ISO 9001:2015 AICTE-CII: GOLD Category Institute NAAC-'A' Grade Institute (CGPA: 3.21) NIRF-2021 Rank : 197

KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE
Opp : Yerragattu Gutta, Hasanparthy (Mandal), WARANGAL - 506 015, Telangana, INDIA.
काकतीय प्रैद्योगिकी एवं विज्ञान संस्थान, वरंगल - ५०६ ०१५ तेलंगाना, भारत
కాకతీయ సాంకేతిక విజ్ఞాన శాస్త్ర విద్యాలయం, వరంగల్ - ౫౦౬ ౦౧౫ తెలంగాణ, భారతదేశము
(An Autonomous Institute under Kakatiya University, Warangal)
(Approved by AICTE, New Delhi; Recognised by UGC under 2(f) & 12(B); Sponsored by EKASILA EDUCATION SOCIETY)
website: www.kitsw.ac.in E-mail: principal@kitsw.ac.in ✆ : +91 9392055211, +91 7382564888

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE)

B.Tech. CSE (DATA SCIENCE)–SCHEME (URR-18R23)

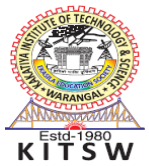
(w.e.f. 2023-24)

of

(I, II, III, IV, V, VI, VII & VIII SEMESTERS)

KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL-15

(*An Autonomous Institution under Kakatiya University, Warangal*)



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VISION OF THE INSTITUTE

- *To make our students technologically superior and ethically strong by providing quality education with the help of our dedicated faculty and staff and thus improve the quality of human life*

MISSION OF THE INSTITUTE

- *To provide latest technical knowledge, analytical and practical skills, managerial competence and interactive abilities to students, so that their employability is enhanced*
- *To provide a strong human resource base for catering to the changing needs of the Industry and Commerce*
- *To inculcate a sense of brotherhood and national integrity*

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (Data Science)

VISION OF THE DEPARTMENT

- *Attaining centre of excellence status in various fields of Computer Science and Engineering by offering worthful education, training and research to improve quality of software services for ever growing needs of the industry and society.*

MISSION OF THE DEPARTMENT

- *Practice qualitative approach and standards to provide students better understanding and profound knowledge in the fundamentals and concepts of computer science with its allied disciplines.*
- *Motivate students in continuous learning to enhance their technical, communicational, and managerial skills to make them competent and cope with the latest trends, technologies, and improvements in computer science to have a successful career with professional ethics.*
- *Involve students in analyze, design and experimenting with contemporary research problems in computer science to impact socio-economic, political and environmental aspects of the globe.*

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

UG - COMPUTER SCIENCE &ENGINEERING (Data Science)

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)	**Within first few years after graduation**, the **COMPUTER SCIENCE AND ENGINEERING (Data Science)** graduates will be able to …
PEO1: Technical Expertise	Demonstrate adept application of core computer science and data science knowledge to create impactful and transformative software solutions

PEO2: Successful Career	Attain excellence in the fields of software and data science, achieving success in one's profession, higher education, and entrepreneurship while staying up-to-date with the latest technologies
PEO3: Soft Skills and Life Long Learning	Exhibit professional ethics, effective communication and team work in solving contemporary knowledge engineering problems and to excel in social innovations.

PROGRAM OUTCOMES (POs) & PROGRAM SPECIFIC OUTCOMES (PSOs)

UG - COMPUTER SCIENCE & ENGINEERING (Data Science)– CSD

PROGRAM OUTCOMES (POs)	**At the time of graduation**, the **COMPUTER SCIENCE AND ENGINEERING (Data Science)** graduates will be able to …
PO1: Engineering knowledge	*apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems*
PO2: Problem analysis	*identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences*
PO3:Design/development of solutions	*design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental Considerations*
PO4: Conduct investigations of complex problems	*use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions*
PO5: Modern tool usage	*create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations*
PO6:The engineer and society	*apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice*
PO7:Environment and sustainability	*understand the impact of the professional engineering solutions in societal and environmental contexts, demonstrate the knowledge of, and need for sustainable development*
PO8:Ethics	*apply ethical principles and commit to professional ethics, responsibilities, and norms of the engineering practice*
PO9:Individual and team work	*function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings*
PO10:Communication	*communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions*
PO11:Project management and finance	*demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments*
PO12:Life-long learning	*recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change*

PROGRAM SPECIFIC OUTCOMES (PSOs):	
PSO1: Software Development and Quality assurance	Utilize foundational knowledge in computer science and engineering and data science techniques to develop efficient computing solutions for complex real world engineering problems.
PSO2: Maintenance	Design and implement solutions for diverse data science systems and cognitive applications, leveraging modern hardware and software tools for enhanced performance and efficiency
PSO3: Immediate professional practice	Develop innovative and efficient data science applications that enhance the effectiveness of existing data processing systems through continuous adaptation and incorporation of emerging updates

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE)
KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL – 15
(An Autonomous Institute under Kakatiya University, Warangal)

URR-18R23

SCHEME OF INSTRUCTION & EVALUATION

I-SEMESTER OF 4-YEAR B. TECH DEGREE PROGRAM

[5Th+2P+3MC]

Sl. No	Category	Course Code	Course Title	Periods/week			Credits	Evaluation scheme				
				L	T	P	C	CIE			ESE	Total Marks
								TA	MSE	Total		
1	BSC	U18MH101	Engineering Mathematics – I	3	1	-	4	10	30	40	60	100
2	ESC	U18CS102	Programming for Problem Solving using C	3	-	-	3	10	30	40	60	100
3	BSC	U18CH103	Engineering Chemistry	3	1	-	4	10	30	40	60	100
4	ESC	U18ME104	Engineering Drawing	2	-	4	4	10	30	40	60	100
5	ESC	U18CE105	Engineering Mechanics	3	1	-	4	10	30	40	60	100
6	ESC	U18CS107	Programming for Problem Solving using C Laboratory	-	-	2	1	40	-	40	60	100
7	BSC	U18CH108	Engineering Chemistry Laboratory	-	-	2	1	40	-	40	60	100
8	MC	U18CH109	Environmental Studies	2	-	-	-	10	30	40	60	100
9	MC	U18EA110	EAA *: Sports/Yoga/NSS	-	-	2	-	100	-	100	-	100
10	MC	U18EA111	Universal Human Value-I (*Induction Programme*)	-	-	-	-	-	-	-	-	-
			Total:	16	3	10	21	240	180	420	480	900

[L= Lecture, T = Tutorials, P = Practical's & C = Credits] EAA: Extra Academic Activity * indicates mandatory non-credit course

Total Contact Periods/Week: 29 Total Credits: 21

Stream-I: ME, CSE, IT, CSE (N), CSE (IoT) Stream-II: CE, EEE, ECE, ECI, CSE (AI&ML), CSE (DS)

SCHEME OF INSTRUCTION & EVALUATION
II-SEMESTER OF 4-YEAR B. TECH DEGREE PROGRAM

[5Th+4P+1MC]

Sl. No	Category	Course Code	Course Title	Periods/week			Credits	Evaluation scheme				
				L	T	P	C	CIE			ESE	Total Marks
								TA	MSE	Total		
1	BSC	U18MH201	Engineering Mathematics – II	3	1	-	4	10	30	40	60	100
2	ESC	U18CS202	Data Structures through C	3	-	-	3	10	30	40	60	100
3	BSC	U18PH203	Engineering Physics	3	1	-	4	10	30	40	60	100
4	HSMC	U18MH204	English for Communication	2	-	2	3	10	30	40	60	100
5	ESC	U18EE205	Basic Electrical Engineering	3	1	_	4	10	30	40	60	100
6	ESC	U18EE206	Basic Electrical Engineering Laboratory	-	-	2	1	40	-	40	60	100
7	ESC	U18CS207	Data Structures through C Laboratory	-	-	2	1	40	-	40	60	100
8	BSC	U18PH208	Engineering Physics Laboratory	_	_	2	1	40	-	40	60	100
9	ESC	U18ME209	Workshop Practice	-	_	2	1	40	-	40	60	100
10	MC	U18EA210	EAA: Sports/Yoga/NSS*	-	-	2	-	100	-	100	-	100
Total:				14	3	12	22	310	150	460	540	1000

[L= Lecture, T = Tutorials, P = Practical's & C = Credits] **EAA: Extra Academic Activity** *** indicates mandatory non-credit course**

Total Contact Periods/Week: 29
Total Credits: 22
Stream-I: ME, CSE, IT, CSE (N),CSE (IoT)
Stream-II: CE, EEE, ECE, ECI,CSE (AI&ML), CSE (DS)

Internships: All students should plan for mandatory 6-8 weeks internship, from end of II semester to commencement of VII semester at industry/R&D organizations/industries of national importance (IITs/IIITs/NITs). As part of Internship Evaluation in VII Semester, students are expected to submit a well-documented internship report and give an informative ppt presentation in VII semester.

SCHEME OF INSTRUCTION & EVALUATION

III-SEMESTER OF 4-YEAR B. Tech. DEGREE PROGRAM

[7Th+2P]

Sl. No	Category	Course Code	Course Title	Periods/week			Credits	Evaluation scheme				
				L	T	P	C	CIE			ESE	Total Marks
								TA	MSE	Total		
1	BSC	U18MH301	Engineering Mathematics – III	3	1	-	4	10	30	40	60	100
2	HSMC	U18TP302	Soft and Inter personal Skills	_	_	2	1	100	-	100	-	100
3	PCC	U18DS303	Object Oriented Programming through JAVA	3	1	-	4	10	30	40	60	100
4	PCC	U18DS304	Operating Systems	3	-	-	3	10	30	40	60	100
5	PCC	U18DS305	Computer Organization and Architecture	3	-	-	3	10	30	40	60	100
6	PCC	U18DS306	Advanced Data Structures	3	-	-	3	10	30	40	60	100
7	PCC	U18DS307	Formal Languages and Automata Theory	3	-	-	3	10	30	40	60	100
8	PCC	U18DS310	Object Oriented Programming through Java Laboratory	-	-	2	1	40	-	40	60	100
9	PCC	U18DS311	Advanced Data Structures Laboratory	_	_	2	1	40	-	40	60	100
			Total:	18	2	6	23	240	180	420	480	900

[L= Lecture, T = Tutorials, P = Practicals & C = Credits] Total Contact Periods/Week : 26 Total Credits: 23

Stream-I: ME, CSE, IT, CSE (N),CSE(IoT) Stream-II: CE, EEE, ECE, ECI, CSE(AI&ML), CSE (DS)

SCHEME OF INSTRUCTION & EVALUATION

IV-SEMESTER OF 4-YEAR B. Tech. DEGREE PROGRAM

[6Th+3P+2MC]

Sl. No	Category	Course Code	Course Title	Periods/week			Credits	Evaluation scheme				
				L	T	P	C	CIE			ESE	Total Marks
								TA	MSE	Total		
1	OE	U18OE401	Open Elective-II	3	1	-	4	10	30	40	60	100
2	HSMC	U18MH402	Professional English	-	-	2	1	100	-	100	-	100
3	OE	U18OE403	Open Elective-I	3	-	-	3	10	30	40	60	100
4	PCC	U18DS404	Artificial Intelligence	3	-	-	3	10	30	40	60	100
5	PCC	U18DS405	Database Management Systems	3	1	-	4	10	30	40	60	100
6	PCC	U18DS406	Python Programming	3	-	-	3	10	30	40	60	100
7	PCC	U18DS407	Database Management Systems Laboratory	-	-	2	1	40	-	40	60	100
8	PCC	U18DS408	Python Programming Laboratory	-	-	2	1	40	-	40	60	100
9	OE	U18OE411	Open Elective-I based Laboratory	_	_	2	1	40	-	40	60	100
10	MC	U18MH415	Essence of Indian Traditional Knowledge	2	-	-	-	10	30	40	60	100
			Total:	17	2	8	21	280	180	460	540	1000
11	MC	U18CH416	Environmental Studies*	2	_	_	_	10	30	40	60	100

[L= Lecture, T = Tutorials, P = Practicals & C = Credits] **Total Contact Periods/Week: 27** **Total Credits: 21**

Open Elective-I: U18OE403A: Object Oriented Programming (CSE) U18OE403B: Fluid Mechanics & Hydraulic Machines(CE) U18OE403C: Mechatronics (ME) U18OE403D R23: Web Programming (IT) U18OE403E: Microprocessors (ECE) U18OE403F: Strength of Materials (ME)	**Open Elective-II:** U18OE401A: Applicable Mathematics (MH) U18OE401B: Basic Electronics Engineering (ECE) U18OE401C: Elements of Mechanical Engineering (ME) U18OE401D: Measurements & Instrumentation (EIE) U18OE401E: Fundamentals of Computer Networks (CSE) U18OE401F: Renewable Energy Sources (EEE) U18OE401H: Essential Mathematics and statistics for Data Science(MH)	**Open Elective-I based Lab:** U18OE411A: Object Oriented Programming Laboratory (CSE) U18OE411B: Fluid Mechanics & Hydraulic Machines Laboratory (CE) U18OE411C: Mechatronics Laboratory (ME) U18OE411D: Web Programming Laboratory (IT) U18OE411E: Microprocessors Laboratory (ECE) U18OE411F: Strength of Materials Laboratory (CE)

SCHEME OF INSTRUCTION & EVALUATION

V-SEMESTER OF 4-YEAR B. TECH DEGREE PROGRAM

[6Th+3P+Seminar]

Sl. No	Category	Course Code	Course Title	Periods/week			Credits	Evaluation scheme				
								CIE			ESE	Total Marks
				L	T	P	C	TA	MSE	Total		
1	MC	U18MH501	Universal Human Values –II	2	-	-	-	10	30	40	60	100
2	PE	U18DS502	Professional Elective - I / MOOC-I	3	-	-	3	10	30	40	60	100
3	PCC	U18DS503	Design and Analysis of Algorithms	3	-	-	3	10	30	40	60	100
4	PCC	U18DS504	Software Engineering	3	-	-	3	10	30	40	60	100
5	PCC	U18DS505	Compiler Design	3	-	-	3	10	30	40	60	100
6	PCC	U18DS506	Data Mining and Data Warehousing	3	-	-	3	10	30	40	60	100
7	PCC	U18DS507	Advanced Java Programming Laboratory	-	-	2	1	40	-	40	60	100
8	PCC	U18DS508	Design and Analysis of Algorithms Laboratory	-	-	2	1	40	-	40	60	100
9	PCC	U18DS509	Data Mining and Data Warehousing Laboratory	-	-	2	1	40	-	40	60	100
10	PROJ	U18DS510	Seminar	-	-	2	1	100	-	100	-	100
Total:				17	-	8	19	280	180	460	540	1000
***Additional Learning*:** *Maximum credits allowed for Honours/Minor in Engineering*				-	-	-	*7*	-	-	-	-	-
Total credits for students opted for Honours/Minor:				-	-	-	*19+7*	-	-	-	-	-

** List of courses for additional learning through **MOOCs** towards Honours/Minor in Engineering shall be prescribed by the department under Honours/ Minor Curricula*

[L= Lecture, T = Tutorials, P = Practicals & C = Credits] Total Contact Periods/Week : 25Total Credits : 19

Professional Elective-I / MOOC-I:
U18DS502A: Computer Networks
U18DS502B: Advanced Database Management System
U18DS502C: Computer Graphics
U18DS502M: MOOCs course

MOOCs: Students are encouraged to do Massive Open Online Courses (MOOCs) on SWAYAM platform (https://www.swayam.gov.in) offered by NPTEL, CEC, IIM-B, IGNOU. Students shall contact the Head of the Department (HoD) to get their interested MOOCs approved by the HoD/Dean Academic Affairs for proper transfer of the credits for the MOOCs.

SCHEME OF INSTRUCTION & EVALUATION

VI-SEMESTER OF 4-YEAR B. TECH DEGREE PROGRAM

[6Th+3P+Miniproject]

Sl. No	Category	Course Code	Course Title	Periods/week			Credits	Evaluation scheme				
				L	T	P	C	CIE			ESE	Total Marks
								TA	MSE	Total		
1	HSMC	U18TP601	Quantitative Aptitude & Logical Reasoning	2	-	-	1	10	30	40	60	100
2	HSMC	U18MH602	Management Economics and Accountancy	3	-	-	3	10	30	40	60	100
3	PE	U18DS603	Professional Elective - II / MOOC-II	3	-	-	3	10	30	40	60	100
4	PCC	U18DS604	Big Data Analytics	3	-	-	3	10	30	40	60	100
5	PCC	U18DS605	Machine Learning	3	-	-	3	10	30	40	60	100
6	PCC	U18DS606	R Programming	3	1	-	4	10	30	40	60	100
7	PCC	U18DS607	Big Data Analytics Laboratory	-	-	2	1	40	-	40	60	100
8	PCC	U18DS608	Machine Learning Laboratory	-	-	2	1	40	-	40	60	100
9	PCC	U18DS609	R programming Laboratory	-	-	2	1	40	-	40	60	100
10	PROJ	U18DS610	Mini Project	-	-	2	1	100	-	100	-	100
Total:				17	1	8	21	280	180	460	540	1000
Additional Learning*: *Maximum credits allowed for Honours/Minor in Engineering*				-	-	-	*7*	-	-	-	-	-
Total credits for *students opted for* ***Honours/Minor students:***				-	-	-	*21+7*	-	-	-	-	-

** List of courses for additional learning through **MOOCs** towards Honours/Minor in Engineering shall be prescribed by the department under Honours/ Minor Curricula*

[L= Lecture, T = Tutorials, P = Practicals & C = Credits] **Total Contact Periods/Week: 26** **Total Credits: 21**

Professional Elective-II / MOOC-II:
U18DS603A: Computer Vision and Image Processing
U18DS603B: Information Retrieval Systems
U18DS603C: Soft Computing
U18DS603M: MOOCs Course

SCHEME OF INSTRUCTION & EVALUATION

VII-SEMESTER OF 4-YEAR B. TECH DEGREE PROGRAM

[4Th+2P+1MC+1MP-I]

Sl. No	Category	Course Code	Course Title	Periods/week			Credits	Evaluation scheme				
				L	T	P	C	CIE			ESE	Total Marks
								TA	MSE	Total		
1	OE	U18OE701	Open Elective – III	3	_	_	3	10	30	40	60	100
2	PE	U18DS702	Professional Elective - III / MOOC-III	3	-	-	3	10	30	40	60	100
3	PE	U18DS703	Professional Elective - IV / MOOC-IV	3	-	-	3	10	30	40	60	100
4	PCC	U18DS704	Data Visualization	3	-	-	3	10	30	40	60	100
5	PCC	U18DS705	Internet of Things Laboratory	-	-	2	1	40	-	40	60	100
6	PCC	U18DS706	Data Visualization Laboratory	-	-	2	1	40	-	40	60	100
7	PROJ	U18DS707	Major Project - Phase – I	-	-	6	3	100	-	100	-	100
8	MC	U18DS708	Internship Evaluation	-	-	2	-	-	-	-	-	-
Total:				12	_	12	17	220	120	340	360	700
Additional Learning*: *Maximum credits allowed forHonours/Minor in Engineering*				-	-	-	*7*	-	-	-	-	-
Total credits for students opted for Honours/Minor students:				-	-	-	*17+7*	-	-	-	-	-

** List of courses for additional learning through **MOOCs** towards Honours/Minor in Engineering shall be prescribed by the department under Honours/ Minor Curricula*

[L= Lecture, T = Tutorials, P = Practicals & C = Credits] Total Contact Periods/Week: 24Total Credits: 17

Open Elective-III:	Professional Elective-III / MOOC-III:	Professional Elective-IV / MOOC-IV:
U18OE602A: Disaster Management U18OE602B: Project Management U18OE602C: Professional Ethics in Engineering U18OE602D: Rural Technology and Community Development	U18DS702A: Reinforcement Learning U18DS702B: Cloud Computing U18DS702C: Social and Information Network Analysis U18DS702M: MOOCs course	U18DS703A:Robotics U18DS703B: Cognitive Computing Systems U18DS703C: Cryptography and Network Security U18DS703D: Internet of Things U18DS703M: MOOCs course

SCHEME OF INSTRUCTION & EVALUATION

VIII-SEMESTER OF 4-YEAR B. TECH DEGREE PROGRAM

[3Th+1MP-II]

Sl. No	Category	Course Code	Course Title	Periods/week			Credits	Evaluation scheme				
				L	T	P	C	CIE			ESE	Total Marks
								TA	MSE	Total		
1	PE	U18DS801	Professional Elective - V / MOOC-V	3	-	-	3	10	30	40	60	100
2	PE	U18DS802	Professional Elective - VI / MOOC-VI	3	-	-	3	10	30	40	60	100
3	OE	U18OE803	Open Elective - IV / MOOC-VII	3	-	-	3	10	30	40	60	100
4	PROJ	U18DS804	Major Project - Phase – II	-	-	14	7	60	-	60	40	100
			Total	9	-	14	16	90	90	180	220	400
Additional Learning*: *Maximum credits allowed for Honours/Minor in Engineering*				-	-	-	*7*	-	-	-	-	-
Total credits for students opted for Honours/Minor students:				-	-	-	*16+7*	-	-	-	-	-

** List of courses for additional learning through **MOOCs** towards Honours/Minor in Engineering shall be prescribed by the department under Honours/ Minor Curricula*

[L= Lecture, T = Tutorials, P = Practicals & C = Credits] **Total Contact Periods/Week: 23** **Total Credits: 16**

Professional Elective-V / MOOC-V:	Professional Elective-VI/ MOOC-VI:	Open Elective-IV/MOOC-VII:
U18DS801A: Ethical Hacking U18DS801B: Virtual Reality Technologies U18DS801C: Robotic Process Automation U18DS801M: MOOCs course	U18DS802A: Natural Language Processing U18DS802B:Fog and Edge Computing U18DS802C: Block Chain Technologies U18DS802M: MOOCs course	U18OE803A: Operations Research U18OE803B: Management Information Systems U18OE803C: Entrepreneurship Development U18OE803D: Forex &Foreign Trade U18OE803M: MOOCs Course

I to VIII SEMESTER OF 4-YEAR B. TECH DEGREE PROGRAM

SEMESTER Vs COURSE CATEGORY WEIGHTAGE

(in terms of Total No. of Courses / Total No. Credits)

Semester	Number of Courses / Number of Credits (*Course Category wise*)									
	BSC	**ESC**	**HSMC**	**PCC**	**OE**	**PE**	**PROJ**	**MC**	**TOTAL**	***B. Tech (Honours/Minor) Programme***
I	3/9	4/12	-	-	-	-	-	3/0	10/21	***Additional 20 credits through 8 courses out of the list of courses prescribed under Honours/Minor curricula***
II	3/9	5/10	1/3	-	-	-	-	1/0	10/22	
III	1/4	-	1/1	7/18	-	-	-	-	09/23	
IV	-	-	1/1	5/12	3/8	-	-	2/0	11/21	
V	-	-	-	7/15	-	1/3	1/1	1/0	10/19	
VI	-	-	2/4	6/13	-	1/3	1/1	-	10/21	
VII	-	-	-	3/5	1/3	2/6	1/3	1/0	08/17	
VIII	-	-	-	-	1/3	2/6	1/7	-	04/16	
Total	7/22	9/22	5/9	28/63	5/14	6/18	4/12	8/0	72/160	***(72+8) / (160+20)***
% Weightage of Course Category	13.75 % (22/160)	13.75 % (22/160)	5.625 % (9/160)	39.375% (63/160)	8.75 % (14/160)	11.25 % (18/160)	7.5 % (12/160)	0 %	100 % (160/160)	**-**