatic 5- position sample changer. 500
   µl sample in 1ml cuvette and 2 ml in 4 ml
   cuvette



# Sigma Vertical Laminar Air Flow Cabinet



- A laminar air flow (LAF) cabinet, also known as a laminar Hood or tissue culture hood, is an enclosed cabinet designed for preventing contamination of biological samples, semiconductor wafers and sensitive materials
- It provides an excellent clean air environment, which is free from contaminant for performing a number of laboratory requirements
- Clean benches are other names of laminar air flow cabinets as the working air environment remains clear due to the high-end filtration process
- Laminar air flow cabinet maintains a unidirectional flow of HEPA-filtered air over the work area and protects the working environment from dust and other air-born particulates
- Laminar air flow or laminar Hood consists of stainless Steel Cabinet, Filter pad or pre-filter, HEPA Filter, Fan or blower, UV Lamp, Working stations Fluorescent lamp etc.



# **Binocular Microscope**

- Coaxial coarselline knobs: Tension adjustment on the right side and fine focus knob graduated, stage movement (XY direction) on rack and pinion
- Quadrupie revolving nose piece (fixed), plane stage of 120x132 millimeters
- With right hand mechanical stage, abba condensor 1.25 (oil immersion) with aperture iris diaphragm and blue rinor
- Universal power supply (100V to 240V) for 6V 20W illuminator, 8cc immersion oil, dust cover and mirror unit (planoconcave)
- Binocular observation tube (indination 45 degree interpupilary distance adjustment range, observation 53-75 millimeters), diopter adjustment on the left



### Stereozoom Microscope

- Strong metallic body powder coated with epoxy protection
- German imported optics 

   L.E.D light in microscope
- Hi- Definition clarity
- Hassle Free focus
- 2 objectives, 2 lenses
- Free Slides packet
- Microscope cover and thermocol box packing



# Olympus CX23 Binocular Microscope

- The Olympus CX23 system provides easy and safe operation throughout the workflow and ensures outstanding optical performance with large field number (FN) 20
- The built-in LED light source provides uniform and stable illumination for long term with low power consumption, and its reduced blue color preserves vivid colors of the sample
- CX23 microscope's unique features accommodates the student and every requirement in the educational setting



## Sigma High Pressure Triple Walled Vertical Autoclave

- Vertical autoclave, also known as steam sterilizers and top loading sterilizers, is a sterilizing machine that comes in a cylindrical shape
- These machines help in sterilization of medical equipment, surgical instruments to name a few
- Sterilization is one of the key medical processes in many industries including food and healthcare
- This machine works on the principle of highpressure steam for sterilizing flasks, medical tools, beakers, etc.
- These are ISO and CE Certified with chamber volumes of 22 liters to 175 liters that accommodate two and three drums accordingly
- These systems are designed for meeting effective sterilization requirements in bacteriological and research laboratories, hospitals and clinics and food and beverage units
- The vertical chamber design maximizes space utilization, while microprocessor control system enables comfortable working all the time you operate the machine



# **BOD (Biological Oxygen Demand) Incubator**

- Double walled modular structure with 80mm thick PUF insulation
- Inside Stainless Steel and Outside Mild Steel Powder Coated OR Stainless Steel
- Observation glass door for quick view and help to avoid temperature variation.
- Heavy-duty latches, door handle with lock & door hinges to maintain a secure and uniform seal
- Racks & trays Stainless Steel with adjustable height.
- CFC Free R 134 A / R 404 (Eco Friendly) refrigeration system
- Control system (PLC or Microprocessor) with touch screen display 4" HMI with Ethernet
- Temperature overshoot and undershoot of temperature giving audio visual alarm
- Documentation with DQ, IQ, OQ & PQ protocol,
   Operations and well explained user manuals etc.





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## Sorvall ST4 Plus Centrifuge

- This device is used for the separation of fluids, gas or liquid, based on density
- Separation is achieved by spinning a vessel containing material at high speed; the centrifugal force pushes heavier materials to the outside of the vessel
- It is used for research purposes and used to purify cells, sub-cellular organelles, viruses, proteins, and nucleic acids
- This device provides standard high contrast user interface for up to 6 saved programs with simple push-button operation for routine applications. With capacity up to 4L, including 196 blood tubes and 96 15mL conical tubes, AutoLock for fast rotor exchange and 13 available rotors
- Intuitive controls simplify operation and provide detailed information on a wide range of operating parameters and processing status for optimal performance.

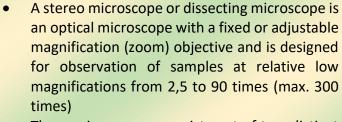


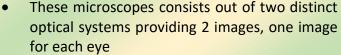
### **Microprocessor Colony Counter**

- The instrument uses the latest microprocessor technology and advanced engineering techniques so as to give enhanced accuracy and reproducibility
- The system has 6 soft touch membrane type keys for ease of operation
- A built-in averaging facility allows the calculation of average colony counts using multiple dishes
- It has the storage facility for 100 result-counts which are retained in the memory even when the instrument is switched off
- Optimum viewing of colonies is aided by peripheral glare free illumination graticuled disc provided in the instrument
- The magnifier magnifies the colony area
- This is an indispensable tool for the microbiologist



### Stereo Microscope





- Subsequently, the human brain combines the two images to one 3-dimensional image with increased depth of focus
- These microscopes enable examining the specimen with high-performance precision and generate three-dimensional images allowing observation for the highest demanding microscopy applications
- These top-level zoom microscopes are perfect for analyzing all kinds of material surfaces or to observe and prepare biological samples
- These stereo microscopes are supplied with a large choice of stands, with or without LED illumination

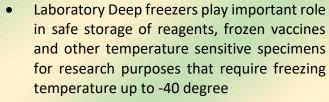


# **Borosil Labquest Steam Distillation**

- Borosilicate glass assembly along with SS steam generator for extended unit life
- Process kill switch to halt the process in case of accidental door opening
- Detachable bottom drip tray for extra protection against acidic attack during sample loading
- Anytime alkali addition during the distillation cycle Tube sensor that enables safe operating conditions in event of tube damage
- Reagent refill level sensor to avert reagent dry out
- The magnifier magnifies the colony area
- This is an indispensable tool for the microbiologist



### -400 C Deep Freezer



- These freezers are ideal for routine storage of samples in the clinical, pharmaceutical and biomedical laboratories. It is CE and ISO certified and designed for deep freezing of temperature minus 40-degree temperature range
- These freezers are ergonomically designed to meet critical freezing storage requirements of life science laboratory, pharmacy and biomedical lab etc.
- These units are designed in either vertical (upright) or horizontal designs
- Each unit is fitted with digital temperature controller for easy temperature settings; other accessories that may include are temperature chart recorder, data logger, buzzer alarm and caster wheels etc.



### **Muffle Furnace**

- A muffle furnace or muffle oven is a furnace in which the subject material is isolated from the fuel and all of the products of combustion, including gases and flying ash
- After the development of high-temperature heating elements and widespread electrification in developed countries, new muffle furnaces quickly moved to electric designs.



# **Soxhlet Apparatus**



- It was originally designed for the extraction of a lipid from a solid material
- Typically, Soxhlet extraction is used when the desired compound has a limited solubility in a solvent, and the impurity is insoluble in that solvent
- It allows for unmonitored and unmanaged operation while efficiently recycling a small amount of solvent to dissolve a larger amount of material

#### Water Bath

- A water bath is laboratory equipment made from a container filled with heated water. It is used to incubate samples in water at a constant temperature over a long period of time
- It is also used to enable certain chemical reactions to occur at high temperature. Water baths are preferred heat sources for heating flammable chemicals, as their lack of open flame prevents ignition





### Lab Fermentor (Capacity: 10L)

- Fermentation is a metabolic process that produces chemical changes in organic substrates through the action of enzymes
- In biochemistry, it is narrowly defined as the extraction of energy from carbohydrates in the absence of oxygen
- In food production, it may more broadly refer to any process in which the activity of microorganisms brings about a desirable change to a foodstuff or beverage
- Fermentor is sterilized using high pressure steam between batches. Strictly speaking, there is often addition of small quantities of chemicals to control the pH or suppress foaming

#### Hot Air Oven

- Hot air ovens are electrical devices which use dry heat to sterilize. They were originally developed by Pasteur
- Generally, they use a thermostat to control the temperature
- Their double walled insulation keeps the heat in and conserves energy, the inner layer being a poor conductor and outer layer being metallic
- There is also an air filled space in between to aid insulation. An air circulating fan helps in uniform distribution of the heat
- These are fitted with the adjustable wire mesh plated trays or aluminium trays and may have an on/off rocker switch, as well as indicators and controls for temperature and holding time





### pH Meter

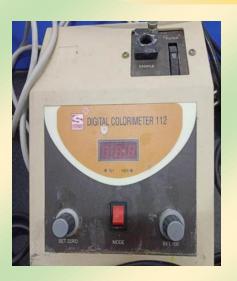


- A pH meter is a scientific instrument that measures the hydrogen-ion activity in waterbased solutions, indicating its acidity or alkalinity expressed as pH
- The pH meter measures the difference in electrical potential between a pH electrode and a reference electrode, and so the pH meter is sometimes referred to as a "potentiometric pH meter"
- The difference in electrical potential relates to the acidity or pH of the solution
- The pH meter is used in many applications ranging from laboratory experimentation to quality control

### Microscope

- A microscope is a laboratory instrument used to examine objects that are too small to be seen by the naked eye
- Microscopy is the science of investigating small objects and structures using a microscope
- Microscopic means being invisible to the eye unless aided by a microscope. The microscope often referred to as the light microscope, is a type of microscope that uses visible light and a system of lenses to magnify images of small subjects
- A simple microscope works on the principle that when a tiny object is placed within its focus, a virtual, erect and magnified image of the object is formed at the least distance of distinct vision from the eye held close to the lens





# **Digital Calorimeter**

- A calorimeter is an object used for calorimetry, or the process of measuring the heat of chemical reactions or physical changes as well as heat capacity
- Differential scanning calorimeters, isothermal micro calorimeters, titration calorimeters and accelerated rate calorimeters are among the most common types
- A simple calorimeter just consists of a thermometer attached to a metal container full of water suspended above a combustion chamber
- It is one of the measurement devices used in the study of thermodynamics, chemistry, and biochemistry

# **Moisture Analyzer**

- A moisture analyzer or moisture analyzer balance can be a portable or fixed moisture meter for moisture determination according to an established moisture measurement principle
- A halogen moisture analyzer balance uses the heat from the halogen lamp or halogen light bulb to dry a material sample



### **Animal House**



- The Animal House support experiments on small laboratory animals like guinea-pigs, rabbits, rats and mice
- The Animal House has created Standard Operating Procedures (SOPs) to ensure quality and consistency in reviewing research proposals of PG Students/Ph.D. Scholars and Faculty Members
- The facility has obtained five sponsored research projects and contributed more than 150 publications
- Young Faculty Members are benefitted with first-hand experience to conduct animal experiments with all safety precautions and can propagate research culture within the Faculty and University as a whole



#### **Business Lab**

- The Mission of Business Lab is to facilitate data-driven decision-making and Management research for Business and Commerce Students in particular and University Students as a whole
- The learning cases may be pertaining to Resource Management, Optimization, Unlocking Gender Inequality, Closing the Skill Gap, Business Plan, Financial Modelling, Analytics
- The learning cases may be pertaining to Resource Management, Optimization, Unlocking Gender Inequality, Closing The Skill Gap, Business Plan, Financial Modelling, Analytics
- Students develop a great potential and capability for Research, Learning and Innovation through experiential learning using technology



### **Media Laboratory and Studios**



- The Photography Studio enables students to learn the basics of product photography to capture images utilizing both natural and artificial light
- Students are taught the techniques and strategies for integrating principles of composition and design into their images and working with the principles associated with light and optics
- The studio consists of multiple working tables, backdrops, cameras, lighting fixtures, light boxes, diffusers, tethers, props and assorted stationary for students use in the lab

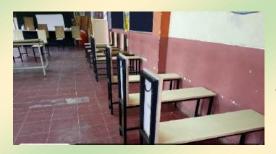
## **Product Ergonomic Studio**

- This ergonomics studio prepares students to create human centric design solutions through application of ergonomic factors
- The studio houses measuring tables, scientific anthropometric measurements instruments, anthropometric scales, books and various products ranging from hair dryers to automotive interiors
- Students are taught fundamentals of ergonomics, human body structure and function, posture, movement and biomechanics, physiological and psychological aspects





### **Print Making and Painting Studio**



- Transferring finished works of art or illustration on to different materials such as fabric and paper is an important process in creating objects of commercial value. Techniques such as woodcut, etching, engraving, and screen-printing are taught to the students
- The quality of the outcome is closely monitored by the faculty and the students are given individual attention in helping them realise their designs
- The students are surrounded by beautiful murals and art works done by the students as soon as they enter the painting studio

### **Carpentry Studio**

- Bench vise 24 no's Particularly used for attach directly to a workbench to hold the work piece during operations such as sawing, planning, and drilling
- Carpentry tools Used for planning and shaping
- Wood Lathing machine 2 no's Used for wood turning



## **Foam Modeling Studio**



- There is a fundamental difference in viewing the design concepts in a computer screen and experiencing it in real life
- The three dimensionality of form prototyping is required to receive touch and feel feedback which is very essential in understanding the form of a concept
- Forms can be built in different materials such as poly-urethane foam, thermocol, clay etc

### **Industrial Clay Studio**

- The knowledge of handling different tools are used for different materials is imperative for creating quality outcome
- Handling tools such as clay tools, carving tools, wire cutting and moulding tools
- The Ceramic studio also houses state of the art pottery wheels and furnaces required for baking and glazing



## **Concept Studio**



- Design students have to showcase their designs to gain adequate feedback from peers, faculties and experts and hence improve themselves in the process
- This studio houses the best projects done by the past and current students
- Any important guests visiting the universities tour this studio providing a scope of recognition and employment opportunities for the students

#### Pace Lab

- Any product designed with the intention of mass production, has to be tested for feasibility and manufacturability before it is ready for real life fabrication
- Product Design includes digital form generation and exploration, material selection and is used in creating realistic renders for which excellent computer resources are very much essential
- Students can model the products and create several iterations, apply material finish for realistic renditions of their imaginations by using software's such as CATIA, sketchbook pro, coral painter



### **Fashion Design Laboratories**



- Evolutionary and innovations in the production of textiles, apparels and clothing has opened the gate way for intelligent fashion in the forth coming years
- Centre of Excellence for Garment Design, Garment Manufacturing and Quality Control was established in the department of Fashion Design, FAD by Handloom and Textiles Department
- Sewing Machine Manual Floral Face Plate and Arm Side Cover, Lever Type Stitch Regulator for Forward and Reverse Stitch Control, Auto Tripping Spring Loaded Bobbin Winder for Uniform Winding of Bobbin, Sheet Metal Bobbin Winder

### **Textile Processing and Quality Testing Lab**

- Textile testing is a key in gauging product quality, ensuring regulatory compliance and assessing the performance of textile materials
- It is a vital basic tool during the processing of a textile raw material into the product
- Textile testing refers to the procedures adopted to determine quality throughout the textile product chain and the application of engineering facts and science to determine the quality and properties of a textile product



## **Rotary Vacuum Evaporator**



- A rotary evaporator is a device used in chemical laboratories for the efficient and gentle removal of solvents from samples by evaporation
- Vacuum evaporators as a class function because lowering the pressure above a bulk liquid lowers the boiling points of the component liquids in it

#### **Probe Sonicator**

- This LABMAN equipment is an ultrasonic probe sonicator in which ultrasonic energy is produced by converting the electrical energy into mechanical vibrations
- This probe sonicator is an ideal instrument to accelerate the chemical and or physico chemical reactions, for the purpose of liquid degassing and also for sample cleaning i.e., to removes all dirt & foreign bodies from components which are immersed in the cleaning liquid



#### **Rubber Rolls Sheller**



- The rubber roll sheller SH A is used in rice processing plants if the paddy rice is to be shelled carefully at high capacities
- For an optimum shelling process, the circumferential and differential speeds of the rubber rolls can be adapted to different rice varieties
- While the paddy is transported through the gap between the rubber rolls, the rolls are cooled by a fan

#### Freeze Drier



- Freeze drying is the removal of ice or other frozen solvents from a material through the process of sublimation and the removal of bound water molecules through the process of desorption
- Excellent method for preserving a wide variety of heat-sensitive materials such as proteins, microbes, pharmaceuticals, tissues & plasma

#### **Continuous Band Sealer**



- Continuous Band Sealer Machine capable of sealing a wide range of bags such as stand-up pouches (Doypack), gusseted bags, pillow-type bags, sachets, barriers bags
- Typical products being packaged with these units include Aggregates, Coffee, Chemicals, Spices, Soaps, Sauces, Snacks, Cookies, Chocolates, Cereals, Dyes, Grains, MREs, Pastas, Pet Food, Pastries, Flours, Parts, Tortillas, Vegetables, and many other products

### **Environmental Chamber**

- An environmental test chamber artificially replicates conditions which machinery, materials, devices or components might be exposed to
- It is also used to accelerate the effects of exposure to the environment, sometimes at conditions not actually expected
- Thermal Shock testing is used to simulate how materials will react when exposed to changes in extreme climatic conditions, such as going from extremely cold to extremely hot conditions in a very short period of time (usually only few seconds)



## Digital bursting strength tester

- The force required for bursting or complete rupture of the board is measured through digital indicator
- The bursting strength defines the material quality as compared to others
- The digital bursting strength tester provides hydraulic load under rubber diaphragm of a specific area of the sample under test





#### Sieve Shaker



- Sieve shakers are used for separation and size determination of particles
- A typical sieve shaker separates particles by passing them through a series of chambers with mesh filters and agitating the sample in order to obtain complete separation
- Choice of equipment will depend on the type of lab and the samples being processed

# Cup and bottle sealer – Hitech Pack

- These advanced cap sealer machines are used for capping bottles and vials
- These capping machines are suitable for a wide range of applications because it is capable to handle bottles and vials of different shapes, sizes and materials



# **Gerber Centrifuge**



- It is used for separating particles from a solution according to their size, shape, density, viscosity and rotor speed
- the particles are usually cells, subcellular organelles, viruses, large molecules such as proteins and nucleic acids
- It works on the basic Theory of Sedimentation

## Vacuum packing machine – Hitech Pack

- Vacuum packing is a method of packaging that removes air from the package prior to sealing
- This method involves (manually or automatically) placing items in a plastic film package, removing air from inside and sealing the package
- Shrink film is sometimes used to have a tight fit to the contents





# Kalweka All Purpose Equipment



- Kalweka equipment is available with 11 attachments
- All-purpose Lab Model is used in pharma industry for Research & Development
- Comes with Horizontal Drive with different attachments
- Ideal for process optimization of pilot scale up manufacture of pharmaceuticals, food supplements and cosmetics product

### **Brookfield's Viscometer**

- Used to measure product viscosity of various pharmaceutical formulations like solutions, suspensions and semisolid formulations like creams and ointments.
- Used in both controlled stress and controlled rate modes to characterize creep behaviour as well as yield stress and viscosity profiles



# **Cooling Centrifuge**



- The centrifuge spins samples at a fast rate, resulting in heavy components to migrate away from the center axis and lighter components to migrate towards the axis. Centrifuge devices are widely used tools in food processing and medical research for cellular, genetic, biological and protein separation analysis
- Additionally provides the cooling mechanism to maintain the uniform temperature throughout the operation of the sample.



# **Disintegration Tester**

- The primary purpose of disintegration tester is to measure the time taken for a tablet (sample) to totally disintegrate inside a liquid medium
- Disintegration tester allow researchers and quality control technicians to ascertain if a tablet does indeed breakdown inside the human body, and how long it takes to do so
- This can provide information useful to improving and manufacturing pharmaceutical drugs and also confirm that standards of compliance and regulation are being maintained



#### **Dissolution Tester**



In the pharmaceutical industry, drug dissolution testing is routinely performed to provide critical invitro drug release information for both quality control purposes, i.e., to assess batch-to-batch consistency of solid oral dosage forms such as tablets and also during formulation development process to predict in-vivo drug release profile

### Flame Photometer

- It is used in determination of potassium, sodium, magnesium and calcium in biological fluids like serum, plasma and urine
- Also used for analysis of industrial water, natural water for determining of elements responsible for hard water, soil samples etc.





# FT-IR Spectrophotometer



- FTIR (Fourier Transform Infra-red Spectroscopy) is a precise method used for identifying organic chemicals in a wide range of applications
- It is also possible to identify some inorganic compounds. Paints, resins, adhesives, polymers, drugs and coatings are some of examples
- It could also be used for drug –excipient compatibility studies during formulation development

### **High Performance Liquid Chromatography**

- HPLC is a chromatographic method that is used to separate a mixture of compounds in analytical chemistry and biochemistry so as to identify, quantify or purify the individual components of the mixture
- Extensively used in food and pharmaceutical industry



## **High Performance Thin Layer Chromatography**



- HPTLC technique is widely employed in the pharmaceutical industry in process development, identification and detection of adulterants in herbal products and helps in the standardization of herbal drugs
- HPTLC is an advanced sophisticated form of TLC

### **Lite Image Microscope**

- This microscope uses visible light to detect and magnify very small objects and enlarging them to obtain digital images of the same
- Useful in microbiological examination of the organism and histopathological studies
- It is used for powder analysis of crude drug samples
- Used in histopathology when dealing with tissues, or in smear tests on free cells or tissue fragments



### Lyophilizer



- Lyophilization is regularly used to preserve vaccines, pharmaceuticals, and other proteins in dry form totally free from moisture / solvent
- Freeze-drying is also used to preserve special food products, eliminating the need for refrigeration

### Multimill

- Multi mill is used for high speed Granulating, Pulverizing, Mixing, Shredding and Chopping, etc., of a wide range of wet and dry materials without special attachments
- This machine utilizes the principle of variable force swing hammer blades having both knife and impact edges rotating with a carefully selected screen to control size reduction



#### Pelletizer



- Pelletizer is especially useful for making dense granules for controlled-release solid oral dosage forms with a minimum amount of excipients
- Extensively used in food and pharmaceutical industry

#### **Probe Sonicator**

- Probe Sonicator is often used to disrupt cell membranes and release cellular contents
- It is used to fragment molecules of DNA
- It is extensively used in nanotechnology for evenly dispersing nanoparticles in liquids and for breaking down particles to nano size



# **Rotary Tablet Punching Machine**



- The equipment is useful for making tablets. Can manufacture tablets for a wide variety of materials like pharmaceuticals, cleaning products, cosmetics
- Different shapes of tablets can be compressed using the powder / granules form of raw materials



## **Ultro Turrex Homogeniser**

- It is used to create a uniform and consistent mixture
- It works by breaking the components and evenly distributing them throughout the solution
- Its yields are typically incorporated into critical products like vaccines, antibiotics, cancer treatment, and pharmaceutical creams



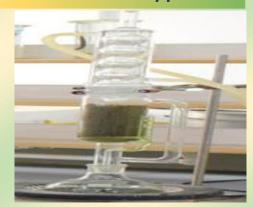
### **UV Spectrophotometer**



- Light with a wavelength range between 190 nm and 800 nm is radiated through the cuvette using a spectrometer and absorption spectrums are recorded
- It is possible to use different broadband UV-Vis light sources
- It is used to estimate the drug concentration in various formulations

## **Soxhlet Apparatus**

- It is the most useful apparatus for solid–liquid extraction in various fields such as pharmaceuticals, Herbal & also foodstuffs
- Nowadays, Soxhlet apparatus is still common and widely used as a reference and standard method in many laboratories for the extraction of oil from various materials



#### **Rotational viscometer - LABMAN**



- Viscosity is usually described as the property of a fluid which determines the rate at which local momentum differences are equilibrated
- Rotational viscosity is a property of a fluid which determines the rate at which local angular momentum differences are equilibrated
- If there is a lack of equilibrium between these degrees of freedom, then the rate of equilibration will be determined by the rotational viscosity coefficient

## Deep fryer - GVP

- Deep fryers generally have a basket to lower the food into the oil tank and raise it when the food has finished cooking
- Fryer baskets purchased separately are not standardized and when selected, need to fit into the deep fryer



#### Vacuum Oven - Lawkim



- Vacuum drying is the mass transfer operation in which the moisture present in a substance, usually a wet solid, is removed by means of creating a vacuum
- In chemical processing industries like food processing, pharmacology, agriculture, and textiles, drying is an essential unit operation to remove moisture

# Tray drying - ISOTECH Technology Pvt Ltd

- Tray dryer can be electrically heated, and Steam heated
- Tray Dryer comes in 6 trays, 12 trays, 24 trays, 48 trays, 96 trays and 192 trays
- The construction of the machine varies as per requirement of the customer, it can be inside outside MS or GMP model depending upon the product and industry requirement





### **Smart Dentin Grinder-Kometabio White**

The below mentioned grinder was indented for Ph.D. study and after which it will be used in Oral Surgery department for socket preservation using autogenous graft material.

The specifications of the products is as follows:

- 1.Wattage 300-500W
- 2.Usage -Hospital
- 3. Operation mode: Electric and manual
- 4. Power source-Electricity
- 5. Portable
- 6.Phase-Single phase
- 7. Frequency-50Hz
- 8. Display Digital

Other details: Uses extracted teeth to create superior quality, autogenous dentin graft, chairside within 15 minutes.

- Reduces healing time
- Maintains bone mass and ridge height which is necessary for rehabilitation
- Reduce cost
- No fear of graft rejection

It comes with the grinder which has a sieve and 12 autoclavable jars and reagents for graft preparation.

#### Cost: 60,000rs

- Conference presentation done using the Smart Dentine grinder for AIP conference, and published in AIP conference proceedings:
- Title: Assessment of inorganic and organic components in demineralized tooth graft material.
- Further to continue the usage of the apparatus in clinical study





#### Microwave Oven – BOSCH



- A microwave oven is an electric oven that heats and cooks food by exposing it to electromagnetic radiation in the microwave frequency range
- Microwave ovens heat foods quickly and efficiently because excitation is fairly uniform in the outer 25– 38 mm



### Microwave system

- Microwave-assisted extraction is an efficient method which involves deriving natural compounds from raw plants
- Microwave extraction allows organic compounds to be extracted more rapidly, with similar or better yield as compared to conventional extraction methods



### **Oral Pathology Museum**



- Museum being a combination of both art and science requires skilled workmanship, meticulous planning and execution to exhibit a specimen to its optimal elegance due to its relatively smaller size and fragile nature
- A well-established Oral Pathology Museum is rarely seen due to negligence of Oral specimens, dearth of knowledge in this field and availability of data

# **3D Printer-Divide by Zero AION 500 MK2**



#### **Building Volume:**

• 500mm\*500mm\*500mm

#### Layer Thickness in mm:

- Range1:0.1-0.15
- Range2:0.15-0.25
- Range3:0.25-0.3

#### **Model Materials:**

- ABS, PLA, HIPS, PETG
- Carbon Fiber, AFPM

#### **Building Speed:**

• 300mm/sec

#### **Present Status:**

Operational



# 3D Printer-Divide by Zero AEQON 400V3

#### **Building Volume:**

400mm\*300mm\*300mm

#### **Layer Thickness in mm:**

Range:0.1-0.25

#### **Model Materials:**

- ABS, PLA, HIPS, PETG
- Carbon Fiber, AFPM
- Metafil, Flexible filaments etc

#### **Building Speed:**

200mm/sec

#### **Present Status:**

Operational



#### 3D Printer-HP's Jet Fusion 580 Color 3D Printer



#### **Technology:**

Multi Jet Fusion Technology

#### Layer Thickness in mm:

0.08mm (0.03 inch)

#### **Building Volume:**

• 332mm\*190mm\*248mm

#### **Print head Resolution:**

• 1200dpi

#### **Building Speed:**

• 2,199cm3/hr

#### **Present Status:**

- Operational
- Will be commissioned in 1st Week of October



# 3D Scanner- Carl Zeiss's COMET LED 2

#### **Sensor Head:**

COMET LED

#### **Measuring Distance:**

• 760mm

#### **Camera Resolution:**

• 2448\*2050

#### **Acquisition Time Preview:**

<1sec</li>

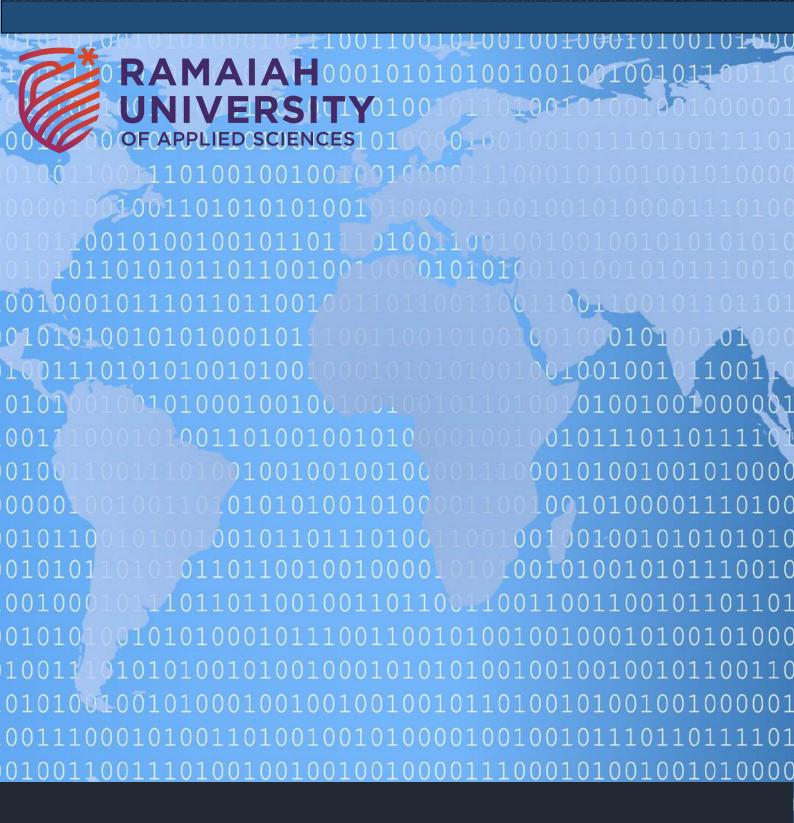
#### **Light Source:**

Blue LED

#### **Present Status:**

Operational





# **Research Division**

# Ramaiah University of Applied Sciences

University House, Gnanagangothri Campus, New BEL Road, M S R Nagar, Bangalore, Karnataka, INDIA - 560 054.

Tel.: +91 80 4536 6666 I Fax: +91 80 4536 6677

Email: dd.sr@msruas.ac.in Web: www.msruas.ac.in

#### **About Advanced Learning Center (ALC):**

The ALC of RUAS has one of its kind 'Surgical Skills Lab' for training Qualified Medical Professionals and Students. The Cadaveric Unit provides an opportunity to learn in an 'Operation Theatre' like ambience to work on a 'Near Life' like specimen. A state of the art facility initiated by the Gokula Education Foundation, Medical provides opportunities for training & research for medical, paramedical and nursing Students and Staff.

#### **Objective:**

To deliver Quality Education & Health care for the betterment of Mankind

#### **Facilities:**

- Cadaver Surgery & Research Lab
- Trauma Life Support Courses
- > Tissue Bank
- Multimedia Learning Center
- Video-Conferencing Facility
- ➤ Live Transmission of Surgical Procedures & Seminars
- Basic & Advanced Medical & Surgical Skills Training
- > Simulated Learning With Simman 3g , Lapmentor, Bronchomentor etc.



#### **Computing Facilities at Ramaiah University of Applied Sciences**

Providing adequate Computational facilities for teaching and learning has always been a priority area of Ramaiah University of Applied Sciences. University will endeavour to implement a standardized desktop environment for use by Students and Staff to ensure uniform look and feel, access, quick and efficient problem resolution by IT personnel. University has a total number of 17 computer laboratories across all faculties with high end 1300 + computers. These computers are having advanced domain specific software tools including industry grade to imbibe the ambience of research, higher learning and technological development. All the classrooms of the University are having computers installed to facilitate the lecturers to teach the students in a more sophisticated manner. Each faculty member of the University are provided with computers to enable them to accomplish their day to day activities and help them in preparation of presentations, notes, assignments, question papers, etc. The administrative staff members of the University are also being provided with computers to carry out the daily administration works. The libraries of the University are having exclusive browsing centers with computers installed to help the students to browse internet and download academic related materials. The University is having high end servers to maintain databases, licenses, data storage, etc. High end graphical and computational workstations are available for student's access to help them in carrying out their project works.

#### **Computing Facilities at RUAS**

Sl. No.	Description	Quantity
1	Systems for Classrooms, Laboratories, Library	1387
2	Systems for Staff	584

#### **Computer Student Ratio**

Number of computers for students in working condition	1387
Total Number of students	5500
Computer Student Ratio	3.96

### List of Software at Ramaiah University of Applied Sciences

#### Faculty of Engineering and Technology

#### **Mechanical & Automotive Engineering**

SI. No.	Software
1	ABAQUS STUDENT EDITION
2	ALTAIR HYPERWORKS
3	AMESIM
4	ANSYS
5	ARENA SIMULATION SOFTWARE
6	AUTODESK SUITE
7	AXSTREAM
8	CAMBRIDGE MATERIAL SELECTOR



9	CAPSMILL
10	CAPSTRUN
11	CASTING PROCESS DESIGN
12	CATIA-V6
13	LS-DYNA
14	MINITAB
15	MSC ADAMS
16	MSC APEX
17	MSC NASTRAN
18	MSC PATRAN
19	MSC MARC
20	MSC DYTRAN
21	PREACTOR
22	QA SIX SIGMA SUITE
23	RICARDO
24	SIMIO
25	SWANSOFT CNC SIMULATION
26	UNIGRAPHICS-NX
27	MACHINE DESIGN ONLINE
28	BOSCH ESI FOR KTS

#### **Computer Science and Engineering**

Sl. No.	Software
1	ANDROID ADT
2	ANDROID STUDIO
3	APACHE + PHP
4	ARM DS-5
5	BLUESTACK
6	DIA
7	ENTERPRISE JAVA TOOL CHAIN
8	GNU TOOL CHAIN + OPENMP
9	GREENFOOR IDE
10	HASKELL PLATFORM
11	LINUX KERNEL
12	MPLAB IDE
13	MYSQL
14	NETBEANS IDE
15	NS2 & NS3 SIMULATORS
16	PYTHON TOOLS
17	SAGEMATH
18	TEXMAKER
19	TOMCAT & GLASSFISH



20	APPLICATION SERVERS
21	XENOMAI KERNEL PATCH

### **Electrical and Electronics Engineering**

Sl. No.	Software
1	ADVANCED SYSTEM DESIGN (ADS)
2	ANSYSCODE COMPOSER STUDIO
3	ARM RVDS
4	METROWERKS CODE WARRIOR
5	CADENCE UNIVERSITY BUNDLE ANALOG & DIGITAL FE & BE
6	EMPIRE 3D
7	EMPRO 3D EM SIMULATION
8	FLASH MAGIC
9	KEIL MDK ARM
10	MADYMO
11	MPLAB IDE
12	NI LABVIEW, NI MULTISIM
13	PSPICE STUDENT EDITION
14	TASM
15	XILINX VIVADO
16	LOGICSIM
17	PROTEUS
18	EMULATOR 8086
19	ROBO STUDIO
20	ANSYS SIMPLORER, MAXWELL
21	MATLAB
22	COMSOL MULTIPHYSICS
23	LUMERICAL LAB SUITE

### **Civil Engineering**

Sl. No.	Software
1	ANSYS
2	AUTODESK SUITE
3	STADD PRO - FOUNDATION ADVANCED, GLOBAL DESIGN CODE
4	BENTLEY POWER REBAR
5	RAM CONCEPT
6	MICROSTATION + POWER DRAFT
7	BENTLEY NAVIGATOR
8	AECOSIM - BUILDING DESIGNER, ENERGY SIMULATOR
9	BENTLEY DESCARTES
10	BENTLEY MAP ENTERPRISE



11	BENTLEY POINTOOLS
12	SEWER GEMS
13	WATER HYDRAULICS PRODUCTS
14	STORM CAD
15	CIVIL STORM
16	HAMMER
17	BENTLEY - MX ROAD SUITE
18	BENTLEY - POWER CIVIL FOR COUNTRY
19	BENTLEY - MAX SURF ENTERPRISE
20	SACS MARINE ENTERPRISE
21	SACS OFFSHORE STRUCTURE ENTERPRISE

#### **Faculty of Art and Design**

Sl. No.	Software
1	AUTODESK SKETCHBOOK PRO
2	AUTODESK SKETCHBOOK DESIGNER
3	AUTODESK AUTOCAD
4	AUTODESK ALIAS AUTOMOTIVE
5	AUTODESK MAYA
6	AUTODESK 3DS MAX
7	AUTODESK SHOWCASE PROFESSIONAL
8	AUTODESK MOUNDFLOW INSIGHT ADVANCED
9	AUTODESK 360
10	COREL DRAW SUITE
11	COREL PAINTER
12	PINNACLE STUDIO
13	DFMA

### **Faculty of Management and Commerce and**

### **Faculty of Hospitality Management and Catering Technology**

Sl. No.	Software
1	FORTUNE NEXT 6i PRO
2	ORELL LANGUAGE S/W
3	MICROSOFT PROJECT
4	ERP NAVIGATOR
5	IBM SPSS
6	TALLY
7	MINITAB STATISTICAL S/W
8	IC SOFT
9	RISK POOL
10	TORA
11	JMP PRO STATISTICAL SOFTWARE



# **Faculty of Dental Sciences**

Sl. No.	Software	
1	DOLPHIN IMAGING PREMIUM	
2	VISTA SCAN & PRACTO	
3	CBCT	
4	3-MATIC	

#### **Faculty of Pharmacy**

SI. No.	Software
1	TURBO C
2	IR SOLUTIONS SOFTWARE
3	EURO CHROME SOFTWARE
4	PCP DISSO V2 – DRUG RELEASE KINETIC STUDIES SOFTWARE
5	GRAPH PAD PRISM – VER. 4.0 SOFTWARE
6	CAMAG – HPTLC SYSTEM – SWITZERLAND (THIN LAYER CHROMATOGRAPHY –
	WINCAT'S SOFTWARE)
7	MICRO IMAGE LITE – OLUMPUS
8	BIOVIS – IMAGE CAPTURE SOFTWARE
9	NIVIQUE DAS SYSTEM (ECG, BP, TISSUE CONTRACTION – INCREASED USE OF DRUG)
10	ANIMAL SIMULATOR PHARMACOLOGY PACKAGE (EXPHARMAPRO + EXCOLOGY)
11	MICROMEDEX – DRUG INFORMATION SOFTWARE
12	TOPCAT - DRUG DESIGN - AUXILIARY SOFTWARE
13	WORDS WORTH ENGLISH LANGUAGE
14	SCHRODINGER SUITE
15	nMASTER 2.0 SAMPLE SIZE SOFTWARE
16	MICROMEDEX CLINIC KNOWLEDGE SUITE (FPH) DRUG INFORMATION, DRUG
	INTERACTIONS & IV COMPATIBILITY, POISON MANAGEMENT INFORMATION DISEASE
	MANAGEMENT (GENERAL & EMERGENCY) SOLUTION FREE MICROMEDEX APPS
17	GASTRO PLUS, DRUG-DRUG INTERACTION MODULE, OPTIMIZATION MODULE,
	METABOLISM & TRANSPORTER MODULE, PBPK PLUS MODULE, ADMET MODULE FOR
	GASTRO (INDLUDES PHYSIOCHEMICAL PROPERTY MODULES ONLY), ADDITIONAL
	DOSAGE ROOTS MODULE (INDLUDESL TWO OF THE FOLLOWING DELIVERY
	MODULES: PULMONARY, OCULAR, ORAL, CAVITY OR DERMAL), IVIV CPLUS MODULE,
	PK PLUS MODULE
18	SYSTEMS BIOLOGY SUITE WITH PK-SIM AND MOBI FOR QUANTITATIVE SYSTEMS
	PHARMACOLOGY WITH MOBI TOOLBOX INTERFACE FOR MATLAB (TECHNICAL
	COMPUTING) AND R (STATISTICAL COMPUTING)



#### **General Software**

SI. No.	Software
1	KASPERSKY END POINT SECURITY SELECT, FOR FILE SERVERS, WORKSTATIONS,
	DESKTOPS AND LAPTOPS WITH CENTRALIZED MANAGEMENT CONSOLE
2	MICROSOFT OFFICE 365
3	MICROSOFT CAMPUS AGREEMENT
4	LIBSOFT - LIBRARY S/W
5	FRONT PAGE
6	JUNO CAMPUS UNIVERSITY MANAGEMENT ERP SOFTWARE
7	TALLY MULTI USER
8	SARAL PAY PACK
9	ACC PAC
10	TURNITIN - ANTI PLAGIARISM
11	ALUMNI MANAGEMENT S/W
12	TIME ATTENDANCE MGMT TOOL
13	HROPAL SOFTWARE (SALARY PACKAGE) (UPTO 2000 EMPLOYEES)
14	TOTAL QUALITY ASSURANCE SOFTWARE BY KAHAN TECHNOLOGIES PVT LTD

#### **Special Laboratory Equipment**

- Scanning Electron Microscope
- Tunnelling Microscope
- 3D Printers (ABS and Metal)
- ABB Robot
- Jet Engine Test Facility
- Aircrafts (2 numbers)
- Laser Trackers and CMMs for Reverse Engineering
- Universal Testing Machine with Insitu-Scanner and Camera Facility
- High Performance Thin Layer Chromatography (HPTLC)
- High Performance Liquid Chromatography (HPLC)
- Fourier Transform Infrared Spectrophotometer (FTIR)
- U V Visible Spectrophotometer
- Pilot Model Pharma Products Manufacturing
- Cone Beam Computed Tomography (CBCT)
- 1800<sup>0</sup> C Furnace
- Aircraft grade Composites Manufacturing Facility
- Clean Room (10000 grade)
- Wind Tunnels-Subsonic and Supersonic
- CNC-Turning Centre, Machining Centre and Wire-cut EDM

# **ANNEXURE 31a**





# **Annual Strategic Perspective Plan**

(2023-24)

# **Prepared by IQAC**

(Approved in Board of Governors meeting held on 1st September 2023)

# **Vision**

"MSRUAS aspires to be the premier University of choice in Asia for student centric professional education and services with a strong focus on applied research whilst maintaining the highest academic and ethical standards in a creative and innovative environment"

# Mission

Our purpose is the creation and dissemination of knowledge. We are committed to creativity, innovation and excellence in our teaching and research. We value integrity, quality and teamwork in all our endeavors. We inspire critical thinking, personal development and a passion for lifelong learning. We serve the technical, scientific and economic needs of our Society.





# **Index Sheet**

Sl. No.	Particulars	Page Number
1	Academics (Teaching-Learning-Assessment)	5-7
2	Research Promotion	8
3	Infrastructure (ICT and Learning Resources)	9-11
4	Student Support Systems	12-13

Redistrar M.S. Ramaiah University of Applied Sciences

Bangalore - 560 054



#### INTRODUCTION(OVERVIEW)

M.S. Ramaiah University of Applied Sciences is working emphatically towards implementing its Long term Strategic Plan (Vision 2025). The Annual Strategic Plan is prepared at the start of every year with a goal of achieving the Long term Vision of the University.

The Annual Strategic Plan (Short Term) for the year 2023-24 is prepared based on the various inputs received from the different stakeholders contributing for the University performance and development.

This plan presented below covers the aspects of

- 1. Academic (Teaching-Learning-Assessment),
- 2. Research and Innovation,
- 3. Infrastructure and ICT and
- 4. Student support systems.

The same has been approved by Board of Governors(BoG) in meeting

Registrar
Registrar
M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054



# 1. Academics (Teaching-Learning-Assessment)

Target Activity	Process involved	In-Charge	Planned Action to achieve target	Target period
Inclusion and operation of RMC, RCPT, RINER in RUAS ERP Portal.	ACM approval BOM and BOG approval	Vice Chancellor and Registrar	The Ramaiah Institute of Nursing Education and Research (RINER) is included into the ERP portal of RUAS. The inclusion of Ramaiah Medical College and Ramaiah College of Physiotherapy into the ERP is in progress.	Implemented from the AY 2024-25.
Introduction of sports and Yoga courses as per NEP Guidelines.	BOS recommendation, ACM and BOM approval	Registrar, Dean- Academics	The PS and CS for the same has been designed and approval got from ACM, BOM.	Implemented from the AY 2024-25.
Introduction of NPTEL/SWAYAM/MOOC courses shortlisted for each program (UG & PG).	BoS recommendation, ACM and BOM approval	Vice Chancellor, Registrar, Dean- Academics	A Faculty coordinator from each Faculty has been identified to monitor the student activities related to the online courses (NPTEL/SWAYAM/MOOC) for UG and PG programs	Functional from the AY 2023-24.

#### **Annual Strategic Perspective Plan (2023-24)**

Proposal of Fellowship in	ACM approval	Vice	Introduced in	Implemented
Oncology Pharmacy under Ramaiah University of Applied Sciences.	BOM approval	Chancellor, Registrar, Dean- Academics	view of increasing the employability of students at various medical sectors.	from the AY 2024-25.
Introduction of Digital Valuation.	ACM approval BOM and BOG approval	Vice Chancellor, Registrar, Dean- Academics	Faculty members are trained on the same.	Implemented from the AY 2023-24.
The programme codes are assigned to B. Voc. Programmes and PG Diploma in Railway Signalling and Telecommunication., as per NAD.	ACM approval BOM approval	Vice Chancellor, Registrar, Dean- Academics	Notified the Directorate of training and lifelong learning.	Implemented from the AY 2024-25.
Introduction of M.Sc. in Psychology at the School of Social Sciences from the academic year 2024.	BOS recommendations, ACM approval BOM and BOG approval.	Vice Chancellor, Registrar, Dean- Academics	Approval taken from all statutory bodies. Application sent to KSHEC for approval of the program.	To be Implemented from the AY 2024-25
'Introduction of B.Sc. (Hons) in Applied Economics' at the School of Social Sciences from the academic year 2024.	BOS recommendations, ACM approval BOM and BOG approval	Vice Chancellor, Registrar, Dean- Academics	Approval taken from all statutory bodies. Application sent to KSHEC for approval of the program.	To be Implemented from the AY 2024-25
Introduction of M. Sc in Data Science and Analytics at the School of Social Sciences from the academic year 2024.	BOS recommendations, ACM approval BOM and BOG approval	Vice Chancellor, Registrar, Dean- Academics	Approval taken from all statutory bodies. Application sent to KSHEC for approval of the program.	To be Implemented from the AY 2024-25

#### **Annual Strategic Perspective Plan (2023-24)**

LL.B. (Hons.) in Cyber Security program at School of Law from the academic year 2024.  Introduction of LL.B. (Hons.) program at School of Law from the academic year 2024.	BOS recommendations, ACM approval BOM and BOG approval  BOS recommendations, ACM approval BOM and BOG approval	Vice Chancellor, Registrar, Dean- Academics  Vice Chancellor, Registrar, Dean-	Approval taken from all statutory bodies. Application sent to KSHEC for approval of the program. Approval taken from all statutory	To be Implemented from the AY 2024-25  To be Implemented
(Hons.) program at School of Law from the academic year 2024.	recommendations, ACM approval BOM and BOG	Chancellor, Registrar,	from all	
Introduction of LL.M.	approva.	Academics	bodies. Application sent to KSHEC for approval of the program.	from the AY 2024-25
from the academic year 2024.	BOS recommendations, ACM approval BOM and BOG approval	Vice Chancellor, Registrar, Dean- Academics	Approval taken from all statutory bodies. Application sent to KSHEC for approval of the program.	To be Implemented from the AY 2024-25
Time B. Voc. Programmes from the AY	BOS recommendations, ACM approval BOM and BOG approval	Vice Chancellor, Registrar, Dean- Academics	Approval taken from all statutory bodies. Application sent to KSHEC for approval of the program.	To be Implemented from the AY 2024-25
Pharmaceutical Development and Manufacturing.	BOS recommendation, ACM approval BOM and BOG approval	Registrar, Dean- Academics	The course curriculum and other details of the courses have been defined.	Implemented from the AY 2023-24
	M.S. Ramaiah Uhiversit Bangalore	rar by of Applied Scie	nces	7



# 2. Research and Innovation

Target Activity	Related last academic year details	Target set	Target period
H-Index of the institute	40	55	End of Academic Year
No. of Research Publications Scopus Indexed Journals	550	530	End of Academic Year
No. of Research Publications in Web of Science	350	360	End of Academic Year
Total of all publications	750	800	End of Academic Year
No. of patents applied	25	30	End of Academic Year
No. of patents granted	20	47	End of Academic Year
Average Impact Factor	3	5	End of Academic Year
No. of Research projects from Government and Non-Government agencies	25	30	End of Academic Year
Project Funds received	200 Lakhs	200 Lakhs	End of Academic Year
Grants(funds) received from Consultancy	85 Lakhs	100 Lakhs	End of Academic Year
No. of PhD awarded	15	20	End of Academic Year
National and International Conferences/Seminars conducted	150	175	End of Academic Year
MoUs	15	20	End of Academic Year

Registrar



# 3. Infrastructure(ICT and Learning Resources)

# A) Infrastructure

Activities Planned	Targeted Infrastructure Creation	Proposed Target for Completion
Center for Advanced Computing at RTC	Creation of Labs-08, Class rooms-06, Seminar halls- 02, Discussion room-01	End of Financial Year
Renovation of Library project at RTC	475 Seating capacity with adequate book racks	End of Financial Year
Center for Entrepreneurship	Smart class rooms-05, Work stations-38, Discussion room-03, meeting room-01	End of Financial Year
Up gradation of Animal room, Machine room project at FPH	Animal rooms-05, Auto clave room, cage wash room, procedure room as per GLP regulations Tablet processing room, compounding area, tablet coating area etc as per GMP regulations	End of Financial Year
Solar project at RTC Hostel	35 Kw ongrid solar system	End of Financial Year
Modification above forensic building for FMC/FLAHS	Class rooms-07, seminar hall-02, Discussion room-01, Conference room-01,Library-01	End of Financial Year
Extension of Advanced learning Center, creation of lab for ALC Project	Minor OT, Conference room, Wet lab, Cold storage, tissue bank, Cadaver receiving etc	End of Financial Year
Laboratory project at FPH	Creation of Laboratory-10 nos	End of Financial Year

# **B)** Library

Particulars	Existing	<b>Proposed Target</b>	Target Period
No. of volumes of textbook	40000	45000	End of Financial Year
No. of volumes of reference textbooks	75000	80000	End of Financial Year
Journals	200	250	End of Financial Year
e-Journals	3000	3500	End of Financial Year
Databases	20	25	End of Financial Year
Ebooks	230000	250000	End of Financial Year



# **Enrichment / Training Programmes at Library**

Event	Dated	Benefited
EBSCO Pharmacy Database Training for FPH Faculty	August-2023	Faculty
Orientation Program about Library Resources for University Students [Deeksharambha]	August-2023	UG Students
Orientation Program about FDS Library Resources	August-2023	PG & UG Students
Orientation Program in FHMCT students about Library Resources	August-2023	UG Students
Orientation Program for B.Sc. Nursing Students	August-2023	B.Sc. Nursing Students
Celebration of Dr. S. R. Ranganathan [father of Indian Library Science] Birthday in RUAS Libraries	August-2023	Library Community
Orientation Program about Library Resources to FPH Students	August-2023	UG Students
Orientation Program for General Nursing Midwifery	September-2023	General Nursing Midwifery Students
Organized One Day Hands on Training Program on "Community Library Resource Management" at School of Law, Heritage Bulding	September-2023	Abhistanam NGO
Orientation Program for M.Sc. & P.B.B.Sc. Nursing Students	October-2023	UG & PG Students
Orientation Program for 2023 -24 Batch FDS Students	October-2023	UG Students
The Orientation Program for Postgraduate MPT Students	November-2023	RMC Students
Orientation Program for 2023 -24 Batch FDS Students	November-2023	PG Students
Two-Day G20 Book Exhibition Summit 2023	November-2023	RUAS Community
Orientation Program for Postgraduate BATCH-1 Students	November-2023	RMC Students
EBSCO HTC Database awareness Programme to FHMCT faculty	December-2023	Faculty
Training of Subscribed E-Resources to FPH faculty	December-2023	Faculty
Orientation Program for Postgraduate BATCH-2 Students	December-2023	RMC Students
Hardward Business Review to FMC students & Faculty	December-2023	PG, UG and Staff
Training session on "RGUHS- HELINET Consortium: EBSCO E-Resources"	December-2023	RMC Students
EBSCO Business elite for FMC students & Faculty	January-2024	PG, UG and Staff
Pearson E Books for FMC students & Faculty	January-2024	PG, UG and Staff
Orientation about Turnitin Plagiarism Software	January-2024	Staff & Students
Library Orientation to FMC students & Faculty	January-2024	PG and UG



#### **Annual Strategic Perspective Plan (2023-24)**

Training of Subscribed E-resources for Nursing Students & Faculty	January-2024	Staff & Students
Orientation Program about Library Resources to FPH PG students	February-2024	PG Students
HELINET Remote Access (faculty & RGUHS affiliated students)	March-2024	Staff & Students
Manupatra Database Training at SOL	March-2024	UG & PG Students
Newly Joined Faculty about Subscibed E- Resources Training Program	March-2024	Faculty
Training about Business Standard to FMC students & Faculty	5-Mar-24	PG, UG and Staff

# C) ICT Facilities(upgradation)

Facilities	Proposed Target	Achieved Target	Target Period
Computers	Addition of 700 Computers to labs and Staff	541 purchased for laboratories / Staff	2023-2024
Lecture Capturing System	Installation of 20 LCS facility across University	14 LCS facility installed	2023-2024
Smart Classroom	Upgradation of classrooms to Smart Classrooms (50 Classrooms)	34 Smart board installations done	2023-2024
Upgradation of Computers	Upgradation of old computers to enhance performance (250)	150 computers upgraded in the first phase	2023-2024
Network Security	Gateway level security upgradation at both campuses (Firewall)	Project completed	2023-2024
Campus Wi Fi Solution	Installation of Wi Fi access points with cloud controller, unified access across university	40% coverage completed in the first phase across university	2023-2024
Passive Networking at newly constructed / renovated buildings	Faculty of Pharmacy renovated building Networking	Project completed	2023-2024
Communication	Upgradation of communication system from Analog to I/P	Upgradation of analog to I/P system at UH and Heritage Block	2023-2024
AV solutions	Establishment of AV Solutions in Board Rooms at RTC and GGC	Project completed	2023-2024

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# 4) Student Support Systems

# i) Student Enrichment Programmes / Training / Seminars / Workshops / Guest Lectures

Target Activity (proposed programmes) Faculty/School/Department responsible/ Details of the Event			
Rotaract Club of RUAS	Her Money Talks	August-2023	
NSS & Rotaract Club of RUAS	AZAD KADAM – Walk with Tiranga	August-2023	
Rotaract Club of RUAS	SYNERGYCON	August-2023	
Drama Club - Anunubhooti	Street Play - Voice of the Dalits (Adivaasi KI Awaz)	August-2023	
Photography Club- Capture Through Lens	World Photography Day	August-2023	
Dance Club- Pravaah	Flash Mob - anti ragging	August-2023	
Rotaract Club of RUAS	World Peace Seminar	September-2023	
NSS & Rotaract Club of RUAS	Menstrual Awareness Campaign	October-2023	
Rotaract Club of RUAS	Wildlife Awareness Program	October-2023	
Club	Club Medley	December-2023	
NSS & Rotaract Club of RUAS	Stray Dogs Collaring	October-2023	
Rotaract Club of RUAS	World Food Day Seminar	October-2023	
NSS & Rotaract Club of RUAS	Food Distribution	October-2023	
NSS RUAS	World Food Day Seminar	October-2023	
NSS & Rotaract Club of RUAS	Street Play on Hand Hygiene	October-2023	
NSS & Rotaract Club of RUAS	Brave Talks	October-2023	
Rotaract Club of RUAS	Dandiya Dhamaal	October-2023	
TedxRUAS Club	TedxRUAS Talks	November-2023	
Rotaract Club of RUAS	PetFed	November-2023	
NSS & Rotaract Club of RUAS	Walk To Heal	January-2024	
NSS & Rotaract Club of RUAS	Blood Donation Camp	January-2024	
NSS & Rotaract Club of RUAS	Terrarium Workshop	January-2024	
NSS & Rotaract Club of RUAS	Seed Ball Prep'n Workshop	January-2024	
NSS & Rotaract Club of RUAS	Huggi Suggi	January-2024	



#### Annual Strategic Perspective Plan (2023-24)

CRY Walkathon	January-2024
Face painting and Rangoli Competition	January-2024
Samvidhan Jatha	January-2024
World Cancer Day	February-2024
International Women's Day	March-2024
Blood Donation Camp	March-2024
Maybelline Workshop-Brave Talk - Mental Health Awareness Drive	March-2024
Cyber Safe Girl	March-2024
Careers in AI and Mind GYM	March-2024
Inter university Drama	March-2024
	Face painting and Rangoli Competition Samvidhan Jatha World Cancer Day International Women's Day Blood Donation Camp Maybelline Workshop-Brave Talk - Mental Health Awareness Drive Cyber Safe Girl Careers in Al and Mind GYM

# ii) Student -Extra-Curricular Activities-Plan of Action

Target Activity (proposed programmes)	Faculty/School/Department responsible	Target period	
World Suicide Prevention Day	All Departments	November-2023	
Installation of Student Council	All Departments	November-2023	
Student Achievements Awards ceremony	All Departments	November-2023	
Teachers Day - 2023	All Departments	September-2023	
International Day of Yoga	All Departments	June-2024	
Karnataka Rajyotsava Kahale-2023 GG Campus	All Departments	November-2023	
Karnataka Rajyotsava Dindima 2023 RT Campus	All Departments	November-2023	
Akaria 2024	All Departments	March-2024	

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# **ANNEXURE 31b**

# Institutional Development Plan (AY 2023-28)





Submitted by: IQAC

Approved in Board of Governors (BoG) held on 28th Nov' 2022



#### **Executive Summary**

The concept of 'Excellence' is well established and the term is used frequently to 'Outstanding Performance' satisfying stakeholders' involvement. In higher education, Excellence is linked to perception of student experience, teaching, learning and service to society in alignment with Vision and Mission of the University. MSMSRUAS is thankful to the sponsoring body, GEF (M) to constitute Executive Advisory Board (EAB) for Ramaiah Group of Institutions. In view of this, MSRUAS aspires to become a premier Institution by achieving Excellence by leveraging best practices from NEP2020. Thus, there is a need to analyze excellence through the lens of different key stakeholders, namely Students, Parents, Employers, Alumni, Industry, Community Service and Society. Therefore, MSRUAS has formulated the following 10 Goals to achieve excellence in the next five years:

Goal 1: Achieving Academic Excellence

Goal 2: Increasing Quality Research Outputs

Goal 3: Deeper Linkages with Industries and Corporates

Goal 4: Multi-Disciplinary Activities with other Faculties/Schools of Ramaiah Group of Institutions

Goal 5: Sought After University for Students

experts to arrive at an unique IDP for the entire University.

Goal 6: Extension and Outreach Activity

Goal 7: National and International Collaborations

Goal 8: Accreditation and Rankings

Goal 9: Providing Quality Healthcare across the Spectrum

Goal 10: Policies and Systems from the Leadership Group embracing ESG

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This Institutional Development Plan (IDP) [2023-28] report Strategies to be adopted to achieve the above- mentioned Goals in a post pandemic scenario as a new normal. Bottom-up approach was adopted to develop the IDP where Faculty Members, HODs and Deans were engaged in developing Faculty/School specific IDPs along with input from Students. The IDPs were internally reviewed and presented to the external experts of EAB. This document consolidates the suggestions and recommendations by all the

After formulating Strategies, the Implementation Plan with Outcomes are also mapped to assess the progress of MSRUAS in the process of achieving Excellence. The Leadership Group has entrusted and empowered all Deans and HoDs for implementation of the same. Moreover, the Leadership Group has



adopted bottom-up approach to prepare this report by involving Faculty Members, HoDs, Deans and Directors. The five-year plan focuses on all-round development of Students and Faculty Members emphasizing on Inter-Disciplinary Research, Blended Learning, Service to Society, Industry Connect, Experiential Learning and International Engagements for better Employability and Entrepreneurship Skills. The MSRUAS Community aspires to achieve excellence with cooperation from all the Stakeholders and Sponsoring Body. Hence, the Strategic Vision Document shall be deemed as a critical road map document for the progress of University and the MSRUAS community shall adhere in letter as well as spirit.



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# Chancellor's Message

"There is a fundamental difference between being good and being excellent. As globalization brings in completely different standards, being the best in the Country is not enough; one has to be among the best in the World"

- Dr. M.R. Jayaram





#### **About the University**

Innovation is perceived as the key global differentiating factor for Individuals, Institutions and Nations in the 21<sup>st</sup> century. Innovation culminates in elevating, translating, and transforming the inventions to reach and meet the societal needs. In the process, Innovation embraces both Global thinking and Local perspectives. M S Ramaiah University of Applied Sciences (MSRUAS) was established in December 2013, as a State Private University, under section 2(f) of the UGC Act 1956.

MSRUAS is envisioned as a modern as well as innovation—intensive University. In particular, Academic programs of MSRUAS are inter and multi-disciplinary in nature and designed to train students to be creative and innovative graduates. Special emphasis is provided for filing of Patents and Technology Transfer for the benefit of local society and mankind as well. RUAS which embraces "Applied Brilliance and Thinking" show case its Philosophy through proactive involvement of Faculty and Students to support "Make in India" and "Athmanirbhar Bharath". MSRUAS strives to maintain an environment that encourages scholarly inquiry and research, a spirit of creative independence and a deep commitment towards academic excellence. Our students come from diverse sections of the society and aim to become global citizens through enrichment of ideas, creativity, innovation and entrepreneurship. The University has received several accolades through Assessment & Accreditation Bodies for our programmes:

- Ramaiah Medical College received NAAC A+ Grade
- Faculty of Dental Sciences ranked 14 in NIRF-2023
- Faculty of Pharmacy ranked 65 in NIRF-2023
- Faculty of Hospitality Management and Catering Technology accredited by NBA
- QS-I-GAUGE has ranked RUAS in "Gold" Category

The University embraces Innovation ecosystem through four entities, viz., Academics, Research, Training & Lifelong Learning and Consultancy. Ramaiah University is keenly developing a research capability in evolving and exciting disciplines of AI and ML, Hypersonics, Autonomy, Genomics, Biomaterials, Biomedical Engineering and Computational Sciences. It has in place the active initiatives such as Distinguished Professorship, Organization of Workshops, Seminars and Prestigious Lecture by renowned Specialists, Establishment of Research partnerships with premier Universities of International stature, Defense and Space laboratories for the transfer of knowledge.

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RUAS has implemented outcome-based curriculum which focuses on equipping the students with domain knowledge, skills and attitudes required for the fulfilment of the local, regional, national, and global developmental needs. It has adopted global best practices in teaching, learning and assessment to ensure all-round development of students which help them immensely in furthering their future career as extraordinary professionals and responsible citizen. The programmes offered by this comprehensive University are multidisciplinary and interdisciplinary in nature which is a strongly desirable characteristic of the education required for modern India and its promising economy.

The Techno Center has the necessary human resources and infrastructure with more than 15 years' of experience in Engineering Design and Analysis; Electronic System Development; New Product Design and Development and Mechanical Prototype Development. In particular, MSRUAS Innovation Center is setup to support the initiatives of IIC of MoE for encouraging Students and Faculty to develop innovative and creative ideas that are useful to Society. On the other hand, a dedicated Technology Business Incubator is established to support novel ideas and start-ups with funding from K-tech (GoK) to nurture and support creativity, innovation and entrepreneurship among Public at large as well as Student community. The Incubator has supported more than 10 Startups and spread over 10,000 square feet which includes advanced machineries like 3D Printer, Thermal Conductivity Analyzer, IHC Lab, Magnetostriction Measurement Instrument, High Temperature Furnace (1800°C) etc. along with latest design and manufacturing tools.

The other salient features of Innovation initiatives for creation and transfer of knowledge include:

- Academic Credits for Innovation and Entrepreneurship Courses for all UG Students
- > Seed Money for preliminary research and Fellowships to Research Scholars (JRF/SRF, PDF)
- > Setting up Ramaiah Innovation Center for Health Care Technologies (RICH-Tech) for Bio-Medical Research
- Distinguished Scholars in Statutory Councils (Academic and Research & Innovation)
- Advanced Learning Center to train Medical and Para-Medical Staff on contemporary technologies
- Encourage Technology Transfer, IPR and Innovative Institutional Governance
- Completed 90+ Sponsored R&D Projects
- INR 17.65 Lakhs generated through licensing of Patents
- > Training of 40,000+ Delegates in technology domains and executed 550+ innovative problems in Defense, Technology and Healthcare Industry

Owing to its passionate pursuance of cutting-edge research, intellectual innovation and strong outreach, RUAS is envisioned to grow into a top University renowned for student-centric professional education and services.

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#### **Vision and Mission Statements:**

#### **Vision**

MSRUAS aspires to be the premier university of choice in Asia for student-centric professional education that lays emphasis on applied research while maintaining the highest academic and ethical standards.

#### **Mission**

Our purpose is the creation and dissemination of knowledge. We are committed to creativity, innovation, and excellence in our teaching and research. We inspire critical thinking, personal development and a passion for lifelong learning.

We value integrity, quality, and teamwork in all our endeavours. And we serve the technical, scientific, and economic needs of our society.

#### Governance:

The governance structure of the University include:

- Board of Governors
- Board of Management
- > Academic Council
- Research and Innovation Council
- Finance Committee
- Deans of Faculties/Schools
- HoDs of Faculties/Schools

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#### **SWOC Matrix**

# The SWOC Matrix of the University is as follows:

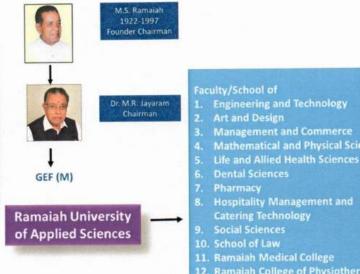
Table 1: SWOC Matrix of RUAS

Strengths	Weakness	
<ul> <li>Ramaiah Brand legacy of 60 Years</li> <li>Industry Relevant Syllabus</li> <li>Emphasis on Experiential Learning</li> <li>Faculty with extensive Experience from Industry and Academia</li> <li>High Staff Retention and Student Placements</li> <li>Strong Clinical Infrastructure (Advanced Skill Center) and Health Care Services</li> <li>Student Centric Learning Process</li> <li>Strive for Continuous Quality Improvement</li> </ul>	Enhance Extramural Funding     Thrust on Research Warranted     Need to Increase Engagement with Industry, Policy Makers and Corporates     Integration of Infrastructure and Manpower to attain Synergy     Limited trained personnel in innovation practices	
Opportunities	Challenges	
Location Advantage to Attract Quality Students Immersion Programme with reputed Universities Interdisciplinary campus offers opportunity to develop research based capabilities and need-based electives for upskilling Leverage Masters' and Doctoral Programme with Foreign Universities Upgradation to Advanced Technological Infrastructure Developing new verticals in clinical domains ex. Aging, NCD rehab Alumni Engagements Extensive Training on Environment, Entrepreneurship, SIP, UHV etc.	Majority of the Faculty pursuing Ph.D. to emphasize on Research     Increase Faculty-Publication Ratio     Faculty upgrading (Innovative teaching learning methods, communication)     Recognizing and Sustaining International Partnerships     Creating Central Instrumentation Center	



# Sponsoring Body- Gokula Education Foundation(M)

GEF- Gokula Education Foundation-1962 - A Public Charitable Trust



- **Catering Technology**

- Ramaiah Medical College
   Ramaiah College of Physiotherapy
   Ramaiah Institute of Nursing Education & Research

Programmes)

# Roadmap for Achieving Excellence



# Roadmap for Achieving Excellence

### Goal 1: Achieving Academic Excellence (New Programmes, Certificate Courses, Dual Specializations etc.)

- Strategy 1.1: Encourage Faculty Members to complete Ph.D. and Sensitizing Research at UG Level
- Strategy 1.2: Develop Online Courses for MooCs, SWAYAM, NPTEL etc.
- Strategy 1.3: Offer Academic Programmes and Training/Certificate, Dual Specialization as per Market Requirements
- Strategy 1.4: NEP Implementation by facilitating nationalization of education through Institutional Collaborations, Student and Faculty Mobility
- Strategy 1.5: Learning resource center through the establishment of Virtual Labs, Skill Labs
- **Strategy 1.6:** Arrangement for national and global participation in the field of higher and professional education
- Strategy 1.7: Establish close linkage with the industry to make teaching, research and training relevant to the needs of the economy at national and global level

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	Implementation Plan (Quantitative)	Outcomes
	Capacity Building Programmes on Discipline Specific Needs Department Advisory Committee (DAC) through bottom-up approach NEP Task Force and Working Committee is Constituted and	Short Term: Digitization through ERP, EHS, DAC, NEP Implementation
	Active Webinars and FDPs on NEP	Mid Term:
	Periodic Review of current Curriculum in the light of NEP, Blended Learning, Online Teaching, Remote Learning, Choice Based Credit Systems, Multiple Exit & Entry Systems, etc. and introduce Multidisciplinary Courses Relevant Technological and Training Support to facilitate Academic Delivery	Revenue from Online Content, Trans- disciplinary Courses, 90% Student Success, Simulation Based
•	Blended learning in classrooms with opportunity to become familiar with contemporary technologies	Learning, Academy of Excellence
	Revenue Model for Online Courses and Delivery in cutting edge domains Initiate Need Based New Programmes, Certificate Courses - Dual, Integrated, Executive, Skill Based Programmes, Professional Development Programmes Interactive and Technology enabled teaching and learning methodology to prepare for the future requirements Internationalization of the Curriculum	Long Term: 100% Student Success, Integrated and Executive Courses, Training across University 100% Faculty with Ph.D., Internationalized Curriculum

Contd...



#### Implementation Plan (Qualitative)

#### **Short Term:**

- Work with Industries, Policy Makers and Research Organizations to assimilate Market Demand
- Attract Students and Industry Personnel on niche and specialized programmes
- ERP and EHS Implementation of Academic Processes
- Value Added Courses for all-round development (language and communication)

#### Mid Term:

- Feedback analysis and reward /corrective measures on Academic matters
- Appropriate use of technology in Teaching & Learning, Removing Language Barriers, Educational Planning & Management
- Offer Simulation Based Learning across all the Courses

#### Long Term:

- Respect for diversity and local context in all curriculum, pedagogy and policy keeping in mind education as a concurrent subject
- Giving freedom to the Faculty Members for designing curriculum and pedagogical approaches within the approved HEI framework



### Goal 2: Increasing Research Outputs (Award of Ph.D. Degree; Publication in SCOPUS/WoS Indexed Journals; Funding from Sponsored Research & Consultancy; Patent Filing and Licensing, Centre of Excellence etc.)

Strategy 2.1: Recognizing Faculty Members with key Research outputs

Strategy 2.2: Management of staff work-load to enable significant time for research

Strategy 2.3: Unifying Research and Innovation activities to create impact on Research Community and Society

Strategy 2.4: Scope for IP Commercialization and Floating Startups

Strategy 2.5: Setup Research Chairs and create integrated platform for Basic,

Translational and Clinical Research

Implementation Plan (Quantitative)	Outcomes
<ul> <li>Individual Department to identify the thrust areas of research</li> <li>Strengthen Research Ecosystem and Outputs through Collaborations</li> </ul>	Money, TDF,
<ul> <li>Common Research Training Calendar and Strengthen Ph.D. Programme</li> </ul>	Fellowships, Research Day, RPPC, Citations of 10,000,
<ul> <li>Benchmark and increase Research Outputs (Ph.D. Degree, Sponsored Research &amp; Consultancy Projects, Patent Filing, Publications in Quality Journals etc.)</li> </ul>	Awards and Incentives
<ul> <li>Facilitate domain specific training on Proposal/Grant Writing, Academic and Technical Writing, Patent Filing, Research &amp; Publication Ethics etc.</li> </ul>	ir Licensing and
<ul> <li>Setting up Common Research Laboratory and Instrumentation Facility</li> </ul>	Upgrading Research Equipment,
<ul> <li>Establish resources to promote and acknowledge interdisciplinary research with definitive Outcomes that can create impact in the Community</li> </ul>	Alternative and an arrangement of the state
<ul> <li>Emphasis on IP Licensing and floating Startups by Faculty Members</li> </ul>	Long Term:
<ul> <li>Strengthen Processes for Unification, Optimization and creating Impact of Research and Innovation efforts</li> </ul>	
<ul> <li>Create conducive Research Ecosystem through Fellowships, Seed Money, Research Centers, Mentoring Faculty Members by Senior Professors</li> </ul>	Research Chairs and Central Facility for
<ul> <li>Promote Research Collaborations and Engagements by associating with Industries, Elite Institutions, Research Organizations</li> </ul>	High EndEquipment
Endowment for Research Chairs  14	



#### Implementation Plan (Qualitative)

#### **Short Term:**

- Enhance Research Culture and Innovation Ecosystem
- Facilitate Interdisciplinary Research and Capacity Building with emphasis on Impact of research outcomes
- High Coordination with Leadership, Governance and Infrastructure
- Quarterly monitoring of research progress at Department level and to notify the lack of progress, if any
- Encourage faculty members guiding PG students to improve the quality and novelty of the dissertation resulting in indexed publication

#### Mid Term:

- Create Niche Centers of Research Excellence and Consolidate Thematic Areas
- Promote Research and Align Investments in Thrust Areas
- Setting up IPR Cell and Technology Transfer Office

#### Long Term:

- Promote Collaborations through Internal Processes and Policies
- Establish with International Partners for Collaborative Research, Joint Ph.D. Supervision & Publications, Faculty & Student Exchange, Joint Events etc.
- Networking with Scientists, Industry Personnel, Policy Makers within and outside India



# Goal 3: Deeper Linkages with Industries and Corporates (Setting up R&D Centres, Sponsoring Industry Chairs and Sponsor Doctoral Programme, CSR Initiatives etc.)

Strategy 3.1: Establish deeper linkages and setting up Center of Excellence with Industries

Strategy 3.2: Sponsor Industry Chairs and supporting Ph.D. Research Scholars in domains critical to National/Global importance

Strategy 3.3: Participate in CSR Initiatives and outreach Activities (For Example: School Dental Health Programme, Tobacco Cessation Center, THSC, NSDC)

Strategy 3.4: Network with Industry Associations



#### Implementation Plan (Qualitative)

#### Short Term:

- Attract Industries by showcasing Research Capabilities and Facilities
- Provide Students to work as Interns and Project Assistants on Industry relevant problems
- Encourage Faculty Members to carry out research on Industry and Societal Problems

#### Mid Term:

- Setup Startups and Center of Excellence (CoE) in partnership with Industries
- Active collaboration with abroad Universities for Industrial Research
- Invite Industry Experts to deliver Courses and Involve Industries to sponsor Workshops/Conferences

#### Long Term:

- Avail grants from CSR Initiatives for setting up Industry Chairs
- Setup specialized Research Centers like Poison Information Center, Public Policy, Drug Discovery, etc.

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# Goal 4: Multi-Disciplinary Activities with other Faculties/Schools of Ramaiah Group of Institutions

(Optimum Utilization of Manpower Resources, Expertise, and Infrastructure)

**Strategy 4.1:** Optimum utilization of Manpower, Resources, Expertise and Infrastructure

Strategy 4.2: Common Platform to interact and discuss synergies as well as competencies

Strategy 4.3: Assemble high performance teams through coopetition to participate in National and International Calls, Expression of Interest, Policy Studies etc.

Implementation Plan (Quantitative)
Create awareness on Research Expertise and Facilities through a common portal as a repository Organize Networking Events, FDPs, Workshops, Team Building Exercises to supplement and complement the expertise of individual Faculty Members Publicize success stories of multi-institution collaborations and best practices emphasizing accountability of individual contributions Promote inter-disciplinary and multi-institution collaborative activities across Ramaiah Group of Institutions by initiating Collaborative Projects through Seed Funding Emphasize on preliminary research in inter-disciplinary domains across Institutions to apply and avail grants from National and International Funding Agencies Access to the latest educational technologies that enable better learning experiences of collaboration

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Institutional Development Plan [AY 2023-28]



#### Implementation Plan (Qualitative)

#### **Short Term:**

- Individual Departments to identify key thrust areas of interest
- Identify other Departments/Faculties/Schools/Sister Institutions which can supplement the research capability of the Department
- Prepare plans and guidelines for establishment of inter-faculty and inter-departmental networking
- Showcase capabilities and best practices on special occasions
- Invite Professors and Experts to share their expertise and research interests as well as aspirations
- Faculty Members to enhance UG/PG projects jointly with other Institutions

#### Mid Term:

- Enhance activities of Center for Professional Development and Training
- Establish activity calendar to promote interaction across Institutions
- Management Development Programmes (MDPs) for HoDs, Deans and Directors
- Enhance the Public Perception in National Market

#### Long Term:

- Leadership Development Programmes (LDPs) to leverage the benefits of coopetition and co-existing
- Networking with elite Institutions and Universities to participate in mutually beneficial Events and Activities
- Enhance the Public Perception in International Market

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### **Goal 5: Sought after University for Students**

- Strategy 5.1: Campus Connect and School Connect activities through Outreach Initiatives
- Strategy 5.2: Marketing and Brand Building activities (National and International) to connect with prospective Students through Social Media (Facebook, LinkedIn etc.), Online & Print Advertisement, Website, etc.
- Strategy 5.3: Offer Scholarship and Fellowship to attract meritorious Students to be Global Citizens
- Strategy 5.4: Ensure Placements and good Campus Experience with all amenities for Curricular and Extra Curricular activities

Implementation Plan (Quantitative)	Outcomes	
<ul> <li>Conduct competitions and invite School/Pre-University Students</li> <li>Create a student friendly ecosystem with good hostel facilities</li> <li>School Health Check Programmes and Health Education</li> <li>Publicize Scholarship and Fellowship Programmes</li> <li>Conduct Career Counselling and Guidance to Schools and Pre-University Colleges</li> <li>Guidance for Pursuing Higher Education</li> <li>Imbibe Entrepreneurial Intentions through Center for Entrepreneurship</li> <li>Publicize Student and Alumni Achievements and sharing their Experiences</li> <li>Increase Academic, Personal and Career Support for existing students</li> <li>Conduct University Lecture by a globally eminent personality and Memorial Oration series (quarterly)</li> </ul>	Short Term: Student Friendly Experience, Outreach Activities, Scholarships, Achieve 80% Admissions, Marketing Calendar, Campus and School Connect, Ambassadors/Mascots,  Mid Term: Achieve 90% Admissions, Establish Admission Offices in India and Abroad, Connecting with Embassys,  Long Term: Achieve 100% Admissions, Participation in Key Events of EPSI, Neighboring Countries, etc., Build on Experiences of Students and Alumni	
Implementation Plan (Qualitativ	re)	

#### **Short Term:**

- Increase visibility of the Faculty Members on Global platforms
- Offer Discipline Core and Vocational Elective subjects

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- Improve Visibility and Perception through Social Media, Publicity, Newspaper Student Exchange
- · Make information of RUAS helpful and student-focused

#### Mid Term:

- Benchmark Admission and Student experiences at National Level
- Ensure integrity, transparency, and resource efficiency of the educational system through audit and public disclosure
- Attract International Students from Developing Countries

#### Long Term:

- Benchmark Admission and Student experiences at International Level
- Attract International Students from Developed Countries through Study Abroad, Cultural Events, etc.

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# Goal 6: Extension and Outreach Activity (NSS, Unnat Bharat Abhiyan, Service to Society, Health Camps etc.)

Strategy 6.1: Connect with Communities/Societies through Employers, Alumni, Government Initiatives, Extension and Outreach activities

**Strategy 6.2:** Organize Networking Events to develop deeper relationship with the Stake Holders

Strategy 6.3: Participate actively in Government Initiatives and CSR activities of an Industry

<ul> <li>Inculcate the sense of belonging in the students about the outreach program of societal relevance</li> <li>Organize Community Based Training Programmes and support Government Initiatives</li> <li>Establish Clubs/Societies/Chapters for conducting activities pertaining to Students, Placements, NSS, UBA</li> <li>Enroll students for NSS, UBA, etc. and strengthen Alumni network</li> <li>Participate in Inter-Institution events, hackathons etc.</li> <li>Pre-placement Training/Workshops and Soft Skills for the outgoing batches</li> <li>Sensitize students on their responsibility to give back to the Society and addressing Community based problems</li> <li>Short Term:         <ul> <li>Community Programmes, Clubs,</li> <li>Highlight Successful Alumni,</li> <li>Students, Employers, Report on Outcomes from Extension and Outreach Activities</li> </ul> </li> <li>Mid Term:         <ul> <li>Organize Inter-disciplinary</li> <li>Community Oriented</li> <li>Programmes with International</li> <li>Partners</li> </ul> </li> <li>Long Term:         <ul> <li>Inclusive approach towards</li> </ul> </li> </ul>	Implementation Plan (Quantitative)	Outcomes
Community, Health, Environment, and Sustainable Living	<ul> <li>the outreach program of societal relevance</li> <li>Organize Community Based Training Programmes and support Government Initiatives</li> <li>Establish Clubs/Societies/Chapters for conducting activities pertaining to Students, Placements, NSS, UBA</li> <li>Enroll students for NSS, UBA, etc. and strengthen Alumni network</li> <li>Participate in Inter-Institution events, hackathons etc.</li> <li>Pre-placement Training/Workshops and Soft Skills for the outgoing batches</li> <li>Sensitize students on their responsibility to give back to the Society and addressing Community based</li> </ul>	Community Programmes, Clubs, HR Conclaves, Round Table, Highlight Successful Alumni, Students, Employers, Report on Outcomes from Extension and Outreach Activities  Mid Term: Organize Inter-disciplinary Community Oriented Programmes with International Partners  Long Term: Inclusive approach towards Community, Health, Environment, and Sustainable



#### Implementation Plan (Qualitative)

#### Short Term:

- Emphasis on creativity and critical thinking to encourage logical decision-making and lateral thinking
- Provide Career Guidance, Training, Placement (Training for NEET, Entrepreneurship, Finance, Soft Skills, etc.)
- Counsel Students for Higher Education in Universities Abroad
- Mandatory participation of Students in Service to Society and Community based Events

#### Mid Term:

- Publicize Extension and Outreach activities to all the Stakeholders
- Organize Inter-disciplinary Community Oriented Programmes apart from their regular curriculum
- Report the student outcomes from UBA, NSS, Service to Society activities in local and national media, social networking sites etc.

#### Long Term:

- Organize Inter-disciplinary Community Oriented Programmes with International Partners
- Prepare Students with an inclusive approach towards Community, Health, Environment, and Sustainable living for enhancing employability
- Student Exchange with International Institutions

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### **Goal 7: National and International Collaborations**

(Student and Faculty Exchange, Collaborative Research, Joint Ph.D. Supervision and Publication, Semester Abroad, Experiential Learning, Joint Conferences, Symposia etc.)

Strategy 7.1: Establish Deeper Relationship with Existing Partners

Strategy 7.2: Department-wise mapping based on expertise and facilities for Collaborative Research and Joint Proposal Submission

Strategy 7.3: Develop synergy between Department and other reputed Institution Faculty in the identified Thrust Areas

Implementation Plan (Quantitative)	Outcomes
<ul> <li>Organize Distinguished Lectures, FDPs, Joint Events etc. for deeper relationships</li> <li>Encourage experiential learning through Faculty and Student Exchange, Study Abroad, Student Observor-ship, etc.</li> <li>Invite Professors from Existing Partners to deliver a Course/ Partial Course/ Sessions</li> <li>Plan Research and Consultancy activities for availing Grants, Joint Publications, Ph.D. Supervision</li> <li>Setup dedicated International Partnership and Collaboration Management (ICPM) office to facilitate Faculty and Student Exchange</li> <li>Avail International Scholarships</li> </ul>	Short Term:  Distinguished Lectures, FDPs, Joint Events, ICPM Office, Encourage one collaboration with a University per Faculty/School to forge partnership activities Mid Term: Experiential Learning to Faculty and Students, Support Academic Visits, Attract International Students, Collaboration with at least three Universities per Faculty/School to forge partnership activities Long Term: 3+1+1, Dual Degree, Certification Options with International Partners, Prestigious Lecture and Inviting Noble Laurette, Collaboration with at least five Universities per Faculty/School to forge partnership activities



#### Implementation Plan (Qualitative)

#### Short Term:

- · Focus on continuous quality improvement of Professional Practice among RUAS Community
- · Conduct International Webinars, Symposium, etc.

#### Mid Term:

- Facilitate Faculty Members and Ph.D. Scholars to visit and interact with Partners as a part of continuous development plan and career progress path
- Joint Certificate Programmes with International Universities

#### Long Term:

- Explore 3+1+1, Dual Degree, Certification options as value additions
- Academia-Research enrichment for global standing and recognition
- Setup jointly unique Laboratories, Research Centers (For Example: Indian Knowledge System, Indian Medicine)

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## Goal 8: Accreditation and Ranking (QS E-Lead, NAAC, NBA etc.)

Strategy 8.1: Identify Iacunae and improve Parameters of Accreditation and Rankings Strategy 8.2: Apply for NAAC, NBA and International Accreditations as well as Ratings Strategy 8.3: Enhance Best Practices in Teaching, Research and Outreach

Implementation Plan (Quantitative)	Target/Outcomes	
<ul> <li>Enhance Teaching &amp; Learning, Research Outputs,         Placements, Graduate Outcomes and Outreach     </li> <li>Work with Stakeholders to improve Peer Perceptions and Visibility of the University</li> </ul>	Short Term: NIRF Top 10 (FDS) Top 25(FPH), QS, AAA, NAAC	
<ul> <li>Engage Agencies for International Accreditations,</li> <li>Rankings, Recognitions etc.</li> <li>Improve Admissions and Placements</li> </ul>	Mid Term: NIRF Top 100 (Overall), NBA, NABH (FDS), UGC 12(b)	
	Long Term: International Ratings and Rankings (AACSB, THE, QS – IGAUGE), NIRF Top 5 (FDS), Top 10 (FPH), NAAC 2 <sup>nd</sup> Cycle	

### Implementation Plan (Qualitative)

#### Short Term:

- Establish well designed Mentoring and Monitoring systems at all levels
- Conduct Training Programmes to Faculty Members

#### Mid Term:

- Recruit, Retain, Recognize and Reward Faculty Members for Achievements
- Imbibe Accreditation and Ranking as a part of work culture

#### Long Term:

Apply for International Rankings and Ratings

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# Goal 9: Providing Quality Healthcare across the Spectrum (No. of Specific Procedures Performed, Quality of Service Parameters and other such criteria for Hospitals)

Strategy 9.1: Electronic Health Record (EHR) Procurement and Maintenance

Strategy 9.2: Provide Quality Health Care to Patients

Implementation Plan (Quantitative)	Outcomes
EHR procurement and implementation	Short Term:
<ul> <li>Map Patient flow by EHR</li> <li>Decrease lead time for each treatment</li> <li>Comprehensive Clinics</li> <li>Upgrade Hospital with new Technologies and Equipment</li> </ul>	HER and Patient Centric Process Development, Achieve Patient ServiceQuality  Mid Term:
	Lean Implementation to reduce Waiting and Treatment Time, Comprehensive Clinic
	Long Term: Infrastructure and Equipment upgradation

#### **Short Term:**

- Implement EHR and establish comprehensive clinic to improve patient treatment
- Up gradation of Hematology Lab in Oral Pathology for obtaining blood reports' immediately

#### Mid Term:

- Establish CAD, CAM and 3D printing laboratory
- NABH Accreditation
- Extending Dental Benefit Scheme to employees of Ramaiah Group of Institutions

#### Long Term:

Setup Corporate Clinic

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## Goal 10: Policies and Systems from the Leadership Group embracing ESG

Strategy 10.1: Benchmark and Conduct Awareness Programmes on Strengths and Challenges of our University along with Opportunities

**Strategy 10.2:** Attract Distinguished Professors and Professors of Practice around the Globe for individual Departments

Strategy 10.3: Emphasizing PPP Model for Participation in Community and Societal Development along with encouragement for Entrepreneurship

Policy and Plan	Outcomes
<ul> <li>Provide state of the art infrastructure (Smart Classrooms, Laboratories, Research Laboratories and Equipment)</li> <li>Conducive Environment for Teaching and Research</li> <li>Provide Annual Budget for individual Faculty/School and Empower them to run as Revenue Center</li> <li>Constitute Empowered Committee for assessment of Budget estimate</li> <li>Plan for 5 Day Working Week for better Work-Life Balance to Employees</li> <li>Provide appropriate education and development opportunities for staff upskilling</li> <li>Sponsor LDPs, MDPs for Senior Management and Leadership Group</li> <li>Leverage on significant scope for interdisciplinary research</li> </ul>	<ul> <li>Institutional Value in the Society</li> <li>Collaborate with Institutions /         Industries / Research Organizations</li> <li>Empower Outcome &amp; Skill Based         Professional Output</li> <li>Enable effective implementation of         proposed strategies</li> <li>Enrich Sponsored Research and         Consultancy projects</li> <li>Identify Internal and External         Budgetary Resources</li> <li>Stakeholders Satisfaction with         Institutional Credibility for         Sustainability</li> <li>Revenue earned to be utilized for         University Development to achieve         Excellence</li> <li>Value Addition to the existing         Programmes</li> <li>Scope for Renewable Energy, Green</li> </ul>
<ul> <li>Analyse the Annual Faculty/Departmental revenue to ensure achievement of departmental goals under various heads</li> </ul>	Technologies, Disabled Friendly Policies, Waste Management etc.

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#### **Way Forward**

The IDP [2023-28] provides a road map in alignment with the pillars identified by NEP 2020 (Affordability, Accessibility, Quality, Equity, Accountability). The points put across in the IDP strongly demonstrate the wide capacity and stronger sustainable outputs of RUAS in the coming years. The domains of teaching, research, and service are considered to make institutes robust, agile and empowered with right people and systems to different specialties of the University with a bottom-up approach. Overall, the focus of the Vision Document is to attract competent Faculty Members and Students by strengthening the lab infrastructure and building the state of art facilities on a Short, Mid and Long-Term basis. Broadly at each Faculty/School level, aligning with NEP specifically the offering of Choice-Based Credits, Flexible Entry-Exit System for Students, Greater Industry Immersion & Engagement, Strengthening Research Ecosystem & Outputs through Collaborations shall be focused based on Priority Areas, Goals and Resource availability. Therefore, implementation of the reported Strategies along with Action Plan and Outcomes in the next five years shall certainly provide equitable and vibrant knowledge through transparency, legitimate and accountability by providing impact quality education to all. In summary, all the internal and external stake holders shall be benefitted. Moreover, the document shall be used as a baseline to prepare and allocate budgets along with resource allocations allotted towards achieving the goals and strategies proposed in the plan.

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# **ANNEXURE 32**





# ERP Implementation Report (from 2020 to 2024)



### e-Governance (ERP) Implementation Report

#### **E-Governance Policy at RUAS:**

- First E-Governance policy was implemented in the year 2014 2015
- It was revised in the year 2020 -21 in view of providing support to major operations of the university

Our University prefers paperless activities as a part of green initiatives by implementing e-Governance (ERP) in major of its operations. The JUNO ERP implementation commenced from January 2020.

Following are the modules implemented on ERP:

- 1. Admissions
- 2. Academics and Examination
- 3. Library
- 4. Finance and Accounts
- 5. Human Resource
- 6. Purchase/Stores/Inventory/Maintenance
- 7. Hostel
- 8. Third Party Integration



#### 1. Academic Module on ERP

Subprocesses of Academic Module:

- Academic Batch Creation
- Syllabus Creation
- Course Registration
- Academic Time Table
- Faculty/Student Course Allocation
- LMS Course Files Session Plan, Course Material, Attendance Marking, Evaluation
- Feedback
- Mentoring
- Eligibility to Semester End Examination

#### **Academic Batch Creation**







#### **Course Registration**



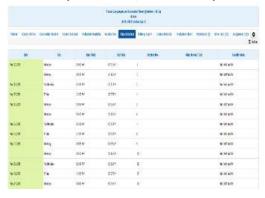


#### **Faculty and Course Allocation Details**

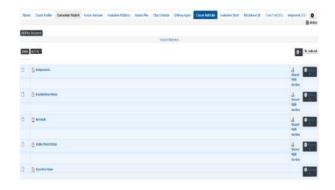
#### **Student Course Allocation**



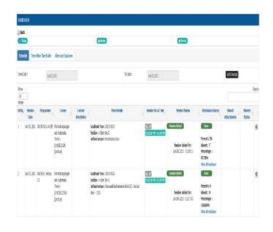
#### Schedule (Time, Date, Class Room)

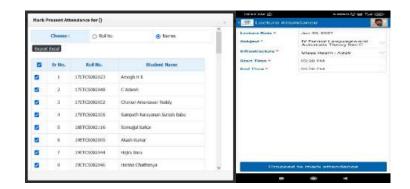


#### **Course Material Upload**



#### **Delivery report and attendance marking**





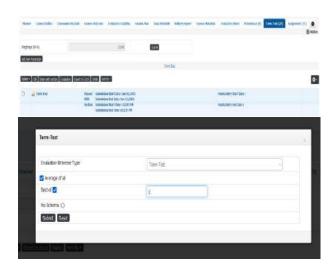


#### **Student Mentoring Process**

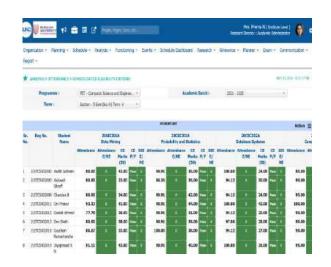




#### **Continuous Evaluation marks entry**



#### **Eligibility to Semester End Examination**



#### Faculty of Engineering and Technology





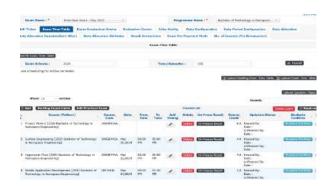
#### **Examination Module on ERP**

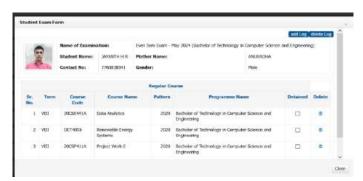
#### Subprocesses of Examination Module:

- Examination Schedule / Time Table Creation
- Exam Form Notification & Exam Fee Structure
- Student Exam Form submission
- Hall Ticket Generation
- Exam Student Attendance
- Internal and External marks entry
- Integration with Logisys (Decoded marks)
- Freeze Marks, Grade Calculation, Overall Result finalization & Declare Result
- Result sheets
- Grade Card, Marks Card & Degree Certificate

#### **Examination Schedule / Time Table Creation**

#### **Exam Form submission**





#### **Hall Ticket Generation**

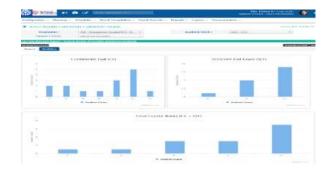
#### Freeze Marks, Grade Calculation & Declare Result







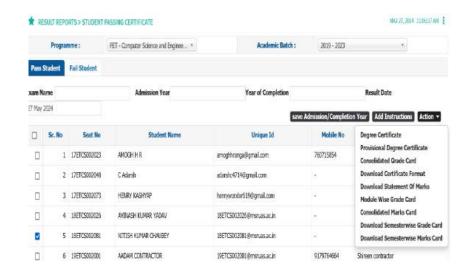




#### Result Announcement - in Student login



#### **Grade Card, Marks Card & Degree Certificate download**





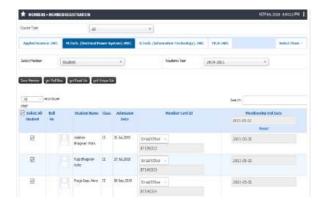
#### 2. Library Module

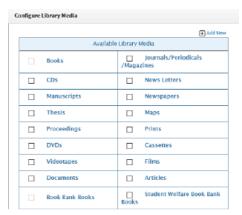
Subprocesses of Admission Module:

- Library Configuration
- Vendor Configuration
- Member Registration
- Catalogue
- On-Line access for students and staff members
- Issue/Return Transaction
- Temporary Transaction
- Accession Register Report

#### **Member Registration**

#### Library Media – Books, Journal/Periodicals, CD's, etc

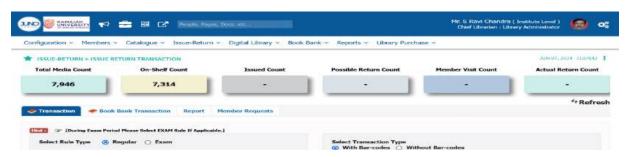




#### Student can access all the e-content/online resources and lab session videos from one place (Library Web-Opac)



#### **Issue Return Transaction**



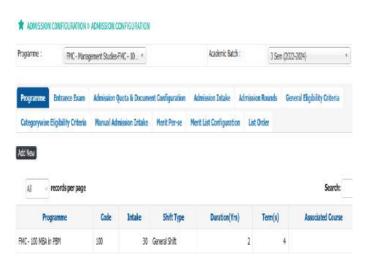


#### 3. Admission Module on ERP

Subprocesses of Admission Module:

- Programme and Batch Creation
- Application
- Fees online payments
- Documentation
- Enrolment

#### **Programme and Batch Creation**



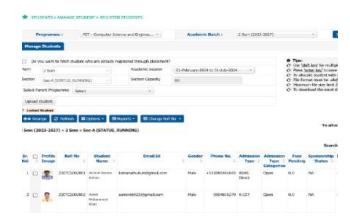
#### **Adding Applicants**



#### **Provisional Admission and Generate Invoice**



#### **Assigning University Registration Number**



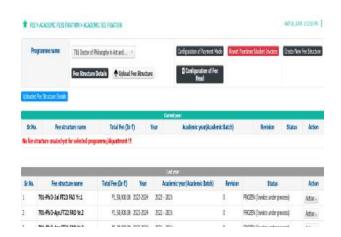


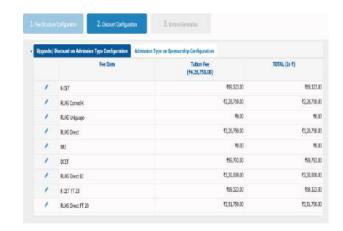
#### 4. Finance and Accounts module on ERP

Subprocesses of Finance and Accounts module:

- Ledger/Bank/Invoice/Voucher/ Cost Center/Accounting Heads
- Student Fee/Tax Invoice/Hostel Fee
- Fee Collection (Integration of online fee payment with Paytm)
- Payroll (Calculation & Publishing)
- Bank Reconciliation
- Fee Reconciliation
- Employee Advance/Expense
- Vendor Payment
- Budget

#### **Student Fee configuration**





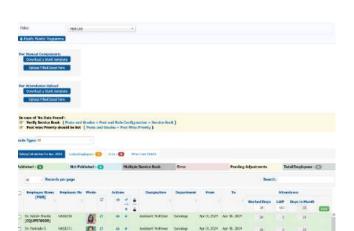
#### **Fee Payment Process**







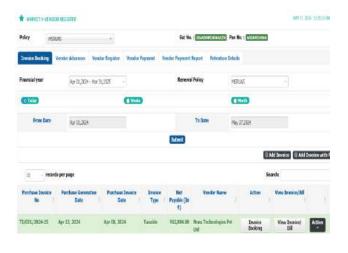
#### **Salary Calculation & Publishing**



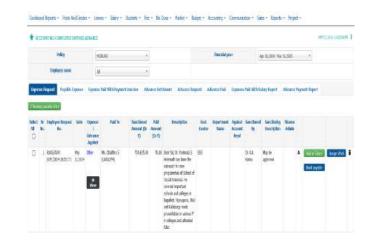
#### **Salary Reports**



#### **Vendor Payment**



#### Advance / Expense processing





#### 5. Human Resource Module on ERP

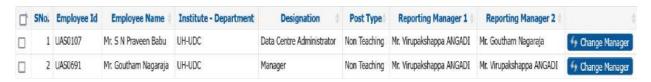
Subprocesses of Human Resource module:

- Recruitment Process
- Reporting/ Faculty/Staff Profile/Service Book
- Time Management/Muster/Leave Management
- Payroll/Appraisal/ Increment/Employee Exit
- Notification/Reports

#### **Leave Configuration**



#### **Freeze Leave Balance**



#### **Employee Manager Configuration**

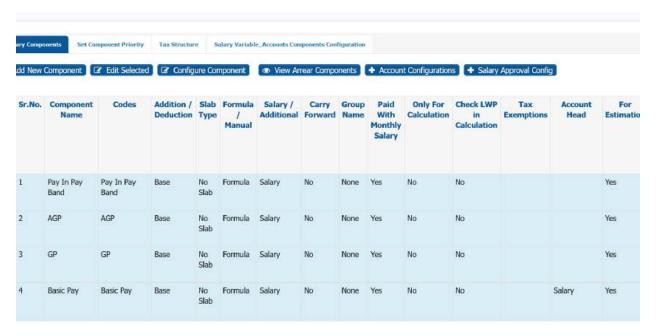




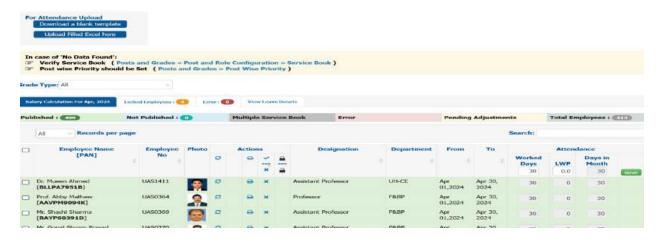
#### **Employee Muster**



#### **Salary Parameter Configurations**



#### **Salary Calculations Process:**



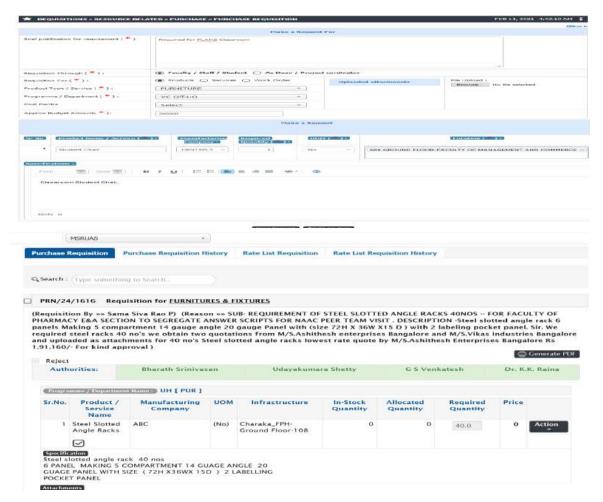


#### 6. Purchase/Stores/Inventory/Maintenance module on ERP

Subprocesses of Purchase/Stores/Inventory module:

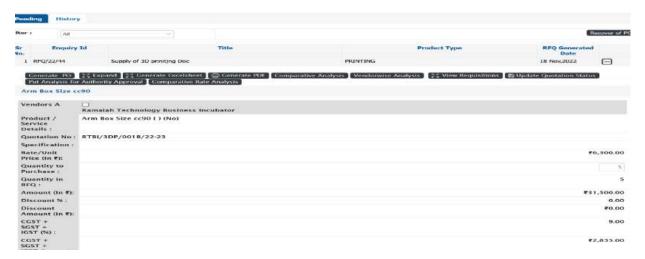
- Stock/ Inventory Purchase requestion
- Quotation Analysis & Approval
- Purchase Order
- Goods Receipt Note/Invoice/Make Payment
- Maintenance Complaint request/status/resolve

#### **Stock/ Inventory Purchase requestion process**





#### **Quotation Analysis & Approval**



#### **Purchase Order Generation**

#### Purchase Order/Work Order

No.:US/2425/0128 Date: 26-May-2024

To,

#### Rajalakshmi Electricals & Hardware

Ganapathi Nagar,Rajgopal Nagar,Main Road,Peenya 3rd Phase,Bangalore, Bengaluru -560058, Karnataka, India.

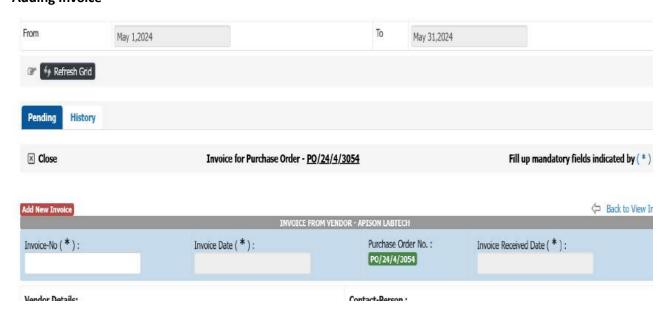
Karnataka, India. Contact Person: Parasramsirvi Phone Number:9845195081 E-mail:parasramsirvi@gmail.com GST Number: 29AADAM2496A1ZN

Sub: Supply of Fan for DTSLD Department. Ref: Your Quotation No: 1231 dt: 18.05.24

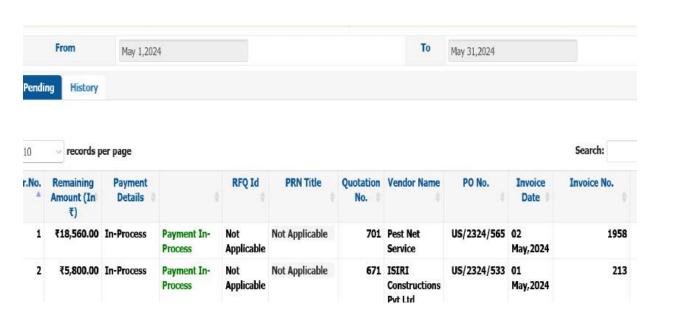
Quotation No: 1231

With reference to the above, please supply the following item(s) to the University (Buyer) as per the terms and conditions annexed herewith:



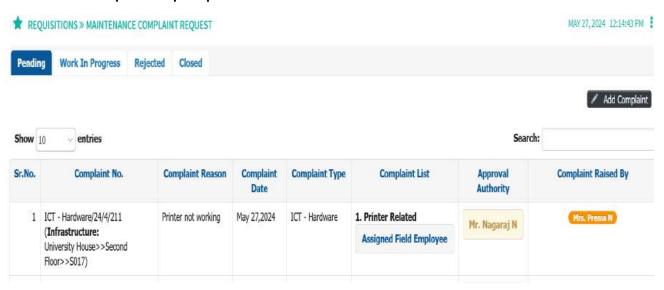


#### **Making payment request to Finance Department**

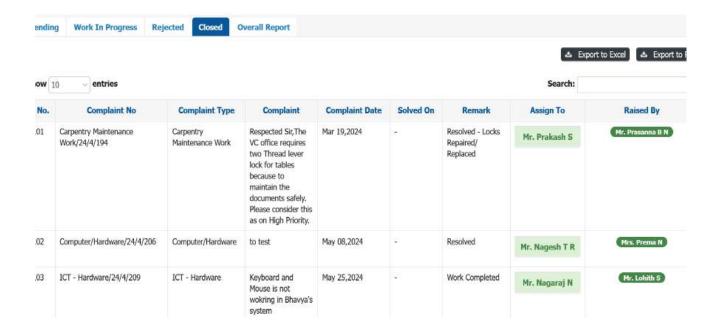




#### **Maintenance Complaint Request process**



#### **Maintenance Complaint Request status report**



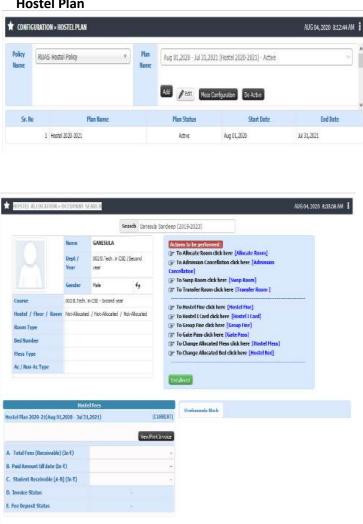


#### 7. Hostel Module on ERP

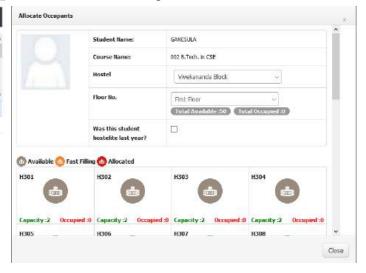
Subprocesses of Hostel module:

- **Hostel Plan**
- **Student Registration**
- **Room Allotment**
- **Hostel Complaint**
- Notification/Reports

#### **Hostel Plan**



#### Room Allotment for the registered students



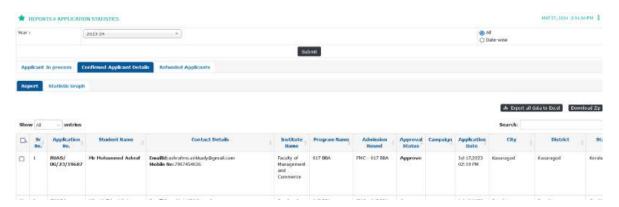


#### 8. Third Party Integration with ERP and Mobile Application of ERP

Subprocesses of Third party integration:

- Digital Evaluation marks upload through Logisys
- Admission Data integration through Meritto
- Online fee payment integration through Paytm gateway
- Student Scholarship Portal Integration through Postman tool
- Email Integration with Microsoft Outlook
- SMS Integration with Voyager Technologies
- Biometric Gateway Breakthrough Solutions to capture muster data of employees
- Mobile Application: Student Diary Profile, Time Table, Fees, Notices, Results and Attendance
- Mobile Application: Faculty Diary Personal details, Leaves, Payslips, Notices & Circulars, approvals

#### **Admission Data integration through Meritto**



#### Payment Gateway - PayTM

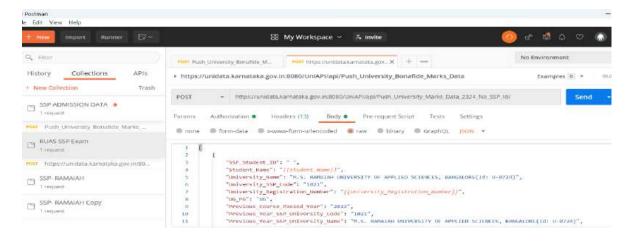




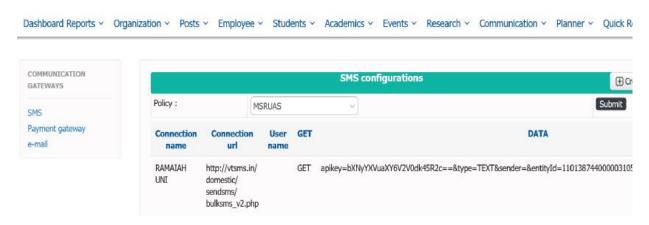
#### **Digital Evaluation – Logisys for Digital Evaluation**



#### Student Scholarship Portal Integration through Postman tool



#### **SMS Integration with Voyager Technologies**

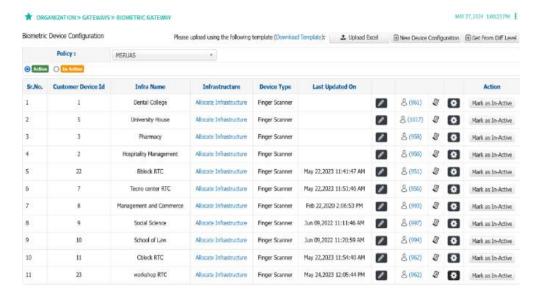




#### **Email Integration with Microsoft Outlook**



#### Biometric Gateway - Breakthrough Solutions to capture muster data of employees

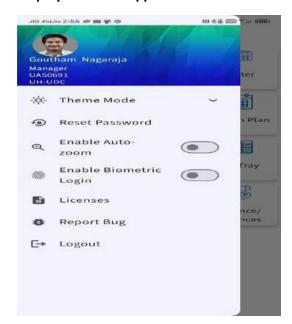




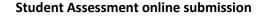
#### **Student Mobile App**



#### **Employee Mobile App**



#### Student Fee payment and Receipt generation









# **ANNEXURE 33**



### APPRAISER SECTION

(to be filled by the Evaluator & Reviewer)

Name: Dr.B.S.Dayananda

Designation: Associate Professor & Head

Department: MME

Faculty: Engineering and Technology

Scale	Adjectival	Description
5	Outstanding	Performance represents extraordinary level of achievement and commitment in terms of quality and time, technical skills & knowledge ingenuity, creativity & initiative. Employees at this level should have demonstrated exceptional job mastery in all major areas of
4	Excellent	Performance exceeds expectations. All goals & objectives achieved above established standards
3	Satisfactory	Performance met expectations in terms of quality of work, efficiency and timelines. The most critical goals were most
2	Unsatisfactory	most critical goals were not mot
1	Poor	Performance was consistently below expectation and/or reasonable progress towards critical goals was not made

#### Form-A EVALUATION

Evaluate by indicating ratings (Rating Scale mentioned in the table above) for each goal, objective & responsibility mentioned by the Appraisee in Appraisee Section.

Acadamia		5	4	3	2	1
Academics		Outstanding	Excellent	Satisfactory	Unsatisfactory	Poor
D		5	4	3	2	1
Research		Outstanding	Excellent	Satisfactory	Unsatisfactory	Poor
			$\square$			
Canda		5	4	3	2	1
Service		Outstanding	Excellent	Satisfactory	Unsatisfactory	Poor
		$\square$				
		5	4	3	2	1
Administrative 1	asks	Outstanding	Excellent	Satisfactory	Unsatisfactory	Poor
	-11	☑	☑			
Other Tasks		5	4	3	2	1
Other rasks		Outstanding	Excellent	Satisfactory	Unsatisfactory	Poor
			PART A (Average rating)			
5 Outstanding ☑	Exc	4 cellent ☑	3 Satisfactory	2 Unsatisfac	ctory	1 Poor

Form A - REVIEWER'S COMMENTS

Please write a brief description on the employee performance Qamaiah University

5

M.S. Ramaiah University of Applied Sciences Bangalore - 560 054

Page 1 of 4

Dr. Dayananda has supported in academics for both Mechanical and Civil Engg students. He is supportive for slow learners in encouraging them by taking additional classes. He has supported fast learner by guiding them to participate in competitions. He has helped the students to get internship and placement in reputed industries like AMS, DUCOM, BMTMN etc.

Working as Head of the department of MME.

He is chief coordinator for NAAC Criteria-01 for FET.

Coordinator for NIRF for FET since 2016.

Chief coordinator for seating arrangements for Convocation 2023.

Member of Purchase committee for FET.

#### Form-B EVALUATION

Some of the below mentioned parameters may not be applicable for all positions. For such parameters N/A option has been provided. Parameters where N/A option is not provided must be compulsorily evaluated as per the scale mentioned in the rating description. For each defined parameter choose the appropriate rating.

Teaching Skills & Knowledge (e.g. Patience, Adaptability.	5 Outstanding	4 Excellent	3 Satisfactory	2 Unsatisfactory	1 Poor
Imagination, Teamwork, Constant Learning, Mentaring)		☑			
Research Guidance To	5	4	3	2	1
Students (e.g. Able to assist and advise students	Outstanding	Excellent	Satisfactory	Unsatisfactory	Poor
on the research topics)		$\square$			
Contribution in Curriculum	5	4	3	2	1
Development (e.g. Able to create significant	Outstanding	Excellent	Satisfactory	Unsatisfactory	Poor
improvements in the courses handled)	☑				
Communication Skills: (e.g. Verbal and written communication	5	4	3	2	1
skills required by the role. Ability to	Outstanding	Excellent	Satisfactory	Unsatisfactory	Poor
convey or share ideas and feelings effectively)		$\square$			
Planning & Organizing	5	4	3	2	1
(e.g. Organizing and participation in Seminars/workshops, special lectures,	Outstanding	Excellent	Satisfactory	Unsatisfactory	Poor
FDP's, Summer institutes)					
Quality of Work	5	4	3	2	1
(e.g. Accuracy, Meticulousness & efficiency in work regardless of volume	Outstanding	Excellent	Satisfactory	Unsatisfactory	Poor
of work)		$\square$			
Professional Development	5	4	3	2	1
(e.g. Works towards developing professionally by updating self with	Outstanding	Excellent	Satisfactory	Unsatisfactory	Poor
new work-related skills & knowledge)		$\square$			
Interpersonal Skills (e.g. Ability to effectively interact with superiors, peers, subordinates,	5	4	3	2	1
customers and students, Networking, Collaboration, Team player, Willingness	Outstanding	Excellent	Satisfactory	Unsatisfactory	Poor
to accept assignments, Helps team members to effectively achieve group goals)	☑				
☐ NÀA Leadership Skills (e.g. Ability to delegate, inspire and communicate effectively. Appraises and	5	4	3	2	1
reviews performance of supervised employees in a timely, fair & appropriate manner. Motivates employees to perform effectively.	Outstanding	Excellent	Satisfactory	Unsatisfactory	Poor
Recognizes & encourages subordinates growth & development. Resolves issues in a timely and effective manner)					



PERFORMANCE APPRAISAL 2022 - 2023 ☐ N/A Initiative & 5 4 3 2 1 Creativity le.g. Ability to develop & implement Outstanding Excellent Satisfactory Unsatisfactory Poor new methods & techniques, Selfstarter, takes up additional challenges, Self-motivated) V П □ N/A Dependability 5 4 (e.g. Attendance & punctuality, 3 7 1 reliability, target oriented, Outstanding commitment towards achieving department, faculty & university goals, Maintains confidentiality as Excellent Satisfactory Unsatisfactory Poor V П appropriate) Form-B (Average rating) 3 Outstanding Excellent Satisfactory Unsatisfactory Poor  $\checkmark$ V 

#### Form-C REVIEWER'S COMMENTS

Please write a brief description on the employee performance

Dr. Dayananada has supported Ph.D scholars in completing their work.

His scholar Ms. Pirathiba S has been awarded the Ph.D. degree during Convocation 2023. One of his scholars Mr. Srinivas has completed all the objectives and is expected submit the

He has published more than 04 papers in a peer reviewed journals.

02 papers in conference.

Supervisor for 04 students of PG and 02 batches of UG programmes

He is an active member of Unnat Bharath Abhiyan-RUAS.

Chairman of DAAPC -Mechanical Engg Department.

Dr. Dayananda is highly dependable colleague and has been a significant contributor to RUAS since its inception. He was the Associate Academic Registrar of FET for a long time (2015-19)

#### OVERALL PERFORMANCE RATING

Combined rating of Form A and Form B. An overall rating of 1 or 5 MUST be supported with a justification. Attach documents if necessary.

5	4	3	2	- 1
Outstanding	Excellent	Satisfactory	Unsatisfactory	Poor
Vi	$\square$		П	

Evaluator's Final Recommendations:

Dr. Dayananada is working in our university since its inception.

His contribution towards academics is highly appreciable.

He supports other departments also in engaging the classes of open elective and courses in M. tech in EMM.

He is active member in supporting FET in organizing the documents for NIRF, AICTE and NAAC Criteria-01 and 04.

His contribution to the development of department/ faculty and University is highly appreciable

Reviewer's Final Recommendations:

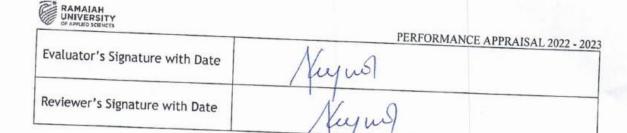
Dr. Dayananda is recommended for the promotion to the post of Professor. He has the potential to take the responsibility of next level academic administration.

APPRAISERS SIGNATURE

Registrar

M.S. Ramaiah University of Applied Sciences Bangalore - 560 Q54







### Performance Appraisal Form for Non-Teaching Staff 2022-2023

1.	Name of the Staff	: OBALESHI P

2. Designation

3. Department

Executive Admission 01108/2014 M.A. B.Ed., Admissions. 4. Date of Joining 5. Qualification

6. Current Responsibilities

#### I. PROFESSIONAL COMPETENCE

SI. No.	Particulars	Excellent	Good	Satisfactory	Average	Poor
1	Knowledge of rules, regulation and procedure		/			
2	Ability to organize work andcarry it out					
3	Ability and willingness to takeup additional load in times of exigencies	V				
5	Ability to learn and perform new duties		/			

#### PERFORMANCE

SI. No	. Particulars	Excellent	Good	Satisfactory	Average	Poor
1	Awareness of policies and procedures of the institution		0			
2	Maintenance of Files/Records		/			
3	Accuracy & Speed of work	E	/			
5	Completion of work on schedule					

#### PERSONAL CHARACTERISTICS

SI. No.	Particulars	Excellent	Good	Satisfactory	Average	Poor
1	Attendance					
2	Punctuality					
3	Discipline					
4	Confidentiality					
5	Communication skills		/			
6	Computer Knowledge					



#### IV. ATTITUDE TOWARDS CO-WORKERS

SI.No.	Particulars	Excellent	Good	Satisfactory	Average	Poor
1	Cooperation with colleagues	V				
2	Mutual motivation with colleagues					

V. ATTITUDE TOWARDS PUBLIC

SI.No.	Particulars	Excellent	Good	Satisfactory	Average	Poor
1	Cooperation to the needs of the public(Parents, Business Associates, Vendors, Well Wishers) of the University		/			
3	Rapport with the public during interaction					

VI. STAFF/STUDENT RELATIONS

SI.No.	Particulars	Excellent	Good	Satisfactory	Average	Poor
1	Ability to engage, motivate, supervise, and effectively work in the interest of students					
3	Responsibility towards your tasks/ areas of management assigned	THE TANK	V	/		

#### Declaration

I	hereby declare	that the informat	tion provided is true to the best of my knowledge.
	Place:-	31 lore	OBALESHI P  Name and Signature of the Non-teaching staff
	Date:-		Name and Signature of the Non-teaching staff

	Countersigned by the Reporting Authority		
Comments :-	air		
	Countersigned by the Receiving Authority	Cu	

Comments :- Sity of Applie	al Mayor	
Comments	cuntersigned by the Accepting Au	M.S.Ramaiah University of Applied Science Bangalore - 560 054
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Si. No.	Name	Designation	Designation Qualification	Department	Date of Join MSRDC	MSRDC Salary - July 2014	Date of Join RUAS	RUAS Experienc e	overall Experienc e	Grade	Scale	Basic Pay	Gross	Promotion as	Scale	Grade	Basic	4	нка	Gross	Diffarenc
	Dr.Dinesh K	Assistant	BDS, MDS	Conservative Dentistry &	1-Dec-12	17000/-	1-Aug-14	8.00	5.07	2	15600- 39100+AGP Rs. 6000	26564	65613	Associate Professor	15600- 39100+AGP Rs. 8000	P3	30320	35,474	960'6	74,890	772,6
7	Dr. Nithin Kumar Shettv	Assistant	BDS, MDS	Conservative Dentistry &			7-Jun-18	4.02	8.00	14	15600- 39100+AGP Rs. 6000	23602	58297	Associate Professor	39100+AGP Rs. 8000	P3	30320	35,474	960'6	74,890	16,593
m	Dr. Shwetha V	Assistant	BDS, MDS	Oral Medicine		57928/-	1-Aug-14	8.00	11.00	P1	15600- 39100+AGP Rs. 6000	31237	77155	Associate Professor	15600- 39100+AGP Rs. 8000	P3	33132	38,764	9,940	81,836	4,681
4	Dr. Madhavi	Assistant	BDS, MDS	Orthodontics			8-Oct-15	60'9	60.9	ď	15600- 39100+AGP Rs 6000	24310	60046	Associate Professor	15600- 39100+AGP Rs. 8000	P3	30320	35,474	960'6	74,890	14,844
17.1	Dr. Shwerten G	Assistant	BDS, MDS	Pedodontics & Preventive			1-Jan-16	90.9	90'9	14	15600- 39100+AGP Rs. 6000	24310	60046	Associate Professor	15600- 39100+AGP 4s, 8000	£ d	30320	35,474	960'6	74,890	34,844
9	6 Dr Ronit Prasad	Assistant	BDS, MDS	Periodontics	30-May-14	13548/-	1-Aug-14	8.00	8.02	14	15600- 39100+AGP Rs.	25790	63701	Associate Professor	15600- 39100+AGP Rs. 8000	P3	30320	35,474	960'6	74,890	11,189
		Professor								Total			384858	100000				unnanun	55,420	456,288	71,430

Assoc	Associate Professor to Professor	Professor					Drocont etatue									Afte	After Promotion	tion			
			Maria and the second	W. Charles and Co.			Leacht States														
SI. No.	Name	Designation	Designation Qualification	Overall Previous experience	Date of Join MSRDC	MSRDC Salary - July 2014	Date of Join RUAS	RUAS Experienc e	RUAS overall Experienc Experienc	Grade	Present Scale	Basic Pay	Gross	Promotion as	Scale after Promotion	Grade	Basic	DA	HRA	Gross	Diffarenc
н	Dr. Shivaronjani Gali	Assoicate	BDS, MDS.Ph.D	Prosthodontics	11-Sep-06	90335/-	1-Aug-14	8.00	16.08	P3	15600- 39100+AGP Rs. 8000	48690	120264	Professor	37400- 67000+AGP Rs.10000	P5	20890	59,541	15,267	125,698	5,434
2	Dr.Sowmya S V	Assoicate	BDS, MDS.Ph.D	BDS, Oral Pathology	20-Jun-11	57928/-	1-Aug-14	8.00	12.02	P3	15600- 39100+AGP Rs. 8000	36205	89427	Professor	37400- 67000+AGP Rs.10000	PS	20890	59,541	15,267	125,698	36,271
m	3 Dr. Shruthi N	Assoicate	BDS, MDS.Ph.D	Conservative Dentistry &	21-Sep-09	79266/-	1-Aug-14	8.00	12.10	Pa	15600- 39100+AGP Rs. 8000	42739	105566	Professor	37400- 67000+AGP Rs.10000	PS	20890	59,541	15,267	125,698	20,132
4	4 Dr.Pushpalatha G	+	-	Pedodontics & Preventive	30-May-14	-/991.29	1-Aug-14	8.00	14.03	B	15600- 39100+AGP Rs. 8000	36205	89427	Professor	37400- 67000+AGP Rs.10000	P5.	20890	59,541	15,267	125,698	36,271

Regarding Professy, if was dirumed with CE Sir & Srivara Sir and was adviced to give them the minimum of layscale of problems

How by v.c. My Hopmand

of Applied Sciences 60 054

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# **ANNEXURE 34**

[A university established by State Act No.15 of 2013]

# UNIVERSITY HOUSE, "GNANAGANGOTRI CAMPUS", NEW BEL ROAD, M.S.R NAGAR, BANGALORE 560 054

### BALANCE SHEET AS AT MARCH 31ST, 2023

PARTICULARS	SCH NO.	7077 2077	
	Jen No.	2022-2023	2021-2022
Source of Funds	1 1		
Permanent Statutory Fund	1 . 1		
Development Fund	1 1	11,93,74,123	11,72,32,920
General Fund	2 3	29,52,68,703	29,52,68,703
	3	81,72,99,616	58,91,23,665
Current Liabilities	1		
Borrowings .			
Sundry Creditors	4	68,88,36,695	11,84,69,889
Statutory Liabilities		21,23,24,028	2,06,56,989
Advances & Deposits	5	2,64,07,152	1,01,17,829
Other Liabilities & Provisions	5 6 7	14,04,96,625	11,31,34,586
2 - TOVISIONS	7	43,43,43,300	32,80,47,770
TOTAL		2 70 10 1	
		2,73,43,50,242	1,59,20,52,349
Application of Funds		1	
Fixed Assets	8	02.25.55	
		83,36,55,874	60,34,80,908
Investments	1 1		
Fixed Deposits with Bank	9		
	9	26,27,08,469	50,26,27,905
Current Assets			
Deposits & Advances	10		
Cash & Bank Balances	10	13,86,30,671	4,51,72,742
Sundry Debtors	11	80,03,62,717	19,00,23,985
Stock in Hand		32,31,36,357	2,44,62,625
Other Current Assets	1	8,76,80,297	w)
-X	12	28,81,75,857	22,62,84,185
TOTAL		2 73 43 50 342	
		2,73,43,50,242	1,59,20,52,349

As per our report of even date annexed

For B.N.Subramanya & Co.,

Chartered Accountants FRN No.:004142S

Girish Hoysala

Partner

M.No.: 220210

Place: Bengaluru Date: 26.10.2023

UDIN: 23220210BGWJNN4983

For M.S.RAMAIAH UNIVERSITY OF APPLIED SCIENCES

Chancellor



[A university established by State Act No.15 of 2013]

# UNIVERSITY HOUSE, "GNANAGANGOTRI CAMPUS", NEW BEL ROAD, M.S.R NAGAR, BANGALORE 560 054

# INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD ENDING MARCH 31ST, 2023

PARTICULARS	SCH NO.	2022-2023	2021-2022
INCOME Direct Income Interest Income Other Income	13 14 15	2,91,66,80,200 2,63,73,151 5,62,06,652	1,20,66,11,375 1,63,13,480 1,31,86,445
TOTAL INCOME (A)		2,99,92,60,003	1,23,61,11,300
EXPENDITURE  Salaries and Other Allowances  Administrative Expenses  Operating Expenses  Repairs and Maintenance  Financial Expenses  Depreciation	16 17 18 19 20 9	1,48,41,87,398 21,91,80,989 88,29,71,848 9,67,21,452 36,60,876 8,43,61,488	60,10,50,826 6,43,29,201 13,07,25,091 2,46,46,684 66,01,843 5,30,21,448
TOTAL EXPENDITURE (B)		2,77,10,84,051	88,03,75,093
XCESS OF INCOME OVER EXPENDITURE (A-B)		22,81,75,952	35,57,36,207

As per our report of even date annexed

For B.N.Subramanya & Co.,

Chartered Accountants FRN No.:004142S

Girish Hoysala

Partner

M.No.: 220210

Place: Bengaluru Date: 26.10.2023

UDIN: 23220210BGWJNN4983

For M.S.Ramaiah University Of Applied Sciences

M R Jayaram

Chancellor

M.S.RAMAIAH UNIVERSITY OF APPLIED SCIENCES SCHEDULES FORMING PART OF BALANCE SHEET AS AT MARCH 31ST, 2023

SCHEDULE: 8

W.D.V. As On 31.03,2023	14,94,41,395	75.15.147	18,21,29,272	5,63.27,252	81,09,428	4.52.204	1,84,54,621	4.35,22,572	3,29,49,826	25,76,59,540	7,28,11,658	83,36,55,874
W.D.		2	18,2	5,6	80		1,8	4.3	3,2	25,7	7.28	83,36
Depreciation For The Year	475884.3553	2188241.881	2,75,74,812.22	75,78,531	12,83,223	75,088	28,18,583	1,21,21,019	37,14,195	2,65,31,911		8,43,61,488
Rate	10%	20%	15%	15%	15%	15%	15%	40%	40%	10%		
Total	14,94,41,395	97,03,389	20,97,04,084	6,39,05,783	93,92,650	5,27,292	2.12,73,204	5,56,43,591	3,66,64,021	28,41,91,451	7,28,11,658	91,80,17,362
Transfer	11	ŧ				•				,	21,65,80,777	21,65,80,777
Additions	* *	44,48,580	5,78,34,663	1,97,84,117	11,58,732	49,984	71,86,138	3,33,33,143	2,68,24,451	23,36,99,104	14,67,98,319	53,11,17,231
W.D.V As On 01.04.2022	14,94,41,395	52,54,809	15,18,69,421	4,41,21,666	82,33,918	4,77,308	1,40,87,056	2,23,10,448	98,39,570	5,04,92,347	14,25,94,116	60,34,80,908
Particulars	Land - Yaralekanahalli Land Wall & Fencina	Vehicles	Equipment	Furniture & Fixtures	Electric Fittings	Sports Materials	Library Books	Computers & Networking	Software	Building Improvements	Capital work-in-progress	TOTAL
No.	H	н	H	2	>	5	II/	VIII	×	×	×	









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[A university established by State Act No.15 of 2013]

#### UNIVERSITY HOUSE, "GNANAGANGOTRI CAMPUS", NEW BEL ROAD, M.S.R NAGAR, BANGALORE 560 054

#### **BALANCE SHEET AS AT MARCH 31ST, 2022**

PARTICULARS	SCH NO.	2021-2022	2020-2021
Source of Funds			
Permanent Statutory Fund	1	11,72,32,920	11,58,62,394
Development Fund	2	29,52,68,703	29,52,68,703
General Fund	3	58,91,23,665	23,33,87,458
Earmarked Funds	5		
Current Liabilities			
Borrowings	6	11,84,69,889	10,72,51,185
Sundry Creditors		2,06,56,989	30,38,452
Statutory Liabilities	7	1,01,17,829	99,14,706
Advances & Deposits	8	11,31,34,586	9,41,76,848
Other Liabilities & Provisions	9	32,80,47,770	32,12,99,676
TOTAL		1,59,20,52,349	1,18,01,99,422
Application of Funds			
Fixed Assets	10	60,34,80,908	51,64,01,323
Investments			
Fixed Deposits with Bank	11	50,26,27,905	19,88,72,902
Current Assets			
Deposits & Advances	12	4,51,72,742	3,86,06,223
Cash & Bank Balances	13	19,00,23,985	25,27,90,346
Sundry Debtors		2,44,62,625	1,70,87,317
Other Current Assets	14	22,62,84,185	15,64,41,311
TOTAL		1,59,20,52,349	1,18,01,99,422

As per our report of even date annexed

# 101, R.V.-15, E Block, 6th Main.

For B.N.Subramanya & Co.,

Chartered Accountants

FRN No.:004142S

Girish Hoysala

Partner \*\*\*
M.No.: 220210

UDIN: 22220210AXCUZI4903

Place: Bengaluru Date: 30.09.2022 For M.S.Ramaiah University Of Applied Sciences

University of

M R Jayaram Chancellor

## [A university established by State Act No.15 of 2013] UNIVERSITY HOUSE, "GNANAGANGOTRI CAMPUS", NEW BEL ROAD, M.S.R NAGAR, BANGALORE 560 054

#### INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD ENDING MARCH 31ST, 2022

PARTICULARS	SCH NO.	2021-2022	2020-2021
INCOME			
Direct Income	15	1,20,66,11,375	1,06,87,39,630
Interest Income	16	1,63,13,480	1,32,02,116
Other Income	17	1,31,86,445	2,59,98,91
TOTAL INCOME (A)		1,23,61,11,300	1,10,79,40,658
EXPENDITURE	B		
Salaries and Other Allowances	18	60,10,50,826	61,89,97,01
Administrative Expenses	19	6,43,29,201	7,49,60,50
Operating Expenses	20	13,07,25,091	10,01,33,58
Repairs and Maintenance	21	2,46,46,684	2,30,81,78
Financial Expenses	22	66,01,843	1,19,10,19
Depreciation	9	5,30,21,448	5,46,95,43
TOTAL EXPENDITURE (B)		88,03,75,093	88,37,78,510
EXCESS OF INCOME OVER EXPENDITURE (A-B) FRANSFERRED TO GENERAL FUND		35,57,36,207	22,41,62,148

As per our report of even date annexed

# 101, R.V.-15 E Block, 6th Main

For B.N.Subramanya & Co.,

Chartered Accountants FRN No.:004142S

Girish Hoysala

Partner

M.No.: 220210

UDIN: 22220210AXCUZI4903

Place: Bengaluru Date: 30.09.2022 For M.S.Ramaiah University Of Applied Sciences

M R Jayaram Chancellor

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[A university established by State Act No.15 of 2013]

#### UNIVERSITY HOUSE, "GNANAGANGOTRI CAMPUS", NEW BEL ROAD, M.S.R NAGAR, BANGALORE 560 054

#### **BALANCE SHEET AS AT MARCH 31ST, 2021**

PARTICULARS	SCH NO.	2020-2021	2019-2020
Source of Funds			
Permanent Statutory Fund	1	11,58,62,394	11,39,86,829
Development Fund	2	29,52,68,703	29,52,68,703
General Fund	3	23,33,87,458	92,25,309
Earmarked Funds	4		73,76,254
Current Liabilities			
Borrowings	5	10,72,51,185	16,52,25,093
Sundry Creditors		30,38,452	1,16,09,835
Statutory Liabilities	6	99,14,706	92,25,806
Advances & Deposits	7	9,41,76,848	7,77,98,335
Other Liabilities & Provisions	8	32,12,99,676	26,07,58,950
TOTAL		1,18,01,99,422	95,04,75,114
Application of Funds			
Fixed Assets	9	51,64,01,323	49,58,62,182
Investments			
Fixed Deposits with Bank	10	19,88,72,902	18,71,86,015
Current Assets			
Deposits & Advances	11	3,86,06,223	1,83,89,307
Cash & Bank Balances	12	25,27,90,346	12,71,11,266
Sundry Debtors		1,70,87,317	2,44,76,846
Other Current Assets	13	15,64,41,311	9,74,49,498
TOTAL		1,18,01,99,422	95,04,75,114

As per our report of even date annexed

7 101, R.V.-15

E Block, 6th Main,

Malloswaram, Bangaloi - 03.

ED ACCO

For B.N.Subramanya & Co., Chartered Accountants FRN No.:004142S

Girish Hoysala Partner

M.No.: 220210

Place: Bengaluru Date: 14.01.2022

UDIN: 22220210AAAAAX1104

For M.S.RAMAIAH UNIVERSITY OF APPLIED SCIENCES

M R Jayaram Chancellor

## [A university established by State Act No.15 of 2013] UNIVERSITY HOUSE, "GNANAGANGOTRI CAMPUS", NEW BEL ROAD, M.S.R NAGAR, BANGALORE 560 054

#### INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD ENDING MARCH 31ST, 2021

PARTICULARS	SCH NO.	2020-2021	2019-2020
INCOME			
Direct Income	14	1,06,87,39,630	1,01,18,19,402
Interest Income	15	1,32,02,116	1,74,10,459
Other Income	16	2,59,98,913	34,17,376
TOTAL INCOME (A)		1,10,79,40,658	1,03,26,47,237
EXPENDITURE			
Salaries and Other Allowances	17	61,89,97,015	57,96,56,883
Administrative Expenses	18	7,49,60,500	6,97,77,121
Operating Expenses	19	10,01,33,586	9,51,72,677
Repairs and Maintenance	20	2,30,81,783	2,15,55,109
Financial Expenses	21	1,19,10,194	1,56,23,655
Depreciation	9	5,46,95,432	5,04,63,549
TOTAL EXPENDITURE (B)		88,37,78,510	83,22,48,993
EXCESS OF INCOME OVER EXPENDITURE (A-B) TRANSFERRED TO GENERAL FUND		22,41,62,148	20,03,98,243

As per our report of even date annexed

101, 8.7, 15

E Block, Gth Main Malleswaram, Bangalor, 13.

For B.N.Subramanya & Co., Chartered Accountants FRN No.:004142S

Girish Hoysala Partner

M.No.: 220210

Place: Bengaluru Date: 14.01.2022

UDIN: 22220210AAAAAX1104

For M.S.Ramaiah University Of Applied Sciences.

Sungators

M R Jayaram Chancellor

# **ANNEXURE 35**



# OFFICE OF THE VICE CHANCELLOR

Ref:RUAS/Office of VC/02/2023-24/DATED:06-12-2023

#### **Notification**

This is to notify that the IQAC Committee Constitution for the year 2023-24 is as follows

Sl. No.	Name	Designation	Roles-IQAC
1	Prof. K. K. Raina	Vice Chancellor	Chairperson
2	Prof. P. N. Razdan	Principal Advisor, Quality Assurance & Excellence Cell, GEF (M)	Advisor (Member) Management Representative
3	Prof. Govind R. Kadambi	Pro-Vice Chancellor, Research	Member
4	Prof.Om Prakash Kharbanda	Pro-Vice Chancellor, Health Sciences	Member
5	Prof. G S Venkatesh	Registrar	Member
6	Dr. Medha Rao	Dean-Academics	Member
7	Dr. Shalini C Nooyi	Dean, Ramaiah Medical College	Member
8	Dr.Jagannathrao Venkatrao Desai	Dean, Faculty of Engineering	Member
9	Ms. Varsha S (2020-2022) MBA - Finance	One nominee each from local society, Students and Alumni	Member
10	Dr. Nagappa Veerappa Bakkannavar Head-CEG-TCS	One nominee each from Employers / Industrialists /Stakeholders	Member Member
11	Shri Parameshwar. S	Chief-QA	Member
12	Dr. Mumtaj. A	Director-QA	Member- Secretary

Vice Chancellor

Chairperson, IQAC Vice Chancellor

M.S. Ramaiah University of Applied Sciences

Bangalore - 560 054.

CC:

1. Pro-Vice Chancellors

2. Registrar

3. Dean-Academics

4. All Deans of the Faculty

5. All members of IQAC

Registered as: MS Ramaiah University of Applied Sciences "Established as per Govt. of Karnataka ACT No: 15 of 2013, Recognized by UGC U/S 2(f) of the UGC Act, 1956"

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www.ramaiah-india.org



### **Internal Quality Assurance Cell (IQAC)**

#### Internal Quality Assurance Cell - Faculty Coordinators - 2023-25

The following are the list of IQAC coordinators nominated by respective Faculty Dean's for the Academic Years 2023-25:

SI. No.	Faculty	Name of the Faculty Member	Designation	Department	E-mail ID
1	Faculty of Dental Sciences	Dr. Sowmya	Professor & HOD	Oral Pathology	sowmya.op.ds@msruas.ac.in
2	Faculty of Hospitality Management and Catering Technology	Dr. Sweety Jamgade	Asst.Professor & HOD	Management Studies - Hospitality	hod.ms.hc@msruas.ac.in
2	Faculty of Hospitality Management and Catering Technology	Mr. Sreekanth N	Asst.Professor	Food and Beverages	sreekanthn.fb.hc@msruas.ac.ir
3	Faculty of Life and Allied Health Sciences	Dr. Chennappa G	Asst. Professor and Head	Food Technology	chennappa.ft.ls@msruas.ac.in
4	Faculty of Management and Commerce	Ms. Shilpa R G	Asst.Professor	Management Studies	shilparg.ms.mc@msruas.ac.in
5	Faculty of Pharmacy	Dr.Sindhu Abraham	Asst.Professor	Pharmaceutics	sindhu.ps.ph@msruas.ac.in
	Faculty of Pharmacy Faculty of Social	Dr. B V Suma Dr Pratistha	Assoc. Professor Asst.Professor	Pharmacognosy  Data Science	suma.py.ph@msruas.ac.in pratishtha.ss@msruas.ac.in
6	Sciences	Bhattacharya			10
7	Faculty of Law	Dr. Aruna L	Assoc. Professor	Law	aruna.sl@msruas.ac.in
8	Faculty of Engineering and Technology	Dr. Raja R	Professor	AAE	raja.aae.et@msruas.ac.in
		Dr. S.P. Sreenivas Padala	Asst.Professor	CE	sreenivaspadala.ce.et@msruas.ac.i
		Mr. Nithin Rao	Assoc. Professor	CSE	nithin.cs.et@msruas.ac.in
		Dr. Harikrishna	Asst. Prof.	CSE	harikrishna.cs.et@msruas.ac.in
		Mr. Praveen Kumar V	Asst.Professor	EE	praveen.ee.et@msruas.ac.in
		Mr. Divya Kiran	Asst.Professor	ECE	divyakiran.ec.et@msruas.ac.in
		Dr. Murugesh M C	Assoc. Professor	MME	murugesh.me.et@msruas.ac.in
	Faculty of Mathematical	Dr. Sheetal Batkurki	Asst.Professor	Chemistry	sheetalbatakurki.cy.mp@msruas.ac.in
9	and Physical Sciences	Dr. Prabhu Tej J	Asst.Professor	Physics	prabhutej.pi.mp@msruas.ac.ir
		Dr. Somashekhara G	Assoc. Professor	Mathematics	somashekhara.mt.mp@msruas.ac.i n
		Ms. Archana P Patil	Asst.Professor	Industrial Design	archana.id.ad@msruas.ac.in
10	Faculty of Art and Design	Mr. Goutham N	Asst.Professor	Fashion Design	gouthamn.fd.ad@msruas.ac.in
11	Ramaiah Medical College	Dr. M G Janaki	Professor	Oncology	janakimg.rmc@msruas.ac.in
12	Ramaiah College of Physiotherapy	Dr Veena K Nambiar	Professor	Physiotherapy	veenakn@msrmc.ac.in
13	Ramaiah Institute of Nursing and Education Research	Dr Radha M S	Professor	RINER	drradhams.riner@msruas.ac.in

IQAC Member Secretary

Dr. Mumtaj A

ssurance

Vice Chancellor Prof. K. K Raina

Rengalate - Japanell

# **ANNEXURE 36**



## **Internal Quality Assurance Cell (IQAC)**

# CONSOLIDATED REPORT OF INTERNAL ACADEMIC AND ADMINISTRATIVE AUDIT (AAA) 2021 - 22

#### **INDEX**

SI.No	Topic	Pg.No
1	Introduction	2
2	The details of the Academic Audits carried over during 2021-22	3
3	List of Internal Auditors identified by Office of Vice Chancellor	3
4	Checklist for Academic Audit	4
5	List of Faculties undergone Academic Audit	5
6	Consolidated Report of Internal Academic Audit 2021-22	5
7	Part A – List of Annexures	6
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10	List of Departments undergone Administrative Audit	9
11	Consolidated Report of Internal Administrative Audit 2021-22	9
12	Part B – List of Annexures	10

Chief, Quality Control (Academics)

Directorate of QEPET

M.S.Ramaiah University of Applications

Bangalore

M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054

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#### INTRODUCTION:

#### The Academic Audit

The Academic Audit is necessary for any educational institution to know its strengths and weaknesses and to improve on quality processes in teaching, learning and evaluation aspects there by enhancing students' success.

#### The Administrative Audit:

It is the process of evaluating the efficiency and effectiveness of the administrative procedure. It includes assessment of policies, strategies & functions of the various administrative departments, control of the overall administrative system etc.

During the Audit process, the departments should be ready with set of data and proper documentation of the departmental activities so that the authenticated data will be readily available for the various accreditations coming up. Audit process also facilitates to work towards filling the gaps identified.

- The Internal Academic and Administrative Audit at RUAS was carried out with expert internal Audit team comprising members from Academics and Internal Quality Assurance cell.
- The internal Auditors were identified by the VC Office and IQAC coordinated the Academic and Administrative Audit for all the Faculties.
- The template for Audit process was approved by the Vice Chancellor and the Audit team critically reviewed the documents and recorded the compliances and non-compliances at each Faculty / Department and the observations made were presented to VC and discussed with respective Deans and HoDs.
- VC has insisted that Non-compliances should be addressed within a short time of period as a ready measure for external audit.
- Totally three Academic Audits and two Administrative Audits were conducted during the Academic Year 2021-22 to streamline the processes, SOPs and documentation procedures at University / Faculty / Department level.

M.S. Ramaiah University of Applied Sciences Bangalete - 560 054

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Bangalore - 560 054 --

lef, Quality Control (Academics)



#### **PART A**

#### **CONSOLIDATED REPORT OF INTERNAL ACADEMIC AUDIT - 2021-22**

Three Academic Audits were conducted in the months of April, June and September 2022 respectively. The detailed report is as under:

The details of the Academic Audits carried over during 2021-22

Clate of Audia	Review of Audited Report by VC with	
Sl.No	Date of Audit	Audit Team and Dean's / Directors
1	5 <sup>th</sup> and 6 <sup>th</sup> April 2022 (Annexure 1&2)	20th April 2022
2	6 <sup>th</sup> , 7 <sup>th</sup> and 8 <sup>th</sup> June 2022 (Annexure 7)	25 <sup>th</sup> June 2022
3	13 <sup>th</sup> Sept.2022 (Annexure 10)	20 <sup>th</sup> Oct.2022

#### List of Internal Auditors identified by Office of Vice Chancellor

Sl.No	Name of Internal Auditors	Designation
1	Dr.Sreenivasa murthy	Dean, FDS
2	Dr.Madhavan V	Professor, FPH
3	Prof.Abby Mathew	Dean, FHMCT
4	Dr. T.N.Srikantha Dath	Associate Dean, DoA
5	Dr.Silju Mathew	Dean, FDS
6	Ms.Vijayalakshmi T	Head, QAC
7	Ms. Geetha B.E.	Head, QAC

Registrar

M.S. Ramaiah University of Applied Sciences

Bangalore - 560 054

Chief, Outsity Control [Academics]
Directorate of OEPET
Directorate of Applied Sciences
M.S.Ramalah University of Applied Sciences
Bangalore - 560 054

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#### **Checklist for Academic Audit (Annexure 3)**

UNIVERSITY OF APPLIED SCIENCES 1.	st ACADEMIC AUDIT REPORT(April 2	2022)
Ref: RUAS/IQAC/AA-042022  Name of the Faculty:  Name of the Department:		Date:
Observations from Auditor's Team		
1 BoS Composition and MoM		
2 Budget and Purchase file		
3 Programmes Offered with Sanctioned Intal	ke	
4 Present student strength-Sem /Year-wise		
5 Year-wise Academic Documents-AR, PS, CS		
Revision of Programmes and Courses with		
7 Time Table		
8 Notices/Circulars		
9 Course Allocation (Teaching-Load)		
10 Course Allocation (Teaching-Load) maintained by course feaders		
Examination Result Reports-Batch-wise-Par Percentages	55	
12 Academic Infrastructure (Labs/Facilities / Works hoops/Statilios)		
13 Mentor-Allocation and Minutes		
14 Feedback Reports		
Research and innovation related activities		
(Publications/Patient/)		
16 MoU details (National and International)		
17 Faculty profiles		
18 FDP Conducted		
19 Achievements (Students and Faculties)		
20 SWOC(Strengths-Weakness-Opportunities- Challenges) Analysis		
21 Value Added Courses		
ther Observations and Recommendati	ons	
Name of the Auditors	Signature of the Auditors with Date	
1		
2		
3		
Signature of the Dean	_	Signature of the Vice Chancellor

Chief, Quality Control (Academics) Directorate of QEPET M.S. Ramaiah University of Applied Sciences Bangalore - 560 054

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#### List of Faculties undergone Academic Audit

- 1. Faculty of Dental Sciences
- 2. Faculty of Hospitality Management and Catering Technology
- 3. Faculty of Pharmacy
- 4. Faculty of Life and Allied Health Sciences
- 5. Faculty of Management and Commerce
- 6. Faculty of Art and Design
- 7. Faculty of Engineering and Technology
- 8. Faculty of Mathematical and Physical Sciences

#### Consolidated Report of Internal Academic Audit 2021-22

- The First Academic Audit was conducted on 5th and 6th of April 2022 (Annexure 4) for eight
  Faculties of RUAS which have completed five academic years. The template in the form of checklist
  was provided by IQAC in consultation with VC which includes information on authenticated
  Academic documents, Curriculum revision, Course allocation, T-L activities, evaluation, research,
  consultancy and extension activities, FDPs, Budget allocation, infrastructure up gradation etc.
- The review of 1st Academic Audit report was done with the Vice Chancellor on 20th April 2022 (Annexure 5). The Auditors presented the observations made and suggestions for the improvements to be made in documentation at each stage.
- VC has insisted to develop standardised formats/ templates/ SOPs for documentation of different processes and development of policy documents at University level. He reflected on contents of course file, result analysis, to conduct SSCM at Faculty level, feedback from all stakeholders etc.
- Suggested to inform all Deans to work towards corrective actions to close the non-compliances mentioned in the report before conducting the 2nd internal Academic Audit and
- Insisted IQAC to organise an awareness programme on importance of process flows, standard operating procedures, development of policy documents and proper documentation of all the activities to streamline the processes at University/ Faculty/ Department Inversity of Applied Sciences

Chief, Quality Control (Academics)

Directorate of QEPET

Directorate of Applied Sciences

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- An awareness programme on importance of process flows, SoPs and Documentation regard to statutory bodies, regulatory bodies and Accreditations/Ratings / Rankings was organized by IQAC on 20th May 2022 (Annexure 6) and Respective Deans of Faculty, Directors, HoDs and Functional Heads of various administrative units have attended the meeting and the Vice Chancellor has addressed the importance of Accreditations for a growing University and the role of National and international acclamations, assessments, rankings to make an University a holistic existence entity.
- The Second Academic Audit was conducted on 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> of June 2022 (Annexure 7) as a follow up action to assess the corrective measures for the suggestions made during 1<sup>st</sup> Academic Audit. The same checklist was used and prompted well in advance to the respective Faculty deans and HoDs to go through the previous report to meet the non-compliances identified during the first Audit (Annexure 8).
- The review of 2<sup>nd</sup> Academic Audit report was discussed on 25<sup>th</sup> June 2022(Annexure 9). The Auditors presented the observations made and they were of the opinion that comparatively there is a lot of improvement in documentation and filing but still there were some gaps where the centralised data like Budget allocation, infrastructure details, etc. need to be made available at Faculty level.
- The third Academic Audit was conducted on 13<sup>th</sup> Sept.2022 (Annexure 10) to minimize the non-compliances identified during 2<sup>nd</sup> Academic Audit process (Annexure 11). Comparatively there was a lot of improvement in documentation but related to centralised data like approved budget allocation documents, infrastructure details etc. need to be addressed at management level, however in a NAAC review meeting held on 19<sup>th</sup> Oct 2022 by Prof.Razdan, Principal Advisor, QAEC, GEF (M), the 3rd Academic Audit report was discussed where it was assured that, for centralised data GEF (M) will procure the required documents (Annexure 12).

Chief, Quality Control (Academics)

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#### Part A – List of Annexures

- Annexure 1&2 List of Internal Auditors and 1st Academic Audit Schedule duly signed by VC
- Annexure 3 1st AAA Checklist
- Annexure 4 1<sup>st</sup> AAA reports- scanned copies duly signed by Auditors/Dean / VC
- Annexure 5 MoM of 1<sup>st</sup> AAA Review meeting
- Annexure 6 Report of awareness programme by VC 20<sup>th</sup> May 2022
- Annexure 7 2<sup>nd</sup> Academic Audit Schedule
- Annexure 8 2<sup>nd</sup> AAA reports- scanned copies duly signed by Auditors/Dean / VC
- Annexure 9 MoM of 2<sup>nd</sup> AAA Review meeting
- Annexure 10 3<sup>rd</sup> Academic Audit Schedule
- Annexure 11 3<sup>rd</sup> AAA reports- scanned copies duly signed by Auditors/Dean / VC
- Annexure 12 MoM of 3<sup>rd</sup> AAA Review meeting

#### **Summary:**

- The Vice Chancellor has reflected on the role of Deans, being relatively senior people in the Faculty,
  must be able to bring their thought process to best utilize the man power resources and set for
  broader outcomes than the Accreditation bodies set for an institution. He insisted all Deans and
  HoDs for review of Internal AAA reports for non-compliances and to fill the gaps identified by the
  Audit team at the earliest.
- The Vice Chancellor has also reflected on the role of HoDs in a department in strengthening its
   Faculty members and proper documentation (notices, circulars, reports) of the departmental
   activities.

Chief, Quality Control (Academics)

Directorate of QEPET

M.S. Ramalah University of Applied Sciences

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Registrar

Registrar

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#### **PART B**

#### **CONSOLIDATED REPORT OF INTERNAL ADMINISTRATIVE AUDIT - 2021-22**

Two Administrative Audits were conducted in the months of May and September/October-2022 respectively. The detailed report is as under:

The details of the Administrative Audits carried over during 2021-22

Sl.No	Date of Audit	Review of Audited Report by VC with Audit Team and Dean's / Directors
1	10 <sup>th</sup> and 11 <sup>th</sup> May 2022 (Annexure – 1&2)	17 <sup>th</sup> May 2022
2	14th Sept.2022 (Annexure – 7)	20 <sup>th</sup> Oct.2022

#### List of Internal Auditors identified by Office of Vice Chancellor

SI.No	Name of Internal Auditors	Designation
1	Dr.Sreenivasa murthy	Dean, FDS
2	Dr.Madhavan V	Professor, FPH
3	Prof.Abby Mathew	Dean, FHMCT
4	Dr. T.N.Srikantha Dath	Associate Dean, DoA
5	Dr.Silju Mathew	Dean, FDS
6	Ms. Vijayalakshmi T	Head, QAC
7	Ms. Geetha B.E.	Head, QAC

Chief, Quality Control (Academics)

Directorate of QEPET

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#### List of Departments undergone Administrative Audit

- 1. Office of Registrar
- 2. Controller of Examination
- 3. Research Division
- 4. Directorate of Student Affairs
- 5. Accounts and Finance
- 6. Information and Communication Technology (ICT)
- 7. Admissions
- 8. Human Resource
- 9. Purchase and Stores
- 10. Internal Quality Assurance Cell (IQAC)
- 11. Directorate of Training and Life Long Learning (DTLL)
- 12. Directorate of Transferable Skills and Leadership Development (DTSLD)

#### (Annexure 3 – Department wise Checklist as applicable)

#### **Consolidated Report of Internal Administrative Audit 2021-22**

- The First Administrative Audit was conducted on 10th and 11th May 2022 (Annexure 4) for major twelve departments at RUAS Gnanagangothri Campus. Reports are department specific and Audit was done on the checklist provided by each department HoD based on its activities.
- The review of 1st Administrative Audit report was done with the Vice Chancellor on 17th May 2022 (Annexure 5). The auditors presented the observations made department wise.
- The Vice Chancellor discussed each department observations and reflected on the proper procedure of documentation and updation of the same every year.
- The Vice Chancellor has suggested to schedule a meeting on 20th May 2022 to address the importance of the process flow, SOPs and documentation to streamline the processes, effective documentation procedures to substantiate the evidence sought during Audit process. Respective Deans of Faculty, Directors, HoDs and Functional Heads of various administrative units are recommended to attend the meeting.
- An awareness programme on importance of process flows, SoPs and Documentation with regard to statutory bodies, regulatory bodies and Accreditations/Ratings / Rankings was organized by IQAC on 20th May 2022 (Annexure 6) Respective Deans of Faculty, Directors, HoDs and Functional

Chief, Quality Control (Academics) Directorate of QEPET M.S.Ramalah University of Applical Sciences

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A & Ramaiah University of Applied Sciences

Registrar



Heads of various administrative units have attended the meeting and the Vice Chancellor has addressed the importance of Accreditations for a growing University and the role of National and international acclamations, assessments, rankings to make an University a holistic existence entity.

- The Second Administrative Audit was conducted on 14th Sept.2022 as scheduled (Annexure 7&8).
- The review of 2nd Administrative Audit report was done with the Vice Chancellor on 19th Oct.2022 and the observations made department wise were discussed briefly (Annexure 9).

#### Part B - List of Annexures

- Annexure 1&2 List of Internal Auditors and 1st Administrative Audit Schedule duly signed by VC
- Annexure 3 & 4 1<sup>st</sup> Administrative Audit Checklist department wise and 1<sup>st</sup> Administrative Audit reports- scanned copies duly signed by Auditors/HoD/Director / VC
- Annexure 5 MoM of 1st Administrative Audit Review meeting
- Annexure 6 Report of awareness programme by VC 20<sup>th</sup> May 2022

-28/10/22

Chief, Quality Control (Academics)

Directorate of QEPET M.S.Ramaiah University of Applied Sciences

- Annexure 7 2<sup>nd</sup> Administrative Audit Schedule
- Annexure 8 –2<sup>nd</sup> Administrative Audit reports- scanned copies duly signed by Auditors/HoD/Director / VC
- Annexure 9 MoM of 2<sup>nd</sup> AAA Review meeting

**Member Secretary** 

**IQAC** 

Hon'ble Vice Chancellor

plore - 560 054 M.S. Ramalah University of Applied Sciences

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## **Internal Quality Assurance Cell (IQAC)**

#### **Academic and Administrative Audit Inspection Schedule**

Dear Sir/Madam,

This is for your kind information that the Academic and Administrative Audit (AAA) Inspection is scheduled on 5<sup>th</sup> and 6<sup>th</sup> April 2022. The schedule is as shown below.

Date	Time	Faculty	Dean	HoD	Audit team
5 <sup>th</sup> April 202	2				
	10 am Onwards	FHMCT	Prof.Abby Mathew	Mr. Shyam Prasad Mr. Rajesh. S Ms. Shashi Binani Ms. Ankita Sharma Dr. Sweety Jamgade	Dr. T.N.Srikantha Dath Dr.Sreenivas Murthy and Ms. Geetha B.E.
Gnana Gangothri Campus	1.30 pm Onwards	FDS	Dr. Sreenivasa murthy	Dr. Swaroop Hegde Dr. Nagaraju Rakesh Dr. Ranganath K Dr. Sowmya SV Dr. Prashantha G S Dr. Dhananjaya G Dr. Kranti. K Dr. Ravishankar K Dr. Pushpanjali K	Prof.Abby Mathew Dr. T.N.Srikantha Dath and Ms. Geetha B.E.
Ramaiah	10 am Onwards	FAD	Dr. Govind R Kadambi	Dr. Mamatha G. Hegde Mr. H. S. Lohit	Dr. Madhavan. V
Technology Campus	1.30 pm Onwards	FMPS	Dr. Govind R Kadambi	Dr. T Niranjana Prabhu Dr. Premakumar H B Dr. S Chandan Kumar	and Ms.Vijayalakshmi
6th April 202	2				
	10-00 to 12 pm	FMC	Dr. Anindya Sen	Dr. Sharath Kumar K.M	Dr.Sreenivas Murthy
Gnana Gangothri	12 pm to 1-30 pm	FLAHS	Dr.Krishnamurthy Jayanna	Dr. Rohini Keshava Dr.Nanje Gowda N A Dr.Tushar Shaw	Dr. T.N.Srikantha Dath and
Campus	2.30 pm Onwards	FPH	Dr. Bharath S	Dr. Harish Kumar D R Dr. Ashoka Babu V L Dr. Basavaraj B V Dr. Anbu J	Ms. Geetha B.E.
Ramaiah Technology Campus	10 am Onwards 1.30 pm Onwards	FET	Dr. Govind R Kadambi	Dr. A. T Sriram Dr. Nayana N. Patil Dr. Pushphavathi T P Dr. Malathi S Dr. Mahendra Babu N C	Dr.Madhavan. V Prof.Abby Mathew and Ms. Vijayalakshmi T

5. Partur

Parameshwar. S
Member Secretary, IQAC

Wice Chancellor

M.S. Ramaiah University of Applied Science

Bangalore - 560 054.

Prof. K. K. Raina
Vice Chancellor



## **Internal Quality Assurance Cell (IQAC)**

#### **Administrative Audit Inspection Schedule**

#### Dear Sir/Madam,

Please find below schedule for Administrative Audit scheduled on 9<sup>th</sup> and 10<sup>th</sup> May' 2022 with the details of offices to be audited.

Respective Directors/Chief/Functional Heads of the administrative offices mentioned to extend their full support to the audit team to make this activity-outcome leading to improvements in the process and documentation.

		Administrative Offices to be Audited						
Date of Audit	Audit Team	10 to 12-30 pm	2 to 3-30 pm	3-30 pm to 5 pm				
9 <sup>th</sup> May 2022 (Monday)	Team 1	Research Division (Dr. Sharath Kumar)	DTLLL (Dr. Vibha Shetty)	Purchase (Ms. Ramya and Sh. Siddaramanna)				
	Team 2	Office of Registrar	DTSLD (Sh. Jyothi Shankar)	Finance & Accounts (Sh. Venkat Subramanyam and Sh. Shanthamurthy)				
10 <sup>th</sup> May 2022 (Tuesday)	Team 1	Admissions (Ms. Anjana)	HR (Ms. Anuradha and Ms. Shwetha)	(Sh. Nagesh T R)				
	Team 2	DSA (Student Affairs) - (Dr. Reema Chaudhury)	COE (inclusive of ERP) - (Prof. Ashok Meti, Ms. Prema and Sh. Gotham Nagaraj)	IQAC (Sh. Paramesh. S)				

Auditor Team					
Team 1 Team 2					
Dr. Sreenivas Murthy	Prof V Madhavan				
Dr. Srikant Dutta	Prof. Abby Mathew				
Ms. Vijayalakshmi T	Ms. Geetha B. E				

Parameshwar. S

Member Secretary, IQAC

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Prof. K. K. Raina Vice Chancellor

Vice Chancellor

M.S. Ramaiah University of Applied Sciences

Bangalore - 580 654.

## **ANNEXURE 37**



	M S RAMAIAH UNIVERSITY OF APPLIED SCIENCES										
	DATES OF STATUTORY BODY MEETINGS CONDUCTED-Since 2021 Till Date (3 Years)										
	ACM		RIC		FC		ВОМ		BOG		
NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE		
23	15th July 2021	13	26th Mar 2021	18	11th Jan 2021	22	7th Oct 2021	21	25th Nov 2021		
24	6th Dec 2021	14	20th Sep 2021	19	28th June 2021	23	7th March 2022	22	11th March 2022		
25	17th Feb 2022	15	10th Dec 2021	20	7th Oct 2021	24	21st Nov 2022	23	18th June 2022		
26	14th July 2022	16	29th Mar 2022	21	25th Mar 2022	25	23rd June 2023	24	28th Nov 2022		
27	26th Sep 2022	17	6th Sep 2022	22	14th Nov 2022	26	18th Dec 2023	25	1st Sep 2023		
28	3rd April 2023	18	6th Mar 2023	23	21st April 2023	27	3rd April 2024	26	20th Dec 2023		
29	14th July 2023	19	5th Dec 2023	24	23rd Aug 2023						
30	11th Dec 2023	20	23rd Mar 2024	25	15th Dec 2023						
31	22nd Mar 2024			26	26th Mar 2024						



# Latest Minutes of the Meeting of the Statutory Bodies of the University



MINUTES OF THE 26<sup>TH</sup> MEETING OF THE BOARD OF GOVERNORS OF M S RAMAIAH UNIVERSITY OF APPLIED SCIENCES, HELD ON 20<sup>TH</sup> DECEMBER 2023, AT 11.30 AM IN THE BOARD ROOM, HERITAGE BUILDING, GG CAMPUS, NEW BEL ROAD, BANGALORE.

#### MEMBERS PRESENT:

SI. No	Name	Designation	Post	
1	Dr M R Jayaram	Chancellor	Chairman	
2	Dr Kuldeep Kumar Raina	Vice Chancellor	Member	
3	Dr K R S Murthy	Nominated by the GoK	Member	
4	Shri M R Sreenivasa Murthy	Chief Executive, GEF (M)/ Member Nominated by GEF(M)		
5	Dr Govind R Kadambi	Pro- Vice Chancellor - Research	Non-voting Member	
6	Dr Om Prakash Kharbanda	Pro- Vice Chancellor- HS	Non-voting Member	
7	Dr A Sivathanu Pillai	Appointed by Chancellor	Member	
8	Dr R Natarajan	Appointed by Chancellor	Member	
9	Dr G S Venkatesh	Registrar	Non-voting member and Member-Secretary	
10	Shri. Venugopala Sastry	CFO, GEF (M)	Special Invitee	
11	Prof P N Razdan	Principal Advisor – QA&EC	Special Invitee	
12	Shri. Udayakumar Shetty	Head, Finance	Special Invitee	

The Chairman of the Board of Governors welcomed the members and called the meeting to order. He noted that the quorum was present and accordingly the agenda matters were taken up for discussion.

#### AGENDA NO. BOG 26.1:

#### Grant of Leave of Absence:

The Board noted that the ex-officio members, viz., The Principal Secretary to the Government Higher Education Department and the Principal Secretary to the Government, Medical Education Department besides nominees from GEF(M), viz., Sri M R Kodandaram, Smt. M R Prabhavathy were absent due to their other commitments. Accordingly, leave of absence was granted. Copy of Attendance is enclosed as Annexure BOG 26.1

#### AGENDA NO. BOG 26.2:

#### Confirmation of the proceedings of 25th meeting of the Board of Governors.

The minutes of 25<sup>th</sup> Board of Governors meeting held on 1<sup>st</sup> Sept 2023 were circulated on 11<sup>th</sup> Oct 2023. The Board noted that no comments were received. The Minutes of the 25<sup>th</sup> meeting of the Board of Governors was confirmed.



#### AGENDA NO.BOG 26.3:

#### **Action Taken Report:**

AGENDA NO.	AGENDA	ACTION TAKEN
BOG 24.11	Report on the activities during centenary celebrations.  In the 24 <sup>th</sup> Meeting of the Board of Governors there was a report on the inauguration of RAMAIAHSAT Satellite Ground Station at Ramaiah Technology Campus, Peenya as part of the MS Ramaiah Centenary Celebrations.  One of the Hon'ble members had then suggested that a 4-year UG Program in Space Technology be introduced in collaboration with Industry. The Board agreed with the suggestion in principle and to initiate the work nominating someone as a Single Point of Contact.	<ul> <li>➤ The ground station was inaugurated by the Hon'ble Chancellor or 7<sup>th</sup> June 2023.</li> <li>➤ A Committee under the Chairmanship of Dr Sivathanu Pillai has been constituted. A meeting was held or 21<sup>st</sup> Nov 2023.</li> <li>➤ The Committee opined that the course structure for the program needs to be designed by looking</li> </ul>
G 24.13.2	Proposal for increase in the intake in B Tech (CSE) from 180 to 300.  The Board of Governors in its 24 <sup>th</sup> Meeting mentioned that an increase in the intake from 180 to 300 in B Tech (CSE) requires NBA Accreditation as per the AICTE norms. Further, there is already a	<ul> <li>➤ The matter is kept on hold.</li> <li>➤ Regulatory guidelines will be followed.</li> <li>➤ The recruitment process is ongoing.</li> <li>➤ The deserving candidates are</li> </ul>



	shortage of faculty in the Computer Science Department.  The Board had then suggested the Vice Chancellor to formulate a better remuneration policy that would attract the talented teachers to join the University.	compensated with additional allowance.  The Board noted and authorized the Vice Chancellor to take suitable decisions on a case-to-case basis in this regard.
BOG 25.7	Introduction of Rate Contract System as part of Purchase Policy.  The Board in its last meeting approved the introduction of a Rate Contract System as part of Purchase Policy and recommended inviting tenders from reputed vendors.	➤ The process is in progress and will be completed soon. The Rate Contract System in full fledge will be implemented from 1st of April 2024.  The Board noted the action taken with respect to the introduction of a Rate Contract
		System as part of the Purchase Policy.
BOG 25.16	To ratify the sanctioned staff strength and promotions to teaching staff.  In the 25th Meeting of the Board of Governors, a note for the ratification of the promotions to the faculty was placed.  The Board suggested that a brief write-up of the process followed be provided as part of the agenda.	<ul> <li>The sanctioned staff strength and promotions to teaching staff were noted and ratified.</li> <li>The new appraisal template was approved by the Board of Management, in its 25th meeting held on 23rd June 2023 and shall be implemented with effect from 2023-24.</li> <li>A brief write-up of the process followed in promotions is enclosed as Annexure BOG 25.16</li> </ul>
		The Board noted the action taken.



#### AGENDA NO.BOG 26.4:

To report on the admission status of the University for the year 2023-24.

The Member Secretary informed the Board about the admission status of the University for the academic year 2023-24, as given in the table below:

Number of	UG		PG		B. Voc.				
Students	Approved	Admitted	Approved	Admitted	Approved	Admitted			
	2220	1642	1103	677	120	41			
	Overall Approved Intake- 3443								
	No. of students admitted as on 15 <sup>th</sup> Dec 2023- 2360								
	Overall % of Admission as on 15th Dec 2023- 68.5%								

The Member-Secretary informed that, for the first time, 89% of B Tech seats are filled, i.e. 586 out of 660 seats. Director, Admissions, presented the admission status for the year 2023-24.

Further, it was submitted that the counselling by KEA for 40% of the Government quota seats in Physiotherapy (BPT and MPT), BSc - Allied Health Sciences, M Tech, MBA and M Pharm are still in progress. As a result, the situation is that the students admitted by the University in August 2023 are waiting for the classes to start, as the Government allotted students are yet to come. The Vice Chancellor requested the Board to grant permission to start classes for the admitted students, as there is a threat of students' withdrawals due to delay in commencement of classes. He also requested for the Board's permission to conduct separate lecture sessions for the Government Quota students joining late, without compromising on the quality of education. He also suggested that the University admitted students and Government Quota students be merged from the second year.

#### Resolution:

The Board resolved that the classes for the University admitted MBA students be started in suitable cohorts as the student sizes are permissible and separate batches/ cohorts be created when the Government allocated students join. However, in respect of M Tech program, since the number of university admitted students is small, they can wait till the Government Quota students join.

Further, the Board suggested exploring the possibilities in this regard.

#### AGENDA NO. BOG 26.5

## To report on submission of SSR for NAAC Accreditation.

The Member-Secretary informed the Board that the University successfully submitted the SSR for NAAC accreditation on 21st Nov 2023. This submission was done after presenting the SSR and getting the approval from the criteria leaders, deans, and leadership of the University. While the DVV clarifications are expected shortly, preparation for the Peer Team Visit is in progress.

#### Resolution:

The Board appreciated the successful submission of SSR for NAAC Accreditation.



#### AGENDA NO. BOG 26.6

To ratify the appointments made since the last Board of Governors meeting.

The Member Secretary briefed the Board that the following staff in senior positions have been appointed since the last meeting:

- 1. Dr. Vijaya Kumar- Advisor and Professor of Eminence, School of Law
- 2. Dr. Sriram Dharba- Director, HR
- 3. Dr. Nagendra Prathap Singh- I/c Director, Techno Centre
- 4. Dr. Sakshi Arora- Assistant Professor and Research Engineer

It is submitted to the Board of Governors that since the 25th meeting of the Board of Governors, held on 1st Sept 2023, recruitment has been done for all the faculties and the details are as follows:

Recruitm for all fa- (except RCPT	No. of candidates shortlisted for interview	No. of candidates selected	No. of candidates joined the university	No. of candidates yet to join the university	No. of candidates declined the offer
RINER)	171	56	33	2	21

At Ramaiah Medical College, 46 Senior Residents and 11 Faculty members have been appointed. The break-up of which are as follows:

SI. No.	Post	Number
1	Senior Residents	46
2	Assistant Professor	9
3	Professor	1
4	Clinical Psychologist	1
	Total	57

The Chancellor expressed his happiness that two national science congresses were conducted at the University, and this is the first of its kind to be held outside of New Delhi and there was lot of appreciation from the academicians & administrators in higher education. CE-GEF (M) mentioned that recently two Professors of Eminence in Economics, Dr. Narayana and Dr. Raghavendra were appointed to the School of Social Sciences and are yet to report. Further, Dr Vijayakumar, former Vice Chancellor, NLSIU has been recruited as Advisor for the School of Law. Still the University needs to recruit highly eminent people.

Further, the Chancellor mentioned that the University is introducing a course on Entrepreneurship for all the undergraduate programs in collaboration with Babson College, Boston. The course will be extended to Social Sciences and Medical students in due course later.

#### Resolution:

The Board noted the appointments made since the last Meeting and ratified the same.



#### AGENDA NO. BOG 26.7

To ratify the Promotions made since the last Board of Governors meeting.

The Member Secretary informed that the performance appraisal of the Teaching Faculty (excluding RMC, RINER and RCPT) has been completed and the process of promotion is under progress. Shortlisted faculty for promotion will be called for interview shortly.

At Ramaiah Medical College, 22 faculty members have been promoted, the breakup of which is as follows:

SI. No.	Post	Number
1	Professor	8
2	Associate Professor	12
3	Assistant Professor	2
	Total	22

#### Resolution:

The Board noted the status of promotions made since the last Board of Governors meeting and ratified the same.

#### AGENDA NO. BOG 26.8

To report the number of faculty members resigned/ superannuated since the last Board of Governors meeting.

The Member Secretary informed the Board that since the 25<sup>th</sup> meeting of the Board of Governors, held on 1<sup>st</sup> Sept 2023, there are a few faculty members who have left the university, and some got superannuated (excluding RMC, RCPT & RINER). The details of which are enclosed in **Annexure BOG 26.8**.

At Ramaiah Medical College, 10 faculty members and 23 Senior Residents have left the institution, break up of which are as follows:

SI. No.	Post	Number
1	Senior Residents	23
2	Assistant Professor	9
3	Professor	1
	Total	33

The matter is brought before the Board for information.

#### Resolution:

The Board noted the number of faculty members left the institution/ superannuated since the last meeting.



#### AGENDA NO. BOG 26.9

To consider and approve the matters referred to by the Research and Innovation Council.

The Member Secretary briefed the Board about the activities of the Research and Innovation Council. The Dean, Research, presented to the Board the key recommendations, strategies and the proposal on Central Research Laboratory. He elaborated upon the following recommendations:

- Publications overview
- Sponsored Research
- Seed Money Funding (2022-23)
- Collaborations Overview
- > PhD Overview
- PhDs Awarded Overview
- > Fellowships JRF/SRF Overview
- IPR overview (Patents)

#### Strategic Priorities:

- Strengthening Infrastructure and Systems
- Sustain strategic investments and closely monitoring.
- > Faculty training and support.
- > Strengthening the research eco-system.

One of the members suggested exploring the possibility of international collaboration for the visibility of the University. He also stated that alumni connect is most important for any University's growth and visibility. Prof. Sivathanu Pillai expressed that industrial connectivity is important to improvise research. The Vice Chancellor informed the Board that each Faculty at the University is conducting alumni meet to build the connectivity with alumni of their department. The Dean, Research, briefed the Board about the proposal for establishing a Central Research Laboratory.

#### Resolution:

The Board appreciated the activities of the Research and Innovation Council and suggested that the existing equipment available at Ramaiah Testing Laboratory could be utilized for the Central Research Laboratory. Further, the Board suggested that the year-wise financial requirements be submitted besides identification of the space required.

The Board suggested applying to ICMR, DBT, DST under "FIST" Scheme by submitting research proposals to them.

#### AGENDA NO. BOG 26.10

To consider and approve the matters referred to by the Board of Examinations.

The Member Secretary briefed the Board on the following salient features with respect to examinations. The Controller of Examination made a brief presentation on the activities and outcome of the Examination Department.

- Digital Evaluation was successfully adopted at the Examination Department.
- Encrypted online QP transmission has commenced.



- > The computer-based test (CBT) is made mandatory to be a part of the CE for all the Non-Health programs.
- > The Examination Regulations of Medical, Physiotherapy and Nursing Programs as per the regulatory requirements were ratified by the Academic Council.

The Member Secretary informed the Board that the digital evaluation component is being tested in the ERP portal.

#### Resolution:

The Board approved the matters referred to by the Board of Examinations.

#### AGENDA NO. BOG 26.11

To consider and approve the list of students graduating in 8th convocation.

The Controller of Examinations presented the list of students graduating in the 8<sup>th</sup> Convocation scheduled to be held on 29<sup>th</sup> Dec 2023. The Chief Guest for the occasion is Dr J N Reddy, University Distinguished Professor, and Regents' Professor, Texas A&M University. The final list of graduands for the upcoming Convocation was recommended in the 10<sup>th</sup> meeting of the Board of Examinations held on Dec 8, 2023, and subsequently in the 30<sup>th</sup> meeting of the Academic Council held on 11<sup>th</sup> Dec 2023 and the Board of Management Meeting held on 18<sup>th</sup> Dec 2023. 1856 students are eligible to be conferred degrees in the ensuing 8th Convocation besides 37 B. Voc. students. There are 83 gold and silver medalists for the best overall academic excellence awards, second best overall academic excellence awards and best dissertation awards. The details are as follows:

No. of students eligible for the award of Degree	Female students	Male students	Pass Percentage
1856	790	1066	95.07

No. of Medalists	Gold Medalists for best overall academic excellence	Silver Medalists second best overall academic excellence	Best Dissertation Award
83	27		
03	37	37	0

The Board vested the authority to the Chairman of BOE to approve the degree of such of the students who fulfil the requirements of PhD degree or any other degree on or before 28th of December 2023.

#### Resolution:

The Board approved the list of students to receive their degrees in the in the 8<sup>th</sup> Convocation to be held on Dec 29, 2023, as proposed.

### AGENDA NO. BOG 26.12 a

To consider and approve the matters referred to by the Academic Council.



The Member Secretary elaborated the Board on the following important points, discussed and deliberated in the 30th Academic Council meeting, held on 11th Dec 2023:

- Course Specifications for various programs 1.
- Launch of PG Certificate courses pertaining to industry-oriented specialization 2.
- Starting of Certificate Courses and Value-added courses as per UGC norms 3.
- Starting of new programs: It has been brought to the notice of the Board that, keeping in mind the market demand and job opportunities, the Academic Council has recommended the following new courses after getting approval from the Government and other Regulatory authorities.

The Director -Admissions presented the intake, fee structure, etc, for the new programs proposed. All these new courses which are proposed are approved by the Board of Studies, Academic Council and Board of Management.

After detailed deliberations, the Board approved the introduction of the following programs with effect from Academic Year 2024-25 with the intake as mentioned below:

#### School of Social Sciences:

CI No	Faculty	Programme	Intake
SI. No.		M. Sc. in Psychology	20
1	School of Social	B. Sc. (Hons) in Applied Economics	60
2	Sciences	B. Sc. (Hons) in Computational Social Sciences	60
3		M. Sc. in Data Sciences and Analytics	20
4		M. Sc. in Data Sciences and Analytics	

Regarding MA in Sustainable Development, Governance and Public Affairs, the Board authorized Sri. Sreenivasa Murthy to take the appropriate decision.

#### School of Law:

SI. No.	Faculty	Programme	Intake
1	School of Law	B. Sc. LLB (Hons) in Cyber Security	120
2		LLB (Hons)	120
3		LLM	60

#### Faculty of Pharmacy:

Sl. No.	Faculty	Programme	Intake
1	Faculty of Pharmacy	M Pharm in Pharmaceutical Regulatory Affairs	15

#### Faculty of Management and Commerce:

SI. No.	Faculty	Programme
1	Faculty of Management Fintech' PG Certificate Course  and Commerce PG Diploma and Certificate Courses with Avasta Lea  Ltd	
2		



#### Faculty of Engineering and Technology:

Sl. No.	Faculty	Programme	
1	BCA	60	
2	B Tech in Cybersecurity	60	
3	M Tech in IoT	15	

The Vice Chancellor is authorized to take the decision with respect to Faculty of Engineering and Technology based on the availability and requirement of faculty members.

The Board suggested optimizing the resources with respect to infrastructure, the University may conduct classes in two sessions, to manage the shortage of classrooms and other infrastructure. Also suggested to look at the nomenclature of the programs proposed, as prescribed by the UGC norms, to avoid complications in later days.

#### Closure of the Programs:

In the 25<sup>th</sup> BOG meeting, the Board had suggested that a critical analysis of such programs where the admission is low, be done and suitable decision be taken regarding the continuation/ discontinuation of such programs. In this regard, the Academic council in its 30<sup>th</sup> meeting deliberated the matter in detail and recommended either the closure of the following program or suspension/ reduction in in-take for the next three years.

All these programs which are proposed for closure are approved by the Board of Studies, Academic Council and Board of Management.

- BSc Physics, Chemistry, Mathematics
- 2. M Tech in Advanced Machinery Design
- M Tech in Power Electronics & Drives
- 4. M Tech in Automotive Engineering
- 5. M Tech in Transportation Engineering
- 6. M Tech in Environmental Engineering
- 7. M Des in Fashion Design
- B. Sc. LL.B. (Hons)

#### Resolution:

The Board after deliberations resolved to suspend the above-mentioned programmes for a period of 2 years and informed to intimate the same to the Government.

#### AGENDA NO. BOG 26.12 b

To consider and approve the increase in the in-take of seats in programmes at the Faculty of Engineering and Technology and School of Social Sciences.

The Member Secretary briefed the Board that there is a necessity for increase in in-take of seats in programmes at the Faculty of Engineering and Technology and School of Social Sciences, as mentioned below:



## Faculty of Engineering and Technology:

SI. No.	Name of the Program	Sanctioned intake 2023-24	AICTE approved intake for the year 2024-25
1	B.Tech in Computer Science &	180	240
2.	Engineering  B.Tech in Information Science & Engineering	60	90
3.	B.Tech in Artificial Intelligence & Machine Learning	60	90

#### School of Social Sciences:

SI. No.	Name of the Program	Sanctioned intake 2023-24	AICTE approved intake for the year 2024-25
1	B. Sc. (Hons) in Psychology	60	120
2.	B.Sc. (Hons) in Data Sciences and Analytics	60	120

#### Resolution:

The Board of Governors approved the increase in the in-take of seats in programmes at the Faculty of Engineering and Technology and School of Social Sciences. Further seek the approval of AICTE/Government of Karnataka.

#### AGENDA NO. BOG 26.13

To consider and approve the matters referred to by the Board of Management.

The 26th Board of Management meeting was held on 18th Dec 2023 and the major agendas discussed are,

- 1) Recruitment and Promotions done since June 2023
- 2) Status of Admission for 2023-24
- 3) Considering RMC library as a central Library
- 4) Starting of new programs
- 5) Closure of few programs
- 6) Convocation Details
- 7) Incentives for conducting MDPs and LDPs (60%+ 40%)



#### Resolution:

The Board approved the matters referred to by the Board of Management and appreciated the establishment of the Central Library at Ramaiah Medical College.

#### AGENDA NO. BOG 26.14

To consider and approve the matters referred to by the Finance Committee.

The Finance Committee meeting was held on 15<sup>th</sup> of Dec 2023. The important agenda discussed in the meeting were as follows:

- 1. Audited Budget for the Year 2022-23
- 2. Resource Mobilization and Utilization policy
- 3. Proposed Expenditure including capital expenditure for the year 2023-24.
- 4. The financial matrix submitted for IQAC.
- 5. Faculty wise budgetary allocation

#### Resolution:

The Board approved the matters referred to by the Finance Committee.

#### AGENDA NO. BOG 26.15

To consider and approve the matters referred to by the Internal Quality Assurance Cell.

The Internal Quality Assurance cell conducted its meeting on 9th Dec 2023. The following were the salient points discussed and deliberated.

#### NAAC:

- 1) SSR for NAAC Accreditation was submitted on 21st Nov 2023.
- 2) Queries for SSR awaited.
- 3) Peer Team visit is expected in January/ February

#### NIRF:

University is applying for NIRF ranking for the various parameters in the following categories, as per the due date given by the Ministry of Education, Government of India.

- Dental
- 2) Pharmacy
- 3) Medical
- 4) Engineering
- 5) Innovation



- 6) Research and
- 7) Overall

The IQAC cell is also preparing for ISO 21001:2018 certification.

#### Resolution:

The Board approved the matters referred to by the Internal Quality Assurance Cell

AGENDA NO. BOG 26.16

Any other matter with the permission of the chair.

The CE-GEF (M) briefed the Board on the wish of the Founder that the present Heritage Building be called "VIDYA SOUDHA". Accordingly sought the approval of the Board on the matter.

#### Resolution:

The Board unanimously approved the proposal to rename Heritage Building as "Vidya Soudha" and authorized to do the needful in the matter.

Dr. G S Venkatesh

Registrar, Member Secretary

Registrar

M.S. Ramaiah University of Applied Sciences

Rangalore - 560 054

Dr. Kuldeep Kumar Raina

Vice Chancellor

M.S. Ramaiah University of Applied Sciences Bangalore - 560 054.

Dr. M R Jayaram

Chancellor, Chairman



## MINUTES OF THE 27th MEETING OF THE BOARD OF MANAGEMENT

## HELD ON 3rd APRIL 2024 AT 11.00 AM IN S1 BOARD ROOM, GG CAMPUS, MSRUAS

#### Present:

Sl. No.	Name and Designation	Membership	
1	Prof. Kuldeep Kumar Raina, VC, RUAS	Chairman	
2	Shri. M R Sreenivasa Murthy, CE, GEF (M)	Member	
3	Shri. B N Subramanya, Advisor, GEF (M)	Member	
4			
5	Dr. Shalini C Nooyi, Dean-RMC	Member	
6	Dr. Jagannathrao Venkatrao Desai, Dean, FET	Member	
7	Dr. G S Venkatesh, Registrar, RUAS	Member Secretary	
8	Dr. P N Razdan, Principal Advisor, Quality Assurance & Excellence Cell	Special Invitee	
9	Shri. T S Venugopala Sastry, CFO, GEF (M)	Special Invitee	
10	Shri. Udayakumar Shetty, Head-Finance, RUAS	Special Invitee	

The Chairman of the Board of Management welcomed the members to the meeting. He noted that the full quorum was present. Subsequently, agenda matters were taken up for discussion. The Chief Executive, GEF (M) informed the Board that the tenure of the Vice Chancellor has been extended for one more term and the Members of the Board congratulated the Vice Chancellor wholeheartedly.

AGENDA NO.	AGENDA
BOM 27.1	Grant of Leave of Absence
	Dr. O P Kharbanda, PVC-HS, could not attend the meeting. He was granted leave of absence.
BOM 27.2	Confirmation of the Minutes of the 26th Meeting of the Board of Management held on 18th Dec 2023.
	The Member Secretary informed the Board that the minutes of the 26 <sup>th</sup> meeting of the Board of Management held on 18 <sup>th</sup> Dec 2023 were circulated to the members on 27 <sup>th</sup>



Dec 2023. No comments were received. He requested the Board to approve the minutes.

#### Resolution:

The Board approved the minutes of the 26th meeting of the Board of Management and the Chairman signed the minutes.

A copy of the minutes is enclosed as Annexure BOM 27.2

#### BOM 27.3 Action Taken Report:

The Member Secretary briefed the action taken report of the previous Board of Management meeting as follows:

AGENDA
To consider and approve the inclusion and operation of RMC, RCPT and RINER in RUAS ERP Portal.  Action Taken:  The Member Secretary informed the Board that the activity related to the inclusion and operation of Ramiah Medical College, Ramaiah College of Physiotherapy and Ramaiah Institute of Nursing Education in RUAS ERP Portal is on. Almost 50%-60% of the work is completed.  This activity will be completed by April or May 2024. He also informed the Board that the ERP activities at RMC will cease to exist from July 2024 and continue to exist under
the single entity of MSRUAS ERP portal.  Decision of the Board:  The Board noted and appreciated the activities that occurred with respect to inclusion and operation of RMC, RCPT and RINER in RUAS ERP Portal.  Regarding framing of purchase policy and implementation of Rate contract system for purchase of glassware, chemicals, and



	OF APPLIED S		
	BOM 26.9	<ul> <li>The Member Secretary informed the Board that a committee has been constituted to deliberate on the implementation of the rate contract system for glass wares and chemicals.</li> <li>A meeting has been scheduled next week with the shortlisted vendors for rates and negotiation.</li> <li>Decision of the Board:</li> <li>The Board noted the progress in the implementation of the rate contract system.</li> </ul>	
	BOW 26.9	To consider and approve the matters referred to by the Research and Innovation Council.	
		<ul> <li>➤ The Member Secretary informed the Board that in the 26th meeting of the Board of Management, the Board advised the research and innovation council to explore Ramaiah Advanced Testing Laboratory for getting it converted as Central Research Laboratory.</li> <li>➤ The Dean, RIC had visited the Ramaiah Advanced Testing Laboratory and submitted a report stating that it can be converted as Central Research Laboratory and made commercially viable.</li> </ul>	
		Decision of the Board:  The Board suggested the Vice Chancellor and the expert team to visit the Ramaiah Advanced Testing Laboratory and submit a feasibility report for utilizing Ramaiah Advanced Testing Laboratory as Central Research Laboratory.	
		REPORTING AGENDA	
BOM 27.4	> The Me (excludi	the admission status of the year 2023-24.  e Member Secretary informed the Board that combining UG and Pacluding Ph. D. Programme), out of total of 3443 students, 2649 students were mitted giving overall percentage of admission at 76.9% for the AY 2023-24.	



- The Vice Chancellor requested the Director of Admissions to deliberate on conduction of entrance exam for various programmes with respect to the Government of Karnataka guidelines for the AY 2024-25. The Director of Admissions informed that the Government of Karnataka is planning to conduct a common entrance exam for the professional programmes for state private universities (especially, for Engineering-60% of university quota seats).
- An association called Karnataka Private University Association is constituted and planning to conduct Karnataka Private University Scholastic Test. It is also proposed to have one common entrance test for the 40% of the non-professional programmes to bring Karnataka domicile students into reservation and a fee structure is also proposed for the same.
- ➤ He informed that this is only a proposal, and no decision has been taken in this regard. He further informed that MSRUAS will continue the same procedure for admission that has been followed so far.
- ➤ The Member Secretary informed the Board members that the Board of Governors had approved the suspension of 9 programmes at the School of Social Sciences, School of Law, Faculty of Mathematical and Physical Sciences, Faculty of Art and Design and Faculty of Engineering and Technology for a period of 2 years.
- ➤ He further presented the list of programmes for which the Board of Governors had given approval for suspension of programmes, details of which are given in Annexure BOM 27.4A. He presented the list of programmes being offered for the year 2024-25 along with sanctioned intake, details of which are given in Annexure BOM 27.4B

#### Decision of the Board:

The Board noted the admission status of the year 2023-24 and activities initiated for the admission of the year 2024-25.

The Board approved the details of the programmes to be offered for the year 2024-25, as given in Annexure BOM 27.4B

#### **BOM 27.5**

To report on the status of NAAC Accreditation.

The Member Secretary informed the Board that the DVV has been submitted and some clarifications were sought by the NAAC and required information has been provided. The peer team visit is expected in April-May 2024.



The Board noted the status of NAAC Accreditation process.

#### **BOM 27.6**

To report the appointments made since the last Board of Management Meeting held on 18th Dec 2023.

The Member Secretary informed the Board of Governors that the following appointments have been made with 50 teaching and 21 non-teaching staff appointed across the various faculties at MSRUAS, since the 26th Board of Management Meeting till date.

#### Staff appointed at Administrative Level:

SL.NO.	NAME	POST				
1	Shri. Shankar Ganesh	Senior Manager-HR				
2	Dr. Shivakumar Hiremath	Director, Operations at Ramaiah Teaching Hospital				

## Teaching Staff and Non-Teaching Staff Appointments:

Faculty	Professor	Associate Professor	Assistant Professor	Lecturer/ Tutor	Teaching Assistant	Visiting	Total	Contract n teaching	ion-
FET	-	-	6			3	9		
FAD	-	-	-	-	-	-	0		
FMC	-	_	1	-	-	2	3		
FMPS	Ē	-		-	-	-	o		
FDS	-	-	15	-	-	-	15		
FPH	-	-	-	-	-	-	0		
FHMCT		-	-	-	-	-	0		
FLAHS	2		1	-	-	1	4		
sss	•		5	2	-	1	8		
SOL		-	6	-	-	2	8		



uo	-	-	-	-	-	-	0	
CFE	-	-	1	-		2	3	
Total	2	0	35	2	0	11	50	19

#### Decision of the Board:

The Board noted the appointments made. The details are enclosed as Annexure BOM 27.6

#### RATIFICATION AGENDA

#### **BOM 27.7**

To ratify the number of staff who have left the institution since the last Board of Management Meeting held on 18<sup>th</sup> Dec 2023.

- ➤ The Member Secretary informed the Board of Governors that there are 20 teaching and 10 non-teaching staff have left the institution due to various reasons like career growth, Industry offer, to pursue higher studies, personal etc.,
- ➤ The Member Secretary submitted to the Board of Governors for suggestion whether to have a common Human Resource Department for the entire MSRUAS, including the constituent colleges- Ramaiah Medical College, Ramaiah College of Physiotherapy and Ramaiah Institute of Nursing Education and Research. It was expressed that having a common HR department might not work out efficiently and will disturb the existing system.
- Instead, it was suggested to include the HR related data of the constituent colleges for the Board meetings as and when required.

#### Decision of the Board:

The Board noted the number of staff who have left the institution. The Board advised that the constituent colleges-RMC, RCPT and RINER to follow a monthly information system (MIS) to submit the HR related information (Recruitment, Promotions, Resignations). They must submit the information to the M S Ramaiah University of Applied Sciences. The Board directed that a circular be issued in this regard by the office of the Registrar.

The details are enclosed as Annexure BOM 27.7



OM 27.8A	To ratify the promotions of the faculty made.							
	The Member Secretary briefed the Board about the number of promotions made.							
	Decision of the Board:							
The Board noted the promotions made. The details are enclosed 27.8A								
OM 27.8B	To ratify the redesignation of Lecturers at FLAHS as Assistant Professors.							
	CORE II AMERICA CARA	etary informed the Board In the Department of Allied F cant Professors.						
	NAME OF THE FACULTY	CURRENT DESIGNATION	REVISED DESIGNATION					
	Mr. Anush Nayak	Lecturer	Assistant Professor					
	Ms. Sri Vidhya L	Lecturer	Assistant Professor					
	Ms. Ranjitha D	Lecturer	Assistant Professor					
	Ms. M Monika Reddy	Lecturer	Assistant Professor					
	Ms. Priyanka KN	Lecturer	Assistant Professor					
	Lecturers with requi	**************************************	t Professor.					
	APPROVAL AGENDA							
BOM 27.9	To consider and approve the matters arising from the 20 <sup>th</sup> Meeting of the Research and Innovation Council held on 23 <sup>rd</sup> March 2024.							
	457	riefed the Board about the ouncil (RIC)in its 20 <sup>th</sup> Meeting,						
	publications to ensure	a standardized template of al uniformity. It was suggested t effectiveness to support a	o plan to set up a Publicati					

activities of the university.



•	RIC suggested that there are several avenues from the government-sponsored
	priority areas for research funding. The directorate of Research and Innovation
	Council should identify the field of research in the research groups already identified
	at the university.

 RIC deliberated on focusing the research on defense technologies and allied critical areas identified by the Government of India. It is also suggested to establish a research center with a thrust on advanced materials related to Defence technologies, through which a good number of proposals can be submitted to seek funds.

#### Resolution:

The Board approved the minutes of the 20th Meeting of the Research and Innovation Council Meeting held on 23rd March 2024, as enclosed in Annexure BOM 27.9.

#### **BOM 27.10**

To consider and approve the matters arising from the 31st Academic Council Meeting held on 22nd March 2024.

The Member Secretary briefed the Board about the important decisions taken in 31st Academic Council Meeting held on 22nd March 2024, as follows:

- Extension of term of existing BoS till 31st July 2024
- 2. Introduction of 3 credit mandatory course on Universal Human Values
- 3. Introduction to R, Python and SQL for biologists for both M. Sc. Biotechnology and M. Sc. Molecular Cell Biology
- 4. Reduction of in-take of Bachelor in Hotel Management programme from 120 to 90 students.
- Suspension of 9 programmes at FET, FAD, SSS, SoL and FMPS for a period of 2 years.

#### Resolution:

The Board approved the minutes of the 31<sup>st</sup> Academic Council Meeting held on 22<sup>nd</sup> March 2024, as enclosed in Annexure BOM 27.10

#### BOM 27.11

To consider and approve the matters arising from the 26<sup>th</sup> Finance Committee Meeting held on 26<sup>th</sup> March 2024.

The Member Secretary briefed the Board about the important decisions taken in 26<sup>th</sup> Finance Committee Meeting held on 26<sup>th</sup> March 2024, as follows:



- 1. Approval for Annual operational and capital budget for FY 2024-25.
- 2. Revision in the tuition fee for the AY 2024-25.
- 3. Revision in the Hostel Fee for the AY 2024-25.
- 4. Proposal for Ramaiah Memorial Merit Scholarship for the AY 2024-25.
- The Chief Executive suggested that the amount that is released in the name of M S Ramaiah Memorial Merit Scholarship to students in the first year should continue, on merit basis.
- ➤ However, there shall be a rider that the student must be a good academic performer not only in the first year but in subsequent years too, till he/ she completes the programme.
- A notification to be issued from the office of the Registrar in this regard. The Chief Executive also expressed that the scholarship must be paid to the student within three months after completion of the admission process.
- ➤ The Head, Finance, presented the revised fee structure for the on-going and new programmes. He stated that in 9 programmes the tuition fee has been increased and for 3 programmes, where the fee was increased last year and that hit the admission, the fee has been decreased.
- ➤ The Member Secretary submitted to the board the proposed fee structure for various programmes to be offered for the year 2024-25, details of which are given in *Annexure BOM 27.11A*.
- ➤ The Head, Finance, informed the Board that the Hostel fee has been revised from 1,20,000/ to 1,30,000/. A lot of improvement in infrastructure, mess, hygiene and in quality of food is made.

#### Resolution:

The Board approved the minutes of the 26th Finance Committee Meeting held on 26th March 2024. University may consider continuation of the amount that is released in the name of M S Ramaiah Memorial Merit Scholarship on terms of reference as recommended by a committee under the Chairmanship of Hon'ble Vice Chancellor.

The Board approved the fee structure for the various programmes to be offered for the year 2024-25 as given in Annexure BOM 27.11A.



	The proceedings of the 26 <sup>th</sup> Finance Committee meeting, is enclosed as Annexure BOM 27.11B.
BOM 27.12	<ul> <li>To consider and approve the Cadre and Recruitment rules.</li> <li>The Member Secretary briefed the Board about the amendments that are incorporated into the Employment Regulations, as recommended by the committee constituted to look into the Cadre and Recruitment rules.</li> <li>The Chief Executive said that the designations presented are all outdated and suggested coming up with designations for administrative posts as per UGC and other regulations. The member Secretary agreed and said that he will look at the other reputed institutions too for guidance in this regard.</li> <li>The Member Secretary informed the Board that the nomenclature of administrative posts will be reviewed, and the new designations will be announced.</li> </ul>
	Resolution:  The Board approved the Cadre and Recruitment rules with the suggestion to review the nomenclature of administrative designations and to come up with designations as per UGC and other regulations. All promotions to higher posts shall be through formal interview process based on the merit, experience cum specialization and performance during the last 3-5 years.  The Board also decided that the Pay scale change for any post is subject to the decision of the Board of Management from time to time.
BOM 27.13	To report the activities at Centre for National Security Studies (CNSS).  The Member Secretary presented the activities at Centre for National Security Studies (CNSS), as follows:  1. CNSS signed MoUs with the following Security Think Tanks of National and International Repute:  29 January 2024 – National Institute of Advanced Studies, Bengaluru  20 February 2024 - The United Service Institution of India, New Delhi  20 February 2024 - The Pathfinder Foundation, Sri Lanka  21 February 2024 - Taiwan Centre for Security Studies, Taipei  Hosted Tibetan Sikyong Penpa Tsering  Conducted training for Army Officers



- Conducted outreach lectures on subjects of traditional and non-traditional security studies.
- CNSS Director Major Gen JV Prasad and Member of Management Committee Mr. PM Heblikar visited Taiwan Centre for Security Studies (TCSS)
- In-principal approval of a Certificate Course on Military Law (Military Justice System in India) in the 9<sup>th</sup> Board of Studies Meeting of the School of Law
- ➤ The Member Secretary informed the Board that the Board of Studies is currently deliberating on the detailed curriculum, eligibility criteria, duration of the course, fee etc., Then it will be taken to the next Academic Council meeting for deliberation and approval.

#### Resolution:

The Board noted the activities at the Centre for National Security Studies (CNSS). The details are enclosed as Annexure BOM 27.13

#### BOM 27.14

## To consider and approve the activities at Ramaiah Advanced Learning Centre (RALC)

- The Member Secretary briefed the Board that a meeting under the Chairmanship of Registrar was held on 12<sup>th</sup> March 2024 to discuss the activities of Ramaiah Advanced Learning Centre and to have a clear road map for clearance of the files and to delineate the activities of RALC. The handbook was brought out in this regard.
- The Principal Advisor, QAEC, suggested to revise the RALC organogram as per the approval authority matrix the incorporation of Director, RALC, reporting to the Vice Chancellor, Registrar and Pro Vice chancellor-HS, MSRUAS, in the organogram submitted by the Ramaiah Advanced Learning Centre (RALC).

#### Resolution:

The Board approved the activities at Ramaiah Advanced Learning Centre (RALC) with the suggestion that the Director, RALC, must report to the Hon'ble Vice Chancellor as per the MSRUAS organogram. It must be incorporated in the organogram submitted by the Ramaiah Advanced Learning Centre (RALC).

#### **BOM 27.15**

To consider and approve the establishment of Skill center for training of student and faculty in basic life support at RUAS.



- The Member Secretary informed the Board that the emergency medicine department of RMC has submitted a proposal for the establishment of a Skill center for training of students and faculty in basic life support at RUAS.
- ➤ It is based on the concept of Saving Lives during the critical phase by Institution of Cardiac Massage and Administering Artificial Respiration. Further, they have highlighted the importance of care to be taken during the Golden Hour of Trauma Victims.
- > They Propose to give this training to all the students and faculty of RUAS. They have requested Mannequins for training of Master Trainers as well as other trainers at a total cost of Rs Fifty Lakhs.
- ➤ The Board of Governors suggested that Ramaiah Medical College can harbor the equipment of Skill center for training of student and faculty in basic life support at RUAS, but the training can occur in Dwaraka auditorium or any open space.

The Board approved the proposal of establishment of Skill center for training of student and faculty in basic life support at RUAS with the suggestion that Ramaiah Medical College will be the suitable place to start the Skill center and approved financial allocation of Rs. 50 lakhs for the said activity. The Board noted that the training will be offered free of cost.

#### BOM 27.18

To consider and approve the name of Faculty of Mathematical and Physical Sciences as Faculty of Natural Sciences.

- The Member Secretary informed the Board that most of the universities/ Higher Educational Institutions have named the faculty which teaches subjects like Physics, Chemistry, Mathematical basic courses as Faculty of Natural Sciences.
- > A request in this regard was received from Dean, RTC, after discussing with respective faculty.
- However, in our university this department is still called Mathematical and Physical Sciences.

### Resolution:

The Board approved the change in the nomenclature from Faculty of Mathematical and Physical Sciences to Faculty of Natural Sciences. Details are enclosed as Annexure BOM 27.18



BOM 27.19

To consider and approve the bifurcation of the Department of Mechanical Engineering at Faculty of Engineering and Technology.

The Member Secretary informed the Board that a request is received from the Dean, FET that the Department of Mechanical and Manufacturing Engineering offer the following important programs:

- 1. B. Tech in Mechanical Engineering
- 2. B. Tech in Robotic Engineering
- 3. M. Tech. in Manufacturing Technologies and Engineering Management
- 4. M. Tech. in Robotic Engineering

Considering the future growth perspective and other regulatory requirements, accreditations and to increase overall efficiency, it is proposed that this department be bifurcated into 2 departments as mentioned below:

- 1. Department of Mechanical Engineering
- 2. Department of Robotics and Automation

Accordingly, the relevant academic programmes at UG and PG level will be offered by the Departments like B. Tech in Mechanical Engineering and M. Tech. in Manufacturing Technologies and Engineering Management be under the Department of Mechanical Engineering and B. Tech in Robotic Engineering and M. Tech. in Robotic Engineering be under the Department of Robotics and Automation.

#### Resolution:

The Board suggested to discuss and deliberate the agenda in the Academic Council first and then be brought to the Board of Management.

### BOM 27.20

To report the activities related to the conference titled as "Advances in Materials Sciences & Technology initiated by Faculty of Engineering & Technology along with Faculty of Mathematical & Physical Sciences & Faculty of Dental Sciences."

The Member Secretary briefed the Board about the proposal for convening an international conference on "Advances in Materials Sciences & Technology initiated by Faculty of Engineering & Technology along with Faculty of



Mathematical & Physical Sciences & Faculty of Dental Sciences" sometimes in July 2024.

Accordingly, the Board approved the proposed conference in its 26<sup>th</sup> meeting held on 18<sup>th</sup> Dec 2023 and authorized the Registrar of the University to receive any contributions, sponsorship amounts, and/or any such amounts issue official receipts for such amounts and utilize the same for the said purposes.

The Department had applied for funds from the Science and Engineering Research Board (SERB) and other agencies.

Further, the Board authorized the Registrar to issue such Utilization Certificates to such contributors and sponsors for having used the funds so received.

### Resolution:

The Board approved the submission of application for release of grants proposed for activities related to the conference titled "Advances in Materials Sciences & Technology initiated by Faculty of Engineering & Technology along with Faculty of Mathematical & Physical Sciences & Faculty of Dental Sciences."

### **BOM 27.21**

Any other matter with the permission of the chair

### **TABLE AGENDA 1**

### BOM 27.21.1

To report the activities of Internal Quality Assurance Cell since the last Board of Management Meeting held on 18<sup>th</sup> December 2023.

The Member Secretary briefed the Board about the activities of Internal Quality Assurance Cell since the last Board of Management Meeting held on 18<sup>th</sup> December 2023, as follows:

- NAAC DVV Pre-qualification passed. Awaiting NAAC Peer Team Visit. One / two rounds of MOCK Peer Team Visit is over for all 13 faculties.
- NIRF 2024 Data submitted under eight categories namely Medical in two categories (College level and University level), Engineering, Management, Pharmacy, Dental, Research, Innovation and Overall. Awaiting results.
- Green Ranking 2024 Received DIAMOND Grading
- AISHE 2022-23 data submission is going on RMC and MSRUAS. The last date
  of data submission is on 05/04/2024.



	OF APPLIED SCIENCES
	• AQAR -2020-21, 2021-22, 2022-23, 2023-24 data submission for RMC is in
	progress.
	<ul> <li>AQAR – 2023-24 for MSRUAS data submission is in progress.</li> </ul>
	<ul> <li>QS - I -GAUGE Ranking (GOLD) - valid till 04/05/2024 - data collection is in</li> </ul>
	progress.
	<ul> <li>Sustainable Development Goals – Mapping with the parameters of MSRUAS is</li> </ul>
	in progress.
	Resolution:
	The Board noted the activities of Internal Quality Assurance Cell since the last Board
	of Management Meeting held on 18 <sup>th</sup> December 2023.
	TABLE AGENDA 2
BOM 27.21.2	To approve the Fee structure for PG Certificate & PG Diploma Programs
	The Member Secretary briefed the Board about the Fee structure for PG Certificate & PG Diploma Programs offered in collaboration with Zenith Rail Edvarsity Private Limited.
	➤ Earlier the University has entered into a collaboration agreement with a private academic partner, viz., Zenith Rail Edvarsity Private Limited, Faridabad to start a few PG Certificate & PG Diploma programs in the University as detailed below:
	PG Certificate in Signalling Systems & Application Engineering for Railways and Metro
	PG Certificate in Safety and Communication Management for Railways and Metro
	PG Diploma in Signalling and Communication Management for Railways and Metro
	The above have already been approved by the Academic Council in its meeting held on 22.03.2024 and in the 26 <sup>th</sup> meeting of the Finance Committee held on 26 <sup>th</sup> March 2024. The same is placed for approval of the Board.
	b and a second s
	The details are enclosed as Annexure BOM 27.21.2
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	Resolution:
	The Board approved the fee structure for PG Certificate & PG Diploma Programs a presented.
	TABLE AGENDA-3
BOM 27.21.3	To approve the Fee structure for PG Certificate & PG Diploma Programs
	Earlier the University has entered into a collaboration agreement with a private academic partner, viz., Avasta Learning Private Limited, Faridabad to start a few PG Certificate & PG Diploma programs in the University as detailed below:
	PG Certificate in Digital Business Management     PG Certificate in International Ecommerce Management
	3) PG Diploma in Digital Business Management & International Ecommerce
	➤ The above have already been approved by the Academic Council in its meeting held on 11.12.2023 and later by the Board of Management in its 26 <sup>th</sup> Meeting held on 18 Dec 2023. Further approved in the 26 <sup>th</sup> Metting of the Finance Committee held on 26 March 2024.
	The details are enclosed as Annexure BOM 27.21.3
	Resolution:
	The Board approved the fee structure for PG Certificate & PG Diploma Programs as presented.

The Chairperson thanked all the members for attending the meeting and giving their valuable input.

Dr. G S Venkatesh

Registrar, Member secretary Registrar

M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054

Dr. Kuldeep Kumar Raina Vice Chancellor, Chairman

Vice Chancellor

M.S. Ramaiah University of Applied Sciences

Bangalore - 560 054.

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# Minutes of the 31st Academic Council Meeting, RUAS, Bengaluru

# Held in blended mode at 11.15 am on 22<sup>nd</sup> March 2024, S18 Board Room, GG Campus, MSRUAS

# **Members Present**

SI. No.	Name of the Member	Designation
1.	Prof. Kuldeep Kumar Raina	Vice Chancellor, Chairperson
2.	Prof. Govind R. Kadambi	Pro Vice Chancellor
3.	Dr. Om Prakash Kharbanda	Pro Vice Chancellor -Health Sciences
4.	Dr. Medha Y Rao	Dean, Academic Affairs
5.	Dr. G S Venkatesh	Registrar, Member Secretary
6.	Dr. U Sudhir	Medical Director, CMH, Bangalore
7.	Dr. B.S. Jayashree	Professor, Manipal Academy of Higher Education, Manipal College of Pharmaceutical Sciences, Manipal
8.	Dr. Ramesh Chandra Malik	Thermoelectric Materials and Device Laboratory, Department of Physics, IISc.
9.	Dr. Deepak Kumar Saini	Professor, IISc, Bangalore
10.	Prof. Manish Thakur	Professor of Sociology, IIM, Kolkata
11.	Prof. Govindaraju T	Professor, Dept. of Chemistry, JNCSAR, Bangalore
12.	Dr. K. Mohanavelu	Scientist "F". DEBEL, DRDO, Bangalore
13.	Prof. R. Rajesh Shenoy	Director, Padmashree Group of Institutions, Bangalore, Karnataka, India.
14.	Dr. Vidyalakshmi Rajagopal	Professor & Head, National Institute of Food Technology, Entrepreneurship and Management, Thanjavur
15.	Dr. Yashoda Kumari	Professor and Chairperson, Knitwear Design, NIFT, Bangalore
16.	Dr. Gopalakrishnan D	Dean, Professor & Head Chair- Dept. of Periodontology- Dr. Patil Dental College & Hospital, Pimpri, Pune-411018
17.	Dr. Anice George	Professor & Former Dean, Manipal College of Nursing, MAHE
18.	Major General Prasad	RPCC- Director
19.	Dr. Sanjay C Desai	Director- ALC
20.	Dr. A G Prathab	Joint Controller of Examinations, RUAS
21.	Mr. S. Parameshwar	Chief – Quality Control
22.	Prof. Krishnamurthy Jayanna	Dean- FLAHS
23.	Prof. Bharath S	Dean - FPH
24.	Dr. Shalini C Nooyi	Dean & Principal, RMC
25.	Dr. Savita Ravindra	Dean- College of Physiotherapy
26.	Prof. Abby Mathew	Dean - FHMCT
27.	Dr. Soma Chaki	Associate Dean- Academic Affairs
28.	Dr. K.M. Sharath Kumar	HoD FMC



	JF APPLIED SCIENCES	
29.	Dr. S. Chandankumar	HoD - Department of Mathematics and Statistics
30.	Dr. Premakumar H B	HoD - Physics
31.	Dr. Rajadurai	Head, Food Technology
32.	Dr. Tushar Shaw	Head, Allied Health Sciences
33.	Dr. Rinki Sharma	Professor and Head
34.	Dr. M. Rajadurai	Associate Professor and Head
35.	Dr. T. Niranjana Prabhu	Associate Dean- Research
36.	Dr. M Sivapragasam	Professor & Head
37.	Prof. P N Razdhan	Principal Advisor –Quality Assurance and Excellence cell
38.	Dr Vikas Shelar	Deputy Controller of Examinations
39.	Dr Anitha	HoD, Psychology and Sociology
40.	Dr Tapasi Ghosh	HoD, Data Science & Analytics
41.	Dr. Vidya Baliga	Deputy Controller of Examination
42.	Dr. Anbalagan Hiroji	Director-Training and Placement
43.	Mr. Angadi VC	Director- ICT
44.	Dr. B S Dayananda	HoD - Mechanical Engineering
45.	Dr. Nayana N. Patil	Professor and Head
46.	Prof. Jyothi Shankar	Director-DTSLD
47.	Dr. Priya Arjun	Director-Students Affairs
48.	Mr. Nagendra	Yoga Instructor
49.	Mr. Kumar	Manager, Sports
50.	Dr M S Radha	Vice Principal, RINER
51.	Dr. Mamatha G Hegde	Head, Fashion Design

# **Members Absent**

Sl. No.	Name of the Member	Designation
1.	Dr. Raju K Parasher	Director/Principal, Amar Jyothi Institute of Physiotherapy, New Delhi
2.	Dr. Deepak Kumar Capri	Director & Sr. Consultant Manipulative Physiotherapist, Capri Institute of Manual Therapy, Delhi, India
3.	Ms. Akshta Suri	Head Training and Development, The Leela Palace Bengaluru
4.	Prof. Kirankumar Momaya	Professor, 214, Shailesh J. Mehta School of Management, I.I.T. Bombay, Powai, Mumbai-400076
5.	Dr. V K Bansal	Head Unit- Laparoscopic Surgery Dept. of Surgical Disciplines and Former Associate Dean, AllMS, New Delhi.
6.	Prof. Balaji Krishnan	Vice- Provost, Global Initiatives, Fogelman College of Business & Economics at the University of Memphis.
7.	Dr. C M Manjunatha	Head, Structural Integrity Division, CSIR-NAL
8.	Mr. G N Velkumar	Qualcomm Pt. Ltd., Bangalore



9.	Prof. Ashok Patil	Professor at Law National Law School of India University, Bangalore
10.	Dr. Ajoy Roy Choudhury	Professor, AIMS, New Delhi
11.	Shri. Venugopala Sastry	CFO, GEF(M)
12.	Prof. Jagannathrao Venkatrao Desai	Dean, FET
13.	Mr. Ravichandra S	Chief Librarian, RUAS
14.	Dr. Nayanjeet Choudhury	Director- RICPHI
15.	Mr. Lohit HS	HoD - Industrial Design
16.	CA Udayakumar Shetty	Head- Finance
17.	Dr. G Gurucharan	Director, RPPC
18.	Dr. Anitha Ramalingam	COE, RUAS
19.	Dr. Mumtaz	Director, IQAC
20.	Dr. Aruna L	HoD-I/c, SoL
21.	Dr. Silju Mathew	Dean – FDS
22.	Dr. Nanda Kumar	Associate Dean- Research
23.	Dr. Vibha Shetty	Director-DTLL
24.	Dr. Sonali Gupta	Director, Centre for Entrepreneurship
25.	Dr. Hemanth T	Director, Admissions

# Call to order and Quorum:

This meeting was called to order by the chairperson at 11.15 am. With sufficient quorum being present, the proceedings of the meeting were commenced by the chairperson.

Agenda Item No.	Discussion on the Agenda Item
AC 31.1	Leave of absence of Members. 51 members attended the meeting; However, some members were unable to join the
	meeting due to pre-occupations and were granted leave of absence.
AC 31.2	Opening Remarks.
	The Chairperson welcomed all the members and special invitees of the Academic Council to the 31st Academic Council Meeting.
	➤ The Chairperson welcomed all the members of the Academic Council and introduced the new members to the Council. He mentioned that the University has completed 10 years successfully and as per the NEP policy laid down by the Government of India, the University have imbibed and implemented certain strengths from the thought process of NEP in few programmes in 2021, but largely in other programmes in 2022.



AC 31.3	crosse 5.5 to set of The Ch their v  Confirmation The minutes o 2024. No comm  Resolution: The Academic	ormed the council that this year the placement and training department had d 200 placements in the organization and the average placement package is 6.8 lakhs per annum. Ramaiah University is striving hard to improve the skill students that makes them globally valuable and employable. nairperson requested the Academic Council members to deliberate and deliver aluable suggestions that will help in the growth of the institution. For the minutes of the 30th Academic Council Meeting, held on 11th Dec 2023. If 30th Academic Council meeting was circulated to all members on 31st Janments were received.
AC 31.4		and the chairperson signed the minutes. e actions taken.
	AGENDA	AGENDA ITEM
	AC 30.6.2	To consider and approve the list of candidates of various programs who
		are eligible recipients of the degrees in the ensuing 8th Convocation of MSRUAS.  Action Taken:
		<ul> <li>The member secretary informed the Academic council that the council approved in its 31<sup>st</sup> meeting, the list of 1855 students receiving the degree in 8<sup>th</sup> convocation and authorized the Vice Chancellor to approve the students who become eligible before the scheduled convocation be awarded the degree, on satisfying all eligibility criteria for graduation. This extended list of graduands shall be ratified in the 31<sup>st</sup> AC meeting.</li> <li>On this ground, 9 more students became eligible to receive the</li> </ul>
		degree and the final total went up to 1864. The member secretary requested the Academic Council to ratify the same.  Decision of the Board:
	AC 30.6.4	The final list of 1864 students are ratified by the Academic Council.  To deliberate on the inclusion of the suffix of 'part-time'/'Flexi' in the degree certificates of the graduands belonging to part-time or Flexi programs.



	Action Taken:
	<ul> <li>The Member Secretary informed the Academic council that in the last AC meeting, the Hon'ble Vice Chancellor was suggested to look at the best practices in other private universities in this regard and make the decision.</li> <li>Based on this, it was decided that the addition of the suffix 'part-time /Flexi' in the degree certificates of the graduands belonging to part-time or Flexi programs is not recommended at this stage.</li> </ul>
	Decision of the Board:  The Academic Council approved the decision unanimously.
AC	To consider and approve the program structure of M.Sc. in Psychology
30.13.2	for the upcoming academic year 2024.
	Action Taken:
	The Member Secretary briefed the Council that the programme structure for the proposed M. Sc. Psychology programme is ready and the university had applied to KSHEC for approval. The inspection is due within this month.
	Decision of the Board:
	The Academic Council noted and approved the program structure of M.Sc. in Psychology for the upcoming academic year 2024.
AC 30.13.3	To consider and approve the Ph D program for the Department of Psychology.
	Action Taken:
	➤ The Member Secretary elaborated to the Academic Council that in the last AC meeting, it was deliberated that any Department to offer a Ph. D. programme must have a PG programme running in the Department and faculty with prescribed years of experience in teaching PG programme. Only then the department is eligible to offer the Ph. D. programme.
	➢ He also informed the Council that the university had applied for starting M. Sc. Psychology programme from the AY 2024-25 and so it is likely that the Ph. D. programme in Psychology will be offered from the year 2025-26.



	Decision of the Board:  The Academic Council deferred the Ph D program for the Department of Psychology for the year 2024-25 stating that the M. Sc. in Psychology be introduced first for the AY 2024-25.
AC 30.13.8	To consider and approve the new programme 'B.Sc. in Rehabilitation Science' and its Programme Structure and Course Structure.
	Action Taken:
	➤ The Member Secretary briefed the AC members that in the last meeting, the Dean, Ramaiah College of Physiotherapy had expressed that the course content of B.Sc. in Rehabilitation Science is overlapping with that of Physiotherapy. So, a committee under the chairmanship of Prof. Govind R Kadambi met and decided to have more Sociology components in B.Sc. in Rehabilitation Science programme.
	It was also noted that to start this programme, permission from Rehabilitation Council of India (RCI) must be obtained, in which case, the course content will be a standard one, that offered by the RCI.
	The committee after detailed deliberation recommended the programme with the suggestion that the market demand and employability have to be explored, in-take can be 30 students and to stick to the programme structure offered by RCI, so that it does not overlap with that of Physiotherapy.
	Decision of the Board:
	The Academic Council in-principal approved the programme and suggested to submit a complete detailed report on the market demand, human resources required, infra-structure requirement. The committee constituted under the Chairmanship of Prof. Govind R Kadambi may relook into it, submit a report that could be taken up in the next AC meeting.
AC 30.13.10	To consider and approve the proposal to launch a new 2-year master's Programme on "M. Sc in Data Sciences and Analytics" for the upcoming academic year 2024-25.



#### **Action Taken:**

> The Members Secretary informed the Board that a new 2-year master's Programme on "M.Sc. in Data Sciences and Analytics "is offered for the upcoming academic year 2024-25 and the program structure for the same is submitted for approval.

## Decision of the Board:

The Academic Council noted and approved the program structure of "M.Sc. in Data Sciences and Analytics" for the upcoming academic year 2024-25.

# AC 30.13.11

To consider and approve Ph D program for Department of Data Sciences and Analytics.

### **Action Taken:**

- The Member Secretary elaborated to the Academic Council that in the last AC meeting, it was deliberated that any Department to offer a Ph. D. programme must have a PG programme running in the Department and faculty with prescribed years of experience in teaching PG programme. Only then the department is eligible to offer the Ph. D. programme.
- ➤ He also informed the Council that the university had applied for starting M. Sc. Data Sciences and Analytics programme from the AY 2024-25 and so it is likely that the Ph. D. programme in Data Sciences and Analytics will be offered from the year 2025-26.

### Decision of the Board:

The Academic Council deferred the Ph D program for the Department of Data Sciences and Analytics for the year 2024-25 stating that the PG programme in Data Sciences and Analytics be introduced first for the AY 2024-25.

Also suggested that any student meeting the Ph. D. requirements may register for Ph. D. in Data Science under the Faculty of Engineering and Technology. The student shall have a supervisor from FET and a coguide from Department of Data Sciences and Analytics, SoSS.



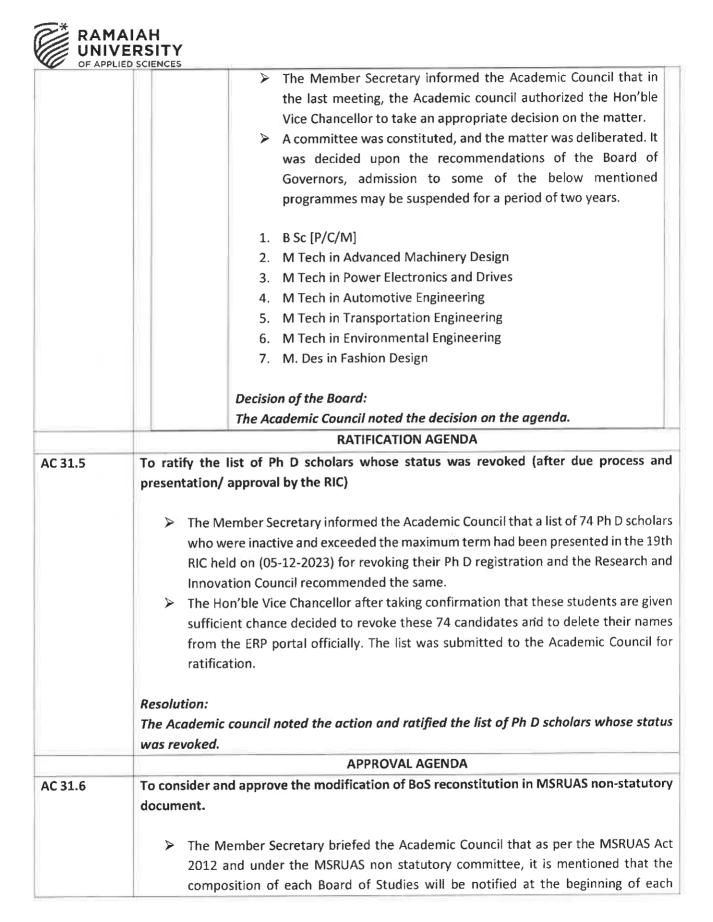
AC	To consider and approve the Course specification for the semester 5,6,7
30.14.1	and 8 B.Sc., (Hons.) Food Processing and Technology (NEP), prepared in alignment with NEP format.
	Action Taken:
	The Member Secretary informed that in the last AC meeting, Academic Council members wished to know the course content, number of credits, which semester the course is offered, evaluation pattern etc., of the Sports and Yoga courses.
	➤ The matter has been deliberated upon and it was clarified that the courses Sports and/ Yoga are common mandatory courses and will be offered to all UG Programmes under the NEP-2020 guidelines in the 5 <sup>th</sup> semester. Also, the courses are optional for students to select one, either Sports or Yoga.
	Decision of the Board:
	The Academic Council approved the Course specification for the semester 5,6,7 and 8 B.Sc., (Hons.) Food Processing and Technology (NEP), prepared in alignment with NEP format and requested the Manager, Sports, to look at the other Institutions offering similar courses, their evaluation pattern and incorporate the best practice into the curriculum. Major General Prasad was requested to give the valuable inputs and guidance in this regard.
	The Sports/ Yoga course may at present be offered in 5 <sup>th</sup> semester for the current batch as approved in 29 <sup>th</sup> meeting of the Academic Council. For new batches it may be decided to offer after examining the availability of number of yoga instructors or volunteers to teach the course and other aspects. Hence in-principal the Academic Council approved the course to be offered for the upcoming 5 <sup>th</sup> semester programmes under NEP 2020 Guidelines. All the Chairpersons of the Board of studies and Deans are requested to give their recommendations in this regard, to enable preparing a chart depicting the course and semester in which it is offered.
AC 20.15.1	To consider and approve the proposal for the introduction of the new
30.15.1	P.G. programme M. Pharm. in Pharmaceutical Regulatory affairs.  Action Taken:

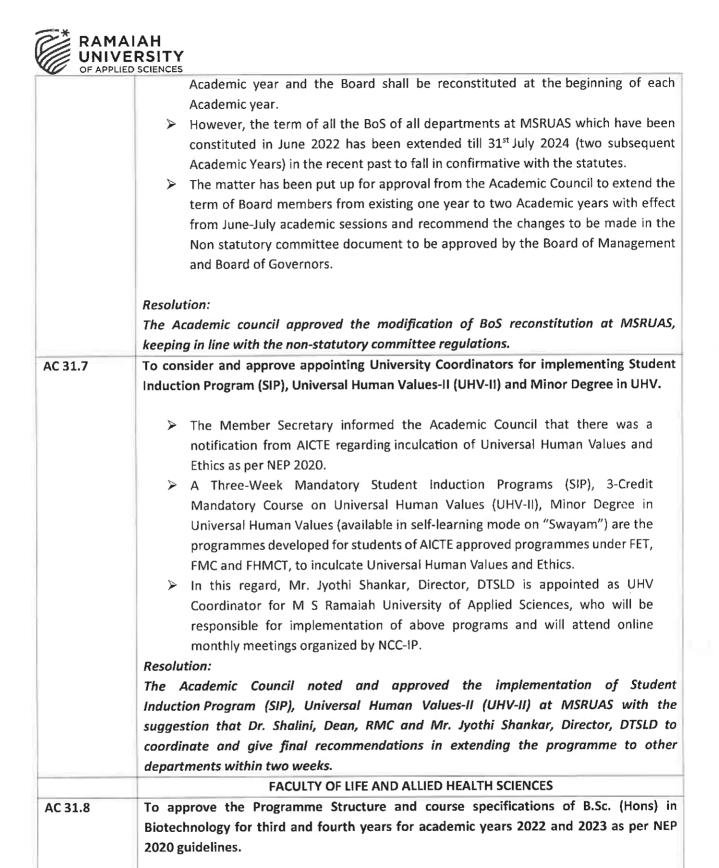


OF APPLIED SCIENCES	➤ The Dean, FPH, presented the program structure and course specifications of the new P.G. programme M. Pharm. in
	Pharmaceutical Regulatory affairs that was approved in the 30 <sup>th</sup> Academic Council Meeting for approval.
	Decision of the Board:
	The programme structure and course specifications of the new P.G.
	programme M. Pharm. in Pharmaceutical Regulatory affairs has been approved by the Academic Council.
AC 30.15.5	To consider and approve the revision in SEE/YEE Evaluation pattern.
	Action Taken:
	The Member Secretary briefed the Academic Council that in the last AC meeting, members suggested for double valuation and setting up of question papers by the external members at the Faculty of Pharmacy. Both has been implemented successfully.
	Decision of the Board: The Academic Council noted the same.
AC 30.17.1	To consider and approve the introduction of B.Sc. LL.B. (Hons.) in Cyber Security – 5 years programme with an intake of 60 students every year.
	Action Taken:
	➤ The Member Secretary informed the AC that the school of law has submitted the programme structure and course specifications of B.Sc. LL.B. (Hons.) in Cyber Security — 5 years programme that was approved in the 30 <sup>th</sup> meeting of the Academic Council.
	Decision of the Board:  The Academic council approved the programme structure and course
	specifications of B.Sc. LL.B. (Hons.) in Cyber Security programme.
AC 30.17.2	To consider and approve the introduction of LL.B. (Hons.) – 3years programme with a sanctioned intake of 60 students every year.
	Action Taken:
	> The member secretary informed the AC that the school of law has has submitted the programme structure and course



		specifications of LL.B. (Hons.) programme that was approved in the 30 <sup>th</sup> meeting of the Academic Council.
		Decision of the Board:
		The Academic council approved the programme structure and course
		specifications of LL.B. (Hons) programme.
	AC 30.17.3	To consider and approve the introduction of LL.M. (2 programmes) – 1 year programme with a sanctioned in take of 30 students per year.
		Action Taken:
		➤ The member secretary informed the AC that the school of law has submitted the programme structure and course specifications of LL.M. programme (with 2 specializations) – 1 year programme that was approved in the 30th meeting of the Academic Council.
		Decision of the Board:  The Academic council approved the programme structure and course specifications of LL.M. programme.
٠	AC 30.18.2	To consider and approve the discontinuation of Part Time B. Voc. Programmes from the AY 2023-24 onwards.
		Action Taken:
		The Member Secretary informed that in last AC meeting it was decided to discontinue the part-time B. Voc. Programmes- B. Voc. In Product Design and Modelling and B. Voc. In Mechatronics.
		In this regard, a notification has been issued stating that the part-time B. Voc. Programmes have been discontinued from AY 2023-24, as approved by the Academic Council in its 30 <sup>th</sup> meeting held on 11 <sup>th</sup> Dec 2023. Decision of the Board:
		The Academic Council noted the action taken.
	AC 30.19	Proposal to start new programmes at FET- For discussion and deliberation of the Academic Council.
		Action Taken:







The Head, Department of Biotechnology presented the Programme Structure and course specifications of B.Sc. (Hons) in Biotechnology for third and fourth years for academic years 2022 and 2023 as per NEP 2020 guidelines for the approval of the Academic Council.

The following are the revisions in the programme structure with the introduction of new courses:

- 1. Medical Biotechnology in Semester 5
- 2. Competitive exam training in Semester 6
- 3. Green energy Technologies and Internship

#### Resolution:

The Academic council approved the Programme Structure and course specifications of B.Sc. (Hons) in Biotechnology for third and fourth years for the batches of 2022 and 2023, as per NEP 2020 guidelines.

#### AC 31.9

To approve introduction of new Value-added course "Introduction to R, Python and SQL for Biologists" for both, MSc Biotechnology and M.Sc. Molecular Cell Biology.

The Head, Department of Biotechnology presented the new Value-added course "Introduction to R, Python and SQL for Biologists" for both, MSc Biotechnology and M.Sc. Molecular Cell Biology.

- 1. The new value-added courses- Python and SQL are useful in dealing with genomics data.
- 2. It will enhance skill and employability of master's students

The Board of Studies had recommended the following:

#### **Course Outcomes**

- CO-1. Create simple Python programs using if/else statements and loops in python.
- CO-2. Create advanced programs in Python using data structures, functions, classes, and objects.
- CO-3. Use R for elementary data processing and visualization.
- CO-4. Use R for elementary statistical analyses.
- CO-5. Use SQL to store and retrieve large amounts of data.

### **Course Delivery**

Scheduling: 2nd or 3 semester

Duration: 30 hours

No of classes: Weekly 2 to 3 sessions

Assessment: Quiz

Training: coding assignments



One of the members suggested to incorporate Biostatistics and computer programming including biological data collection in the curriculum of R, Python and SQL for Biologists since most of the students are from either computational science or Biology and must be aware of data collection.

#### Resolution:

The Academic council approved the new Value-added course "Introduction to R, Python and SQL for Biologists" for both, MSc Biotechnology and M.Sc. Molecular Cell Biology, as presented with the suggestion that a small component of biological data collection to be included in the curriculum and the department may seek inputs from Faulty of Engineering and Technology for course delivery.

### **FACULTY OF HOSPITALITY MANAGEMENT AND CATERING TECHNOLOGY**

#### AC 31.10

To consider and approve the reduction in the Sanctioned Intake of Bachelor of Hotel Management Programme from 120 students to 90 students from the Academic Year 2024-25.

- ➤ The Member Secretary informed the Academic Council that the Faculty of Hospitality Management and Catering Technology had proposed the reduction in the intake of Bachelor of Hotel Management and Catering Technology programme from 120 to 90 from the AY 2024-25.
- > Taking into consideration the decreased admission at FHMCT for the BHM programme as in the table below and the NBA Ranking conditions, this reduction in intake has been proposed.

ADMISSION STATUS SINCE 2019 TILL DATE-BHM						
Academic Year Sanctioned Intake Admis						
2019-2020	120	80				
2020-2021	120	84				
2021-2022	120	103				
2022-2023	120	74				
2023-2024	120	60				

### **NBA Conditions:**

- 1. Minimum admissions for the previous 3 years should be 50% of the sanctioned intake.
- 2. Student Faculty Ratio (SFR) required for maximum marks is 15:1 and minimum marks is 25:1

Current SFR with 120 intake is 28:1

SFR with 90 intakes will be 20:1

Resolution:



	The Academic council approved the proposal to reduce the Sanctioned Intake in Bachelor of Hotel Management Programme from 120 students to 90 students from the Academic Year 2024-25.				
	FACULTY OF ENGINEERING AND TECHNOLOGY				
AC 31.11	To consider and approve the Programme Structure and Course Specifications of 2nd year B. Tech. in Aerospace and Automotive Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering, Mechanical Engineering and Civil Engineering.				
	The Head, Department of Civil Engineering presented the Programme Structure and Course Specifications of 2nd year B. Tech. in Aerospace and Automotive Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering, Mechanical Engineering and Civil Engineering.				
	<ol> <li>Introduction of a new and mandatory courses- Essence of Indian Knowledge Systems and Indian Constitution, Human Rights and Law</li> <li>The changes incorporated for 2023 batch in all the mentioned B.Tech. Programmes.</li> <li>The Vice Chancellor suggested making best use of the SWAYAM, NPTEL and MOOC courses as UGC permits online courses up to 40%.</li> </ol>				
	Resolution:				
	The Academic Council approved the Programme Structure and Course Specifications of 2nd year B. Tech. in Aerospace and Automotive Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering, Mechanical Engineering and Civil Engineering in line with the NEP guidelines, suggesting that improvisation of the curriculum shall be looked in to for the betterment of students.				
AC 31.12	To consider and approve the Programme Structure and Course Specifications of 2nd year M. Tech. programmes at Faculty of Engineering and Technology, RTC, Peenya, MSRUAS.				
	The Head, Department of Civil Engineering presented the Programme Structure and Course Specifications of 2nd year M. Tech. programmes at Faculty of Engineering and Technology.				
	The commonality between the M. Tech. programmes of all Departments under FET has been discussed and deliberated.				
	The Vice Chancellor expressed that all PG and all UG programmes must have uniform number of credits prescribed with only 5% variation. Also, the office of the Academic Affairs to prepare a chart for all programmes indicating the credits for each programme offered at the university.				



The Academic Council approved the Programme Structure and Course Specifications of 2nd year M. Tech. programmes at Faculty of Engineering and Technology, RTC, with the suggestion that the Department must come up with a revised and best curriculum for M. Tech. programme that shall be reviewed for approval.

#### RAMAIAH MEDICAL COLLEGE

### AC 31.13

To consider and approve the change in the nomenclature of the phase wise teaching departments by NMC.

- The Dean, RMC, presented the change in the nomenclature of the phase wise teaching departments by NMC, as follows:
- · Pre-Clinical to First Professional
- Para Clinical to second Professional/ Third Professional part I
- Clinical to Third Professional Part I & Part II

All the departments are deemed to be clinical as per CBME curriculum.

### Anatomy:

· The following changes were requested from the department of anatomy.

# UG:

- 1. The new formative assessment pattern for Anatomy has been revised by the UGMEB of NMC (Annexure attached). The same must be applied for the MBBS 2023-24 batch under RUAS.
- 2. Change in distribution of teaching hours subject wise (ECE)
- 3. AETCOM module for Anatomy is changed.
- 4. The Department of Anatomy has recommended the inclusion of OSPE (5 marks) for formative and summative practical assessment.

### PG: None

### Physiology:

The following changes were incorporated in line with the current NMC guidelines provided in Aug-Sept 2023.

### <u>UG</u>

- 1) Change in distribution of teaching hours subject wise (Lectures,SGT,SDL,ECE)
- 2) The pattern of continuous internal assessment theory and practical
- 3) OSPE has to be included as part of assessment.
- 4) AETCOM module for Physiology is changed.



### <u>PG</u>

- Good clinical practice to be included.
- · Revision in curriculum including assessment as per NMC regulations -PG
- Approval of Panel of Examiners for summative examinations.

### **Biochemistry:**

The following changes were incorporated in line with the current NMC guidelines provided in Aug-Sept 2023.

### UG:

- 1) The pattern of continuous internal assessment theory and practical
- 2) AETCOM module for Biochemistry is changed and is incorporated.
- 3) The pattern of continuous internal assessment theory and practical
- · Revision in curriculum including assessment as per NMC regulations -PG
- Approval of Panel of Examiners for summative examinations.

#### **II Professional Year:**

- Approval of Syllabus revision as per NMC guidelines
- Academic calendar including tentative dates of Formative and Summative Assessment.
- Approval of examination- Internal assessment and Summative exam marks as per NMC guidelines
- Approval list of eligible examiners for summative examinations.

### **III Professional Year:**

- · Approval of Syllabus revision as per NMC timeline
- Academic calendar including tentative dates of Formative assessment.
- Approval of examination- Internal assessment and Summative exam marks as per NMC guidelines
- Revision in curriculum including assessment as per NMC regulations -PG

Approval of Panel of Examiners for summative examinations.

### Super Specialty:

- External B.O.S. members from each department
- Ratification of new NMC guidelines with respect to super specialties like implementation of dissertation, conduct of internal examinations etc.,



- The same has been recommended by the Board of Studies and is submitted for the approval of the Academic Council.
- > The Vice Chancellor suggested offering basic computer courses for the Health Science students by the Faculty of Engineering and Technology. These courses need not be credited.
- > The Member Secretary expressed that any health care professional other than medical should be trained in BLS whereas the students of Medicine should be trained in both BLS and ACLS advanced course.

The Academic Council approved the change in the nomenclature of the phase wise teaching departments by NMC. Further, the modifications, as recommended by the BoS under the Departments-Anatomy, Physiology, Biochemistry and Super specialty are approved by the Academic Council.

### RAMAIAH ADVANCED LEARNING CENTRE

#### AC 31.14

To consider and approve the proposal for starting the Tissue Bank Certification Course at RALC in collaboration with the DTI, Barcelona.

- > The Director, Ramaiah Advanced Learning Centre presented the proposal for starting the Tissue Bank Certification Course at RALC in collaboration with the DTI, Barcelona.
- > The Tissue Bank at the RALC is the only one of its kind certified by the Appropriate Authority of Karnataka.
- > The main thrust is on preserving bone, large quantities of which are required in managing bony defects following surgery for
  - · bone cancers,
  - · bone loss during trauma,
  - bone fusion in spinal surgery, or
  - · during revision joint replacement surgery.
- ➤ The Ramaiah Tissue Bank has collaborated with the Donation and Transplant Institute of Barcelona (who have 22 years of experience in conducting the course) for the conduct of India's first-ever course in Tissue Banking for a duration of the two months.

### Advantages of the Course:

- Career opportunities
- Specialised skills



- · Contribution to healthcare innovation
- · Ethical and regulatory understanding
- · Networking opportunities
- Job security
- · Personal fulfilment
- One of the member suggested that the faculty from DTI, Barcelona must be the resource person, there should be an examination conducted and evaluated by the Controller of Examinations, M S Ramaiah University of Applied Sciences, as the certificate is issued by the University, and a course structure in consent with DTI, Barcelona must be prepared, also the eligibility, hours and credits of the course must be well defined. The course can be conducted in a blended mode.

The Academic Council after detailed deliberation approved the proposal for starting the Tissue Bank Certification Course at RALC in collaboration with the DTI, Barcelona.

Further suggested to offer the course as an Advanced Certification course on Tissue banking and Advanced Therapies instead of PG Certification course on Tissue banking and Advanced Therapies.

# AC 31.15

To consider and approve the new programmes offered by FET through DTLL in association with Zenith Rail Edvarsity Pvt Ltd during weekends in hybrid mode(online/offline).

The Member Secretary briefed the Academic Council about the new programmes offered by the Department of Electronics and Communications Engineering and Computer Science Engineering through DTLL in association with Zenith Rail Edvarsity Pvt Ltd during weekends in hybrid mode(online/offline).

### TABLE 1

Sl.No.	Name of the Programme	Duration	Credits	In-take	Remarks
1	PG Certificate in Signaling Systems & Application Engineering for Railways and Metro		21	15	Trimester 1&2
2	PG Certificate in Safety & Communication Management for Railways and Metro		21	15	Trimester 1&3



П	3	PG Diploma in signaling 11 Months	40	30	Trimester 1,2&3	
		and Communication				
Ш		Management for Railways				
		and Metro				

### **TABLE 2**

Sl.No	Name of the Programme	Intake	Remarks
1	PG Certificate in Digital Business Management	15	Trimester 1 & 2
2	PG Certificate in International Ecommerce Management	15	Trimester 1& 3
3	PG Diploma in Digital Business Management and Ecommerce	30	Trimester 1, 2 &3

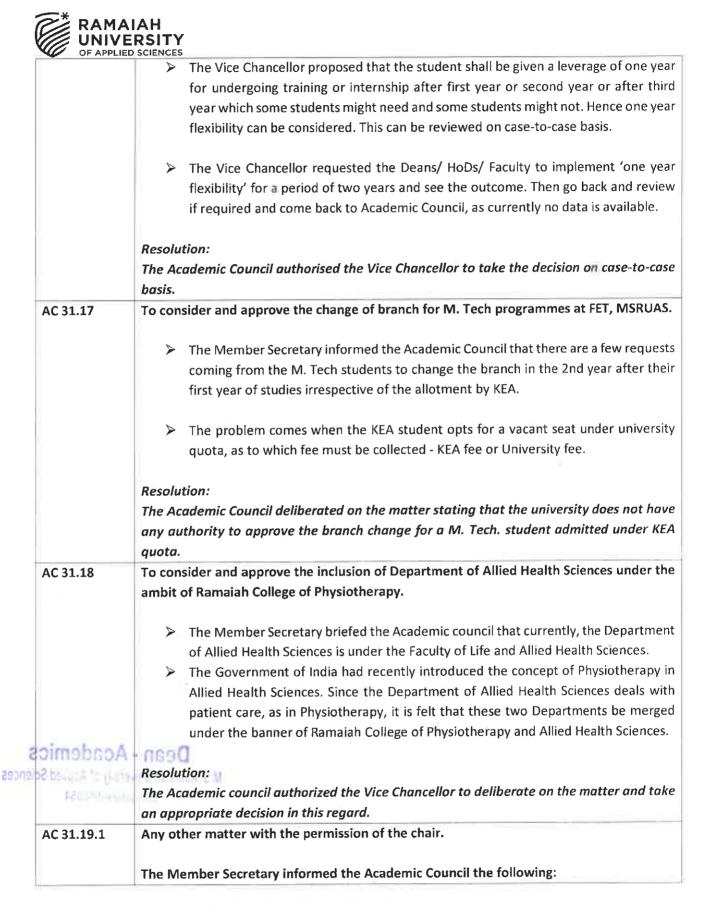
#### Resolution:

The Academic Council in-principal approved the new programmes offered by FET through DTLL in association with Zenith Rail Edvarsity Pvt Ltd during weekends in hybrid mode(online/offline) with the suggestion that the eligibility to the programme and course fee are to be well defined and deliberated. Further, the Academic council approved the intake for PG Certificate in Digital Business Management, PG Certificate in International Ecommerce Management and PG Diploma in Digital Business Management and Ecommerce, as mentioned in table 2.

### AC 31.16

To consider and approve the revision in the Academic Regulation of B.Voc. programmes regarding duration to complete the degree/diploma.

- The Member Secretary briefed the Academic Council that according to the current regulations of RUAS the maximum duration of the Programmes is twice the duration of completion of a programme (N+2) and the question is whether the same is applicable to the B. Voc. Programmes also or not. In this regard, when the UGC guidelines were referred it was clearly mentioned that there is no maximum limit for a student to complete the B. Voc. Programme.
- ➤ But when the VTU regulations were referred, it stated that the student had to complete first year within 4 years, second year must be cleared within 5 years and third year must be cleared within 6 years.





	Extension of The Hon'ble Vice Chancellor's Service at M S Ramaiah University of Applied Sciences for one more term (a period of three years).
	Resolution:
	The Academic Council expressed their happiness over the decision taken by the management and congratulated the Hon'ble Vice Chancellor.
AC 31.19.2	The Member Secretary informed the Academic Council the following:
	Relieving of Dr. Krishnamurthy Jayanna, Dean, Research from April 1st, 2024.
	Resolution:
	The Academic Council wished Dr. Krishnamurthy Jayanna good luck in all his future endeavours.
AC 31.19.3	The Head, Department of Aerospace and Automotive Engineering informed the Academic Council the following:
	Top All India Rank by B. Tech. Aerospace Engineering student in GATE 2024
	➤ Mr. Devendra Singh Deora (Reg. No. 19ETAS012011) of the B. Tech. Aerospace
	Engineering (2019-23 batch) has secured an All-India Rank of 39 in the Graduate Aptitude Test in Engineering GATE 2024.
	Resolution:
	The Academic Council noted and appreciated the achievement of the student Mr.
	Devendra Singh Deora.

The meeting concluded with thanks to all the Academic Council members for their valuable inputs.

Dr. G S Venkatesh

Registrar, Member Secretary Registrar

M.S. Ramaiah Univaria Stapplied Sciences

Bangalore - 5oc d54

Dean, Academic Affairs

Dr. Medha Y Rao

**Dean - Academics** 

M.S. Ramaiah University of Applied Sciences

Bangalore-560054

Prof. Kuldeep Kumar Raina

Vice Chancellor, Chairperson

Vice Chancellor M.S. Ramaiah University of Applied Sciences Bangalore - 560 054.

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# Minutes of 20<sup>th</sup> Research Innovation Council Meeting, RUAS, Bengaluru held in blended mode at 02:00 pm on 23<sup>rd</sup> March 2024 at S1, Gnanagangothri Campus, New BEL Road, Bangalore

# **Members Present**

Name of the Member	Designation
Prof. Kuldeep Kumar Raina	Vice Chancellor
Prof Om Prakash Kharabanda	Pro-Vice Chancellor, Health Sciences
Prof. Govind R. Kadambi	Pro-Vice Chancellor – Engineering Sciences
Dr. Medha Y Rao	Dean - Academic Affairs
Dr J V Desai	Dean, RTC
Prof. S. Bharath	Dean (I/C) - FPH
Dr. K.M. Sharath Kumar	Professor and Head – FMC
Prof. Abby Mathew	Dean - FHMCT
Dr. Savita Ravindra	Dean -RCP
Dr. Sonali Jadhav	Dean- RINER
Dr. Sivathanu Pillai (Online)	Professor Emiritus and Advisor
Prof. S. Asokan (Online)	Professor and Chairman Department of Instrumentation and Applied Physics, Indian Institute of Science
Dr. TM Kotresh (Online)	Director - Defense Bioengineering and Electro Medical Laboratory (DEBEL), DRDO
Dr. Bontha V Babu (online)	Scientist-G & Head, Indian Council of Medical Research, New Delhi
Dr. Krishnamurthy Jayanna	Dean - Office of Research and Dean - FLAHS (Member Secretary)
Dr. T Niranjana Prabhu	Associate Dean – ORI
Dr. B S Nandakumar	Associate Dean – ORI
Dr Sandhya K V	IPR Coordinator
Mr. Narasimha Reddy RTBI	
Mr. Parikshit	Techno Center
HODs and Research Coordinators	participated online



# Members absent

Name of the Member	Designation		
Dr. G S Venkatesh	Registrar		
Prof. Smita Srinivas	Founder and Director, TCLab		
Dr. Anita Mahadevan	Professor and Head - Department of Neuropathology, NIMHANS		
Dr. Prem K. Mony	Professor, Epidemiology and Vice Dean, St Johns Research		
Dr. Prem k. Mony	Institute		
Dr. Ajay D Pillai	Scientist-E, National Centre for Cell Science, Pune		
Dr. Shalini Nooyi	Dean - Ramaiah Medical College		
Dr. Silju Mathew	Dean - FDS		
Shri Gurucharan Gollerkeri	Director, School of Social Sciences		
Dr. Kiran Kumar	umar Convenor- Institutional Innovation Council		

# Call to Order and Quorum:

The meeting was called by the Hon Vice Chancellor, the chair of the RIC on 23<sup>rd</sup> of March 2023 at 02.00 pm. With sufficient quorum being present, the Chairperson commenced the proceedings.

Agenda Item No.		Discussion on the Agenda Item	Resolution	
RIC 20.1	16 members	o Grant Leave of Absence attended offline, and 8 including four external experts a. The leave of absence was recorded for the members who	Attendance sheet is enclosed as RIC 20.1	
	were absent.			
RIC 20.2	<ul> <li>To approve Min</li> <li>The 19<sup>th</sup> RIC circulated to</li> <li>Comments voice on comment</li> </ul>	The minutes of the meeting of 19 <sup>th</sup> RIC is enclosed as RIC 20.2		
RIC 20.3		ons were incorporated and finalized.	It was resolved to:	
	The ATR of the	To review and approve the Action Taken Report of the 19 <sup>th</sup> Meeting of RIC held on 05 Dec 2023  The ATR of the 19 <sup>th</sup> Meeting RIC Meeting on 05 <sup>th</sup> December 2023 was presented by the Dean-Research & Innovation.		
	Agenda	Action/Recommendation Action Taken / Resolution		
	RIC 19.4: Consider the status and progress of Research outputs including	<ul> <li>The Research and Innovation Council recommended to have projections for 2024 and future (publication citations and index; patents;</li> <li>The Council noted the suggestions and developed a focused strategic road map for 2023-24.</li> <li>The Council noted the suggestions and developed a focused strategic road map for 2023-24.</li> <li>The Council noted the suggestions and developed a focused strategic road map for 2023-24.</li> </ul>	<ul> <li>Set up a committee with Dr. Pillai as advisor towards identifying the core research centers at the RUAS</li> </ul>	



Agenda Item No.		Resolution	
	roadmap, and sponsored research projects:	sponsored research, etc.), and plan strategic activities to achieve them.  The Council suggested to continue the focus on infrastructure was taken for which a Calendar of research activities were prepared and disseminated in line with on Infrastructure upgradation and human resource capacities.	
		<ul> <li>The Research and Innovation Council recommended Planning for Multidisciplinary Research Seminars/ Colloquia at university level to enhance multidisciplinary research.</li> <li>The Council noted the suggestions and conducted an Interdisciplinary colloquium (January 2024), the report of which is attached.</li> <li>Annexure RIC 20.3</li> </ul>	
		<ul> <li>The Research and Innovation Council suggested to Plan setting up of bio banks and cell lines which are critical for basic science research.</li> <li>Also to plan Consultancy services and revenue generation in the establishment of CRL</li> <li>The bio banks and cell line facilities will be taken up in discussion with leadership/ management.</li> </ul>	
	19.5: To Consider the Status and Review updates of the doctoral programs at RUAS.	<ul> <li>The Research and Innovation Council suggested connecting with the alumni network and to explore social media for attracting good PhD scholars.</li> <li>The Social media at RUAS has been utilized effenciantly for allumini connect and promotion of PhD programme</li> <li>the Council laid specific emphasis to align the topics with national priorities, during the Quarterly JRF review.</li> </ul>	
		The council approved to forward the list of scholars as approved by	



Agenda Item No.	Discussion on the Agenda Item			Resolution
		inactive PhD scholars (74) whose status is to be revoked (as per UGC guidelines) to the Academic Council.	the Hon VC (chairperson of RIC)has been submitted in 31st ACM held on 22nd March 2024 for ratified and got approved.	
	19.6: To Consider the Status and review updates of Intellectual Property Rights	The Research and Innovation Council suggested to Encourage the PG research to focus on product development.	The IPR activity calunder has been developed and incorporated into the event of calunder of Office of Research.	
		The Research and Innovation Council recommended to have further deliberations on ranking systems (for patents and publications) and its implications for RUAS strategy in the light of the revisions and updates of ranking systems. The council suggested to develop a note to map various programs and their connections to the national policy priorities.	This will be planned in the next phase, and the updates will be provided in the next RIC meeting.	
		The Research and Innovation Council suggested to Set up a Science Communication Cell to disseminate research outputs internally and to the outside world.	<ul> <li>The Science communication activities are initiated, and a cell is yet to be developed, which will be taken up in the next phase.</li> <li>The faculty and students are encouraged to submit scientific articles and blogs to be published and disseminated on monthly</li> </ul>	



Agenda Item No.		Discussion on the Ag	enda Item	Resolution
	19.8 To Consider the Status and Review Updates of activities in the last six months of the IIC, RTBI, Technocenter	• The Research and Innovation Council suggested the IIC to engage all faculties, and C-CAMP.	basis (Recent Issue of Gokula Gnana Vahini).  The council communicated that a conference in association with the Kannada University - Hampi was conducted for scientific communication, 29-30 Sept 2023.  Also, that the annual research report- GANANA MANTHANA of the RUAS compiled by the Office of Research and Innovation highlighted the research achievements and outputs was released during the 8th RUAS convocation.  An MoU was signed with the C-CAMP to encourage both students and faculty in research activities.	
		• The Research and Innovation Council suggested to Set up a Central Research / Instrumentation facility which are critical for stepping up faculty and PhD research and develop new proposals and budgets for 2024-25.	<ul> <li>The council responded that Due to diverse range of disciplines located in two separate campuses, two central facilities one focused on Health Sciences at GG campus and the other to meet the needs of the RTC campus are explored.</li> <li>The team was advised to explore feasibility of using Ramaiah Advance Testing</li> </ul>	



Agenda Item No.		Discussion on the Ag	genda Item	Resolution
	integration of Health Sciences Revised policy of Research incentives Research Calendar		Laboratory, and feasibility report is submitted to the leadership/management.  • For RTC campus, due to space constraints, the central instrumentation facility will be pursued next year.	
		The Research and Innovation Council approved the strategy for nurturing research groups and research centers, and pathway to developing centers of excellence in principle. RIC advised to consolidate research thrust areas and research centers internally and forward a proposal for the next RIC.	<ul> <li>The council prepared a list of faculty members based on their publications and sponsored research projects to map and align with the center of excellence identified.</li> <li>During the interdisciplinary colloquium, the faculty interests were mapped, and subresearch groups were made.</li> <li>The report will be taken up for futher discussion and deliberation in the next RIC</li> </ul>	
		The Research and Innovation Council suggested that the Revised Incentives for publications that were proposed may be weighed against reputed journals for each discipline. The current incentive policy may be continued till such time.	The council reiterated that the previously approved incentive policy is implemented, and the Revised incentive scheme is prepared as suggested by RIC and submitted in the next RIC	
		The Research and Innovation Council approved the Annual calendar for research	IPR activities are in- corporated into the Annual Research Calendar as suggested by RIC	



Agenda Item No.	Discussion on the Agenda Item	Resolution
	activities with suggestions to fine tune and integrate IPR activities.	
RIC 20.4	<ul> <li>Consider the status and progress of review updates of the office of Research and Innovation with a focus on publications, spon research, seed funding, MOU</li> <li>A detailed analysis of the publication analysis , Sponsored Research projects, Seed Funding, Research infrastructure.</li> <li>Industrial Projects – Techno Centre was provided, where 3 out of 5 are completed, 1 project is awaiting its result and 1 is ongoing.</li> <li>A recent Interdisciplinary colloquium – 'IGNITE Research at Ramaiah'</li> <li>Functional MOU and Linkages within the faculties and outside as evidenced through exchanges and publications were presented.</li> <li>Current status of RUAS Incentive policy implementation was mentioned.</li> <li>Details of significant achievements and recognitions were presented.</li> <li>Key Highlights of Discussions:</li> <li>The RIC appreciated the efforts of the university in scaling up of publications, and overall research activities to augment research outputs.</li> <li>The chair suggested the faculty involved in active research be identified and to form clusters based on the interdisciplinary themes.</li> <li>Prof A S Pillai suggested avenues from the government-sponsored priority areas for research. An open house for research capability can be conducted</li> <li>Dr. Bontha V Babu suggested that, the faculty should be made to realize that research is not optional but integral to academics</li> <li>Dr. Asokan appreciated the increase in the number of publications and grants. He mentioned the Innovation Park in IISc which is going to be inaugurated shortly and the students and faculty can utilize the same.</li> <li>Dr. T. M. Kotresh gave an input about focusing the research on defense technologies, and suggested to establish a research centre with a thrust on advanced materials related to defense.</li> </ul>	It was resolved to: Set up a Publication Committee /Centre. Create a standardized template of affiliation for the submission of publications to journals. And the details are enclosed as RIC 20.4 A Involve techno center towards-Tech Transfer initiatives. Details are enclosed in the RIC 20.4 B Provide letters of acknolwdegement to collaborators and student/faculty acheivers. Conduct suggested to open house for showcasing research capabilities to various stakeholders. The details are enclosed in the 20.4 C
20.5	To Consider the Status and Review updates of the doctoral programs at RUAS.	It was resolved to: • Facilitate applications both
	Progress made in doctoral programs in the year 2023 was presented.	within RUAS and by external scholars
	<ul> <li>Key Highlights of Discussions:</li> <li>Chairman suggested identifying the eligible scholars and faculty members from RUAS and facilitate in their applications.</li> </ul>	from national and international insitutions towards



Prof Pillai suggested to improve the number of full-time scholars through focused efforts.  Wherever CGPA is not available, especially in the health sciences courses an equivalence of 60% can be considered as the eligible merit, in line with the UGC recommendadation. The same may be applied as standard practice across all the faculties (60% or 6.0 CGPA). It was suggested to explore identifying competent supervisors from various other institutions and industries to supplement and complement the research & PhD training.  The course (PhD) syllabus is to be incorporated into the website and a hard copy with all the amendments is to be maintained in all the departments.  GCTU related specific updates (of list of scholars, supervisors) and outdstanding fee was sought, and the RIC advised VC to look into the details and plan appropriate next steps.	and projects.  Organize sensitization workshops for PhD / other aspirants towards disseminating various opportunities at RUAS.  Amend the eligibility criteria for RUAS
With regards to PhD technical course specifications of departments of Aerospace and Biotechnology, the chair advised to take up the academic matters to the Academic Council for approval.	fellowships to 60% or equivalent CGPA  • Dissemination of PhD coursework in the RUAS website  • Organize a review meeting with supervisors of GCTU scholars to assess academic progress and fee issues.  • More details are enclosed in RIC 20.5
Consider the Status and review updates of Intellectual Property ghts  IPR Cell activities were presented A steady increase in the number of patents filed and granted year after year The idea of patent commercialization about monetization and socialization is being explored.  Exp Discussion points:  RIC appreciated the progress made every year and suggested having an "Annual patent book".  RIC advised focusing on the commercialization of patents through industry engagement.	It was resolved to:  Bring out IPR related achievements as an Annual IPR Report.  Explore commercialization of relevant patents.  A detailed explanation is attached in the RIC 20.6
gŀ	IPR Cell activities were presented A steady increase in the number of patents filed and granted year after year The idea of patent commercialization about monetization and socialization is being explored.  Discussion points:  RIC appreciated the progress made every year and suggested having an "Annual patent book".  RIC advised focusing on the commercialization of patents through



Agenda Item No.	Discussion on the Agenda Item	Resolution
item No.	<ul> <li>PG students to be encouraged toward product development.</li> <li>Dr. Soma Chaki suggested looking into government schemes like Karnataka ELEVATE for newer patented ideas</li> </ul>	
20.7	<ul> <li>To Consider the Status and Review Updates of activities in the last six months of the IIC, RTBI, Techno-center</li> <li>The major focus of IIC on Innovation Ecosystem, activities conducted by IIC, were presented.</li> <li>Achievements, startups incubated, and current action plan were shared.</li> <li>Key Techno Centre activities, the status of Industrial Projects, and the status of sponsored projects were highlighted.</li> <li>Key highlights of discussions:</li> <li>RIC members appreciated the good efforts made.</li> <li>RTBI should concentrate on improving revenue generation through better technology outcomes and Intellectual property</li> <li>RIC suggested effective utilization of the infrastructure by the faculty members and others to ensure the objectives of the scheme are met in principle.</li> <li>Dr. Kotresh suggested the centre to look for funding from Defense sectors, Centre for Material Sciences etc.</li> </ul>	It was resolved to:  • Engage the students in internships to improve the quality of training and enhance industry fitness in all competencies.  A detailed (RIC 20.7A, 20.7B, 20.7C) is attached.
RIC 20.8	<ul> <li>To review and approve activities and budgets proposed for 2024-25 as part of Strategic road map</li> <li>An overview of the trends and progress in the last 3 years indicating that the strategic roadmap &amp; activities with key target achievements were presented.</li> <li>Budgets for key activities for 2024-25 to the tune of 2.76 Cr including the newly added budget for intramural funding was presented.</li> <li>Key highlights of the discussions:</li> <li>The RIC appreciated the progress in the trajectory of annual trends over the last 3 years and advised to sustain the focus and momentum.</li> <li>RIC suggested to attract SRF and PDF through a focused research agenda that is possible by faculty support and infrastructure upgradation, and advised Office of Research to focus on this in the coming year.</li> <li>The chair suggested to have aspirations and targets of PhDs graduation to 100 in the next 2 years and plan systematically to achieve the same.</li> <li>RIC in principle approved the proposed straregic focus and activities for 2024-25, and with respect to intra-mural funding, the chair advised to share a detailed plan as to how the funds can be managed to support new initiatives.</li> <li>RIC advised to explore the expansion of the Office of Research at RTC</li> </ul>	<ul> <li>Attract Senior         Research Fellows         and Post Doctoral         Fellows through a         focused research         agenda.</li> <li>Plan systematically         to ensure continual         improvement in the         numbers of PhDs         graduating.</li> <li>A detailed note is         attached in the RIC     </li> <li>20.8</li> </ul>



Agenda Item No.	Discussion on the Agenda Item	Resolution
	completed at RTC.	
20.9	<ul> <li>Any other matters with permission of the Chair &amp; Closing remarks</li> <li>Dr. Kotresh suggested that collaborating with funding agencies and organizations can help improve research and revenue.</li> <li>At the end, the chair announced that Prof Krishnamurthy Jayanna is moving on to taking additional assignments and thanked him for his contributions and effort. He also then acknowledged the efforts of Office of Research team and the faculty for their efforts.</li> </ul>	

There being no further business, the Chairman declared the meeting adjourned by unanimous consent.

The Meeting ended with a Vote of Thanks from the Chairman.

Signature with Date

Dr. Krishna Murthy Jayanna

Dean- Office of Research and Innovation

(Member Secretary, RIC)

Office of Research and Innovation MS Ramaiah University of Applied sciences New BEL Road, Gnanaganhothri Campus, Bangalore - 560 054

Prof. Kuldeep.K.Raina

Vice Chancellor (Chairman, RIC)

Vice Chancellor M.S. Ramaiah University of Applied Sciences Bangalore - 560 054.

MINUTES OF THE 26TH MEETING OF THE FINANCE COMMITTEE OF M S RAMAIAH UNIVERSITY OF APPLIED SCIENCES HELD ON MARCH 26, 2024, AT 11.30 AM IN THE S1 BOARD ROOM, UNIVERSITY HOUSE, GG CAMPUS, NE BEL ROAD, BANGALORE.

SI No	Name/ Designation	Role
	Members Present:	Note
01	Sri M R Sreenivasa Murthy, IAS (Retd), Chief Executive, GEF (M)	Chairman
02	Prof. K K Raina, Vice Chancellor	Member
03	Sri T S Venugopala Sastry, CFO, Nominee of GEF (M)	Member
04	Dr G S Venkatesh, Registrar	Member
05	Sri Udayakumar Shetty, Head- Finance	Member Secretary
	Members Absent:	Wellber Secretary
06	Sri B N Subramanya, Nominee of GEF (M)	Member

The Member-Secretary extended a warm welcome to all the members present and briefed the members on various agenda items placed before the Committee. He requested the Chairman to call the meeting to order as the quorum is present.

### AGENDA NO. FC 26.1:

### Grant of Leave of Absence:

The Committee noted that Sri B N Subramanya could not make it to the meeting and has sent a mail seeking leave of absence. Accordingly, the Leave of Absence was granted.

### AGENDA NO. FC 26.2:

### Approval of the minutes of 25th Finance Committee meeting held on December 15, 2023.

After detailed perusal, the committee approved the minutes of the  $25^{th}$  Finance Committee meeting held on December 15, 2023.

### AGENDA NO. FC 26.3:

### **Action Taken Report:**

The Committee deliberated on the action points on the decisions taken in the 25<sup>th</sup> Finance Committee meeting held on December 15, 2023. It was noted that appropriate actions have been taken in respect of the consolidated Operational & Capital Budget. Secondly, the Registrar explained that the issue of classroom shortages has been suitably addressed. Further, it was explained that a separate Status Report on the implementation of the ERP is provided at Annexure 2. The Registrar explained that the complete ERP implementation in respect of Purchase, Finance & Accounts & HR modules may take 3 months till June 2024. However, he mentioned that substantial progress has been made since the last meeting of the Finance Committee. The Committee laid emphasis on the need for training the users to overcome the user disinterest. The Committee further suggested that an external expert may be roped in to support the initiative, if need be, in addition to additional staff as discussed in the last meeting.

Further, the Chief Executive desired that a scheme of incentives be considered, may be with 15 days salary for 20-25 staffers/ faculty members who are responsible for completing the adoption of ERP before 30<sup>th</sup> June 2024.

### AGENDA NO. FC 26.4

### Opening of the bank accounts:

The Committee noted the opening of the following bank accounts for transactions pertaining to the grants and tax payments and ratified the action taken:

SI No	Purpose	Bank	Account No
01	To facilitate tax and other statutory payments	Axis Bank, Rajajinagar Br	924010006171690
02	Grant: IISc- Stars Project	SBI, Dollars Colony Br	42793278067
03	Grant: Anti-Microbial	Axis Bank, Rajajinagar Br	924010004810427
04	Grant: Lateral Flow	Axis Bank, Rajajinagar Br	924010009604816
05	Grant: Positive Aging Study	Axis Bank, Rajajinagar Br	924010014637623
06	Grant: Scaffolds for Regeneration	Axis Bank, Rajajinagar Br	Yet to get the Ac No

### AGENDA NO. FC 26.5

### Note on the lease of the property at Peenya:

The Committee perused the note and enquired about the proposed utilization of the additional space available now. The Vice Chancellor explained that the internal space management has been decided and the Technical Cell, GEF(M) has started the work. The leased premises will accommodate 8 nos. labs, 6 nos. classrooms, 2 nos. discussion rooms besides staff rooms/ cubicles for about 10 faculty members. The space may be available before the commencement of the next academic year, he said.

### AGENDA NO. FC 26.6

### Introduction of Ramaiah Memorial Scholarship for the Academic Year 2024-25

The Committee perused the note placed on the proposed release of the scholarships to the eligible students for the Academic Year 2023-24 as detailed below:

Scheme	Scheme details	Students	Amount
Scheme 1	Merit Based Scholarship for B Tech students	16	4,00,000
Scheme 2	Merit Scholarship based on the performance in JEE & K-CET.	13	5,00,000
Scheme 3	Merit Scholarship for B Com, BBA, BSc, BA, B Des with certain merit criteria	37	9,20,000
Scheme 4	Merit Scholarship for MBA students	4	2,00,000
Scheme 5	State Based Scholarship intended to benefit Northeastern States & Andaman & Nicor islands.	5	1,50,000
Scheme 6	Tibetan Diaspora Scholarship	1	25,000
Scheme 7	Scholarship for the children of the Alumni	5	1,90,000
Scheme 8	Scholarship for the orphan students	1	
	Total	82	30,000 <b>24,15,000</b>

### The Committee suggested that:

- The scholarships under the schemes instituted for the Academic Year 2023-24 be disbursed immediately along with certificates of appreciation. This may be done through a function preferably chaired by the Chancellor. The same can be conducted at Peenya as more students are from RT Campus.
- 2) Henceforth the scholarships shall be released to the eligible students within 30 days of the commencement of the academic session, otherwise the importance of the same will be lost.
- 3) Approval of the Board of Management may be obtained for the continuation of the scholarship to the students in the subsequent years till completion of their course at the same amount for the 82 students provided the students maintain the suggested CGPA of 7.5.

Further, the Committee approved the proposed schemes of scholarship for the Academic Year 2024-25 as mentioned below and desired that the same shall be publicized suitably to the prospective students in our admission-related initiative:

### Scholarship Scheme for Academic Year 2024-25:

The continuation of the scholarship schemes introduced in the Academic Year 2023-24 for the Academic Year 2024-25 with minor modifications was proposed. The scheme is as below:

### SCHEME I - Merit Scholarship for B Tech based on +2 performance.

SI. No.	CBSE/ICSE	State Board	Scholarship	
1	Above 9.5 CGPA	90% & above	30,000	
2	Between 9.0 & 9.49 CGPA	80 - 89.99%	20,000	

### SCHEME II – Merit Scholarship Based On K- CET

SI No	Criteria	Scholarship
	Karnataka CET rank within 5000 (FET, FPH, RCPT, RINER, FLAHS, FMC)	30,000

# SCHEME III - Merit Scholarship For B COM/BBA/BSC/BA/ B Des/ B Pharm/ BPT/ BHM/ Pharm D/ BA LLB/ BSc LLB/ BSc N/ PBBSc N

SI. CBSE/ICSE	State Board	Scholarship
1 Above 9.5 CGPA	90% & above	30,000
2 Between 9.0 & 9.49 CGPA	. 90 90 noe/	300-20-1 (S00-20-20-1)
	80 - 89.99%	20,000

### SCHEME IV - MERIT SCHOLARSHIP FOR MBA

Scholarship
50,000
40,000
30,000

<sup>\*</sup>Would mean in 10th, +2 & degree.

### SCHEME V – State Based Scholarships

Criteria	Scholarship
Students from Northeast States - Arunachai Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Andaman & Nicobar	20,000

### SCHEME VI – Tibetan Diaspora Scholarship

Criteria	Scholarship
Students from communities of Tibetan people living outside their original homeland of Tibet.	25,000

### SCHEME VII - Sports Scholarship

SI No	Criteria	+2 Performance	Scholarship
1	Represented at the State Level in a recognized sport/games event conducted by the official governing body.	Min 60% or equivalent	30,000
2	Representing the State at the National Level in a recognized sport/game event conducted by the recognized governing body.	-Min 50% or equivalent	40,000

### SCHEME VIII- Scholarship for children of the alumni:

Criteria	Performance	Scholarship
MSRUAS/ GEF for a minimum period of 3 years	Min 60% or equivalent in +2 or PUC for the UG programs; or Min 60% or equivalent CGPA in the degree for all PG programs	20,000

### SCHEME IX- Scholarship for orphan students:

Criteria	Performance	Scholarship
The student shall be eligible when both the parents are not alive	Min 60% or equivalent in +2 or PUC for the UG programs; or	40,000

Min 60% or equivalent CGPA in	
the degree for all PG programs	

### SCHEME X- Scholarship for differently abled.

Criteria	Performance	Scholarship	
	Min 60% or equivalent in +2 or PUC for the UG programs; or	30,000	
	Min 60% or equivalent CGPA in the degree for all PG programs		

### General conditions:

- a) All scholarships are applicable to Academic Year 2024-25 only.
- b) Only one Scholarship can be claimed by a given student, based on his/her preference.
- c) The Home State of the students for the State Based Scholarship is decided by Adhaar Card/Passport.
- d) The scholarships are based on merits and at the discretion of the Management. Hence, the same cannot be claimed as matter of right by any student/parent.
- e) The above scholarships are for the students who have not availed any other concessions/ scholarship or reduced fee from the Govt/ other bodies.
- f) The continuation of the scholarship under the above schemes in the subsequent Academic Years is subject to maintenance of suitable academic excellence as may be specified from time to time and the decision of the University.
- g) Approval of the Board of Management may be sought for the continuation of the scholarship scheme as above.

### AGENDA NO. FC 26.8

### Revision in the hostel fee @ RT Campus

The Committee noted that the proposal was for ratification of the action taken to increase the hostel fee from the existing level of Rs. 1.20 lakhs per annum to Rs. 1.30 lakhs considering that the University has brought in significance improvements in the facilities as mentioned below:

- a) There were several complaints from the students about the quality of the food served at the mess. Accordingly, the University has brought in a new reputable corporate catering company with absolutely no complaints so far. The new caterer has started serving the food with effect from 4<sup>th</sup> December 2023 at a higher cost compared to earlier.
- b) Biometric attendance recording has been installed for monitoring the consumption of food and for processing the payments to the caterer based on actual consumption of food at the mess.
- Significant investments that have been made in the mess are in terms of kitchen utensils, crockery & cutlery.
- d) RO plant has been installed for providing good quality drinking water at the Girls' Hostel. One more such unit is planned for the Boys' Hostel as well.
- e) The Boys' Hostel lift has started operating recently and a new lift will be provided at the Girls' Hostel in the coming months.
- f) All the complaints on carpentry, electrical, housekeeping, plumbing complaints which were there for a long time have been attended. The drainage lines have been cleared up. And there are no complaints from the inmates. A team to monitor these aspects has been put in place to attend to such complaints regularly. Housekeeping timings have been changed to suit the students' availability at the hostels.

- g) Painting work has been completed in the old hostel building, both internal and external.
- h) Gymnasium and sports facilities have been added up to the basement of the Boys Hostel available for all the students.

The Committee enquired about the costing parameters justifying the proposed increase in the hostel fee for which the Member-Secretary explained that the overall cost works out to around Rs 1.30 lakhs per student per year.

Considering the general increase in the cost, the Committee approved the proposed increase in the hostel fees from the existing level of Rs. 1.20 lakhs per annum to Rs. 1.30 lakhs per annum.

### AGENDA NO. FC 26.9

### Revision in the Tuition Fee in the University for the Academic Year 2024-25

The Committee examined the proposal for the revision in the Fee Structure and noted that the fee for the following programs is proposed to be revised:

PROGRAM	SPECILIZATION	QUOTA	2022-23 (Actual)	2023-24 (Actual)	2024-25 (Proposed)		
Engg:							
B Tech	AI&ML	RUASAT	240,000	400,000	450,000		
	ISE	RUASAT	240,000	400,000	425,000		
	ECE	RUASAT	240,000	300,000	350,000		
Pharma:							
M Pharm	Pharmaceutics	Mgt	200,000	230,000	250,000		
	Pharmacology	Mgt	200,000	230,000	250,000		
Mgt & Commerce:							
B Com		Mgt	100,000	1,75,000	140,000		
Life & Allied Sciences	s:			=0 =1+3+	1.0,000		
BSc (Hons)	ССТ	Mgt	240,000	2,40,000	250,000		
	MRIT	Mgt	215,000	2,15,000	220,000		
	OTT	Mgt	190,000	1,90,000	200,000		
	FPT	Mgt	130,000	195,000	175,000		
Social Sciences:							
B Sc(Hons)	DSA	Mgt	140,000	250,000	175,000		
	Psy	Mgt	135,000	200,000	200,000		
Nursing:							
GNM		Mgt	114,300	114,300	80,000		
Other new programs:							
PG Certificate in Digital Business Management							
PG Certificate in E-Commerce Management							
PG Diploma in Digital	Business Manageme	nt & E-Comn	nerce		182,200		
PG Certificate in Signa	Illing Systems & Appl	ication Engg	for Rail & Meti	ro	104,180		
PG Certificate in Safet	y & Communication	Managemen	for Rail & Me	tro	104,180		
PG Diploma in Digital	Business Manageme	nt & E-Comm	nerce		182,200		

The Committee after extensive deliberations approved the proposed changes in the fee structure and desired to know the impact of the above changes. It was explained that the total positive impact on account of the above changes will be only Rs. 10.58 lakhs per annum but will have a positive impact on the admissions in respect of B Com, BSc DSA & GNM programs.

After detailed deliberations, the Committee approved the changes suggested on the above lines.

### AGENDA NO. FC 26.10

### Operational & capital Budget for the Financial Year 2024-25

The Committee perused the draft Operational & Capital Budget of the University for the Financial Year 2024-25 in detail and noted that the proposed budget provides for significant capital investments in infrastructure creation at Rs. 83.38 crores including the ongoing projects estimated to cost Rs. 38.98 Crores for FY 2024-25. The Committee further noted that the University will generate sufficient cash surplus to meet the financial need for the Capital Investments envisaged.

The Member-Secretary explained that this is the Consolidated Budget for the University and the budgetary allocations of each of the faculty is also provided as desired by the Finance Committee in its 25<sup>th</sup> Meeting held on Dec 15, 2023.

The Committee decided to recommend the draft Budget for the Financial Year 2024-25 to be placed before the Board of Management for its approval.

### Any other subject with the permission of the chair.

There being no other subject/s to discuss, the meeting concluded with a vote of thanks to the chair.

Member-Secretary

## **ANNEXURE 38**

# **Teaching Faculty**

# 6th Pay Scale as per AICTE Norms

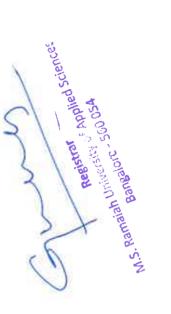
Payscale	15600 - 39100 + AGP Rs.6000	15600 - 39100 + AGP Rs. 7000	15600 - 39100 + AGP Rs.8000	37400 - 67000 + AGP Rs.9000	37400 - 67000 + AGP Rs.10000
Grade	P1	P2	P3	P4	P5
Designation	Assistant Professor	Assistant Professor	Assistant Professor	Associate Professor	Professor
SI No.	_	2	3	4	5



# Non - Teaching Faculty

6th Pay Scale as per Government of Karnataka

SI No.	Payscale
-	17000-400-18600-450-20400-500-22400-550-24600-600-27000-650-29600-750-32600
2	21400-500-22400-550-24600-600-27000-650-29600-750-32600-850-36000-950-39800-1100-42000
3	27650-650-29600-750-32600-850-36000-950-39800-1100-46400-1250-53900-1450-56800
4	43100-1100-46400-1250-53900-1450-62600-1650-72500-1900-83900-2200-88300
2	61150-1450-62600-1650-72500-1900-83900-2200-97100-2500-112100-2800-128900-3100-150600



## **ANNEXURE 39**



RANK DETAILS-RUAS/KCET RANK OF 2021-2022 ADMISSIONS									
COURSE	CLASS XII	EXAM SCORE	RUA	S SCORE	KCET	KCET RANK		COMED-K RANK	
	HIGHEST	LOWEST	HIGHEST	LOWEST	HIGHEST	LOWEST	HIGHEST	LOWEST	
FET	SCORE	SCORE	SCORE	SCORE	RANK	RANK	RANK	RANK	
B.Tech									
AEROSPACE									
ENGINEERING	99.33	61	91.1	33.3	11158	326517	15433	15433	
AUTOMOTIVE									
ENGINEERING	74.17	60.83	56.6	32.2	51989	162417	-	-	
CIVIL ENGINEERING	94.5	45	55.5	55.5	39366	171206	-	-	
COMPUTER SCIENCE	100	64.66	05.6	27.7	6246	00450	0.4.44	40202	
AND ENGINEERING	100	61.66	96.6	37.7	6216	99159	8441	19283	
ELECTRICAL AND ELECTRONICS ENGINEERING	99.83	45.8	_		32161	164056	_	_	
ELECTRONICS AND COMMUNICATION							47250		
ENGINEERING	100	61.33	-	-	17247	160026	17259	39220	
MECHANICAL ENGINEERING	100	46	70	44.4	38984	175336	-	-	
ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING	99.17	45	92.2	54.4	6643	33336	13427	15272	
INFORMATION SCIENCE AND									
ENGINEERING	99.83	45.6	81.1	56.6	5734	179729	6264	32538	

MATHEMATICS AND								
COMPUTING	97.5	50.6	66.6	63.6	26034	179459	26034	41608
ROBOTICS	99.5	56.3	50	31.1	19701	152192	-	-
FLAHS								
B.Sc. (Hons)								
BIOTECHNOLOGY	94.17	50	95.5	26.6	NA	NA		
FOOD PROCESSING								
AND TECHNOLOGY	95.5	54.83	85.5	30	NA	NA		
CARRIAC CARE								
CARDIAC CARE	06.0	67.46	00.0	25.5				
TECHNOLOGY (CCT)	96.8	67.16	83.3	35.5	NA	NA		
DIALYSIS THERAPY	0.0	46.00	75.5	24.4				
TECHNOLOGY(DTT)	96	46.83	75.5	34.4	NA	NA		
MEDICAL RADIOLOGY								
AND IMAGING								
TECHNOLOGY	92.83	66.33	84.4	28.8	NA	NA		
	52.55	00.00	• • • • • • • • • • • • • • • • • • • •					
OPERATION THEATER								
TECHNOLOGY (OTT)	100	52.33	85.5	28.8	NA	NA		
OPTOMETRY (OPT)	93.66	65.5	91.1	37.7	NA	NA		
FDU								
FPH	400	47.0	02.4	22.5	6053	50456		
B.PHARM	100	47.8	92.4	23.5	6953	50456		
PHARM.D	87.83	45.16	83.1	22.6	5114	21148		
FMC							-	
B.COM(HONS)	88.16	40.6	88.3	21.6	NA	NA	1	
BBA	98.5	44.33	95	28.3	NA	NA		

FHMCT						
BHM	88	45	96.6	33.3	NA	NA
FAD						
B.Design						
PRODUCT DESIGN	94.6	51	98.3	48.3	NA	NA
FASHION DESIGN	68.16	51.83	86.6	35	NA	NA
FMPS						
B.Sc						
CHEMISTRY			77.7	54.4	NA	NA
COMPLITED COLEMO			90	24.4	NIA	NIA.
COMPUTER SCIENCE ELECTRONICS	100	69	80	24.4	NA NA	NA NA
MATHEMATICS	100	09	78.8	51.1	NA NA	NA NA
PHYSICS			85.5	28.8	NA NA	NA NA
STATISTICS			77.7	58.8	NA NA	NA NA
STATISTICS			77.7	36.6	IVA	INA
SSS						
B.Sc(Hons)-(DATA						
SCIENCE AND						
ANALYTICS)	92	49.3	No Test	No Test	NA	NA
B.Sc(Hons)-						
PHSYCOLOGY	100	50	No Test	No Test	NA	NA
B.A(Hons)-						
SOCIOLOGY	72	55	No Test	No Test	NA	NA
B.Sc(Hons)-						
ECONOMICS	70	54	No Test	No Test	NA	NA
SL						
B.Sc(Hons)-LLB	90	55	No Test	No Test	NA	NA

FDS						
BDS	100	50	NA	NA	80116	881206
UG Total						
FLAHS						
M.Sc						
M.Sc.						
BIOTECHNOLOGY	9.7	6.16	83.3	61.1	NA	NA
M.Sc. FOOD SCIENCE						
AND TECHNOLOGY	8.7	6.59	95.5	58.8	NA	NA
M.Sc MOLECULAR			3.3.2	22.2	1	
AND CELLULAR						
BIOLOGY	89.9	6.9	84.4	36.6	NA	NA
MASTERS IN PUBLIC						
HEALTH	75.62	57	95.5	47.7	NA	NA
MASTER IN						
HOSPITAL						
ADMINISTRATION	90	52	95.5	36.6	NA	NA
FAD						
M.Design						
M.Des PRODUCT						
DESIGN	65.5	50.7	80	48.8	NA	NA
M.Des FASHION						
DESIGN	80.68	72.3	81.1	42.3	NA	NA
FMPS						
M.Sc						
APPLIED SOLID STATE						
PHYSICS			55.5	45.5	NA	NA
rnisics			33.3	45.5	INA	IVA

OPTOELECTRONICS	95.6	61.62	-	-	NA	NA
NUCLEAR PHYSICS						
AND TECHNOLOGY			85.5	36.6	NA	NA
ANALYTICAL						
CHEMISTRY			90	30	NA	NA
INDUSTRIAL	91.5	70.86				
CHEMISTRY	91.5	70.80	73.3	20	NA	NA
ORGANIC CHEMISTRY			91.1	37.7	NA	NA
APPLIED	90.39	70.5				
MATHEMATICS	90.59	70.5	84.4	35.5	NA	NA
			T	1		
FDS						
MDS						
Oral Medicine and						
Radiology	71.69	65.89	NA	NA	8265	14056
Periodontics	71.05	62.25	NA	NA	2520	18493
Oral and Maxillofacial						
Surgery	75.44	62.11	NA	NA	840	16541
Conservative						
Dentistry and						
Endodontics	70.91	66.36	NA	NA	380	10919
Orthodontics and	_					
Dentofacial						
Orthopaedics	72.97	69.27	NA	NA	269	8560
Oral Pathology and						
Microbiology	67	.33	NA	NA	2887	2887
Public Health						
Dentistry	65	.22	NA	NA	14537	14537

		1	1	1	1	Ī
Pedodontics and						
Preventive Dentistry	78.44	64.02	NA	NA	586	16222
Prosthodontics,						
Crown and Bridge	74.47	64.53	NA	NA	668	13058
SSS					NA	NA
MA IN PUBLIC POLICY	80.51	65.66	83.3	58.8	NA	NA
FET						
M.Tech						
Aerospace						
Engineering	78	57.5	47.7	45.4	5393	7860
Automotive						
Engineering	74	64	-	-	5480	7732
Structural						
Engineering	81	55	-	-	2026	3201
Construction						
Engineering and						
Management	78.5	61	76.6	40	2445	3659
Environmental						
Engineering and						
Management	81	55	58.8	54.4	2625	5966
Transportation						
Engineering	80	58	65.5	40	2880	4616
Data Science and						
Engineering	85.6	66	64.4	54.4	4113	6197
Artificial Intelligence	•-					
& Machine Learning'	93	54	78.7	38.4	2324	6344

Power Electronics						
and Drives	77	52	65.5	41.1	0	0
VLSI and						
Nanotechnology	73	58.5	63.3	51.1	6767	6767
Advanced Machinery						
Design	73	1.6	-	-	0	0
Manufacturing						
Technologies and						
Engineering Mgt	72	70	68.6	60	0	0
Dobatic Engineering	82	61	90	F1	F200	F940
Robotic Engineering	82	01	90	51	5208	5840
FMC						
MBA	53.8	90.59	94.4	22.2	22	6975
MBA- HM			80	51.1	NA	NA
MBA- PBM	7.59	9.92	92.2	53.3	NA	NA
FMC						
M.COM	74	60	88.8	47.7	NA	NA
FPH						
M.PHARM						
PHARMACOGNOSY	NA	NA	NA	NA	NA	NA
PHARMACEUTICAL						
CHEMISTRY	79.79	61.5	71.1	55.5	54	566
PHARMACEUTICS	79.28	65.5	77.7	67.7	21	304
PHARMACOLOGY	81.97	64.41	81.1	68.8	46	393
PHARMACY PRACTICE	67.49	58.5	83.3	53.3	45	62
The state of the s	07.13	30.3	55.5	33.3	13	02



	RANK DETAILS-RUAS/KCET RANK OF 2021-2022 ADMISSIONS									
COURSE	CLASS XII	EXAM SCORE	RUA	S SCORE	KCET	RANK	COMED-	-K RANK		
	HIGHEST	LOWEST	HIGHEST	LOWEST	HIGHEST	LOWEST	HIGHEST	LOWEST		
FET	SCORE	SCORE	SCORE	SCORE	RANK	RANK	RANK	RANK		
B.Tech										
AEROSPACE										
ENGINEERING	99.33	61	91.1	33.3	11158	326517	15433	15433		
AUTOMOTIVE										
ENGINEERING	74.17	60.83	56.6	32.2	51989	162417	-	-		
CIVIL ENGINEERING	94.5	45	55.5	55.5	39366	171206	-	-		
COMPUTER SCIENCE AND ENGINEERING	100	61.66	96.6	37.7	6216	99159	8441	19283		
ELECTRICAL AND	100	01.00	90.0	37.7	0210	33133	0441	19203		
ELECTRONICS										
ENGINEERING	99.83	45.8	-	-	32161	164056	-	-		
ELECTRONICS AND COMMUNICATION ENGINEERING	100	61.33	_	_	17247	160026	17259	39220		
MECHANICAL	100	01.55			17247	100020	17233	33220		
ENGINEERING	100	46	70	44.4	38984	175336	-	-		
ARTIFICIAL INTELLIGENCE AND										
MACHINE LEARNING	99.17	45	92.2	54.4	6643	33336	13427	15272		
INFORMATION SCIENCE AND										
ENGINEERING	99.83	45.6	81.1	56.6	5734	179729	6264	32538		

MATHEMATICS AND								
COMPUTING	97.5	50.6	66.6	63.6	26034	179459	26034	41608
ROBOTICS	99.5	56.3	50	31.1	19701	152192	-	-
FLAHS								<u> </u>
B.Sc. (Hons)								
BIOTECHNOLOGY	94.17	50	95.5	26.6	NA	NA		
FOOD PROCESSING								
AND TECHNOLOGY	95.5	54.83	85.5	30	NA	NA		
CARDIAC CARE								
TECHNOLOGY (CCT)	96.8	67.16	83.3	35.5	NA	NA		
DIALYSIS THERAPY								
TECHNOLOGY(DTT)	96	46.83	75.5	34.4	NA	NA		
MEDICAL RADIOLOGY								
AND IMAGING								
TECHNOLOGY	92.83	66.33	84.4	28.8	NA	NA		
OPERATION THEATER								
TECHNOLOGY (OTT)	100	52.33	85.5	28.8	NA	NA		
OPTOMETRY (OPT)	93.66	65.5	91.1	37.7	NA	NA		
FPH								
B.PHARM	100	47.8	92.4	23.5	6953	50456		
PHARM.D	87.83	45.16	83.1	22.6	5114	21148		
FMC								
B.COM(HONS)	88.16	40.6	88.3	21.6	NA	NA		
BBA	98.5	44.33	95	28.3	NA	NA		

FHMCT						
ВНМ	88	45	96.6	33.3	NA	NA
FAD						
B.Design						
PRODUCT DESIGN	94.6	51	98.3	48.3	NA	NA
FASHION DESIGN	68.16	51.83	86.6	35	NA	NA
FMPS						
B.Sc						
CHEMISTRY			77.7	54.4	NA	NA
COMPUTER SCIENCE			80	24.4	NA	NA
ELECTRONICS	100	69	-	-	NA	NA
MATHEMATICS			78.8	51.1	NA	NA
PHYSICS			85.5	28.8	NA	NA
STATISTICS			77.7	58.8	NA	NA
SSS						
B.Sc(Hons)-(DATA						
SCIENCE AND						
ANALYTICS)	92	49.3	No Test	No Test	NA	NA
B.Sc(Hons)-						
PHSYCOLOGY	100	50	No Test	No Test	NA	NA
B.A(Hons)-	_					
SOCIOLOGY	72	55	No Test	No Test	NA	NA
B.Sc(Hons)-						
ECONOMICS	70	54	No Test	No Test	NA	NA
SL						
B.Sc(Hons)-LLB	90	55	No Test	No Test	NA	NA

FDS						
BDS	100	50	NA	NA	80116	881206
UG Total						
FLAHS						
M.Sc						
M.Sc.						
BIOTECHNOLOGY	9.7	6.16	83.3	61.1	NA	NA
M.Sc. FOOD SCIENCE						
AND TECHNOLOGY	8.7	6.59	95.5	58.8	NA	NA
M.Sc MOLECULAR			3.3.2	22.2	1	
AND CELLULAR						
BIOLOGY	89.9	6.9	84.4	36.6	NA	NA
MASTERS IN PUBLIC						
HEALTH	75.62	57	95.5	47.7	NA	NA
MASTER IN						
HOSPITAL						
ADMINISTRATION	90	52	95.5	36.6	NA	NA
FAD						
M.Design						
M.Des PRODUCT						
DESIGN	65.5	50.7	80	48.8	NA	NA
M.Des FASHION						
DESIGN	80.68	72.3	81.1	42.3	NA	NA
FMPS						
M.Sc						
APPLIED SOLID STATE						
PHYSICS			55.5	45.5	NA	NA
rnisics			33.3	45.5	INA	IVA

OPTOELECTRONICS	95.6	61.62	-	-	NA	NA
NUCLEAR PHYSICS						
AND TECHNOLOGY			85.5	36.6	NA	NA
ANALYTICAL						
CHEMISTRY			90	30	NA	NA
INDUSTRIAL	91.5	70.86				
CHEMISTRY	31.3	70.80	73.3	20	NA	NA
ORGANIC CHEMISTRY			91.1	37.7	NA	NA
APPLIED	90.39	70.5				
MATHEMATICS	30.33	70.5	84.4	35.5	NA	NA
			Т	Т		
FDS						
MDS						
Oral Medicine and						
Radiology	71.69	65.89	NA	NA	8265	14056
Periodontics	71.05	62.25	NA	NA	2520	18493
Oral and Maxillofacial						
Surgery	75.44	62.11	NA	NA	840	16541
Conservative						
Dentistry and						
Endodontics	70.91	66.36	NA	NA	380	10919
Orthodontics and						
Dentofacial						
Orthopaedics	72.97	69.27	NA	NA	269	8560
Oral Pathology and						
Microbiology	67	.33	NA	NA	2887	2887
Public Health						
Dentistry	65	.22	NA	NA	14537	14537

		1		1	1	
Pedodontics and						
Preventive Dentistry	78.44	64.02	NA	NA	586	16222
Prosthodontics,						
Crown and Bridge	74.47	64.53	NA	NA	668	13058
SSS					NA	NA
MA IN PUBLIC POLICY	80.51	65.66	83.3	58.8	NA	NA
FET						
M.Tech						
Aerospace						
Engineering	78	57.5	47.7	45.4	5393	7860
Automotive						
Engineering	74	64	-	-	5480	7732
Structural						
Engineering	81	55	-	-	2026	3201
Construction						
Engineering and						
Management	78.5	61	76.6	40	2445	3659
Environmental						
Engineering and						
Management	81	55	58.8	54.4	2625	5966
Transportation						
Engineering	80	58	65.5	40	2880	4616
Data Science and						
Engineering	85.6	66	64.4	54.4	4113	6197
Artificial Intelligence						
& Machine Learning'	93	54	78.7	38.4	2324	6344

Power Electronics						
and Drives	77	52	65.5	41.1	0	0
VLSI and						
Nanotechnology	73	58.5	63.3	51.1	6767	6767
Advanced Machinery		•				
Design	71.6		-	-	0	0
Manufacturing						
Technologies and						
Engineering Mgt	72	70	68.6	60	0	0
Robotic Engineering	82	61	90	51	5208	5840
FMC						
MBA	53.8	90.59	94.4	22.2	22	6975
MBA- HM			80	51.1	NA	NA
MBA- PBM	7.59	9.92	92.2	53.3	NA	NA
FMC						
M.COM	74	60	88.8	47.7	NA	NA
FPH						
M.PHARM						
PHARMACOGNOSY	NA	NA	NA	NA	NA	NA
PHARMACEUTICAL						
CHEMISTRY	79.79	61.5	71.1	55.5	54	566
PHARMACEUTICS	79.28	65.5	77.7	67.7	21	304
PHARMACOLOGY	81.97	64.41	81.1	68.8	46	393
PHARMACY PRACTICE	67.49	58.5	83.3	53.3	45	62



RANK DETAILS-RUAS/KCET RANK OF 2023-2024 ADMISSION							
COURSE	CLASS 2	KII EXAM	RUAS	SCORE			
	HIGHEST	LOWEST	HIGHEST	LOWEST			
FET	SCORE	SCORE	SCORE	SCORE			
B.Tech							
AEROSPACE ENGINEERING	97	62	95.55	31.11			
AUTOMOTIVE ENGINEERING	78	57	63.3	36.6			
CIVIL ENGINEERING	77	45.7	73.33	33.33			
COMPUTER SCIENCE AND ENGINEERING	98.4	56	91.1	47.77	]		
ELECTRICAL AND ELECTRONICS ENGINEERING	87	45	83.33	43.33	1		
ELECTRONICS AND COMMUNICATION ENGINEERING	95.6	51	95.55	56.33	1		
MECHANICAL ENGINEERING	85.6	58	83.33	43.33	]		
ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING	98.1	55	95.55	56.66	1		
INFORMATION SCIENCE AND ENGINEERING	92	54.8	86.66	53.66	]		
MATHEMATICS AND COMPUTING	94	66	88.88	45.55			
ROBOTICS	88.5	64.8	80	56.22			
FLAHS							
B.Sc. (Hons)							
BIOTECHNOLOGY	94.20	56.60	80.00	56.44			
FOOD PROCESSING AND TECHNOLOGY	91.80	54.40	80.00	51.11			
CARDIAC CARE TECHNOLOGY (CCT)	89.00	52.00	83.33	53.33			
DIALYSIS THERAPY TECHNOLOGY(DTT)	74.00	66.83	58.89	35.56	1		
MEDICAL RADIOLOGY AND IMAGING TECHNOLOGY	91.00	62.30	77.78	67.78	1		

OPERATION THEATER TECHNOLOGY (OTT)	85.00	59.40	80.00	25.56	
OPTOMETRY (OPT)	90.20	45.67	64.44	51.11	
FPH					
B.PHARM	95	50	91.66	50	
PHARM.D	93	67	85	60	
FMC					
B.COM(HONS)	97.33	51	90	30	
ВВА	96.33	41.83	97.5	30	
FHMCT					
внм	95	44.66	86.66	30	
FAD					
B.Design					
PRODUCT DESIGN	88.3	65	86.6	31.6	
FASHION DESIGN	88.5	57	71.6	45.8	
INTERATION DESIGN	83.3	51	76.6	46.6	
FMPS					
B.Sc					
CHEMISTRY					
MATHEMATICS	93.6	55	84.4	34.4	
PHYSICS					
SSS					

O.E.	E2	01	20	
	_			
		<u> </u>		
89	70	76	71	
87.83	55	75	30	
96.8	53	90	21.66	
				ADM
88.3	48.5	80	52.5	_
82	54.4	72.5	32.5	
88.8	64	87	53	
				ADM
80.00	6.38	80.00	53.22	
72.00	67.10	91.11	45.56	
90.67	70	91.1	54.5	
84.88	6.00	80.00	25.56	
77.30	57.26	84.44	43.33	
90.00	55.72	86.67	40.00	
	96.8 88.3 82 88.8 80.00 72.00 90.67 84.88 77.30	98 52 89 70 87.83 55 96.8 53 88.3 48.5 82 54.4 88.8 64 88.8 64 80.00 6.38 72.00 67.10 90.67 70 84.88 6.00 77.30 57.26	98       52       85         89       70       76         87.83       55       75         96.8       53       90         88.3       48.5       80         82       54.4       72.5         88.8       64       87         80.00       6.38       80.00         72.00       67.10       91.11         90.67       70       91.1         84.88       6.00       80.00         77.30       57.26       84.44	98     52     85     50       89     70     76     71       87.83     55     75     30       96.8     53     90     21.66       88.3     48.5     80     52.5       82     54.4     72.5     32.5       88.8     64     87     53       80.00     6.38     80.00     53.22       72.00     67.10     91.11     45.56       90.67     70     91.1     54.5       84.88     6.00     80.00     25.56       77.30     57.26     84.44     43.33

M.Design								
M.Des PRODUCT DESIGN	61.8	68.58	88.8	38.8				
M.Des FASHION DESIGN	8.92	6.3	71.1	43				
FMPS								
M.Sc								
APPLIED SOLID STATE PHYSICS	9.47	6.2	34.4	24.4				
NUCLEAR PHYSICS AND TECHNOLOGY	3.47	0.2		24.4				
ANALYTICAL CHEMISTRY	80.5	8.93	77.7	53.3				
INDUSTRIAL CHEMISTRY	74.45	6.6	87.7	37.7				
ORGANIC CHEMISTRY	82.9	6.5	87.7	34.4				
APPLIED MATHEMATICS	87.3	6.96	47.7	44.4				
FDS								
MDS								
Oral Medicine and Radiology								
Periodontics								
Oral and Maxillofacial Surgery								
Conservative Dentistry and Endodontics								
Orthodontics and Dentofacial Orthopaedics	ADMISSION	ADMISSION YET TO HAPPEN AT KEA						
Oral Pathology and Microbiology								
Public Health Dentistry								
Pedodontics and Preventive Dentistry								
Prosthodontics, Crown and Bridge								
SSS								

MA IN PUBLIC POLICY	88	60	97	80		
FET						
M.Tech						
Aerospace Engineering	8.9	7.9	71.5	31.11		
Automotive Engineering	Admission not happened					
Structural Engineering	8	7.72	66	24.44		
Construction Engineering and Management	8.53	6.74	78.88	62.22		
Environmental Engineering and Management		Admission n	ot happened	d		
Transportation Engineering		Admission n	ot happened	d	1 4 2 6 3	
Data Science and Engineering	82	75	84.4	56.66		
Artificial Intelligence & Machine Learning'	85	58	74.4	68.8		
Power Electronics and Drives	Admission not happened					
VLSI and Nanotechnology	Admission not happened					
Advanced Machinery Design	Admission not happened					
Manufacturing Technologies and Engineering Mgt	Admission not happened					
Robotic Engineering			71.11	71.11		
FMC						
MBA						
MBA- HM	86	50.5	82	30		
MBA- PBM	1					
FPH						
M.PHARM						
PHARMACOGNOSY	69.1	70	68	68		
PHARMACEUTICAL CHEMISTRY	88	65	73	57.7		

PHARMACEUTICS	82	70	87.7	74.4	
PHARMACOLOGY	93	76	87	76.7	
PHARMACY PRACTICE	80	78.3	83.3	78.02	
RINER					
M.SC-NURSING	79.5	55	72.5	30	
PHYSIOTHERAPY					
MPT	83	67	75	62	
MEDICAL-MD/MS					

KCET I	RANK	COMED-K RANK		JEE MAIN SCORE	
HIGHEST	LOWEST	HIGHEST LOWEST		HIGHEST	LOWEST
RANK	RANK	RANK	RANK	SCORE	SCORE
ADMISSION YE	Τ ΤΟ ΗΔΡΡΕΝ	ADMISSION YE	Τ ΤΟ ΗΔΡΡΕΝ		
FROM		FROM			
NIA	NΙΛ	NΙΔ	NΙΔ	NΙΛ	N A
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
		NA	NA	NA	NA
ADMISSIO	N VET TO	NA	NA	NA	NA
HAPPEN F		NA NA		NA	NA

	MOINT WEY	NA	NA	NA	NA
		NA	NA	NA	NA
ADMISSIC	ON YET TO	NA	NA	NA	NA
HAPPEN F	ROM KEA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
1471	14/1	14/1	1471		14/ \

	1				
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
SION YET TO	HAPPEN AT KEA	<u> </u>			
ADMISSI	ON YET TO	NA	NA	NA	NA
HAPPE	N AT KEA	NA	NA	NA	NA
	 On yet to N at kea		NA	NA	NA
HAPPE			NA	NA	NA
HAPPE	N AT KEA		NA	NA	NA
HAPPE SION YET TO	N AT KEA		NA	NA	NA
HAPPE SION YET TO	N AT KEA HAPPEN AT KEA		NA NA	NA NA	NA NA
HAPPE SION YET TO ADMISSI	N AT KEA  HAPPEN AT KEA  ON YET TO HAPP	PEN AT KEA			
HAPPE SION YET TO ADMISSI NA	N AT KEA  HAPPEN AT KEA  ON YET TO HAPP  NA	PEN AT KEA	NA	NA	NA
HAPPE SION YET TO ADMISSI NA NA	N AT KEA  HAPPEN AT KEA  ON YET TO HAPPEN  NA  NA	PEN AT KEA NA NA	NA NA	NA NA	NA NA
ADMISSI NA NA NA	N AT KEA  HAPPEN AT KEA  ON YET TO HAPPEN  NA  NA  NA  NA	PEN AT KEA  NA  NA  NA	NA NA NA	NA NA NA	NA NA NA

NIA	NIA	NI A	NA	NIA	NIA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
				,	

NA	NA	NA	NA	NA	NA
		NA	NA	NA	NA
		NA	NA	NA	NA
		NA	NA	NA	NA
		NA	NA	NA	NA
		NA	NA	NA	NA
ADMISSIO	ON YET TO	NA	NA	NA	NA
HAPPE	N AT KEA	NA	NA	NA	NA
	Ī	NA	NA	NA	NA
	Ī	NA	NA	NA	NA
	Γ	NA	NA	NA	NA
	Ī	NA	NA	NA	NA
	Γ	NA	NA	NA	NA
		NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA

NA	NA	NA	NA	NA	NA			
NA	NA	NA	NA	NA	NA			
NA	NA	NA	NA	NA	NA			
NA	NA	NA	NA	NA	NA			
NA	NA	NA	NA	NA	NA			
ISSION YET TO HAPPEN AT KEA								

## **ANNEXURE 40**



#### Pass percentage of the final year students of last 5 years

V	OF APPLIED SCIENCES	Pass Percentage										
SI.No	Programs	UG/PG	201	.8-19	201	9-20	202	0-21	202	1-22	202	2-23
			No. of Stds Admitted	No. of Stds Gradudated								
1	Bachelor of Hotel Management	UG	107	64	80	93	83	84	103	94	74	74
2	Bachelor of Pharmacy	UG	99	40	95	48	100	51	98	77	96	75
3	Bachelor of Design in Product Design	UG	48	22	37	37	32	43	31	38	14	33
4	Bachelor of Design in Fashion Desing	UG	8	-	12	-	8	15	15	8	15	11
5	Bachelor of Design in Interaction Desing	UG					0		0		17	
6	Bachelor of Technology in Civil Eng.	UG	41	46	33	38	25	34	17	39	14	33
7	Bachelor of Technology in Computer Sciences Eng.	UG	150	45	163	118	167	201	165	153	180	156
8	Bachelor of Technology in Electric and Electronic Eng.	UG	39	45	47	46	30	37	38	27	30	55
9	Bachelor of Technology in Electronics and Communication	UG	120	51	66	63	76	119	78	117	60	63
10	Bachelor of Technology in Machanical Eng.	UG	68	43	50	52	19	76	32	62	15	55
11	Bachelor of Technology in Aerospace Eng.	UG	52	-	50	-	49	63	51	52	56	47
12	Bachelor of Technology in Automotive Eng.	UG	23	-	60	-	7	24	12	24	30	13
13	Bachelor of Technology in Robotics	UG	-	-	-	-	30		30		30	
14	Bachelor of Technology in AI & ML	UG	-	-	-	-	57		59		60	
15	Bachelor of Technology in ISE	UG	-	-	-	-	38		55		60	
16	Bachelor of Technology in M & C	UG	-	-	-	-	20		37		26	
17	Bachelor of Dental Surgery	UG	60	47	60	50	60	52	60	54	60	56
18	Bachelor of Sciences (Hons) in Bio Technology	UG	60	-	56	-	59	48	59	50	56	50
19	Bachelor of Sciences (Hons) in Food Processing and Technology	UG	60	1	60	-	60	54	60	58	41	54
20	Bachelor of Sciences (Hons) in DDT	UG	6	-	20	-	11	-	13	5	9	20
21	Bachelor of Sciences (Hons) in MRIT	UG	23	•	30	-	27	-	29	17	17	25
22	Bachelor of Sciences (Hons) in OTT	UG	10	-	20	-	20	-	24	9	24	18
23	Bachelor of Sciences (Hons) in OPT	UG	0	-	9	-	17	-	17	-	12	9
24	Bachelor of Sciences (Hons) in CCT	UG	0	-	30	-	30	-	29	-	13	20
25	Bachelor of Business Administration	UG	60	-	93	-	119	52	120	78	120	94
26	Bachelor of Commerce (Hons)	UG	40	-	32	-	60	37	59	29	60	53
27	Bachelor of Scinces (Hons) in PCMS	UG	16	-	22	-	49	13	48	15		44
28	Bachelor of Scinces (Hons) in CS	UG	10	-	22	-	11	-	70	3	22	10

29	Bachelor of Scinces (Hons) LLB	UG	-	-	-	-	-	-	10	-	16	
30	Bachelor of Arts (Hons) LLB	UG	-	-	-	-	-	-	0	-	53	
31	Bachelor of Scinces (Hons) Psycology	UG	-	-	-	-	-	-	57	-	60	
32	Bachelor of Scinces (Hons) Economics	UG	-	-	-	-	-	-	6	-	10	
33	Bachelor of Arts (Hons) Sociology	UG	-	-	-	-	-	-	4	-	0	
34	Bachelor of Scinces (Hons) Data Scinece & Analytics	UG	-	-	-	-	-	-	21	-	59	
35	ВРТ	UG	-	-	-	-	-	-		-	40	
36	B.Sc Nursing	UG	-	-	-	-	-	-		-	72	
37	Post B.Sc Nursing	UG	-	-	-	-	-	-		-	17	
38	MBBS	UG	-	-	-	-	-	-		-	148	
39	Bachelor of Vocation in Culinary Operations	UG	33	22	33	16	16	21	21	16	0	8
40	Bachelor of Vocation in Mechatronics	UG	5	-	2	18	0	27	0	24	0	32
41	Bachelor of Vocation in Post Harvest Technology	UG	-	-	11	-	8	-	12	-	0	10
42	Bachelor of Vocation in Product Design and Modelling	UG	6	27	6	69	3	71	2	74	0	68
43	PG Diploma in Railway Signalling and Telecommunication	UG		26		26		5		20		-

			201	8-19	201	9-20	202	20-21	202	1-22	202	22-23
SI.No	Programs	UG/PG	No. of Stds Admitted	No. of Stds Gradudated								
1	Master of Design in Product Design	PG	8	8	6	8	11	10	8	11	10	8
2	Master of Design in Fashion Desing	PG	-	-	-	-	3	-	4	4	7	3
3	Master of Dental Surgery in Pedodontics	PG	6	6	6	5	6	6	6	6	6	6
4	Master of Dental Surgery in Orthodontics	PG	5	5	5	5	5	5	5	5	5	5
5	Master of Dental Surgery in Oral Surgery	PG	6	4	6	6	6	4	6	7	6	6
6	Master of Dental Surgery in Periodontics	PG	5	5	5	5	5	4	4	6	5	5
7	Master of Dental Surgery in Prosthodontics	PG	5	5	5	5	5	5	5	4	5	5
8	Master of Dental Surgery in Conservative	PG	5	5	5	5	5	5	5	5	5	5
9	Master of Dental Surgery in PHD	PG	2	7	2	-	2	2	1	2	1	2
10	Master of Dental Surgery in Oral Medicine	PG	3	3	3	-	3	2	2	4	2	3
11	Master of Dental Surgery in Oral Pathology	PG			1	-	0		1		1	
12	Master of Technology in Automotive Eng.	PG	7	6	4	6	5	3	7	5	0	6
13	Master of Technology in Aircraft Design	PG	11	7	7	8	0	7	-	-	-	-
14	Master of Technology in Automotive Product Design	PG	3	1	0	2	0	-	-	-	-	-
15	Master of Technology in Turobomechinary Design	PG	3	1	0	1	0	1	-	-	-	-
16	Master of Technology in Constucation Eng. Management	PG	16	14	19	12	17	18	21	16	9	14

17	Master of Technology in Civil Structral Design	PG	21	14	0	17	0	1	0	-		-
18	Master of Technology in Sanitation and Weast Managem	PG	5	6	6	3	0	3	0	-	0	-
19	Master of Technology in Transportation Eng.	PG	14	-	9	13	9	9	14	6	4	9
20	Master of Technology in Computer Science Networking	PG	3	6	0	4	0	-	-	-	-	-
21	Master of Technology in Automotive Electronics	PG	6	-	0	6	0	-	-	-	-	-
22	Master of Technology in Real Time Embaded System	PG	2	9	0	2	0	-	-	-	-	-
23	Master of Technology in Mechine Learning and Intaligent	PG	17	7	11	15	0	17	-	-	-	-
24	Master of Technology in Signal Processing and Technolog	PG	2	-	0	2	0	-		-		-
25	Master of Technology in VLSI	PG	5	7	0	5	0	2		-		-
26	Master of Technology in Bio Medical Eng.	PG	2	5	0	1	0	-	-	-	-	-
27	Master of Technology in Sensor Control and System Eng.	PG	2	1	0	2	0	-	-	-	-	-
28	Master of Technology in Electronics System Design Eng.	PG	0	2	0	-	0	-	-	-	-	-
29	Master of Technology in Electrical Mechine Desing	PG	1	4	0	1	0	-	-	-	-	-
30	Master of Technology in Engineering and Manufractruing	PG	6	1	0	7	0	-	-	-	-	-
31	Master of Technology in Advanced Mechinary Design	PG	7	5	5	6	4	4	-	4	-	
32	Master of Technology in Advanced Manufactruing Techn	PG	1	1	0	1	4	-	-	-	-	-
33	Master of Technology in Robotic Eng.	PG	4	3	7	5	7	5	5	7	6	3
34	Master of Technology in VLSI NanoTechnology	PG	0	-	9	-	10	8	2	8	1	2
35	Master of Technology in Structural Engineering	PG	-	-	10	-	12	6	8	11	9	8
36	Master of Technology in Environmental Engineering & M	PG	-	1	0	-	10	-	7	9	4	5
37	Master of Technology in Data Science Eng.	PG	0	-	8	-	8	6	9	8	13	8
38	Master of Technology in Artifical Intaligent and Mangem	PG		-	0	-	12	-	17	10	12	13
39	Master of Technology in Manufacturing Technologies an	PG		•	4	-	10	-	2	10		1
40	Master of Technology in Aerospace Eng	PG		•	0	-	11	-	7	10	9	7
41	Master of Technology in Power Electronics and Drives	PG	0	1	8		4	7	3	4		3
42	Master of Business Administration in Financial Management	PG		38		58		45		57		73
43	Master of Business Administration in Human Resource and M	PG		12		20		15		27		35
44	Master of Business Administration in Marketing Management	PG		11		18		19		24		32
45	Master of Business Administration in Operation Management		140	26	118	12	198	20	221	17	240	13
46	Master of Business Administration in BSF	PG		-		-		4		13	-	-
47	Master of Business Administration in Business Analytics	PG		-		-		12		35		47
48	Master of Business Administration in Hotel Management	PG		6		9	ļ	12		8		2
49	Master of Business Administration in Pharma  Master of Commerce in ACT	PG		3	9	9		8		6		7
50		PG PG	16	<u>4</u> 6	8	12 4	12	2	9	8	0	9
51	Master of Commerce in BAF	PG		ь		4		2		4	U	-

52	Master of Science in Applied Mathematics	PG	8	1	4	4	9	5	11	5	8	11
53	Master of Science in NPT	PG		-		1		2		8		-
54	Master of Science in Industrial Chemistry	PG		8		1		1		14		-
55	Master of Science in Organic Chemistry	PG		-	8	-	30	3		7	30	15
56	Master of Science in Analytical Chemistry	PG	4	4		3		4	27	7		9
57	Master of Science in ASP(Physics)	PG	10	1	10	7	18	7	13	10	13	10
58	Doctor of Pharmacy	PG	30	-	30	22	30	15	30	22	29	25
59	M Pharm in Pharmaceutical Chemistry	PG	3	5	5	3	14	5	13	13	14	12
60	M Pharm in Pharmaceutics	PG	15	7	11	14	12	10	13	11	15	13
61	M Pharm in Pharmacology	PG	15	8	10	11	15	9	14	15	15	14
62	M Pharm in Pharmacognosy	PG	2	-	2	-	0	2	0	-	10	-
63	M Pharm in Pharmacy Practice	PG	1	-	3	1	4	3	7	4	9	7
64	Master of Science in Bio Technology	PG		-	28	-	30	27	30	30	27	26
65	Master of Science in Food Processing and Technology	PG		-	30	-	30	30	30	29	30	29
66	Master of Science in Food Nutrition & Dietetics	PG									29	
67	Molecular and Celulor Biology	PG		-	17	-	28	16	27	25	26	26
68	Master of Public Health	PG		-	0	-	26	-	30	19	24	26
69	Master of Hospital Administration	PG	28	20	23	24	26	21	29	26	28	25
70	Master of Arts in Public Policy	PG	-	-	-	-	6	-	7	5	5	7
71	Master in Physiotherapy	PG	-	-	-	-	-	-	-	-	-	19
72	M.Sc Nursing	PG	-	-	-	-	-	-	-	-	-	14
73	MD/MS	PG	-	-	-	-	-	-	-	-	-	147
74	Super Speciality DM/M.Ch	PG	-	-	-	-	-	-	-	-	-	40



## **ANNEXURE 41**



Or. M R JAYARAM
Chancellor
Ramaiah University
of Applied Sciences

 F +91 80 4536 6666 F +91 80 4536 6677 -W www.msruas.ac.in E chancellen@msruas.ac.in

Date: 7th July 2022

To,

The Principal Secretary to Government,
Higher Education Department,
Vidhana Soudha,
Bengaluru 560 001

Respected Madam,

Sub: Regarding Constitution of Members of the Fee Regulation Committee of M.S. Ramaiah University of Applied Sciences

Ref. 1)Letter No. EO No.ED/134/URC/2022 from Higher Education Department, Government of Karnataka dated 06.07.2022

2) our letter dated 18.06.2022

With reference to the above subject, vide cited reference No.1, the State Government has nominated the following persons to the Fee Regulatory Committee of M.S. Ramaiah University of Applied Sciences under the provisions of Sec. 38 of M.S. Ramaiah University of Applied Sciences Act, 2012

1) Justice N.K. Patil,
Former Judge, Sri Ketaki Sangameshwara Nilaya,
No. 753, 14<sup>th</sup> Main, Judicial Layout,
Bangalore- 560 065

 Principal Secretary or Secretary to Government incharge of Higher Education or by his nominee not below the rank Of Deputy Secretary

3) Principal Secretary or
Secretary to Government incharge of Medical
Education or by his nominee not below the rank
Of Deputy Secretary

Chairman

Member

Member



.Or. M.R. JAYARAM

 Chancellor Ramaiah University if of Applied Sciences Juniversity House
Hew SEL Spad
MSR Nagar
Bengaluru 550 054
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É chancelior@msruas.ac.in

Further, in partial modification of our letter dated 18:06.2022, the following members are nominated for Fee Regulation Committee of Ramaiah University of Applied Sciences.

- 1) Dr. M.R. Jayaram
- 2) Dr.K.K. Raina
- 3) Dr.S. Kumar
  Retd. Professor of Pathology &
  Retd. Chancellon of Devaraj Urs
  deemed to be University
- 4) Dr. Archna Academic Registrar Prof. of Chemical Engineering Ramaiah Institute of Technology (Affiliated to VTU)

Mr. Jayaram E S

Co-opted Chartered Accountant.

Academician (Woman)

Chancellor

Vice Chancellor

Academician

This is for your kind information and needful action.

Yours faithfully

For M.S. Ramaiah University of Applied Sciences

Dr. M.R.Jayaram

Chancellor

## **ANNEXURE 42**



# ಆಧಿಕೃತವಾಗಿ ಪ್ರಕಟಿಸಲಾದುದು

ವಿಶೇಷ ರಾಜ್ಯ ಪತ್ರಿಕೆ

ਝਾਰਨ − IV-A Part − IV-A ಪೆಂಗಟೂರು, ಮಂಗಳವಾರ, ಜುಲೈ ೯, ೨೦೧೩ (ಅಷಾಢ ೧೮, ಶಕ ವರ್ಷ ೧೯೩%) Bangalore, Tuesday, July 9, 2013 (Ashadha 18, Shaka Varsha 1935) ನಂ. ೮೯೩ No. 893

### PARLIAMENTARY AFFAIRS AND LEGISLATION SECRETARIAT NOTIFICATION

NO SAMVYASHAE 29 SHASANA 2012, Bangalore, dated: 09.07.2013

Ordered that the translation of the ಎಂ.ಎಸ್. ರಾಮಯ್ಯ ಅನ್ವಯಿಕ ವಿಜ್ಞಾನಗಳ ವಿಶ್ವವಿದ್ಯಾಲಯ ಅಧಿನಿಯಮ, 2012 (2013ರ ಕರ್ನಾಟಕ ಅಧಿನಿಯಮ ಸಂಖ್ಯೆ 15) in the English language, be published as authorised by the Governor of Karnataka under clause (3) of Article 348 of the constitution of India in the Karnataka Gazette for general information.

The following translation of the ಎಂ.ಎಸ್. ರಾಮಯ್ಯ ಅನ್ವಯಿಕ ವಿಜ್ಞಾನಗಳ ವಿಶ್ವವಿದ್ಯಾಲಯ ಅಧಿನಿಯಮ, 2012 (2013ರ ಕರ್ನಾಟಕ ಅಧಿನಿಯಮ ಸಂಖ್ಯೆ 15) in the English language is published in the Official Gazette under the authority of the Governor of Karnataka under clause (3) of Article 348 of the Constitution of India.

#### KARNATAKA ACT NO. 15 OF 2013

(First Published in the Karnataka Gazette Extra-ordinary on the Seventh day of February, 2013)

#### M.S. RAMAIAH UNIVERSITY OF APPLIED SCIENCES ACT, 2012

(Received the assent of the Governor on the Fifth day of February, 2013)

An Act to establish and incorporate in the State of Karnataka a University of unitary nature in private sector by the Gokula Education Foundation (Medical) to promote and undertake the advancement of applied University education in Technical, Health, Management, life sciences and allied sectors and for the matters connected therewith or incidental thereto.

Whereas it is expedient to establish and incorporate in the State of Karnataka a University of unitary nature in private sector by the Gokul Education Foundation (Medical) to promote and undertake the advancement of applied University Education in Technical, Health, Management, life sciences and allied sectors and for the matters connected therewith or incidental thereto for the purposes hereinafter appearing;

Be it enacted by the Karnataka State Legislature in the sixty third year of the Republic of India as follows:-

#### **CHAPTER - I**

#### **PRELIMINARY**

- 1. Short title, extent and commencement. (1) This Act may be called the M.S.Ramaiah University of Applied Sciences Act, 2012.
  - (2) It extends to the whole of the State of Karnataka.
- (3) It shall come into force on such date as the State Government may, by notification, in the official Gazette, appoint.
  - 2. Definitions. In this Act, unless the context otherwise requires,-
- (a) "Academic Council" means the Academic Council of the University as specified in section 25:
- (b) "Agenda Matters" means all the matters and businesses to be designated in the Statutes each of which can be either included in the Agenda or be taken up for discussion and decision at a meeting of the Board of Governors or the Board of Management or any Committees, as the case may be, only subject to the prior written approval of the Chancellor, consenting to the passing of such matters and businesses at such a meeting;
- (c) "Board of Governors" means the Board of Governors of the University as specified in Section 23:
- (d) "Board of Management" means the Board of Management of the University as specified in Section 24;
- (e) "Chancellor", "Vice-Chancellor", "Pro Vice-Chancellor" means respectively the Chancellor, Vice Chancellor and Pro Vice Chancellor of the University;
- (f) "Campus" means a campus established, maintained by the University wherever situated:
- (g) "Committees" means the committees formed under this Act or by the various functionaries of the University as the case may be and includes the Nomination Committee, the Finance Committee, the Distance Education Committee and such other committees;
- (h) "Constituent College" means a college or institution established and maintained by the University;
- (i) "Finance Committee" means the Finance Committee of the University as specified in Section 27;
- (j) "Foundation" means the Gokula Education Foundation(Medical), registered under the Indian Trust Act, 1982.
  - (k) "Government" means the Government of Karnataka;
- (I) "National Accreditation bodies" means a body established by the Central Government for laying down norms and conditions for ensuring academic standards of higher education, such as University Grants Commission, All India Council of Technical Education, National Council of Teacher Education, Medical and Dental Councils of India, Pharmaceutical Council of India, National Council of Assessment and Accreditation, Indian Council of Agriculture Research, Distance Education Council, Council of Scientific and Industrial Research etc. and includes the Government;
  - (m) "Prescribed" means prescribed by rules made by the Government under this Act;
- (n) "Principal in relation to a Constituent College" means the head of the Constituent College and includes, where there is no Principal or in the absence of a Principal appointed, the Vice-Principal or any other person for the time being appointed to act as Principal;
  - (o) "Registrar" means the Registrar of the University;
- (p) "Regional Centre" means a centre established or maintained by the University for the purpose of coordinating and supervising the work of Study Centres in any region and for performing such other functions as may be conferred on such centre by the Board of Management;
- (q) "Sponsoring Authority" or "Sponsoring Body" in relation to this Act means the Foundation:
  - (r) "State" means State of Karnataka;

- (s) "Statutes" and "Regulations" means respectively the Statutes and Regulations of the University made under this Act;
- (t) "Study Centre" means a centre established and maintained by the University for the purpose of advising, counseling or for rendering any other assistance required by the students in the context of the education;
- (u) "Teacher" means and includes a Professor, Associate Professor, Assistant Professor, Reader or Lecturer or such other person as may be appointed for imparting instruction or conducting or to guide research in the University or in a Constituent College and includes the Principal of Constituent College in conformity with the norms prescribed by the University Grants Commission:
- (v) "University Grants Commission" means the Commission established under section 4 of the University Grants Commission Act, 1956 (Central Act 3 of 1956);
- (w) "University" means the M.S.Ramaiah University of Applied Sciences established and incorporated under this Act;
  - (x) "Visitor" means the visitor of the University as specified in section 13.

#### CHAPTER - II

#### THE UNIVERSITY AND SPONSORING BODY

- 3. Proposal for the establishment of the University.- (1) The Foundation shall have the right to establish the University of unitary nature subject to and in accordance with the provisions of this Act.
- (2) The proposal to establish a University shall be made to the State Government by the Foundation.
  - (3) The proposal shall contain the following particulars, namely:-
  - (i) the objects of the University along with the details of the foundation;
  - (ii) the extent and status of the University and the availability of land;
- (iii) the nature and type of programmes of study and research to be undertaken by the University during a period of five academic years immediately following the commencement date;
  - (iv) the nature of faculties, courses of study and research proposed to be started;
  - (v) the campus development such as buildings, equipment and structural amenities;
- (vi) the phased outlays of capital expenditure for a period of five academic years immediately following the commencement date;
- (vii) the item-wise recurring expenditure, sources of finance and estimated expenditure for each student;
- (viii) the scheme for mobilizing resources and the cost of capital thereto and the manner of repayments to each source;
- (ix) the scheme of generation of funds internally through the recovery of fee from students, revenues anticipated from consultancy and other activities relating to the objects of the University and other anticipated incomes;
- (x) the details of expenditure on unit cost, the extent of concessions or rebates in fee, freeship and scholarship for students belonging to economically weaker sections and the fee structure indicating varying rate of fee, if any, that would be levied on students who are either non resident Indians or persons of Indian origin or sponsored by non resident Indians or persons of Indian origin and students of nationalities other than India;
- (xi) the years of experience and expertise in the concerned discipline at the command of the foundation; as well as the financial resources;
  - (xii) the system for selection of students to the courses of study at the University; and
- (xiii) status of fulfillment of such other conditions as may be required by the State Government to be fulfilled before the establishment of the University.

- (4) A Screening Committee shall be constituted by the State Government consisting of three member who are Ex-officio members of Karnataka State Higher Education Council to examine the proposals received, which shall make recommendations to the State Government.
- 4. Establishment of the University.- (1) Where the State Government, after considering the recommendations of the screening Committee and holding such inquiry as it may deem necessary, is satisfied that,-
  - (i) the Trust has ability to run an University with sufficient infrastructure.
  - (ii) owns a land to the extent specified below in accordance with its location, namely:-
    - (a) twenty five acres of land if it is within limits of Bruhat Bangalore Mahanagara Palike;
    - (b) forty acres of land if it is outside the limits of Bruhat Bangalore Mahanagara Palike but within Bangalore Metropolitan Region Development Authority area;
    - (c) not less than sixty acres of land in the places other than the places specified in clauses (a) and (b).

The land specified above shall consist of a single block and it shall be in the name of concerned trust/foundation/institution/ university itself. Based on the furnished particulars required in sub-section (3) of section 3, the Government may direct the Trust to establish the permanent Statutory Endowment Fund as specified in section 47.

- (2) After the establishment of the Permanent Statutory Endowment Fund, the State Government may, by notification, in the official Gazette, accord sanction for establishment of the University of unitary nature in the State by the name of "M.S.Ramaiah University of Applied Sciences".
- (3) The headquarters of the University shall be at Bangalore. The University shall have Campuses or Regional Centres, Study Centres anywhere in Karnataka and subject to the prior permission of the State Government and as per UGC norms.
- (4) The First Chancellor, the First Vice-Chancellor, First members of the Board of Governors, First members of the Board of Management and the Academic Council and all persons who may hereafter become such officers or members, so long as they continue to hold such office or membership, shall constitute a body corporate and can sue and be sued in the name of the-University.
- (5) On sanction for the establishment of the University under sub-section (2), the land and other movable and immovable properties acquired, created, arranged or built by the Foundation for the purpose of the University shall vest in the University.
- (6) In all suits and other legal proceedings by or against the University, the pleading shall be signed and verified by, and all processes in such suits and proceedings shall be issued to and be served on the Registrar.
- (7) The land, building and other properties of the University shall not be used for any purpose other than incidental to the objects of the University.
- **5. Grants and Financial Assistance.-** The University shall be self-financing and shall neither make a demand nor shall be entitled to any maintenance grant-in-aid or any other financial assistance from the State or any other body or corporation owned or controlled by the State:

Provided that the State may, provide financial support through grants or otherwise,-

- (a) for research, development and other activities for which other State Government organizations are provided financial assistance; or
- (b) for any specific research or programmes receiving support from the State Government; and
- (c) provided to or for the benefit of similar universities in the State whether subject to a change in State policy or otherwise:

Provided further that the university may receive any financial support from any other source.

- 6. Power to establish constituent College, additional campuses, Regional Centres or Study Centres. The University may have Constituent Colleges, Regional Centres, additional campuses and Study Centres at such places in the State as it deems fit after the completion of five years after its establishment with prior approval of the State Government subject to norms of UGC and other National Accreditation bodies.
- 7. Objects of the University. The University shall employ a broad range of strategies to achieve its vision and objectives,-
- (i) to support, promote and undertake advancement of and innovation in University education leading up to and including post graduate, doctoral and post doctoral courses in the Technical, Health, Management, Life sciences and allied sectors and make provisions for research, advancement and dissemination of knowledge including consultancy in these fields;
- (ii) to collaborate with any other universities, research institutions, non-profit organizations, industry associations, professional associations or other organizations, to conceptualize, design, develop and offer specific educational and research programmes, training programmes and exchange programmes for students, faculty members and others;
- (iii) to undertake collaborative research and advocacy with any organizations with prior approval of the State Government;
- (iv) to disseminate and advance knowledge by providing instructional and research facilities in such branches of learning as it may deem fit and in particular, to make special provisions for integrated courses in Technical, Health, Management, Life sciences and other such Higher Educational Programmes of the University and to make appropriate measures for promoting interdisciplinary studies and research;
- (v) to develop human resources to meet the demands of high end technical and professional industries with research on future sustainable technologies catering to engineering solutions and support technology business and technology incubation;
- (vi) to provide innovative system of University level education, flexible and open with regard to methods and places of learning, combination of courses eligibility for enrolment, age of entry, conduct of examinations and operation of programmes with a view to promoting access and equity in higher learning besides encouraging excellence in new fields of knowledge and placing special emphasis on both academic as well as application oriented learning;
- (vii) to develop resource centres to contribute to quality education with prior approval of concerned Government;
- (viii) to establish Campuses, Regional centres, study centres and constituent Colleges at various locations in Karnataka and to contribute and develop an understanding of educational change in technical, professional, general education and social and human development with prior approval of Government;
- (ix) to institute degrees, diplomas, certificates and other academic distinctions like award of credits on the basis of successful completion of academic work evaluated through multiple modern methods of assessment:
- (x) to disseminate knowledge and develop a public debate on issues of education and allied development fields through seminars, conferences, executive education programmes, community development programmes, publications and training programmes and events;
- (xi) to undertake programmes for development and training of faculty and researchers of the University in partnership with any other university of quality with prior approval of the State Government;
- (xii) to undertake necessary or expedient action to pursue and promote the objectives of the University;
- (xiii) to pursue any objectives as may be approved by the Government for the enhancement of education and other development sectors in India.

- 8. Powers of the University. The University shall have the following powers, namely:-
- (i) to establish and maintain such Campuses, Regional Centres and Study Centres in Karnataka as may be determined by the University from time to time in the manner laid down by the Statutes with prior approval of the Government and as per UGC norms;
- (ii) to carry out all such other activities as may be necessary or feasible in furtherance of the object of the University;
- (iii) to confer degrees or other academic distinctions in the manner and under conditions laid down in the Statutes;
- (iv) to institute and award fellowships, scholarships and prizes, awards, medals etc., in accordance with the Statutes;
- (v) to demand and receive such fees, bills, invoices and collect charges as may be fixed by the Statutes or rules, as the case may be;
  - (vi) to make provisions for extracurricular activities for students and employees;
- (vii) to make appointments of the Faculty, officers and employees of the University or a Constituent College, Campuses, Regional Centres, Study Centres;
- (viii) to receive voluntary donations and gifts of any kind not prohibited by any Law for the timebeing inforce and to acquire, hold, manage, maintain and dispose of any movable or immovable property, including trust and endowment properties for the purpose of the University or a Constituent College or a Campus, Regional Centre, Study Centre:
- (ix) to institute and maintain hostels and to recognize places of residence for students of the University or a Constituent College;
- (x) to supervise and control the residence and to regulate the discipline among the students and all categories of employees and to lay down the conditions of service of such employees, including the Code of Conduct for the students and employees;
  - (xi) to create academic, administrative and support staff and other necessary posts;
- (xii) to co-operate and collaborate with other Universities in such a manner and for such purposes as the University may determine from time to time;
- (xiii) to organize and conduct refresher courses, orientation courses workshops, seminars and other programmes for teachers, lesson writers, evaluators and other academic staff;
- (xiv) to determine standards of admission to the University or a Constituent College, Regional Centres, Study Centres with the approval of Academic Council and to make admission of students of Karnataka not less than the extent provided in this Act;
- (xv) to do all such other acts or things whether incidental to the powers aforesaid or not, as may be necessary to further the objects of the University;
- (xvi) to institute Degrees, Diplomas, Certificates and other academic distinctions on the basis of examination or any other method of evaluation approved by the Government;
- (xvii) to provide for the preparation of instructional materials, including films, cassettes, tapes, video cassettes, CD, VCD and other software and other relevant electronic and print media;
- (xviii) to raise, collect, subscribe and borrow money with the approval of the Board of Governors whether on the security of the property of the University, for the purposes of the University;
- (xix) to acquire, takeover, and run the management of any other educational institution with the prior approval of the State Government;
  - (xx) to acquire properties with the prior approval of the Board of Management;
- (xxi) to undertake any other activities connected with or incidental to above objectives of the University.
- **9.** University open to all classes, castes, creed, gender or nation. -The University admissions shall be open to all persons irrespective of caste, class, creed, gender or nation. All admissions shall be made on the basis of merit in the qualifying examinations:

"Provided that forty percent of the admissions in all courses of the university shall be reserved for the students of Karnataka State and admissions shall be made through a Common Entrance Examination conducted by the State Government or its agency and seats shall be allotted as per the merit and reservation policy of the State Government from time to time.

Provided further that where there are less than ten seats in any course like Post Graduate, they shall be reserved by clubbing such courses together and where there are less than three posts in any course they shall be reserved by rotation."

- 10. National Accreditation.- The University shall seek accreditation from respective statutory national accreditation bodies soon after its establishment. Further all the courses run by Private Universities shall be as per the regulations of the National Accreditation Bodies.
- 11. Powers of the sponsoring body.- The sponsoring body shall have the following powers with reference to the University, each of which may be exercised by the Sponsoring Body at its discretion, namely:-
  - (i) to appoint or re-appoint or terminate the appointment of the Chancellor;
  - (ii) to constitute the first Board of Governors of the University;
  - (iii) to nominate the chairperson of the Board of Governors;
  - (iv) to nominate three persons as members of the Board of Governors;
  - (v) to nominate two persons as members of the Board of Management;
  - (vi) to determine the source of funds to be contributed to the University Endowment Fund;
  - (vii) to determine the application and spending of moneys by the University;
  - (viii) to resolve any conflict at the meeting of the Board of Governors in the manner provided for in this Act.

#### CHAPTER - III

#### OFFICERS OF THE UNIVERSITY

- 12. Officers of the University. The following shall be the officers of the University, namely:-
  - (i) The Visitor;
  - (ii) The Pro-visitor;
  - (iii) The Chancellor;
  - (iv) The Vice-Chancellor;
  - (v) The Pro Vice-Chancellor;
  - (vi) The Registrar;
  - (vii) The Finance Officer; and
  - (viii) Such other officers as may be declared by the Statutes to be officers of the University.
- 13. The Visitor.- (1) His Excellency the Governor of Karnataka shall be the Visitor of the University and the visitor may offer suggestions for the improvement of the functioning of the University.
- (2) The Visitor shall preside at the convocation of the University for conferring degrees and diplomas.
  - (3) The Visitor shall have the following powers, namely:-
  - (i) to call for any paper or information relating to the affairs of the University;
  - on the basis of the information received by the Visitor and if he is satisfied that any order, proceedings or decision taken by any authority of the University is not in conformity with the Act, Regulations, or Rules, he may issue such directions as he may deem fit in the interest of the University and the directions so issued shall be complied with by all the concerned.

- 14. The Pro-Visitor.- (1) The Hon'ble Minister for Higher Education, Government of Karnataka shall be the pro-visitor of the University.-
- (2) The pro-visitor shall, when the Visitor is absent, preside at the Convocation of the University for conferring degrees and diplomas.
  - 15. The Chancellor.- (1) The Chancellor shall be appointed by the Sponsoring Body.
- (2) The founder trustee of the Sponsoring Body shall be the first Chancellor, who shall hold for life or till he demits office.
- (3) The subsequent Chancellor shall be either the then Trustee of the Sponsoring Body or such other person of eminence of national figure in the field of education, science, culture or public life, when such an appointment is being considered, as may be decided by the Sponsoring Body.
- (4) The subsequent Chancellor so appointed shall hold the office as determined by the Sponsoring Body.
- (5) The Chancellor shall have such powers as may be conferred on him by this Act or the Statutes made there under, which shall include the following powers, namely:-
  - (i) to function as the head of the University;
  - (ii) to preside at all convocations of the University in absence of visitor and provisitor;
  - (iii) to function as a Chairperson of the Board of Governors of the University;
  - (iv) to appoint or re-appoint or terminate the appointment of the Vice-Chancellor, in accordance with the provisions of this Act and the Statutes;
  - (v) to nominate a person as a member of the Nomination Committee as referred to in sub-section (2) of section 16 of this Act;
  - (vi) to preapprove the appointment of the Pro Vice-Chancellor, the Dean, the Registrar and the Finance Officer;
  - (vii) to nominate two academicians as members on the Board of Governors;
  - (viii) to appoint the first Pro Vice-Chancellor and the Finance Officer;
  - (ix) to constitute the first Board of Management, the Finance Committee, the Research Council and the Academic Council;
  - (x) to pre-approve the Agenda matters in the manner provided for in the Act;
  - (xi) to resolve a conflict (excluding conflicts at a meeting of the Board of Governors) in the manner provided in this Act.
- (6) In the event of there being a conflict inter-se between the functionary or body and any other functionary or body of the University, then the issue shall be referred to the Chancellor and the decision of the Chancellor in respect of such issue shall be final and binding on the University.
- 16. The Vice-Chancellor.- (1) The Vice-Chancellor shall be appointed by the Chancellor for a term of three years subject to other terms and conditions as may be laid down by the Statutes from among three persons recommended by the Nomination Committee constituted in accordance with the provisions of sub-section (2). After the term of three years, it is renewable for another term of three years.

Provided that a Vice-chancellor shall continue to hold the office even after expiry of his term till new Vice-chancellor joins. However, in any case this period shall not exceed one year.

- (2) The Nomination Committee referred to in sub-section (1) shall consist of the following persons, namely:-
  - (i) One person nominated by the Chancellor;
- (ii) Two nominees of the Board of Governors, one of whom shall be nominated as the Convener of the Committee by the Board of Governors.

- (3) The Nomination Committee shall, on the basis of merit, recommend three persons suitable to hold the office of the Vice-Chancellor and forward the same to the Chancellor along with a concise statement showing the academic qualifications and other distinctions of each person.
- (4) The Vice-Chancellor shall be the Principal Executive and Academic Officer of the University and shall exercise general supervision and control over the affairs of the University and give effect to the decisions of the authorities of the University.

Provided that, where any matter, other than the appointment of a Teacher is of urgent nature requiring immediate action and the same could not be immediately dealt with by any officer or the authority or other body of the University empowered by or under this Act to deal with it, the Vice-Chancellor may take such action as he may deems fit with the prior written approval of the Chancellor.

(5) The Vice-Chancellor shall exercise such other powers and perform such other duties as may be laid down by the Statutes or the Rules.

Provided that, where in the opinion of the Vice-chancellor, any decision of any authority of the university is outside the powers conferred by this Act or Statutes. Regulations or Rules made there under or is likely to be prejudicial to the interests of the university, he shall request the concerned authority to revise its decision within fifteen days from the date of its decision and in case the authority refuses to revise such decision wholly or partly or fails to take any decision within fifteen days, then such matter shall be referred to the Chancellor and his decision thereon shall be final.

- (6) The services of the Vice-Chancellor can be terminated by the Chancellor with the approval of the Board of Governors after following the principles of natural justice and after providing an opportunity to present his case including for termination on disciplinary grounds.
- (7) The Vice-Chancellor shall preside at the convocation of the University in the absence of the Visitor, Pro-Visitor and the Chancellor.
- 17. The Pro Vice-Chancellor. The Vice-Chancellor shall appoint not exceeding three provice Chancellors with the written approval of the Chancellor in such manner and they shall exercise such powers and perform such duties as may be laid down by the Statutes.
- 18. Deans of faculties.- Deans of faculties shall be appointed by the Vice-Chancellor with the written approval of the Chancellor in such manner and they shall exercise such powers and perform such duties as may be laid down by the Statutes.
- 19. The Registrar.- (1) The Registrar shall be appointed by the Chancellor in such manner and on such terms and conditions as may be laid down by the Statutes.
- (2) All contracts as defined in statutes shall be entered into and signed by the Registrar on behalf of the University.
- (3) The Registrar shall have the power to authenticate records on behalf of the University and shall exercise such other powers and perform such other duties as may conferred by the statutes or may be required from time to time, by the Chancellor or the Vice-Chancellor.
- (4) The Registrar shall be responsible for the due custody of the records and the common seal of the University and shall be bound to place before the Chancellor, the Vice-Chancellor or any other authority, all such information and documents as demanded.

- 20. The Finance Officer. The Finance Officer shall be appointed by the Vice-Chancellor with the written approval of the Chancellor in such manner and he shall exercise such powers and perform such duties as may be laid down by the Statutes.
- 21. Other Officers.- The manner of appointment, terms and conditions of service and powers and duties of the other officers of the University shall be such as may be specified by Statutes.

#### CHAPTER - IV

#### **AUTHORITIES OF THE UNIVERSITY**

- 22. Authorities of the University.- The following shall be the authorities of the University, namely:-
  - (i) The Board of Governors;
  - (ii) The Board of Management;
  - (iii) The Academic Council:
  - (iv) The Research and Innovation Council;
  - (v) The Finance Committee; and
  - (vi) Such other authorities as may be declared by the Statutes to be the authorities of the University.
- 23. The Board of Governors and its powers.- (1) The Board of Governors shall consist of the following, namely:-
  - (i) The Chancellor- Chairperson;
  - (ii) The Vice-Chancellor- Member;
  - (iii) The Principal Secretary/Secretary to the State Government in the Higher Education or by his nominee not below the rank of Deputy Secretary;
  - (iv) The Principal Secretary / Secretary to the Government in the Medical Education or by his nominee not below the rank of Deputy Secretary;
  - (v) One expert from the field of management, finance or any other specialized, including administration to be nominated by the State Government;
  - (vi) Two persons nominated by the Sponsoring Body of whom one shall be woman;
  - (vii) The Pro Vice-Chancellor who shall be a non-voting member;
  - (viii) One eminent educationist nominee of the university grant commission.
  - (2) The Registrar shall be non-voting member Secretary of the Board of Governors.
- (3) The tenure of office of the members of the Board of Governors, appointment of members, other than Government nominees, renewal and removal, etc., shall be such as may be laid down by the Statutes.
- (4) All meetings of the Board of Governors shall always be chaired by the Chancellor and in his absence by any one of the nominees of the Chancellor. If Chancellor has not nominated any person to Chair such a meeting, members present in the meeting shall elect the Chairperson for that meeting only from among themselves by a simple majority.
- (5) Quorum for all meetings of the Board of Governors shall be three members attending and voting at such meeting.

Provided that the presence of either the Chancellor or one nominee of the Sponsoring Body and in the absence of the Chancellor or one nominee of Sponsoring Body, the Vice Chancellor, shall always be necessary to form the quorum for any meeting of the Board of Governors.

- (6) The Board of Governors shall be the Principal Governing Body of the University and shall have the following powers, namely:-
  - (i) to appoint the Statutory Auditors of the University;
  - (ii) to lay down policies to be pursued by the University;
  - (iii) to review decisions of the other authorities of the University if they are not in conformity with the provisions of this Act, or the Statutes or the Rules;
  - (iv) to approve the Budget and Annual Report of the University;
  - (v) to make new or additional Statutes or amend or repeal the earlier Statutes and Rules;
  - (vi) to take decision about voluntary winding up of the University;
  - (vii) to approve proposals for submission to the Government;
  - (viii) to nominate three members to the Fee Regulation Committee;
  - (ix) to take such decisions and steps as are found desirable for effectively carrying out the objects of the University.
  - (7) The Board of Governor shall, meet at least three times a year.
  - (8) The Board of Governors shall meet at such time and place as may be specified by Statute.
  - 24. The Board of Management. (1) The Board of Management shall consist of the following, namely:-
    - (i) The Vice Chancellor;
    - (ii) The Pro-Vice Chancellors;
    - (iii) The Registrar;
    - (iv) Two nominees of the Sponsoring Body;
    - (v) Two Deans of the faculties as nominated by the Vice Chancellor.
  - (2) The Vice Chancellor shall be the Chairperson of the Board of Management and the Registrar shall be the Secretary of the Board of Management.
  - (3) The Board of management shall be the executive body of the University. The powers and functions of the Board of Management shall be such as may be specified by the statutes.
  - (4) All meetings of the Boards of Management shall always be chaired by the Vice Chancellor and in the absence of the Vice Chancellor, by the nominee of the Sponsoring Body and where the Sponsoring Body has not nominated any nominees, then by any other member as elected by the members present in the meeting.
  - (5) In the event of a conflict of opinion at a meeting of the Board of Management, the issue shall be referred to the Chancellor and the decision of the Chancellor in respect of such issue shall be final and binding on the University.

25. The Academic Council. - (1) The Academic Council shall consist of the following. namely:-

(i) The Vice-Chancellor

- Chairperson

(ii) The Pro Vice Chancellor

- Members

(iii) The Registrar

- Secretary

(iv) Such other members as may be specified by the Statutes.

(2) The Academic Council shall be the principal academic body of the University and shall, subject to the provisions of this Act, the Statutes, Regulations and the Rules, co-ordinate and exercise general supervision over the academic policies of the University.

26. The Research and Innovation Council. - (1) Research and Innovation Council shall be the Principal Research and Innovation Committee of the University and shall provide the larger holistic vision of the kind of research to be undertaken by the University, including prioritization of the research areas. Research and Innovation Council shall, subject to the provisions of this Act, the Statutes, Regulations and the Rules, co-ordinate and exercise general supervision over the Innovationand Research policies of the University.

(2) The Research and Innovation Council shall consist of the following, namely:-

(i) The Vice-Chancellor

- Chairperson

(ii) The Pro Vice Chancellor

- Member

(iii) The Dean of Research

- Secretary

(iv) Head of the Department of Innovation

- Member

(v) Deans of all Faculties

- Members; and

(vi) Such other members as may be specified in the Statutes.

27. The Finance Committee. - (1) The Finance Committee shall consist of the following, namely:-

(i) The Chancellor or his Nominee-

- Chairperson

(ii) The Vice-chancellor

- Member

(iii)The Registrar

- Member

(iv) The Finance Officer

- Secretary

(v) One nominee of the Sponsoring Body

- Member; and

(vi) Such other members as may be specified in the statutes.

(2) The Finance Committee shall be the principal financial body of the University to take care of financial matters and shall, subject to the provisions of this Act, Rules and Statutes co-ordinate and exercise general supervision over the financial matters of the University.

**28. Other Authorities.-** The constitution, powers and functions of the other authorities of the University shall be such as may be specified by the statutes.

- 29. Disqualification for membership of an Authority or Body: A person shall be disqualified for being a member of any of the authorities of bodies of the University, if he;
  - (a) is of unsound mind and stands so declared by a competent court;

- (b) is an un discharged insolvent:
- (c) has been convicted of any offence involving moral turpitude;
- (d) is conducting or engaging himself in private coaching classes; or
- (e) has been punished for indulging in or promoting unfair practice in the conduct of any examination, in any form, anywhere.
- (f) As and when the Sponsoring Body were to form an opinion in writing that a Member of any of the authorities or bodies is unfit to hold the post.
- 30. Proceedings not invalidated on account of vacancy.- No act or proceedings of any authority of the University shall be invalid merely by reason of the existence of any vacancy or defect in the constitution of the authority.
- 31. Provisions pertaining to Agenda Matters.- (1) No Agenda Matter shall be either included in the Agenda for or taken up for discussion and decided in, the meeting of the Board of Governors or the Board of Management or any Committees without obtaining the prior written approval of the Chancellor.
- (2) In the event of breach, the Chancellor shall be entitled at all time to immediately take remedial action by reversing all decisions taken by any functionary or body of the University in breach of the provisions of the Act and consequent upon the pursuit of such a remedial action all such actions taken by the functionary or body of the University in breach of the provisions of the Act shall be deemed to be null and void, ab initio and consequently the status quo ante shall prevail in respect of the matter or decision in breach.

#### CHAPTER - V

#### STATUTES AND REGULATIONS

- **32. Statutes.-** Subject to the provisions of this Act, the Statutes may provide for any matter relating to the University and staff, as given below, namely:-
- (i) the procedure for transaction of business of the Authorities of the University and the composition of bodies not specified in this Act;
- (ii) the operation of the permanent statutory endowment fund, University endowment fund, the general fund and the development fund;
- (iii) the terms and conditions of appointment of the Vice-Chancellor, the Registrar and the Finance Officer and their powers and functions;
- (iv) the mode of recruitment and the terms and conditions of service of the other officers, Teachers and employees of the University;
- (v) the procedure for resolving disputes between the University and its officers, Faculty members, employees and students;
  - (vi) creation, abolition or restructuring of departments and faculties;
  - (vii) the manner of co-operation with other Universities or institutions of higher learning;
  - (viii) the procedure for conferment of honorary degrees;
  - (ix) provisions regarding grant of free ships and scholarships;
- (x) policies in respect of seats in different courses of studies and the procedure of admission of students to such courses;

- (xi) policy relating to the fee chargeable from students for various courses of studies;
- (x) institution of fellowships, scholarships, studentships, free ships, medals and prizes;
- (xi) any other matters which may be decided by the Board of Governors or required to be provided by statutes under this Act.
- 33. Statutes how made.- (1) The first statutes framed by the Board of Management shall be submitted to the Board of Governors for its approval.
- (2) The Board of Governors shall consider the First Statutes, submitted by the Board of Management and shall give its approval thereon with such modifications, if any, as it may deem necessary.
- (3) The University shall publish the First Statutes, as approved by the Board of Governors in the University Notification, and thereafter, the First Statutes shall come into force from the date of its publication.
- 34. Power to amend the Statutes.- The Board of Governors may, make new or additional Statutes or amend or repeal the Statutes.
- 35. Regulations.- Subject to the provisions of this Act, the regulations may provide for all or any of the following matters, namely:-
  - (i) admission of students to the University and their enrolment and continuance as such;
- (ii) the courses of study to be laid down for all degrees and other academic distinctions of the University:
  - (iii) the award of degrees and other academic distinctions;
  - (iv) the conditions of the award of fellowships, scholarships, studentships, medals and prizes;
- (v) the conduct of examinations and the conditions and mode of appointment and duties of examining bodies, examiners invigilators, tabulators and moderators;
- (vi) the fee to be charged for admission to the examinations, degrees and other academic distinctions of the University;
  - (vii) the conditions of residence of the students at the University or a Constituent College;
- (viii) maintenance of discipline among the students of the University or a Constituent College;
  - (ix) all other matters as may be provided in the Statutes under the Act.
- **36. Regulations how made.-** The Regulations shall be made by the Academic Council and approved by Board of Management.
- **37. Power to amend Regulations.-** The Academic Council may, with the approval of the Board of Management, make new or additional regulations or amend or repeal the regulations.
- 38. Fee Regulation Committee.- (1) The fee of the university seats reserved for Karnataka Students under section 9 shall be regulated by the Fee Regulation Committee constituted by the Government which shall be headed by a retired Supreme Court or High Court Judge and consists of Chancellor, Vice-Chancellor of the University, Principal Secretary or Secretary to Government incharge of Higher Education or by his nominee not below the rank of Deputy Secretary, Principal Secretary or Secretary to Government incharge of Medical Education or by his nominee not below the rank of Deputy Secretary, two Academicians nominated by the Board of Governors of whom one

shall be woman. A Chartered Accountant of repute shall be co-opted for this purpose in the Committee."

(2) The Committee shall look after the compliance of the university in its admissions and collection of fee.

#### CHAPTER - VI

#### **MISCELLANEOUS**

- 39. Conditions of service of employees.- (1) Every employee shall be appointed under a written contract subject to such terms and conditions as may be specified by statutes and regulations or prescribed if any by rules which shall be kept in the University and a copy of which shall be furnished to the employee concerned.
- (2) Disciplinary action against the employees shall be governed by the procedure specified in the Statutes.
- (3) Any dispute arising out of the contract between the University and an employee shall, be resolved in the manner provided for in the written contract and in accordance with the Statues.
- 40. Right to appeal.- In case of disciplinary actions by the University against its employee or student, the aggrieved employee or students shall have a right to appeal as specified by the statutes.
- **41. Provident or pension fund.-** The University shall constitute for the benefit of its employees such provident or pension fund and provide such insurance scheme as it may deem fit in such manner and subject to such conditions as may be specified by the statutes and the laws in force.
- 42. Disputes as to constitution of University authorities and bodies.- If any question arises as to whether any person has been duly elected or appointed as, or is entitled to be a member of any authority or other body of the University, the matter shall be referred to the Chancellor whose decision thereon shall be final.
- **43.** Constitution of Committees.- Any authority of the University mentioned in section 22, shall be empowered to constitute a committee of such authority, consisting of such members of such authority and having such powers as the authority may deem fit.
- 44. Filling of casual vacancies.- Any casual vacancy among the members, other than exofficio members of any Authority or body of the University shall be filled in the same manner in which the member whose vacancy is to be filled up, was chosen, and the person filling the vacancy shall be a member of such authority or body for the residual term for which the person in whose place he would have been a member.
- **45. Protection of action taken in good faith.** No suit or other legal proceedings shall lie against any officer or other employee of the University for anything, which is done in good faith or intended to be done in pursuance of the provisions of this Act, the Statues or the Rules.
- **46. Transitional provisions.-** Notwithstanding anything contained in any other provisions of this Act and the Statues.-
- (i) the first Vice-Chancellor and Pro-Vice-Chancellor, if any shall be appointed by the Chancellor;
  - (ii) the first Registrar and the first Finance Officer shall be appointed by the Chancellor; and

- (iii) the first Board of Management, the first Finance Committee, the first Innovation and Research Council and the first Academic Council shall be constituted by the Chancellor.
- 47. Permanent Statutory Endowment Fund.-(1) The University shall establish a Permanent Statutory Endowment Fund of at least rupees twenty five crores out of which at least fifteen crores shall be in cash and remaining in the form of Bank guarantee which may be increased suo moto but shall not be decreased.

"Provided that in case of a University outside the Bangalore or Bangalore Rural District at least ten crores must be in form of cash and the remaining five crores shall be in form of Bank Guarantee."

- (2) The University shall have power to invest the permanent Statutory Endowment Fund in such manner as may be prescribed.
- (3) The University may transfer any amount from the General Fund or the Development Fund to the permanent Statutory Endowment Fund. Excepting in the event of dissolution of the University, in no other circumstances can any monies be transferred from permanent Statutory Endowment Fund for other purposes.
- (4) Seventy five percent of the incomes received from permanent Statutory Endowment Fund shall be used for the purpose of development or general work of the University. The remaining twenty five percent shall be reinvested in the permanent Statutory Endowment Fund.
- 48. University Endowment Fund.- (1) The University shall establish a Permanent Statutory Endowment Fund of at least rupees twenty five crores out of which at least fifteen crores shall be in cash and remaining in the form of Bank guarantee which may be increased suo moto but shall not be decreased.
- (2) The University shall have the power to invest the University Endowment Fund in a manner as may be specified by the Statutes.
- (3) The University Endowment Fund is a self-imposed fund that the University desires to maintain voluntarily and invest it responsibly to protect itself from financial challenges that may arise on account of pursuing social objectives and/or unforeseen circumstance.
- (4) The University may transfer any amount from the General Fund or the development fund to the University Endowment Fund. Excepting in the event of dissolution of the University, in no other circumstances can any monies be transferred from the University Endowment Fund for other purposes.
- (5) Eighty percent of the incomes received from the University Endowment Fund shall be used for the purposes of development or general work of the University. The remaining twenty percent shall be reinvested into the University Endowment Fund.
- 49. General Fund. (1) The University shall establish a General Fund to which the following amount shall be credited, namely:-
  - all fees which may be charged by the University;
  - (ii) all sums received from any other source not prohibited by any law for the time being in force;
  - (iii) all contributions made by the University;
  - (iv) all contributions/donations made in this behalf by any other person or body which are not prohibited by any law for the time being in force.

- (2) The funds credited to the General Fund shall be applied to meet all the recurring expenditure of the University.
- **50.** Development fund.- (1) The University shall establish a Development Fund to which the following funds shall be credited, namely:-
  - (i) development fees which may be charged from students;
- (ii) all sums received from any other source for the purposes of the development of the University:
  - (iii) all contributions made to the University;
- (iv) all contributions/donations made in this behalf by any other person or body which are not prohibited by any law for the time being in force; and
  - (v) all incomes received from the Permanent Statutory Endowment Fund.
- (2) The funds credited to the Development Fund from time to time shall be utilized for the development of the University.
- **51.** Maintenance of funds.- The funds established under sections 47, 48, 49 and 50 shall, subject to general supervision and control of the Board of Governors, be regulated and maintained in such manner as may be prescribed.
- **52. Annual Report.-** (1) The annual report of the University shall be prepared under the direction of the Board of Management and shall be submitted to the Board of Governors for its approval.
- (2) The Board of Governors shall consider the annual report in its meeting and may approve the same with or without modification.
- (3) A copy of the annual report duly approved by the Board of Governors shall be sent to the Visitor and the State Government before 31<sup>st</sup> December following close of the financial year in 31<sup>st</sup> March of each year.
- **53.** Account and audit.- (1)The annual accounts and balance sheet of the University shall be prepared under the direction of the Board of Management and all funds accruing to or received by the University from all source and all amount disbursed or paid shall be entered in the account maintained by the University.
- (2) The annual accounts of the University shall be audited by an auditor, who is a member of the Institute of Charted Accountants of India, every year.
- (3) A copy of the annual accounts and the balance sheet together with the audit report shall be submitted to the Board of Governors before 30<sup>th</sup>November following close of the financial year in 31 March of each year.
- (4) The annual accounts, the balance sheet and the audit report shall be considered by the Board of Governors at its meeting and the Board of Governors shall forward the same to the visitor and the Government along with its observation thereon on or before 31st December of each year.
- **54. Mode of proof of University record.-** A copy of any receipt, application, notice, order, proceeding or resolution of any authority or committee of the University or other documents in possession of the University or any entry in any register duly maintained by the University, if certified by the Registrar, shall be received as prima facie evidence of such receipt, application, notice, order, proceeding, resolution or document or the existence of entry in the

register and shall be admitted as evidence of the matters and transaction therein recorded where the original thereof would, if produced, have been admissible in evidence.

- 55. Power of State Government to issue directions. The State Government may give such directions to the University as in its opinion are necessary or expedient for carrying out the purposes of this Act or to give effect to any of the provisions contained therein or of any rules or orders made thereunder and the Board of Governor or the Board of management, as the case may be, of the University shall comply with every such direction.
- **56. Penalties.-** (1) Whoever contravenes the provisions of this Act or the rules made thereunder or any examination matters or in matters relating to award of degrees or in giving marks cards shall on conviction be punishable with fine of rupees fifty thousand which may extend to ten lakhs rupees or with an imprisonment for a term of six months which may extend to two years or with both.

Provided that, where the University is also involved the permission letter granted under this Act to commence the University shall be withdrawn."

- (2) A penalty under this section may be imposed without prejudice to the penalty specified in any other Act.
- **57. Power to enter and inspect.-** Any officer not below the rank of Group 'A officer authorised by the State Government in this behalf, shall, subject to such conditions as may be specified therein under the Karnataka Educational Institutions (Prohibition of Capitation Fee) Act, 1984 (Karnataka Act 37 of 1984) shall be deemed to be the Officer authorized to exercise the same powers and discharge the same functions as provided under section 9 of that Act for the purposes of this Act.
- 58. Power to give direction for dissolution of the University.- (1) If the University proposes dissolution in accordance with the law governing its constitution or incorporation, it shall give at least six months prior notice in writing to the Government.
- (2) The Karnataka State Higher Education Council shall conduct periodical Inspection of University regarding;-
  - (i) Standard of Instructions for grant of degree;
  - (ii) Quality of Education;
  - (iii) Avoidance of commercialization of Higher Education;
  - (iv) contravention of the provisions of the Act if any;

-and send report to the Government.

- (3) On identification of mismanagement, maladministration and indiscipline, the Government shall issue directions to the management of the University to set right the administration. If the direction is not followed within such time as may be prescribed, the right to take decision for winding up of the University or any course thereof shall vest with the Government.
- (4) The manner of winding up of the University or any course thereof shall be such as may be prescribed by the Government in this behalf.

Provided that no such action shall be initiated without affording a reasonable opportunity to show cause to the University

(5) On receipt of the notice referred to in sub-section (1), the Government shall, in consultation with the relevant Regulatory Authority make such arrangements page 579

administration of the University from the proposed date of dissolution of the University or winding up of the course and until the last batch of students in regular courses of studies of the University complete their courses of studies in such manner as may be specified by the Statues.

- 59. Expenditure of the University during dissolution.-(1) The expenditure of administration of the University during taking over period of its management under subsection (5) of section 58 shall be met out of the Permanent Statutory Endowment Fund, the General Fund or the Development Fund in such manner as may be prescribed.
- (2) If the fund referred to in section 47, 48, 49 and 50 are not sufficient to meet the expenditure of the University during the taking over period of its management, such expenditure may be met by disposing of the properties or asset of the University, by the Government.
- (3) Where the dissolution of the University is due to mismanagement or maladministration, the Government is at liberty to identify the persons responsible for such mismanagement or maladministration and to impose penalty as it deems fit.
- **60.** Removal of difficulties.- (1) If any difficulty arises in giving effect to the provisions of this Act, the State Government may, by a notification or by order, make such provisions, which are not inconsistent with the provisions of this Act, as appear to it to be necessary or expedient, for removing the difficulty:

Provided that, no notification or order under this section shall be made after the expiry of a period of five years from the date of commencement of this Act.

- (2) Every Order made under sub-section (1), shall, as soon as may be after it is made, be laid before the State Legislature.
- 61. Power to make rules by the State Government.- (1) The State Government may make rules, by notification, to carryout the purposes of this Act.
- (2) Every rule made under this Act shall be laid as soon as may be after it is made before each House of the State Legislature while it is in session for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the rule or both Houses agree that the rule should not be made, the rule shall thereafter have effect only in such modified form or be of no effect, as the case may be, so however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule.

The above translation of ಎಂ.ಎಸ್. ರಾಮಯ್ಯ ಅನ್ವಯಿಕ ವಿಜ್ಞಾನಗಳ ವಿಶ್ವವಿದ್ಯಾಲಯ ಅಧಿನಿಯಮ, 2012 (2013ರ ಕರ್ನಾಟಕ ಅಧಿನಿಯಮ ಸಂಖ್ಯೆ 15) be published in the Official Gazette under clause (3) of Article 348 of the Constitution of India.

## H.R. BHARDWAJ GOVERNOR OF KARNATAKA

By Order and in the name of the Governor of Karnataka,

### K.S.Mudagal

Secretary to Government(I/C)
Department of Parliamentary
Affairs and Legislation

## **ANNEXURE 43**



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23rd August, 2023

Ref: RUAS BOG/CON/2023

#### **Constitution of Board of Governors**

Board of Governors of Ramaiah University of Applied Sciences be and is hereby constituted by the following membership as per section 4.2 of Statute 2.1:

Sl.No	Name	Designation	Membership
1	Dr. M.R Jayaram	Chancellor	Chairman
2	Mr. M.R. Kodandaram	Nominated Member, Sponsoring Body	Member
3	Mrs. M.R. Prabhavathy	Nominated Member, Sponsoring Body	Member
4	Mr. M.R. Sreenivasa Murthy	Nominated Member, Sponsoring Body	Member
5	Dr. A Sivathanu Pillai	Appointed Member by Chancellor under Academician category	Member
6	Dr. K.R.S. Murthy	Appointed Member by Chancellor under Academician category	Member
7	Principal Secretary, Higher Education, GoK	Appointed Member, GoK	Member
8	Principal Secretary, Medical Education, GoK	Appointed Member, GoK	Member
9	Vacant	Appointed Member, GoK	Member
10	Dr. Kuldeep Kumar Raina	Vice Chancellor	Ex-Officio Member
11	Dr. Govind R Kadambi	Pro- Vice Chancellor	Ex-Officio Member Non- Voting Member
12	Dr. Om Prakash Kharbanda	Pro- Vice Chancellor- Health Sciences	Ex-Officio Member Non- Voting Member
13	Dr. G.S. Venkatesh	Registrar	Ex-Officio Member Non- Voting Member and Member Secretary

#### **Special Invitees**

SI.No	Name	Designation	Membership
1	Dr. R. Natarajan	Former Director, IIT Madras/ Former Chairman AICTE, New Delhi	Special Invitees
2	Dr. P.N. Razdan	Principal Adviser Quality Assurance & Excellence Cell - (GEF)	Special Invitees

The tenure of the Committee will be upto 31st December 2024.

Dr. G. S. Venkatesh Registrar

Registrar M.S. Ramaiah University of Applied Sciences

Bangalore - 560 054

Dr. M.R. Jayaram

Chancelletion

Vice Chancellor

M.S. Ramaiah University of Applied Sciences

Prof.(Dr.) Kuldeep K. Raina

Vice Chancellor

M.S. Ramaiah University of Applied Sciences Bangalore - 560 054.



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Date: July 25th ,2023

#### Ref: RUAS/CONS/BOM/2023

#### **Re-Constitution of the Board of Management**

Board of Management of Ramaiah University of Applied Sciences is hereby re-constituted by the following members as per section 24 of RUAS Act read with Section 5.1 of Statute 2.1

SI.No	Designation	Name	Membership
1	Vice Chancellor	Prof. Kuldeep Kumar Raina, VC, RUAS	Chairperson
2	Nominee of the Sponsoring Body	Mr. M.R Sreenivasa Murthy, CE, GEF(M)	Member
3	Nominee of the Sponsoring Body	Mr. B.N. Subramanya, Adviser, GEF(M)	Member
4	Pro Vice Chancellor-1	Dr. O.P. Kharbanda, PVC-HS	Member
5	Pro Vice Chancellor-2	Dr. Govind R Kadambi, PVC- Research	Member
6	Dean-RMC	Dr. Shalini Nooyi, Dean-RMC	Member
7	Dean-FET/FAD/FMPS	Dr. Jagannath Rao Desai- Dean FET/FAD/FMPS	Member
8	Registrar	Dr.G.S Venkatesh, Registrar, RUAS	Member Secretary

#### **Special Invitees**

1	Dr. P.N. Razdan	Principal Adviser, Quality Assurance & Excellence Cell
2	Mr.Venugopala Sastry	Chief Financial Officer, GEF(M)
3	Mr. Udaya Kumar Shetty	Finance Head

**Tenure:** 

Appointed members shall hold office upto 31st December 2024

Dr. G.S. Venkatesh

Registrar

Registrar

M.S. Ramaiah University of Applied Science

Bangalore - 560 054

Prof. Kuldeep Kumar Raina

Vice Chancellor

Vice Chancellor

M.S. Ramaiah University of Applied Sciences

Bangalore - 560 054.



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# MEMBERS OF ACADEMIC COUNCIL OF RAMAIAH UNIVERSITY OF APPLIED SCIENCES Academic Council Member List

SI.	Name of the Members	Designation	Position
1.	Prof. Kuldeep Kumar Raina	Vice Chancellor	Chairperson
2.	Prof. Govind R. Kadambi	Pro Vice Chancellor	Member
3.	Dr. Om Prakash Kharbanda	Pro Vice Chancellor (Health Sciences)	Member
4.	Dr. G S Venkatesh	Registrar	Member-
			Secretary
5.	Dr. Medha Y Rao	Dean Academic Affairs	Member
Dea	ans	7	
6.	Prof. Krishnamurthy Jayanna	Dean- FLAHS	Member
7.	Prof. Bharath S	Dean - FPH	Member
8.	Dr. Shalini Nooyi	Dean & Principal M S Ramaiah Medical College	Member
9.	Dr. Savita Ravindra	Dean- M S Ramaiah College of Physiotherapy	Member
10.	Dr. Sonali Jadhav	Dean- MSRINER	Member
11.	Dr. Silju Mathew	Dean - FDS	Member
12.	Dr. Jagannathrao Venkatrao Desai	Dean- FET	Member
13.	Prof. Abby Mathew	Dean - FHMCT	Member
14.	Dr. Gurucharan Gollerkeri	Dean/ Director- SoSS & SoL	Member
15.	Dr. Soma Chaki	Associate Dean- Academic Affairs	Member
Chair	person of BoS		
16.	Dr. Janaki M G	HoD- Dept. of Radiation Oncology	Member
17.	Dr. Shailaja Shetty	HoD- Dept. of Anatomy	Member
18.	Dr. Sujani B K	HoD- Dept. of OBG	Member
19.	Dr. Girish Chandra Y P	HoD- Dept. of Forensic Medicine	Member
20.	Dr. Tarun Dilip Javali	HoD- Dept. of Urology	Member
21.	Dr.Jadhav Sonali Tarachand	Dean & Principal, RINER	Member
22.	Dr.Radha.M.S	Professor cum Vice- Principal, RINER	Member
23.	Dr.G.Balamurugan	Assistant Professor of Nursing	Member
		National Apex Coordinating Centre for	
		Tele MANAS, NIMHANS	
24.	Mrs.Sangeetha.X.	Asst. Professor, RINER	Member
25.	Dr.Roopakala.M.S	Professor, RMC	Member
26.	Dr. Nivedita Maity	Associate Professor, RMC	Member
27.	Dr.Suresh.K.Sharma	Professor & Principal, AllMS, Jodhpur,	Member
		Rajasthan	
28.	Mrs. Gracy Mathai	Chief Executive Officer, Baby Memorial	Member
		Hospital, Calicut, Kerala	
29.	Dr. S.Kanchana	Professor cum Principal	Member
		Omayal Achi College of Nursing, Chennai,	
m -		Tamilnadu	
30.	Dr. Savita Ravindra	Dean & Principal- RCPT	Member



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31.	Dr. Silju Mathew	Professor & Dean- Faculty of Dental Sciences	Member
32.	Dr. Bharath Srinivasan	Professor & Dean- Faculty of Pharmacy	Member
33.	Prof. Abby Mathew	Professor & Dean- FHMCT	Member
34.	Dr. S Chandan Kumar	HoD - Department of Mathematics and Statistics - FMPS	Member
35.	Dr. Premakumar H B	HoD - Physics - FMPS	Member
36.	Dr. T Niranjana Prabhu	HoD - Chemistry - FMPS	Member
37.	Dr. Sharath Kumar K M	HoD – Dept. of Management &	Member
		Commerce - FMC	
38.	Dr. Dayananda B S	HoD - Mechanical Engineering - FET	Member
39.	Dr. Nayana N Patil	Professor and Head, Civil Engineering - FET	Member
40.	Dr. Rinki Sharma	Professor and Head, Computer Science & Engineering - FET	Member
41.	Dr. Malathi s	Professor and Head, Electronics &	Member
		Communication Engineering- FET	
42.	Dr. M Sivapragasam	Professor and Head, Aerospace	Member
	, "	Engineering - FET	
43.	Dr. Sandhya Sankaran	HoD - Biotechnology- FLAHS	Member
44.	Dr. Rajadurai Murugan	HoD- Food Technology – FLAHS	Member
45.	Dr. Tushar Shaw	HoD- Allied Health Sciences – FLAHS	Member
46.	Dr. Mamatha G Hegde	HoD – Fashion - FAD	Member
47.	Mr. H S Lohit	HoD – Product Design - FAD	Member
Exter	nal Experts		
48.	Dr. U Sudhir	Expert - Medical	Member
49.	Dr. B Srinivas Pai	Expert - Medical	Member
50.	Dr. V K Bansal	Expert - Medical	Member
51.	Dr. Raju K Parasher	Expert- Physiotherapy	Member
52.	Dr. Deepak Kumar Capri	Expert- Physiotherapy	Member
53.	Dr. Anice George	Expert- Nursing	Member
54.	Prof. Deepak Kumar Saini	Expert- FLAHS (Biotechnology)	Member
55.	Prof. R. Rajesh Shenoy	Expert- FLAHS (Allied Health Sciences)	Member
56.	Dr. Vidyalakshmi Rajagopal	Expert- FLAHS (Food Technology)	Member
57.	Dr B.S. Jayashree	Expert- Pharmacy	Member
58.	Ms. Akshta Suri	Expert- FHMCT	Member
59.	Prof. Balaji Krishnan	Expert- Management & Commerce	Member
60.	Prof. Kirankumar Momaya	Expert- Management & Commerce	Member
61.	Dr.B.J.Gireesha	Expert- Mathematics and Statistics	Member
62.	Dr. Ramesh Chandra Malik	Expert - Physics	Member
63.	Prof. Govindraju T	Expert - Chemistry	Member
64.	Dr. Yashoda Kumari	Expert - Art & Design	Member
65.	Dr. N Balakrishnan	Expert – ASE, FET	Member
66.	Dr. K. Mohanavelu	Expert- ASE, FET	Member
67.	Dr. C M Manjunatha	Expert- FET	Member
68.	Prof. Govindarajan Ramaswamy	Expert- CSE - FET	Member
69.	Prof. Manish Thakur	Expert- Social Sciences	Member
70.	Prof. Ashok Patil	Expert- Law - SoL	Member



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71.	Dr. Ajoy Roychoudhury	Expert - Dental Sciences	Member
72.	Dr. D. Gopalakrishnan	Expert - Dental Sciences	Member
Direc	tors of RUAS	V	
73.	Dr. T Hemanth	Director-Admission, RUAS	Member
74.	Dr. Jyothi Shankar	Director-DTSLD, RUAS	Member
75.	Dr. Vibha Shetty	Director-DTLL, RUAS	Member
76.	Ms. Priya Arjun	Asst. Director-Students Affairs, RUAS	Member
77.	Prof. M Sai Baba	Director- Professional Development, RUAS	Member
78.	Dr. Sonali Gupta	Director- Centre for Entrepreneurship, RUAS	Member
79.	Major General Prasad	RPCC- Director, RUAS	Member
80.	Dr. A Mumtaj	Director- IQAC	Member
81.	Dr. Anbalagan Heroji	Director - Training & Placement	Member
Non-	Teaching Fraternity	7	
82.	Mr. Venugopala Sastry	CFO, GEF (M)	Member
83.	Dr. Anitha Ramalingam	COE, RUAS	Member
84.	Mr. Ravichandra S	Chief Librarian, RUAS	Member
Alum	ni		
85.		Alumni - 1	Member
86.		Alumni - 2	Member

The Members shall hold office until 31st December, 2024

Dr G S Venkatesh, Registrar

Member Secretary, Academic Council Ramaiah University of Applied Sciences

Registrar

M.S. Ramaiah University of Applied Science.

Bangalore - 560 054

Prof. Dr Kuldeep Kumar Raina, Vice Chancellor

Chairperson, Academic Council

**Ramaiah University of Applied Sciences** 

Vice Chancellor

M.S. Ramaiah University of Applied Sciences

Bangalore - 560 054.

Approved by

Dr M. R. Jayaram

Chancellor

**Ramaiah University of Applied Sciences** 

Chancellor

M.S. Ramaiah University of Applied Sciences



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Ref: RUAS/ORI//RIC 001/2023

20th August 2023 Bangalore

## **Constitution of Research and Innovation Council**

Research and Innovation Council of Ramaiah University of Applied Science is hereby reconstituted as per section 7.3 of statute 2.1:

Sl. No	Name	Designation	Membership
1.	Prof. Kuldeep Kumar Raina	Vice Chancellor	Chairperson
2.	Prof. Govind R. Kadambi	Pro-Vice Chancellor - ES	Member
3.	Dr. Om Prakash Khardanda	Pro-Vice Chancellor - Health Sciences	Member
4.	Dr. G S Venkatesh	Registrar	Member
5.	Sri Gurucharan Gollerkeri	Director and Professor - SSS & SL	Member
6.	Dr. Medha Y Rao	Dean - Academic Affairs	Member
7.	Dr Anitha Ramalingam	Controller of Examination	Member
8.	Dr. J.V. Desai	Dean -RTC	Member
9.	Dr. Silju Mathew	Dean - FDS	Member
10	Prof. S. Bharath	Dean (I/C) - FPH	Member
11.	Dr. K.M. Sharath Kumar	Professor and Head – FMC	Member
12	Dr. Shalini Nooyi	Dean - Ramaiah Medical College	Member
13	Prof. Abby Mathew	Dean - FHMCT	Member
14	Dr. Savita Ravindra	Dean -RCP	Member
15	Dr. Sonali Jadhav	Dean- RINER	Member
16	Prof. Smita Srinivas	Founder and Director, TCLab	Member
17.	Prof. S. Asokan	Professor and Chairman Department of Instrumentation and Applied Physics, Indian Institute of Science	Member
18	Dr. Anita Mahadevan	Professor and Head - Department of Neuropathology, NIMHANS	Member
19	Dr. Prem K. Mony	Professor Epidemiology and Vice Dean, St Johns Research Institute	Member
20	Dr. TM Kotresh	Director - Defense Bioengineering and Electro Medical Laboratory (DEBEL), DRDO	Member
21	Dr. Bontha V Babu	Scientist-G & Head, Indian Council of Medical Research, New Delhi	Member
22	Dr. Ajay D Pillai	Scientist-E, National Centre for Cell Science, Pune	Member
23	Dr. M. Girish Chandra	Senior Research Scientist TCS Innovation Laboratory	Member
24	Dr. Praveen Birur N	Vice Principal and Head, K.L.E.S Institute of Dental Science	Member
25	Dr. Krishnamurthy Jayanna	Dean - Office of Research and Dean - FLAHS	Member- Secretary

Member Nominated by the Sponsoring Body The tenure of the committee will be up to 31st August 2025

> Prof. (Dr.) K.K Raina Vice Chancellor/ Chairperson Vice Chancellor

Registered as: MS Ramaiah University of Applied Sciences M.S. Ramaiah University of Applied Sciences Registered as : MS Ramaiah University of Applied Sciences 11.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.0



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Date: October 20th ,2022

Ref: RUAS/Cons/001/2022-23

## Re-Constitution of the Finance Committee

Finance Committee of Ramaiah University of Applied Sciences is hereby re-constituted by the following members as per section 27 of RUAS Act read with Section 8.2 of Statute 2.1

SI.No	Designation	Name	Membership
1	Chancellor or his Nominee	Mr. M.R Sreenivasa Murthy, CE, GEF(M) Chancellor's nominee	Chairperson
2	Vice Chancellor	Prof. Kuldeep Kumar Raina, VC, RUAS	Member
3	Nominee of the Sponsoring Body	Mr. Venugopala Sastry, CFO, GEF (M)	Member
4	Nominee of the Sponsoring Body	Mr. B.N. Subramanya, Adviser, GEF(M)	Member
5	Registrar	Dr.G.S Venkatesh, Registrar, RUAS	Member
6	Finance Officer	Mr. Udaya Kumar Shetty, Finance Head, RUAS	Member Secretary

The tenure of the Committee will be until further orders.

Dr. G.S. Venkatesh

Registrar

Registrar

M.S. Ramaiah University of Applied Sciences

Bangalore - 560 054

Prof. Kuldeep Kumar Raina

Vice Chancellor

Vice Chancellor

M.S. Ramaiah University of Applied Sciences
Bangalore - 560 054.

For kind approval of the Hon'ble Chancellor

Dr. M.R .Jayaram

Chancellor

# **ANNEXURE 44**



On M R JAYARAM
Chancellor
Ramaiah University
of Applied Sciences

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Date: 7th July 2022

To,
The Principal Secretary to Government,
Higher Education Department,
Vidhana Soudha,
Bengaluru 560 001

Respected Madam,

Sub: Regarding Constitution of Members of the Fee Regulation Committee of M.S. Ramaiah University of Applied Sciences

Ref. 1)Letter No. EO No.ED/134/URC/2022 from Higher Education Department, Government of Karnataka dated 06.07.2022

2) our letter dated 18.06.2022

With reference to the above subject, vide cited reference No.1, the State Government has nominated the following persons to the Fee Regulatory Committee of M.S. Ramaiah University of Applied Sciences under the provisions of Sec. 38 of M.S. Ramaiah University of Applied Sciences Act, 2012

1) Justice N.K. Patil,
Former Judge, Sri Ketaki Sangameshwara Nilaya,
No. 753, 14<sup>th</sup> Main, Judicial Layout,
Bangalore- 560 065

 Principal Secretary or Secretary to Government incharge of Higher Education or by his nominee not below the rank Of Deputy Secretary

3) Principal Secretary or
Secretary to Government incharge of Medical
Education or by his nominee not below the rank
Of Deputy Secretary

Chairman

Member

Member



.Dr. M R JAYARAM

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Further, in partial modification of our letter dated 18:06.2022, the following members are nominated for Fee Regulation Committee of Ramaiah University of Applied Sciences.

- 1) Dr. M.R. Jayaram
- 2) Dr.K.K. Raina
- 3) Dr.S. Kumar
   Retd. Professor of Pathology &
   Retd. Chancellon of Devaraj Urs deemed to be University
- 4) Dr. Archna
  Academic Registrar
  Prof. of Chemical Engineering,
  Ramaiah Institute of Technology (Affiliated to VTU)

Mr. Jayaram E S

Co-opted Chartered Accountant.

Academician (Woman)

Chancellor

Vice Chancellor

Academician

This is for your kind information and needful action.

Yours faithfully

For M.S. Ramaiah University of Applied Sciences

Dr. M.R.Jayaram

Chancellor



## M.S. RAMAIAH UNIVERSITY OF APPLIED SCIENCES



# PROCEEDINGS OF THE FEE REGULATION COMMITTEE MEETING HELD ON 2<sup>ND</sup> MAY 2023

Venue- S1 Board Room, Ramaiah University of Applied Sciences

Chairman: Justice (Retd.) N. K. Patil



### PROCEEDINGS OF THE FEE REGULATION COMMITTEE MEETING HELD ON 02.05.2023.

#### AT S1 BOARD ROOM OF RAMAIAH UNIVERSITY OF APPLIED SCIENCES AT 9.00 AM

#### **Members Present:**

Justice N K Patil
 Dr. M R Jayaram, Chancellor
 Prof. K K Raina, Vice Chancellor
 Principal Secretary, Medical Education
 Represented by Mr. Jyothi Prakash
 Prof. S Kumar, Chairman, COMEDK
 Prof. Archana, Registrar, RIT
 Chairman
 Member
 Member
 Member
 Member

7) Mr. Jairam E S, Chartered Accountant Co-opted Member

8) Dr. G S Venkatesh, Registrar Secretary

#### **Special Invitees:**

1) Mr. T S Venugopala Sastry, CFO, GEF(M)

2) Mr. Udayakumar Shetty, Finance Head-RUAS

3) Mr. Hemanth T, Joint Registrar, RUAS

4) Mr. Girish Hoysala, Chartered Accountant

5) Mr. Mohan, Chartered Accountant

Dr. G S Venkatesh, Secretary to the Committee welcomed the members of the Fee Regulation Committee and requested the Chairman to preside over the meeting. With the permission of the Chair, the agenda on proposed revision of fees in respect of some of the programs offered by M S Ramaiah University of Applied Sciences was taken up for discussion.

The Secretary briefed the members that the Fee Regulatory Committee meeting held on 04.08.2022 has fixed the fee structure for various programs for the year 2022-23, 2023-24 & 2024-25 as follows:

Sl No	Faculty	Program	Branch	Fee Fixed for 2021-22	Fee Fixed for 2022-23
			UG Programs		
1	FET	B Tech	Aerospace Engg	2,40,000	2,40,000
			Automotive Engg	2,40,000	2,40,000
			Civil Engg	2,40,000	2,40,000
			Computer Science & Engg	3,40,000	3,40,000
			Electrical & Electronics Engg	2,40,000	2,40,000
			Electronics & Communication Engg	2,40,000	2,40,000
			Mechanical Engg	2,40,000	2,40,000
			Artificial Intelligence & Machine Learning	2,40,000	2,40,000
			Information Science & Engg	2,40,000	2,40,000
			Mathematics And Computing	2,40,000	2,40,000
			Robotics	2,40,000	2,40,000
2	FAD	B Des	Product Design	1,86,750	2,00,000
			Fashion Design	1,86,750	2,00,000
			Interaction Design	-	2,15,000
3	FMPS	B Sc	Chemistry	76,750	1,00,000



Sl Faculty No		Program	Branch	Fee Fixed for 2021-22	Fee Fixed for 2022-23	
			Mathematics	76,750	1,00,000	
			Physics	76,750	1,00,000	
			Statistics	76,750	1,00,000	
4	FDS	BDS		6,70,250	7,50,000	
5	FPH	B Pharma		1,91,750	2,05,000	
		Pharma D		3,26,750	3,40,000	
6	FHMCT	ВНМ		1,56,750	1,75,000	
7	FMC	B Com		81,750	1,00,000	
		BBA		1,09,750	1,25,000	
8	FLAHS	BSc Hons	Biotechnology	1,06,750	1,40,000	
			Food Processing & Technology	1,21,750	1,40,000	
			Cardiac Care Technology (CCT)	1,86,750	2,40,000	
			Dialysis Therapy Technology (DTT)	1,40,000	1,40,000	
			Medical Radiology & Imaging Technology (MRIT)	1,66,750	2,15,000	
			Anaesthesia & Operation Theatre Technology (AOTT)	1,50,000	1,90,000	
			Optometry (Opt)	1,50,000	1,65,000	
9	SSS	BA	Sociology	1,01,750	1,15,000	
		BSc	B Sc (Hons)- (Data Science & Analytics)	1,26,750	1,40,000	
			B Sc (Hons)- Psychology	1,21,750	1,35,000	
			B Sc (Hons)-Economics	1,01,750	1,15,000	
10	SOL	BSc LLB		1,26,750	1,40,000	
		BA LLB				
			PG Programs			
1	FET	M Tech	Aerospace Engg	2,01,750	2,15,000	
			Structural Engg		2,40,000	
			Construction Engg & Management	2,26,750	2,40,000	
			Environmental Engg & Management	2,01,750	2,15,000	
			Transportation Engg	2,01,750	2,15,000	
			Data Science & Engg	2,01,750	2,15,000	
			Artificial Intelligence & Machine Learning	2,01,750	2,15,000	
			Robotic Engg	2,01,750	2,15,000	
2	FAD	M Des	Product Design	2,01,750	2,15,000	
	77.45		Fashion Design	2,01,750	2,15,000	
3	FMPS	M Sc	Applied Solid State Physics	76,750	95,000	
			Optoelectronics	76,750	95,000	
			Nuclear Physics & Technology	76,750	95,000	
			Applied Mathematics	76,750	95,000	
			Analytical Chemistry	76,750	95,000	
			Industrial Chemistry	76,750	95,000	



Sl No	Faculty	Program	Branch	Fee Fixed for 2021-22	Fee Fixed for 2022-23
			Organic Chemistry	76,750	95,000
4	FDS	MDS	Oral Medicine & Radiology	4,22,076	4,25,000
			Periodontics	10,65,000	10,65,000
			Oral & Maxillofacial Surgery	12,65,000	14,75,000
			Conservative Dentistry & Endodontics	12,65,000	14,75,000
			Orthodontics & Dentofacial Orthopaedics	12,65,000	14,75,000
			Oral Pathology & Microbiology	4,22,076	4,25,000
			Public Health Dentistry	4,22,076	4,25,000
			Pedodontics & Preventive Dentistry	10,65,000	10,75,000
			Prosthodontics, Crown & Bridge	10,65,000	14,75,000
5	FPH	M	Pharmacognosy	176750	1,90,000
		Pharma	Pharmaceutical Chemistry	1,76,750	1,90,000
			Pharmaceutics	1,86,750	2,00,000
			Pharmacology	1,86,750	2,00,000
			Pharmacy Practice	1,76,750	1,90,000
7	FMC	MBA	Multiple	3,26,750	3,40,000
		M Com	Regular	76,750	90,000
8	FLAHS	MSc	Biotechnology	1,01,750	1,40,000
			Food Science & Technology	1,16,750	1,50,000
			Food Nutrition & Dietetics	-	1,40,000
			Molecular & Cellular Biology	86,750	1,40,000
		MPH	Masters in Public Health	1,06,750	1,60,000
		МНА	Masters of Hospital Administration	2,11,750	2,25,000
9	SSS	MA	Public Policy	1,76,750	1,90,000

He mentioned that the fee structure for the Faculty of Engineering & Technology for 2022-23 was similar to that of 2021-22 and noted that the admission in some of the branches was rather poor ranging from 30 % to 100% as detailed follows:

	2020-21		2021-22		2022-23	
UG Programs	Intake	Admn	Intake	Admn	Intake	Admn
B Tech-Automotive	60	7	60	12	30	13
B Tech-Civil	60	25	60	17	30	14
B Tech-Electrical & Electronics	60	30	60	38	60	31
B Tech-Mechanical	120	19	120	32	60	15
B Sc (Hons)P/C/M/S/CS/E	120	61	120	47	60	22
B Sc (Hons)DTT	30	11	30	13	30	9
B Sc (Hons)Optometry	30	17	30	17	30	12
B Sc(Hons)-LLB	-	-	60	10	60	16

He mentioned that many developments have taken place subsequent to the Fee Regulation Committee meeting held on  $4^{th}$  August, 2022 in view of the implementation of NEP 2020/ NAAC, the details of which are as below:



- 1) University has disbursed Seed Money Grant to promote submission of proposals for Research funding to various agencies. The Seed Money Grant released to 87 researchers range from Rs. 2.00 Lakhs to Rs. 5.00 Lakhs per project aggregating to Rs. 2.57 crores during the year 2022-23.
- 2) Most of the Full-time Ph D scholars were given JRF/SRF fellowships. The stipend rates are revised from Rs. 18,000/- to Rs. 31,000/- per month for JRF and to Rs. 41,000/- for SRF causing a significant additional cost burden to the University.
- 3) University has initiated steps to implement Digital Valuation System to speed up the process of valuation and early declaration of results. The Projects is expected to cost around Rs. 2.00 Crores.
- 4) The ICT investments like establishment of Data Centre, procurement of modern computers to the Faculty of Engineering & Technology and upgradation of Hospital Information System aggregating to Rs. 29.00 Crores would be required over a period of next 2-3 years.
- 5) The University needs to provide hostel accommodation for an additional 500 students and create larger accommodation facility at Peenya.
- 6) Pharmacy block renovation which is in progress and likely to be completed by 2023-24 is expected to need further capital expenditure of Rs. 11.00 crores.

He further informed that the University is going for NAAC accreditation and as per Criteria 4, University has to spend minimum of 40% of non-salary expenditure towards infrastructure augmentation every year which amounts to spending nearly Rs. 24.00 crores every academic year. He noted that, all these developments have necessitated revision of fees to ensure quality education along with good infrastructural facilities to the students.

In the light of the foregoing, he proposed the following Fee Structure for the program offered at Ramaiah University of Applied Sciences for the year 2023-24:

PROGRAM	SPECIALIZATION	QUOTA	2022-23 (Actual)	2023-24 (**)	
Engg:					
B Tech	AI&ML	RUASAT	240,000	400,000	
	ISE	RUASAT	240,000	400,000	
	M&C	RUASAT	240,000	350,000	
	CSE	RUASAT	340,000	500,000	
	ME	RUASAT	240,000	260,000	
	ASE	RUASAT	240,000	260,000	
	AE	RUASAT	240,000	260,000	
	CE	RUASAT	240,000	240,000	
	EEE	RUASAT	240,000	240,000	
	ECE	RUASAT	240,000	300,000	
	Robo	RUASAT	240,000	300,000	
	All	CET	111,796	114,104	(*)
	All	COMEDK	262,156	273,485	(*)
M Tech	All	Mgt	215,000	213,000	
	SE & CEM	Mgt	240,000	233,000	
	All	PGCET	117,310	124,599	(*)
Dental:					



PROGRAM	SPECIALIZATION	QUOTA	2022-23 (Actual)	2023-24 (**)	
BDS		Mgt	830,250	630,000	
		NRI	980,250	980,000	
		NEET	179,108	178,858	(*)
MDS	OMDR	Mgt	432,576	430,000	
	Perio	Mgt	1,075,500	1,075,500	
	Oral & Maxillofacial	Mgt	1,475,000	1,475,000	
	Conserv & Endo	Mgt	1,475,000	1,475,000	
	Ortho & Dentofacial	Mgt	1,475,000	1,475,000	
	Oral Path & Micro	Mgt	432,576	430,000	
	Public health	Mgt	432,576	430,000	
	Pedo & preventive	Mgt	1,075,500	1,075,500	
	Prostho	Mgt	1,475,000	1,475,000	
		NRI	1,873,750	1,882,000	
		PGCET	430,826	460,501	(*)
Pharma:					
B Pharm		Mgt	205,000	250,000	
		CET	66,500	66,090	(*)
Pharm D		Mgt	340,000	373,000	
		CET	107,500	109,550	(*)
M Pharm	Cognosy	Mgt	190,000	210,000	
	Chemistry	Mgt	190,000	210,000	
	Practice	Mgt	190,000	210,000	
	Ceutics	Mgt	200,000	230,000	
	Cology	Mgt	200,000	230,000	
		PGCET	92,000	99,120	(*)
Mgt & Commerce:					
B Com		Mgt	100,000	150,000	
BBA		Mgt	125,000	150,000	
MBA		Mgt	340,000	350,000	
		PGCET	106,310	114,289	(*)
M Com		Mgt	90,000	Disc	
Life & Allied Sciences:					
B Sc (Hons)	BT & FPT	Mgt	140,000	175,000	
	CCT	Mgt	240,000	236,000	
		CET	50,000	46,600	(*)
	DTT	Mgt	165,000	161,000	



PROGRAM	SPECIALIZATION	QUOTA	2022-23 (Actual)	2023-24 (**)	
		CET	50,000	46,600	(*)
	MRIT	Mgt	215,000	211,000	
		CET	50,000	46,600	(*)
	OTT	Mgt	190,000	186,000	T
		CET	50,000	46,600	(*)
	Opto	Mgt	165,000	161,000	
		CET	50,000	46,600	(*)
MSc	ВТ	Mgt	140,000	154,000	
	MCB	Mgt	140,000	144,000	
MHA MPH Arts & Design: B Des M Des Social Sciences: B Sc(Hons) BA (Hons) MA (PP) Hospitality & Catering: BHM	FND	Mgt	140,000	164,000	
	FST	Mgt	140,000	164,000	
МНА		Mgt	225,000	249,000	
МРН		Mgt	160,000	184,000	
Arts & Design:					
B Des	PD&FD	Mgt	200,000	213,000	
	ID	Mgt	215,000	238,000	
M Des		Mgt	215,000	218,000	
Social Sciences:					
B Sc(Hons)	DSA	Mgt	140,000	250,000	
	Psy	Mgt	135,000	200,000	
	Eco	Mgt	115,000	150,000	
BA (Hons)	Socio	Mgt	115,000	115,000	
MA (PP)		Mgt	190,000	192,000	
Hospitality & Catering:					
ВНМ		Mgt	175,000	179,000	
Law;					
BA (Hons) LLB		Mgt	160,000	200,000	
BSc (Hons) -LLB		Mgt	140,000	200,000	
Maths & Physics:					
BSc	All	Mgt	100,000	99,900	
MSc	All	Mgt	95,000	96,000	
Nursing:				3 5,5 5 8	
GNM		CET	38,800	34,770	(*)
		Mgt	114,300	110,000	
PBBSc N		CET	50,000	46,600	(*)
		Mgt	85,000	81,000	



PROGRAM	SPECIALIZATION	QUOTA	2022-23 (Actual)	2023-24 (**)	
BSc N		CET	46,250	42,625	(*)
		Mgt	240,000	236,000	
MSc N		PGCET	120,000	124,800	(*)
		Mgt	165,000	165,000	
Physiotherapy					
ВРТ		Mgt	3,00,00	3,00,00	
MPT		Mgt	4,00,00	4,00,00	

#### Medical

SI No	Program	Private qu	ıota fee pa	NRI/Others (Q) quota fee pa						
		2022-23	Proposed for 2023-24	2022-23	Proposed for 2023-24					
1	MBBS	22,00,000	22,00,000	40,00,000	40,00,000					
2	MD/MS									
	Anatomy	3,00,000	Fee as fixed for the Govt. Quota seats	3,00,000	Fee as fixed for the Govt. Quota seats					
	Physiology	3,00,000	Fee as fixed for the Govt. Quota seats	3,00,000	Fee as fixed for the Govt. Quota seats					
	Biochemistry	3,00,000	Fee as fixed for the Govt. Quota seats	3,00,000	Fee as fixed for the Govt. Quota seats					
	Pathology	4,00,000	4,00,000	15,00,000	15,00,000					
	Pharmacology	4,00,000	Fee as fixed for the Govt. Quota seats	4,00,000	Fee as fixed for the Govt. Quota seats					
	Forensic Medicine	4,00,000	Fee as fixed for the Govt. Quota seats	4,00,000	Fee as fixed for the Govt. Quota seats					
	Microbiology	4,00,000	Fee as fixed for the Govt. Quota seats	4,00,000	Fee as fixed for the Govt. Quota seats					
	Community Medicine	4,00,000	Fee as fixed for the Govt. Quota seats	4,00,000	Fee as fixed for the Govt. Quota seats					
	Dermatology	60,00,000	60,00,000	1,20,00,000	1,20,00,000					
	Pediatrics	45,00,000	45,00,000	80,00,000	80,00,000					
	General Medicine	45,00,000	45,00,000	90,00,000	90,00,000					
	Radiation oncology	20,00,000	20,00,000	40,00,000	40,00,000					



Sl No	Program	Private qu	iota fee pa	NRI/Others (0	Q) quota fee pa
		2022-23	Proposed for 2023-24	2022-23	Proposed for 2023-24
	Radio Diagnosis	50,00,000	50,00,000	1,00,00,000	1,00,00,000
	Respiratory Medicine	35,00,000	35,00,000	65,00,000	65,00,000
	Ophthalmology	35,00,000	35,00,000	65,00,000	65,00,000
	Orthopedics	40,00,000	40,00,000	75,00,000	75,00,000
	Anesthesia	20,00,000	20,00,000	40,00,000	40,00,000
	General Surgery	40,00,000	40,00,000	75,00,000	75,00,000
	OBG	45,00,000	45,00,000	75,00,000	75,00,000
	Psychiatry	25,00,000	25,00,000	-	40,00,000
	Hospital administration	15,00,000	15,00,000	-	25,00,000
	Emergency medicine	25,00,000	25,00,000	-	40,00,000
	ENT	25,00,000	25,00,000	-	40,00,000
3	1		DM/M Ch		
	Cardiology	15,00,000	15,00,000	-	-
	Endocrinology	30,00,000	30,00,000	-	-
	Medical Gastroenterology	15,00,000	15,00,000	-	-
	Medical Oncology	10,00,000	10,00,000		-
	Nephrology	15,00,000	15,00,000	-	-
	Neurology	10,00,000	10,00,000	-	-
	Neurosurgery	10,00,000	10,00,000		-
	Pediatric Surgery	10,00,000	10,00,000	-	-
	Plastic Surgery	10,00,000	10,00,000	-	-
	Surgical Oncology	40,00,000	40,00,000	-	-
	Urology	40,00,000	40,00,000	-	-
	Vascular Surgery	10,00,000	10,00,000	-	-

<sup>(\*)</sup> Any variation in the fee structure due to revision by the Govt will accordingly be applicable

The Committee after marathon discussion deliberated on various pros & cons on the matter in detail. The Chairman specifically desired to know the reason for increase in the fee in respect of – 1) Computer Science and Engineering; 2) Al&ML; 3) Information Science & Engineering; and 4) Mathematics & Computing. The Chancellor informed that a number of infrastructural development work necessitates significant capital expenditure. He also mentioned that admissions in branches like Mechanical Engineering and Civil Engineering, is significantly less than the sanctioned intake. This, he felt, necessitated for rationalizing the fees amongst the engineering branches, taking market need & importance with respect to programmes in the interest of welfare of students and faculty.



Accordingly, the Chairman desired to know the fee charged by other comparable universities in these courses. Mr. Udayakumar Shetty, Finance Officer, informed the Committee that the fee proposed in respect of all these four branches of engineering is either less or comparable to the fee charged by other universities. Therefore, he is of the considered opinion that compared to Ramaiah university other universities are charging more which is depicted in the following table:

PROGRAM	Branch	2023-24 RUAS	PES Univ	Vidyashilp Univ	Atria Univ	Dayanand Sagar CE	Reva Univ
Engg:							
B Tech	AI&ML	400,000	11,00,000			500,000	500,000
	ISE	400,000	11,00,000	496,375		500,000	450,000
	M&C	350,000					
	CSE	500,000	11,00,000	496,375	725,000	500,000	500,000

The Committee taking into consideration proposed by finance officer as depicted above, noted that many of the similarly placed private universities are charging either higher fee or closer to the fee proposed by this University in the four branches. The Chancellor mentioned that in RV College of Engineering, Rs. 16.00 Lakhs per annum is being charged for Computer Science & Engineering. Mr. Jairam, Chartered Accountant, noted that RVCE is charging more fees and we cannot compare it with our University. He further enquired about the cash inflow required for complete implementation of ICT and Criteria 4 of NAAC. The Registrar informed that the funds needed for complete implementation of ICT requirements are around Rs. 29.00 crores and this will be implemented in a phased manner spread over 2-3 years.

Therefore, the Committee desired to know the provisional financial results for the academic year 2022-23. The Finance Officer explained the fee revenue at present stands at Rs. 113.00 crores whereas, the expenditure without depreciation is around Rs. 103.00 crores accounting for gratuity & leave credit. He further informed that if depreciation is considered, the expenditure may go up to Rs. 110.00 crores. Accordingly, he brought to the notice of the Committee that if the new proposed fees are accepted by the Committee, additional revenue of Rs. 7.00 crores are expected, which can be utilized for the proposed overall development of the University.

The Registrars of the University brought to the notice of the committee that there is a requirement of new hostel construction at Peenya campus to accommodate more students. Registrars informed that a capital expenditure of nearly Rs. 42.00 crores are required for establishing new hostel facility accommodating nearly 600 students. The Chairman noted that this is an absolute necessity both from security point of view as well as for allowing the students to make use of the library facilities at late hours. The committee also noted that providing hostel facilities will reduce the time required for commuting for the students. The Chancellor noted that the discussions in this regard with several alternatives are in advanced stage.

Prof. S Kumar desired to know whether there are any changes in fees to be collected from Medical and Dental Students for the year 2023-24. The Registrar informed that the same fee approved for the year 2022-23 is being charged for the year 2023-24 for the Undergraduate Medical & all the Clinical Postgraduate programs. He noted that, in pre and para clinical Postgraduate programs, there is need to revisit the fee structure while the demand is subdued. Prof S Kumar informed that, in case if no admissions are made for a continuous three years, there is a likelihood of National Medical Commission stopping admissions into such programs and the Medical College may have to restart these programs afresh. He felt that it is appropriate to reduce the fees for the pre & para clinical Postgraduate programs as suggested. The Chancellor informed that already a decision has been taken to the effect that if any of the students take up pre-clinical and para-clinical Postgraduate programs, then such students after successfully completing the program will be offered faculty positions



preferably in Ramaiah Medical College. The Committee after taking into consideration the views expressed by the Chancellor appreciated the stand taken by the Chancellor as apt and appropriate.

The Chairman, noted that the admissions in the School of Social Sciences is very good in the subjects of Data Sciences and Psychology whereas, it is noted to be poor in the subjects like Sociology, Economics and Public Policy. The Chancellor noted that the intake in all these subjects in the School of Social Sciences be clubbed together and admissions be made against this clubbed intake based on the demand of the student. Further, he informed that other universities are also following the same practice. The Committee felt that the suggestion of the Chancellor is very good and can be implemented on par with other universities.

The Registrar informed that in some of the programs, the fee proposed for 2023-24 is marginally reduced from the fee structure for the year 2022-23. He noted that these are very insignificant changes but can profoundly affect the perception about the Program. The Committee deliberated the matter and advised the fees to be fixed at the same rates as approved for the year 2022-23.

The Chancellor suggested that, in some of the Programs like B Com, MBA, BPT and MPT, there is a higher demand and the fee structure in these programs may be increased in order to achieve the demands of the students and to give good infrastructural support. The Committee unanimously accepted the suggestion of the Chancellor and noted that the suggestion can be implemented.

Dr. Archana, Registrar, Ramaiah Institute of Technology, noted that the Science and Technology expertise are getting into the domain of law and are becoming an integral part of learning. She noted that BSc LLB in this regard will have a higher potential in the days to come and felt that adequate publicity needs to be given for enhancing the admissions in these programs. The Chairman and the Chancellor concurred by the opinion expressed by her.

The Committee after going through the deliberations observed that there is certain need to improve the resources to meet these developmental costs besides augmenting the existing infrastructural facilities. After due deliberations, the Committee approved the Fee Structure for the various programs for the Academic Year 2023-24 as referred below:

FEE TABLE FOR THE ACADEMIC YEAR 2023-24

PROGRAM	SPECILIZATION	QUOTA	2022-23 (Actual)	2023-24 (**)	NRI
Engg:					
B Tech	AI&ML	RUASAT	240,000	400,000	7,000
	ISE		240,000	400,000	7,000
	M&C		240,000	350,000	6,000
	CSE		340,000	500,000	7,500
	ME		240,000	260,000	6,000
	ASE		240,000	260,000	6,000
	AE		240,000	260,000	6,000
	CE		240,000	240,000	5,500
	EEE		240,000	240,000	5,500
	ECE		240,000	300,000	6,000
	Robotics		240,000	300,000	7,000
	All	CET	111,796	114,104	
	All	COMEDK	262,156	273,485	
M Tech	All	Mgt	215,000	213,000	5,000
	SE & CEM	Mgt	240,000	233,000	5,500
	All	PGCET	117,310	124,599	



PROGRAM	SPECILIZATION	QUOTA	2022-23 (Actual)	2023-24 (**)	NRI
Dental:					
BDS		Mgt	830,250	630,000	
		NRI	980,250	980,000	
		NEET	179,108	178,858	
MDS	OMDR	Mgt	432,576	430,000	
	Perio	Mgt	1,075,500	1,075,500	
	Oral & Maxillofacial	Mgt	1,475,000	1,475,000	
	Conserv & Endo	Mgt	1,475,000	1,475,000	
	Ortho & Dentofacial	Mgt	1,475,000	1,475,000	
	Oral Path & Micro	Mgt	432,576	430,000	
	Public health	Mgt	432,576	430,000	
	Pedo & preventive	Mgt	1,075,500	1,075,500	
	Prostho	Mgt	1,475,000	1,475,000	
		NRI	1,873,750	1,882,000	
		PGCET	430,826	460,501	
Pharma:					
B Pharm		Mgt	205,000	250,000	3500
		CET	66,500	66,090	
Pharm D		Mgt	340,000	373,000	
		CET	107,500	109,550	
M Pharm	Cognosy	Mgt	190,000	210,000	
	Chemistry	Mgt	190,000	210,000	
	Practice	Mgt	190,000	210,000	
	Ceutics	Mgt	200,000	230,000	6000
	Cology	Mgt	200,000	230,000	
		PGCET	92,000	99,120	
Mgt &					
Commerce: B Com		24			
BBA		Mgt	100,000	1,75,000	2,500
MBA		Mgt	125,000	150,000	2,500
· IDII		Mgt	340,000	4,00,000	5,000
M Com		PGCET	106,310	114,289	
Life & Allied		Mgt	90,000	Disc	
Sciences:					
3 Sc (Hons)	BT & FPT	Mgt	140,000	175,000	2 000
	CCT	Mgt	240,000	2,40,000	2,000
		CET	50,000	46,600	3,500
	DTT	Mgt	165,000	165,000	2500
		CET	50,000		2500
	MRIT	Mgt	215,000	46,600	2000
		CET	50,000	2,15,000	3000



PROGRAM	SPECILIZATION	QUOTA	2022-23 (Actual)	2023-24 (**)	NRI
	OTT	Mgt	190,000	1,90,000	2750
		CET	50,000	46,600	
	Opto	Mgt	165,000	165000	2500
		CET	50,000	46,600	
MSc	BT	Mgt	140,000	154,000	2,250
	MCB	Mgt	140,000	144,000	2,000
	FND	Mgt	140,000	164,000	2,500
	FST	Mgt	140,000	164,000	2,500
MHA		Mgt	225,000	249,000	3,500
MPH		Mgt	160,000	184,000	2,750
Arts & Design:			····		
B Des	PD&FD	Mgt	200,000	213,000	4,000
	ID	Mgt	215,000	238,000	4,500
M Des		Mgt	215,000	218,000	4,250
Social Sciences:					
B Sc(Hons)	DSA	Mgt	140,000	250,000	2,000
	Psy	Mgt	135,000	200,000	2,000
	Eco	Mgt	115,000	150,000	2,000
BA (Hons)	Socio	Mgt	115,000	115,000	2,000
MA (PP)		Mgt	190,000	192,000	2,750
Hospitality & Catering:					
ВНМ		Mgt	175,000	179,000	3,000
Law:					
BA (Hons) LLB		Mgt	160,000	200,000	2,500
BSc (Hons) -LLB		Mgt	140,000	200,000	2,250
Maths & Physics:			12.75,550	200,000	_,_50
BSc	All	Mgt	100,000	99,900	1,750
MSc	All	Mgt	95,000	96,000	1,750
Nursing:				2 2,000	_,. 55
GNM .		CET	38,800	38,800	
		Mgt	114,300	114300	
PBBSc N		CET	50,000	46,600	
		Mgt	85,000	85,000	
BSc N		CET	46,250	42,625	
		Mgt	240,000	240,000	
MSc N		PGCET	120,000	124,800	
		Mgt	165,000	165,000	
Physiotherapy					
BPT		Mgt	3,00,000	3,50,000	



PROGRAM	SPECILIZATION	QUOTA	2022-23 (Actual)	2023-24 (**)	NRI
MPT		Mgt	4,00,000	4,50,000	

Sl	Program	Private quot	a fee	NRI/Others (Q	) quota fee
No		2022-23	Proposed for 2023-24	2022-23	Proposed for 2023-24
1	MBBS	22,00,000	22,00,000	40,00,000	40,00,000
2		I	MD/MS		
	Anatomy	3,00,000	Fee as fixed	3,00,000	Fee as fixed by
			by the Govt		the Govt
	Physiology	3,00,000	Fee as fixed	3,00,000	Fee as fixed by
			by the Govt		the Govt
	Biochemistry	3,00,000	Fee as fixed	3,00,000	Fee as fixed by
			by the Govt		the Govt
	Pathology	4,00,000	4,00,000	15,00,000	15,00,000
	Pharmacology	4,00,000	Fee as fixed	4,00,000	Fee as fixed by
			by the Govt		the Govt
	Forensic Medicine	4,00,000	Fee as fixed	4,00,000	Fee as fixed by
			by the Govt		the Govt
	Microbiology	4,00,000	Fee as fixed	4,00,000	Fee as fixed by
			by the Govt		the Govt
	Community Medicine	4,00,000	Fee as fixed	4,00,000	Fee as fixed by
			by the Govt		the Govt
	Dermatology	60,00,000	60,00,000	1,20,00,000	1,20,00,000
	Pediatrics	45,00,000	45,00,000	80,00,000	80,00,000
	General Medicine	45,00,000	45,00,000	90,00,000	90,00,000
	Radiation oncology	20,00,000	20,00,000	40,00,000	40,00,000
	Radio Diagnosis	50,00,000	50,00,000	1,00,00,000	1,00,00,000
	Respiratory Medicine	35,00,000	35,00,000	65,00,000	65,00,000
	Ophthalmology	35,00,000	35,00,000	65,00,000	65,00,000
	Orthopedics	40,00,000	40,00,000	75,00,000	75,00,000
	Anesthesia	20,00,000	20,00,000	40,00,000	40,00,000
	General Surgery	40,00,000	40,00,000	75,00,000	75,00,000
	OBG	45,00,000	45,00,000	75,00,000	75,00,000
	Psychiatry	25,00,000	25,00,000		40,00,000
	Hospital administration	15,00,000	15,00,000	-	25,00,000
	Emergency medicine	25,00,000	25,00,000	_	40,00,000
	ENT	25,00,000	25,00,000	-	40,00,000
		DN	//M.Ch.		
	Cardiology	15,00,000	15,00,000	88	-
	Endocrinology	30,00,000	30,00,000	-	-
	Medical Gastroenterology	15,00,000	15,00,000	-	_
	Medical Oncology	10,00,000	10,00,000	-	-
	Nephrology	15,00,000	15,00,000	-	-
	Neurology	10,00,000	10,00,000	-	-
	Neurosurgery	10,00,000	10,00,000	_	_
	Paediatric Surgery	10,00,000	10,00,000	-	-
	Plastic Surgery	10,00,000	10,00,000	-	-
	Surgical Oncology	40,00,000	40,00,000	_	_
	Urology	40,00,000	40,00,000	-	
	Vascular Surgery	10,00,000	10,00,000		



## <u>AGENDA -2 : Introduction of Ramaiah Memorial Scholarship Scheme</u>

The Registrar informed that in the welfare and interest of meritorious students the university is introducing the scheme of Ramaiah Memorial Scholarship for all faculties, the details of which are mentioned below:-

## SCHEME I - MERIT SCHOLARSHIP FOR B TECH BASED ON +2 PERFORMANCE

CBSE/ICSE	STATE BOARD	SCHOLARSHIP
Above 9.5 CGPA	90% & above	30,000
Between 9.0 & 9.49 CGPA	80 - 89.99%	20,000
	Above 9.5 CGPA  Between 9.0 & 9.49 CGPA	Above 9.5 CGPA 90% & above

## SCHEME II - MERIT SCHOLARSHIP BASED ON JEE & K- CET

	CRITERIA	SCHOLARSHIP
1	JEE Mains Qualified (50 percentile) / CLAT Qualified (50 percentile)	40,000
2	Karnataka CET rank within 5000 (FET, FPH, RCPT, RINER, FLAHS, FMC)	30,000

## SCHEME III - MERIT SCHOLARSHIP FOR B COM/BBA/BSC/BA/ B Des

CBSE/ICSE	STATE BOARD	SCHOLARSHIP
Above 9.5 CGPA	90% & above	30.000
Between 9.0 & 9.49 CGPA	80 - 89 99%	20,000
	Above 9.5 CGPA	Above 9.5 CGPA 90% & above

## SCHEME IV - MERIT SCHOLARSHIP FOR MBA

Sl. No.	CRITERIA	SCHOLARSHIP
1	CAT/XAT>=80 %tile or MAT>=90 %tile+ Throughout 1st Division*	50,000
2	CAT/XAT>=70 %tile or MAT>=85 %tile + Throughout 1st Division*	40,000
3	CAT/XAT>=60 %tile or MAT>=80 %tile + Throughout 1st Division*	30,000

<sup>\*</sup>Includes in 10th, +2 & degree.

## SCHEME V - STATE BASED SCHOLARSHIPS (Approx 20 students)

	CRITERIA	SCHOLARSHIP
1	Students from North East States - Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Andaman & Nicobar	25,000



## SCHEME VI – TIBETAN DIASPORA SCHOLARSHIP (Approx 2 students)

	CRITERIA	SCHOLARSHIP
1	Students from communities of Tibetan people living outside their original homeland of Tibet.	25,000

### SCHEME VII - SPORTS SCHOLARSHIP (10 students)

	CRITERIA	+2 PERFORMANCE	SCHOLARSHIP
1	Represented at the State Level in a recognized sport/games event conducted by the official governing body.	Min 60% or equivalent	30,000
2	Representing the State at the National Level in a recognized sport/game event conducted by the recognized governing body.		40,000

## SCHEME VIII- SCHOLARSHIP FOR CHILDREN OF THE EMPLOYEES

	CRITERIA	+2 PERFORMANCE	SCHOLARSHIP
1	The parent of student shall have served for the MSRUAS/ GEF for a minimum period of 3 years as a regular employee and whose services are confirmed.	equivalent	30,000

## SCHEME IX- SCHOLARSHIP FOR CHILDREN OF THE ALUMNI

CRITERI	A	PERFORMANCE	SCHOLARSHIP
The parent of student shall had degree from the institutions of a minimum period of a employee and whose services	un my MSRUAS/ GEF vears as a regular	equivalent in +2	30,000

## SCHEME X- SCHOLARSHIP FOR ORPHAN STUDENTS

	CRITERIA	PERFORMANCE	SCHOLARSHIP
1	The student shall be eligible when both parents are not alive	Min 80% or equivalent in +2 or PUC for the UG programs; or Min 80% or equivalent CGPA in the degree for all PG programs	30,000



## SCHEME XI - SCHOLARSHIP FOR DIFFERENTLY ABLED

	CRITERIA	PERFORMANCE	SCHOLARSHIP
1 Th	he students who are differently abled with min acapacitation of 30%	Min 80% or equivalent in +2 or PUC for the UG programs; or Min 80% or equivalent CGPA in the degree for all PG programs	30,000

- a) All scholarships are applicable to Academic Year 2023-24 only.
- b) Only one Scholarship can be claimed by a given student, based on his/her preference.
- c) The Home State of the students for the State Based Scholarship is decided by Aadhaar Card/Passport.
- d) The scholarships are based on merits and at the discretion of the Management. Hence, the same cannot be claimed as matter of right by any student/parent.
- e) The above scholarships are for the students who have not availed any other concessions/ scholarship or reduced fee from the Govt/ other bodies.
- f) The continuation of the scholarship under the above schemes in the subsequent Academic Years is subject to maintenance of suitable academic excellence as may be specified from time to time. However, this shall not apply to sports scholarship under Scheme VII.

The above schemes will come into force with effect from Academic Year 2023-24.

The Committee after due deliberations of the subject matter in detail and taking into consideration the welfare of meritorious students felt necessitated and appreciated this initiative and accordingly suggested following modifications to be incorporated.

- a) In scheme V, the amount of scholarship may be increased to Rs. 30,000/-
- b) In Scheme X, the amount of scholarship may be increased to Rs. 40,000/-

The Committee further opined that sufficient, effective publicity be given for the scheme (Ramaiah Memorial Scholarship Scheme) so that deserving meritorious students can avail this benefit.

### Any other matters with the permission of the Chair:

The Chairman while broadly enquiring about the welfare measures taken by the University observed that the University campus may need more greenery and more saplings may be planted in the campus.

He also suggested that the health benefit scheme may be introduced for the welfare of the employees of the University. Chancellor agreed for the suggestions given by the Chairman.

Prof. K. K. Raina, Vice Chancellor, RUAS Dr. G. S. Venkatesh, Registrar, RUAS

Justice (Retd.) N K Patil Chairman iniversity o

## **ANNEXURE 45**



#### M S RAMAIAH UNIVERSITY OF APPLIED SCIENCES

## Interest Earned on Statutory FD from 2020-21 to 2022-23

FY ->	2020-21	2021-22	2022-23
Interest Earned on Statutory			
Fund(INR)	7,502,258	5,482,102	8,564,810