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1.Program Outcomes (POs) and Program Specific Outcomes (PSOs)

Department of Information Technology

Engineering Graduates will be able to:

- 1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. **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.
- 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.
- 4. **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.
- 5. **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.
- 6. **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.
- 7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write



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effective reports and design documentation, make effective presentations, and give and receive clear instructions.

- 11. 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.
- 12. 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.

2.Program Specific Outcomes (PSOs)

At the end of BTECH program Information Technology graduates will be able to:

PSO1: To create, select, and apply appropriate techniques, resources, modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PSO2: To manage complex IT projects with consideration of the human, financial, ethical and environmental factors and an understanding of risk management processes, and operational and policy implications.



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Course Outcome-CO-PO Mapping <u>First Semester</u>

Subje	ject Code: HS 8151 Semester: I								
Subjec	et Name :	Communicative Eng	lish	,					
		Course	Outcome						
C101.1	Communicate clearly both in the written form and orally using appropriate vocabulary and comprehend written texts to make inferences.								
C101.2		asively in different social cohesively, coherently and	U 1						
C101.3	Speak, read	and write effectively for a v	ariety of professional and s	social settings.					
C101.4	-	otive, narrative, expositor ytical and evaluative meth		nd write usingcreative,					
C101.5	Listen, comprehend and respond to different spoken and written discourses/excerpts different accents and write different genres of texts adopting various writing strategies								

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C101.1	1	2	2	1	-	1	-	-	2	3	1	1	-	-
C101.2	1	1	1	2	-	1	-	-	1	3	-	1	-	-
C101.3	2	1	2	3	-	1	1	-	-	2	1	1	3	-
C101.4	-	-	-	-	-	-	-	-	2	2	-	1	1	-
C101.5	2	2	1	2	2	1	3	-	2	3	1	1	1	-
Total	6	6	6	8	2	4	4	-	7	13	3	5	5	-
No. of COs Mapping with Pos	4	4	4	4	1	4	2	-	4	5	4	5	3	-
Average	1. 2	1. 2	1. 2	1. 6	.4	.8	.8	-	1. 4	2. 6	.6	1	1	ı
Round (Average)	1	1	1	2	0	1	1	-	1	3	1	1	1	_



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Subje	ct Code:	MA8151	Semester:	I						
Subjec	et Name :	Engi	neering Mathematics	s - I						
		Course C	Outcome							
C102.1	Use both the	limit definition and rules of	differentiation to different	iate functions.						
C102.2	Apply differe									
C102.3	of Calculus substitution,	egrals both by using Rieman, also evaluate integrals partial fractions and integrals divergence of improper	using techniques of egration by parts, in ac	integration, such as ddition to determine						
C102.4	110		mpute multiple integrals, area, volume, integrals in polar to change of order and change of variables.							
C102.5	Apply variou	us techniques in solving diffe	erential equations.							

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C102.1	3	3	3	1	-	-	-	-	2	-	-	2	1	-
C102.2	3	3	3	1	-	-	-	-	2	-	-	2	1	-
C102.3	3	3	3	1	-	-	-	-	2	-	-	2	1	-
C102.4	3	3	3	1	-	-	-	-	2	-	-	2	1	-
C102.5	3	3	3	1	-	-	-	-	2	-	-	2	1	-
Total	15	15	15	5	-	-	-	-	10	-	-	10	5	-
No. of COs Mapping with Pos	5	5	5	5	-	-	-	-	5	-	-	-	-	-
Average	3	3	3	1	-	ı	ı	-	2	1	-	2	1	1
Round (Average)	3	3	3	1	_	-	-	_	_	_	-	2	1	_



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Subject	bject Code: PH8151 Semester: I									
Subject	Name:		Engineering Physics							
		Course	Outcome							
C103.1	•		ls and be able to choose icity for different application							
C103.2	Illustrate t	he advantages of optical co	advantages of optical communication using LASER.							
C103.3	Explain the		solids, liquids, good therr	nal conductorand bad						
C103.4			wledge of quantum mechanics and classical mechanics in problems related to science and technology							
C103.5	Describe techniques		tal defects and various cry	ystalgrowth						

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C103.1	1	1	1	-	-	-	-	-	-	-	-	-	-	-
C103.2	2	1	1	-	-	-	-	-	-	-	-	-	-	-
C103.3	2	1	1	-	-	-	-	-	-	-	-	-	-	-
C103.4	2	1	1	-	-	-	-	-	-	-	-	-	-	-
C103.5	2	2	2	-	-	-	-	-	-	-	-	-	-	-
Total	9	6	6	-	-	-	-	-	-	-	-	-	-	-
No. of COs Mapping with Pos	3	3	3	-	-	-	-	-	-	-	-	-	-	-
Average	1. 83	1. 17	1. 17	-	-	-	-	-	-	-	-	-	-	-
Round (Average)	2	1	1	-	-	-	-	-	-	-	-	-	-	-



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Subject	t Code:	CY 8151	Semester:	I						
Subject	Name:	E	ngineering Chemistr	y						
		Course (Outcome							
C104.1		the importance of water tecand industrial applications.	hnology in the purification	on of water and its						
C104.2	Illustrate application	the concepts of adsorption ns.	in surface chemistry and	d catalysis and its						
C104.3		ne use of phase rule in ide are of alloys.	ntifying its applications	in metallurgyand						
C104.4	-	• 1	e different types of industrial techniques of petroleum processing and the conformal on of calorific values and combustion parameters.							
C104.5		he fundamentals of different processes and batteries.	ent alternative sources	of energy,the						

со	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C104.1	3	1	2	3	2	-	-	-	2	-	3	3	-	-
C104.2	3	2	3	2	2	-	-	-	2	1	2	3	-	-
C104.3	3	3	2	2	2	1	1	1	1	1	1	2	-	-
C104.4	2	3	3	2	3	ı	ı	ı	1	ı	3	3	1	-
C104.5	3	2	3	2	3	-	-	-	2	1	2	3	1	-
Total	14	11	13	11	12	-	-	-	8	1	10	14	-	-
No. of COs Mapping with Pos	5	5	5	5	5	-	-	-	5	-	4	5	-	-
Average	2. 80	2. 20	2. 60	2. 20	2. 40	-	-	-	1. 60	1	2. 00	2. 80	-	-
Round (Average)	3	3	3	2	2	-	-	-	2	-	2	3	-	-



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Subject	Code:	GE8151	Semester :	I						
Subject	Name:	Problem S	olving and Python Pro	gramming						
		Course	Outcome							
C105.1	Discuss the logical solutions through Flowcharts, Algorithms and Pseudo code									
C105.2	Explain the	syntax for python programi	ning constructs.							
C105.3	Compute th	ne flow of the program to ob	tain the programmatic solution	n.						
C105.4	Compute th	ne compound data using Pytl	ound data using Python lists, tuples, and dictionaries							
C105.5	Apply pyth	on programs to read and wri	te data from/to files.							

со	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C105.1	2	1	1	1	-	-	-	-	-	-	-	-	1	-
C105.2	2	1	1	1	2	-	-	-	-	-	-	-	2	2
C105.3	2	1	1	1	2	-	-	-	-	-	-	-	1	2
C105.4	2	1	1	1	2	-	-	-	-	-	-	-	2	2
C105.5	3	2	2	1	3	-	-	-	-	-	-	-	1	2
Total	11	6	6	5	9	-	-	-	-	-	-	-	7	8
No. of COs Mapping with Pos	5	5	5	5	5	1	1	-	1	1	-	-	5	4
Average	2.2	1.2	1.2	1	1.8	ı	-	-	-	-	-	-	1.4	2
Round (Average)	2	2	2	1	2	-	-	-	-	-	-	-	1	2



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Subject	t Code:	GE8152	I									
Subject	Name:		Engineering Graphics									
		Course	Outcome									
C106.1	Familiariz	e with the fundamentals a	with the fundamentals and standards of Engineering graphics									
C106.2	Project ort	thographic projections of l	ines and plane surfaces									
C106.3	Draw the	projections of a simple sol	ids and truncated solids									
C106.4	Draw the	sectional view and develop	tional view and develop the lateral surface of simple and truncated solids.									
C106.5	Visualize	and to project isometric ar	d perspective sections of si	mple solids.								

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C106.1														
C106.2														
C106.3														
C106.4														
C106.5														
Total														
No. of COs Mapping with Pos														
Average														
Round (Average)														



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Subject	t Code :	GE8161	Semester :	I					
Subject	Name:	Problem Solving	and Python Progran	nming Laboratory					
	Course Outcome								
C107.1	Write, test	Write, test, and debug simple Python programs.							
C107.2	Implemen	t Python programs with co	onditionals and loops.						
C107.3	Develop P	ython programs step-wise	by defining functions and	calling them.					
C107.4	Demonstr	ate the use Python lists, tu	ples, and dictionaries for r	epresenting					
	compound data.								
C107.5	Illustrate the concepts of read and write data from/to files in Python.								

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C107.1	1	1	1	1	-	-	-	-	-	=	-	-	1	-
C107.2	3	2	2	1	3	-	-	-	-	-	-	-	2	1
C107.3	3	3	3	2	3	-	-	-	-	ı	-	-	1	2
C107.4	3	2	2	1	3	-	-	-	-	-	-	-	2	1
C107.5	1	1	1	1	1	-	-	-	-	1	-	-	2	1
Total	11	9	9	6	10	-	-	-	-	1	-	-	8	5
No. of COs Mapping with Pos	5	5	5	5	5	-	-	-	-	-	-	-	5	4
Average	2.2	1.8	1.8	1.2	2	-	-	-	-	ı	-	-	1.6	1.2
Round (Average)	2	2	2	1	2	-	-	-	-	-	-	-	2	1



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Subject	t Code :	BS8161	Semester:	I							
Subject	Name:	Physics	and Chemistry Lab	oratory							
	Course Outcome										
C108.1	Ability to explain the young's modulus by non uniform bending and rigidity modulus by torsion pendulum.										
C108.2	•	omprehend the compressibngth of mercury spectrum.	ility of given liquid using	g ultrasonic interferometer							
C108.3	•	stimate the thickness of thi to estimate the strength of	•								
C108.4	Ability to estimate the strength of acid by conductometry and PHmetry										
C108.5	O8.5 Able to estimate water quality parameters.										

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C108.1	3	2	2	3	3	-	-	-	-	-	-	1	-	-
C108.2	3	2	2	2	3	-	-	-	-	-	-	1	-	-
C108.3	1	1	1	1	1	-	-	-	-	-	-	1	-	-
C108.4	2	2	2	2	2	-	-	-	-	-	-	1	-	-
C108.5	2	2	2	2	2	-	-	-	-	-	-	1	-	-
Total	11	9	9	10	11	-	-	-	-	-	-	5	-	-
No. of COs Mapping with Pos	5	5	5	5	5	-	-	-	-	-	-	5	-	-
Average	2.2 0	1.8 0	1.8 0	2.2	2.2	ı	-	-	-	ı	-	1.0 0	-	-
Round (Average)	2	2	2	2	2	1	-	-	-	-	-	1	-	1



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Course Outcome-CO-PO Mapping Second Semester

Subject	Code:	HS 8251	Semester :	II						
Subject	Name:		Technical English							
		Cours	e Outcome							
C109.1	Read tech									
C109.2	Listen and comprehend lectures and talks in their areas of specialization write effectively for a variety of professional and social settings.									
C109.3	Speak and informal c		nd effectively in varied form	mal and						
C109.4			nd persuasively and produce different types of writing sucha ports and winning job applications.							
C109.5		cate clearly using al correspondences.	technical vocabulary in	their						

СО	РО	РО	РО	РО	РО	РО	РО	РО	РО	РО	РО	РО	PS	PS
CO	1	2	3	4	5	6	7	8	9	10	11	12	01	O2
C109.1	3	2	-	-	-	1	-	-	-	-	1	2	3	2
C109.2	3	2	-	2	-	1	-	-	-	-	1	-	3	3
C109.3	3	2	2	-	2	1	-	-	-	-	1	2	2	3
C109.4	3	2	2	2	-	1	-	-	-	-	1	1	2	3
C109.5	3	2	2	-	1	1	-	-	-	-	1	-	3	3
Total	15	10	6	4	3	5	-	-	-	-	5	5	13	15
No. of COs Mapping with Pos	5	5	3	2	2	5	-	-	-	-	5	3	5	5
Average	3	2	1. 2	0. 8	.6	1	-	-	-	-	1	1	2. 6	3
Round (Average)	3	2	1	1	1	1	-	-	-	-	1	1	3	3



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Subject	Code:	MA8251	Semester:	II					
Subject	Name:	Eng	ineering Mathematics	s - II					
		Course	Outcome						
C110.1		will have a good understand action of a matrix, Symmetr	-	_					
C110.2	point func	vill have a good understand tion and related identities, ss, Stokes and Green's the	Evaluation of line, surface	e and volume integrals					
C110.3	Students v mapping.	vill have a good understand	ling of Analytic functions	and conformal					
C110.4	11 9								
C110.5	transform	vill have a good understand of simple functions, prope n to differential equations	rties, various related theor	rems and					

со	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C110.1	3	3	3	1	-	-	-	-	2	-	-	2	1	1
C110.2	3	3	3	1	-	-	-	-	2	-	-	2	1	1
C110.3	3	3	3	1	-	-	-	-	2	-	-	2	1	1
C110.4	3	3	3	1	-	-	-	-	2	-	-	2	1	1
C110.5	3	3	3	1	-	-	-	-	2	-	-	2	1	1
Total	15	15	15	5	-	-	-	-	10	-	-	10	5	5
No. of COs Mapping with Pos	5	5	5	5	-	-	-	-	5	-	-	5	-	-
Average	3	3	3	1	-	-	-	-	2	-	-	2	1	1
Round (Average)	3	3	3	1	_	_	_	_	_	-	_	_	-	-



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Subject	ect Code : PH8252 Semester : II									
Subject	Name:	PHYSICS I	FOR INFORMATION	N SCIENCE						
	Course Outcome									
C111.1	Distinguis theories	Distinguish conductor, Semiconductors and insulators based on classical and quantu heories								
C111.2	Explain el semicondu	-	ort properties and carrier m	nechanism in						
C111.3	1	nderstanding of the funda ation in data storage device	mentals of magnetic materies.	ials, their classifications						
C111.4		Understand the optical properties of materials and applications of these properties in fabrication of modern optical and electro-optical devices								
C111.5	Interpret how the properties of Nano-objects depend on confining electron waves, and how this can be exploited.									

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C111.1	2	1	1	-	-	-	-	-	-	-	-	1	-	-
C111.2	2	1	1	-	-	1	-	-	-	-	-	1	1	-
C111.3	2	1	1	-	-	-	1	-	-	-	-	1	1	-
C111.4	2	1	1	-	-	-	-	-	-	-	-	1	-	-
C111.5	2	1	1	-	-	-	-	-	-	-	-	1	1	-
Total	10	5	5	-	-	-	-	-	-	-	-	5	1	-
No. of COs Mapping with Pos	5	5	5	-	-	-	-	-	-	-	-	-	1	-
Average	2	1	1	-	-	-	-	-	-	-	-	1	1	-
Round (Average)	2	1	1	_	_	_	-	_	_	_	_	1	-	-



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Subject	Code:	BE8255	Semester:	II
Subject	Name:		ECTRICAL,ELECTRO UREMENTSENGINEE	
		Outcome		
C112.1				
C112.2				
C112.3				
C112.4				
C112.5				

со	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C112.1														
C112.2														
C112.3														
C112.4														
C112.5														
Total														
No. of COs Mapping with Pos														
Average														
Round (Average)														



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Subject	t Code :	IT8201	Semester:	II							
Subject	Name:	INFORMATI	ON TECHNOLOGY	ESSENTIALS							
		Course	Outcome								
C113.1	Design and	d deploy web-sites									
C113.2	Design an	d deploy simple web-appl	ications								
C113.3	Create sim	nple database applications									
C113.4	Develop ii	nformation system									
C113.5	Describe t	the basics of networking an	nd mobile communications								

СО	РО	РО	РО	РО	PO	РО	PO	PO	PO	PO	РО	PO	PS	PS
	1	2	3	4	5	6	7	8	9	10	11	12	01	O2
C113.1	3	2	2	2	-	-	-	-	-	-	-	-	1	-
C113.2	3	2	2	2	-	-	-	-	-	-	-	-	1	-
C113.3	3	2	2	2	-	-	-	-	-	-	-	-	1	-
C113.4	3	2	2	2	-	-	-	-	-	-	-	-	1	1
C113.5	2	1	1	1	-	-	-	-	-	-	-	-	1	-
Total	14	9	9	9	-	-	-	-	-	-	-	-	5	-
No. of COs Mapping with Pos	5	5	5	5	-	-	-	-	-	-	-	-	5	1
Average	2.8	1.8	1.8	1.8	-	-	-	ı	-	-	-	-	1	1
Round (Average)	3.0	2.0	2.0	2.0	ı	-	ı	ı	-	-	ı	-	1.0	1



ST. JOSEPH

COLLEGE OF ENGINEERING



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Subject	t Code :	CS8251	Semester :	II				
Subject	Name:	P	ROGRAMMING IN	С				
		Course	Outcome					
C114.1	Explain tl	ne syntax for C programm	ing					
C114.2	Associate	the programs in 'C' for re	al world situation					
C114.3	Apply the problems.	concepts of Arrays, String	gs in 'C' language for user	defined				
C114.4	Apply the concept of functions and pointers, Programs with structure using 'language.							
C114.5	Discuss to read and write data from/to files in 'C' Programs.							

CO	РО	РО	РО	РО	РО	РО	РО	РО	РО	РО	РО	РО	PS	PS
СО	1	2	3	4	5	6	7	8	9	10	11	12	01	02
C114.1	2	2	3	2	-	-	-	-	-	-	-	-	1	2
C114.2	3	3	3	1	1	-	-	-	-	-	-	-	2	3
C114.3	3	2	2	2	3	-	-	-	-	-	-	-	1	2
C114.4	3	3	3	1	3	-	-	-	-	-	-	-	3	2
C114.5	3	3	2	3	2	-	-	-	-	-	-	-	2	3
Total	14	13	13	9	9								9	12
No. of COs Mapping with Pos	5	5	5	5	4								5	5
Average	2.8	2.6	2.6	1.8	1.8								1.8	2.4
Round (Average)	3	3	3	2	2								2	2



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Subject	t Code :	GE8261	Semester :	II
Subject	Name:	ENGINEERI	NG PRACTICES LA	BORATORY
		Course	Outcome	
C115.1				
C115.2				
C115.3				
C115.4				
C115.5				

со	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C115.1														
C115.2														
C115.3														
C115.4														
C115.5														
Total														
No. of COs Mapping with Pos														
Average														
Round (Average)														



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Subject	t Code :	CE8261								
Subject	Name:	C PROC	GRAMMING LABOR	RATORY						
		Course	Outcome							
C116.1	Develop C	programs for simple applica	ations making use of basic con	nstructs						
C116.2	Apply the c	concept of conditionals and	loops in C programs.							
C116.3	Apply the	concept of functions, recurs	ion in C programs							
C116.4	Analyze th	e concept of pointers, and s	f pointers, and structures in C							
C116.5	Examine tl	he use of sequential and rand	dom access file processing.							

со	PO1	PO2	PO3	PO4	PO5	PO6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C116.1	3	3	3	3	3	-	-	-	-	-	-	-	1	3
C116.2	3	2	3	-	2	-	-	-	-	-	-	-	1	2
C116.3	2	3	2	2	3	-	-	-	-	-	-	-	1	2
C116.4	3	3	3	2	3	-	-	-	-	-	-	-	2	3
C116.5	3	2	2	-	2	-	-	-	-	-	-	-	1	2
Total	14	13	13	7	13								6	12
No. of COs Mapping with Pos	5	5	5	3	5								5	5
Average	2.8	2.6	2.6	2.3	2.6								1.2	2.4
Round (Average)	3	3	3	2	3								1	2



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Subject	t Code:	IT8211	Semester:	II						
Subject	Name:	INFORMATIO	ON TECHNOLOGY	ESSENTIALS						
Subject	. Maine .		LABORATORY							
		Course	Outcome							
C117.1	Design int	teractive websites using base	sic HTML tags, different s	tyles, links and with all.						
C117.2	Basic cont	trol elements								
C117.3	Create clie	ent side and server side pro	grams using scripts using l	PHP.						
C117.4		rnamic web sites and handle connected to database	and handle multimedia components, Create applications							
C117.5	Implemen communic	C	chnologies behind computer networks and mobile							

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C117.1	3	2	2	2	-	-	-	-	-	-	-	-	1	-
C117.2	3	2	2	2	-	-	-	-	-	-	-	-	1	-
C117.3	3	2	2	2	-	-	-	-	-	-	-	-	1	-
C117.4	3	2	2	2	-	-	=	-	-	-	-	-	1	-
C117.5	2	1	1	1	-	-	-	-	-	-	-	-	1	-
Total	14	9	9	9	-	-	-	-	-	-	-	-	5	-
No. of COs Mapping	5	5	5	5	5	5	5	5	5	5	5	5	5	5
with Pos														
Average	2.8	1.8	1.8	1.8	-	-	-	-	-	-	-	-	1	-
Round (Average)	3.0	2.0	2.0	2.0	-	-	ı	-	-	-	-	-	1.0	-



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Course Outcome-CO-PO Mapping Third Semester

Subject	t Code :	MA8351	Semester:	III						
Subject	Name:	DIS	SCRETE MATHEMAT	ICS						
		Course	Outcome							
C201.1	Understan	nd how to solve the given st	andard partial differentia	l equations						
C201.2		Ferential equations using Fo	urier series analysis whic	h plays a vital role in						
C201.3		e the physical significance wo dimensional heat flow p		<u>o</u>						
C201.4	equations	Understand the mathematical principles on transforms and partial differential equations would provide them the ability to formulate and solve some of the physical problems of engineering.								
C201.5		ffective mathematical tools by using Z transform techn								

СО	PO	РО	PO	РО	РО	РО	РО	РО	РО	РО	РО	PO	PS	PS
CO	1	2	3	4	5	6	7	8	9	10	11	12	01	O2
C201.1	3	3	3	1	-	-	-	-	1	-	-	-	3	-
C201.2	3	3	3	1	-	-	-	-	1	-	-	-	3	-
C201.3	3	3	3	1	-	-	-	-	1	-	-	-	3	-
C201.4	3	3	3	1	-	-	-	-	1	-	-	-	3	-
C201.5	3	3	3	1	-	-	-	-	1	-	-	-	3	-
Total	15	15	15	5	-	-	-	-	5	-	-	-	15	-
No. of COs Mapping														
with Pos	5	5	5	5	-	-	-	-	5	-	-	-	-	-
Average	3. 00	3. 00	3. 00	1. 00	-	-	-	-	2. 00	-	-	-	3. 00	-
Round (Average)	3	3	3	1	_	_	_	-	2	_	-	_	3	-



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Subject	Code:	CS8351	Semester:	III					
Subject	Name:	DIGITAL PR	INCIPLES AND SYS	TEM DESIGN					
		Course Outcome							
C202.1	Apply the	apply the Boolean function using k-map							
C202.2	Interpret c	combinational circuit for a	given function using logic	gates					
C202.3	Recognise	synchronous circuit for the	ne given condition						
C202.4	Recognise	ognise asynchronous circuit for the given condition							
C202.5	Apply pro	Apply programmable logic towards memory management							

CO	РО	PS	PS											
СО	1	2	3	4	5	6	7	8	9	10	11	12	01	02
C202.1	3	2	2	-	-	-	-	-	-	-	-	-	2	-
C202.2	3	2	2	-	-	-	-	-	-	-	-	-	2	-
C202.3	3	2	2	-	-	-	-	-	-	-	-	-	1	-
C202.4	3	2	2	-	-	-	-	-	-	-	-	-	2	-
C202.5	3	2	2	-	-	-	-	-	-	-	-	-	2	-
Total	15	10	10	-	-	-	-	-	-	-	-	-	9	-
No. of COs Mapping														
with Pos	5	5	5	-	-	-	-	ı	-	-	-	-	5	-
Average	3	2	2	-	-	ı	-	1	-	-	-	-	1.8	-
Round (Average)	3	2	2	-	_	-	-	1	-	-	-	-	2	-



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Subject	t Code:	CS8391	Semester:	III					
Subject	Name:	D	ATA STRUCTURES	5					
		Course	Outcome						
C203.1	Implement abstract data types for linear data structures and to apply list ADT.								
C203.2	Apply the linear data structures, stack and queue, to solve real-world problems.								
C203.3	Apply the	Tree ADT to solve the various	ous problems.						
C203.4	Apply the domains.	different traversal technique	es of Graph ADT in solvin	g problems in different					
C203.5	Handle ope	mechanism etc. on							

C203	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C203.1	3	2	3	-	-	-	-	-	-	-	-	-	3	3
C203.2	3	3	3	-	-	-	-	-	-	-	-	-	2	2
C203.3	3	2	3	-	-	-	-	-	-	-	-	-	2	2
C203.4	3	3	3	-	-	-	-	-	-	-	-	-	3	3
C203.5	3	2	2	1	-	1	-	-	2	2	-	2	1	1
No. of COs Mapping with Pos														
Average	3.00	2.40	2.8	1	-	1	-	-	2.00	2.00	-	2.00	2.33	2.00
Round (Average)	3.00	2.00	3.00	1.00	-	1.00	-	-	2.00	2.00	-	2.00	2.00	2.00



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Subjec	t Code :	CS8392	Semester :	III					
Subject	Name:	OBJECT	ORIENTED PROGRA	AMMING					
	Course Outcome								
C204.1	Develop Ja	Develop Java programs using OOP Principles							
C204.2	Develop Ja	va programs with the cond	epts inheritance and interfa	ices					
C204.3	Build Java	applications using excepti	ons and I/O streams						
C204.4	Develop Java applications with threads and generics classes								
C204.5	Develop interactive Java programs using swings								

СО	PO1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PSO 2
C204.1	2	1	1	-	-	-	-	-	-	-	-	-	2	2
C204.2	2	1	1	-	-	-	-	-	-	-	-	-	2	2
C204.3	2	1	1	-	-	-	-	-	-	-	-	-	2	2
C204.4	2	1	1	-	-	-	-	-	-	-	-	-	2	2
C204.5	2	1	1	-	-	-	-	-	-	-	-	-	2	2
Total	12	6	6										10	10
No. of COs Mapping with Pos	5	5	5										5	5
Average	2.4	1.2	1.2										2	2
Round (Average)	2	1	1										2	2



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Subject	Code:	EC8394	Semester:	III
Subject	Name:	ANALOG AN	D DIGITAL COMM	UNICATION
		Course	Outcome	
C205.1				
C205.2				
C205.3				
C205.4				
C205.5				

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C205.1														
C205.2														
C205.3														
C205.4														
C205.5														
Total														
No. of COs Mapping with Pos														
Average														
Round (Average)														



ST. JOSEPH

COLLEGE OF ENGINEERING



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Subject	t Code:	CS8381	Semester:	III						
Subject	Name:	DATA ST	RUCTURES LABO	RATORY						
		Course Outcome								
C206.1	Write funct	etions to implement linear and non-linear data structure operations.								
C206.2	Suggest approblem.	propriate linear / non-linea	r data structure operations	for solving a given						
C206.3	Appropriate problem.	ely use the linear / non-line	ear data structure operatio	ns for a given						
C206.4	Apply appr storage and	opriate hash functions that retrieval.	result in a collision free s	cenario for data						
C206.5	Handle sea	rching and sorting operations on various data structures.								
	Choose sui manner	table data structures to han	dle real time applications	in an efficient						

со	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C206.1	1	2	3	_	-	-	-	1	1	1	_	1	-	1
C206.2	2	3	3	-	-	-	-	1	2	1	-	2	1	2
C206.3	2	2	3	-	-	-	-	1	2	1	-	2	1	2
C206.4	2	3	2	-	2	-	-	2	3	2	-	3	2	2
C206.5	2	2	2	-	2	2	-	1	2	2	-	3	1	_
No. of COs Mapping with Pos	5	5	5	-	4	1	5	5	5	5	5	5	5	5
Average	1.8	2.4	2.6	-	2	2	ı	1.2	3	1.4	-	2.2	1	1.4
Round (Average)	2.0	2.0	3.0	-	2.0	2.0	-	1.0	3.0	1.0	-	2.0	1	1.0



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Subjec	t Code :	CS8383	Semester:	III						
Subject	Name:	OBJECT ORIENT	ED PROGRAMMIN	NG LABORATORY						
		Course Outcome								
C207.1	Develop an packages	nd implement Java progran	ns for simple applications	that make use of classes,						
C207.2		nd implement Java progran Collections	ns for simple applications	that make use of						
C207.3		nd implement Java progran handling, multithreading	ns for simple applications	that make use of						
C207.4	Develop ap	pplications by incorporating	file processing utilities							
C207.5	Develop ap	pplications using generic pr	rogramming and GUI							

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C207.1	3	2	3		3	-	-	-	-	-	-	-	2	2
C207.2	3	2	3		3	-	-	-	-	-	-	-	2	2
C207.3	3	2	3		3	-	-	-	-	-	-	-	2	2
C207.4	3	2	2		3	-	-	-	-	-	-	-	3	2
C207.5	3	2	2		3	-	-	-	-	-	-	-	2	2
Total	15	10	13		15	-	-	-	-	-	-	-	11	10
No. of COs Mapping with Pos	5	5	5		5	-	-	-	-	-	-	-	5	5
Average	3	2	2.6		3	-	-	-	-	-	-	-	2.1	2
Round (Average)	3	2	3		3	-	-	-	-	-	-	_	2	2



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Subject	t Code:	CS8382	Semester :	III								
Subject	Name:	DIGITA	L SYSTEMS LABOR	ATORY								
		Course Outcome										
C208.1	Interpret c	ombinational circuit using	logic gates									
C208.2	Illustrate c	combinational circuit using	MSI devices									
C208.3	Practice va	arious counters using flipfle	pp									
C208.4	Practice shift registers using flipflop											
C208.5	Solve verilog code for the design of digital circuit											

СО	РО	PO	РО	РО	РО	PO	РО	РО	РО	РО	РО	РО	PS	PS
	1	2	3	4	5	6	7	8	9	10	11	12	01	O2
C208.1	3	2	2	-	-	-	-	-	-	-	-	-	1	-
C208.2	3	2	2	-	-	-	-	-	-	-	-	-	1	-
C208.3	3	2	2	-	-	-	-	-	-	-	-	-	1	-
C208.4	3	2	2	-	-	-	-	-	-	-	-	-	1	-
C208.5	3	2	2	-	-	-	-	-	-	-	-	-	1	-
Total	15	10	10	-	-	-	-	-	-	-	-	-	5	-
No. of COs Mapping														
with Pos	5	5	5	-	-	ı	ı	-	-	-	-	-	5	-
Average	3	2	2	-	-	-	-	-	-	-	-	-	1	-
Round (Average)	3	2	2	-	-	-	-	-	-	-	-	-	1	-



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Subject	t Code:	HS8381	Semester:	III						
Subject	Name:	INTERPERSONAL	SKILLS/LISTENING	G AND SPEAKING						
Course Outcome										
C209.1	.1 Listen and respond appropriately									
C20921	Participate	e in group discussions								
C209.3	Make effe	ctive presentations								
C209.4	Participate	e confidently and appropria	tely in conversations both	formal and informal						

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C209.1	3	1	2	1	-	-	-	-	1	-	-	1	3	2
C20921	3	1	2	1	-	-	-	-	1	-	-	1	3	2
C209.3	3	1	2	1	-	-	1	1	1	1	-	1	3	2
C209.4	3	1	2	1	-	-	-	-	1	-	-	1	3	2
Total	12	4	8	4	-	-	ı	ı	4	ı	-	4	12	8
No. of COs Mapping with Pos	4	4	4	4	-	-	-	-	4	-	-	4	4	4
Average	3	1	2	1	_	-	ı	-	1	1	-	1	3	2
Round (Average)	3	1	2	1	-	-	-	-	1	-	-	1	3	2



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Course Outcome-CO-PO Mapping Fourth Semester

Subject	ect Code: MA8391 Semester: IV										
Subject	Name:	PROBA	ABILITY AND STA	TISTICS							
	Course Outcome										
C210.1	Explain the basic concepts of Random variable, discrete and continuous rando variables, Moment Generating Function and List out the distributions.										
C210.2	Marginal	distribution and condi-	tional distribution, cov	w the Joint distribution, variance, correlation and variables, Central limit							
C210.3	Classify t Poisson P	<u>=</u>	nd explain the concepts	of Markov Processes &							
C210.4	Solve and analyze the different types of Queueing models, finite and infinite capacity and single, multi server problems.										
C210.5	Formulate the concepts of one & two dimensional random variable, random process and queueing theory.										

СО	РО	РО	РО	РО	РО	РО	РО	РО	РО	РО	РО	РО	PS	PS
CO	1	2	3	4	5	6	7	8	9	10	11	12	01	O2
C210.1	3	3	3	1	-	-	-	-	1	1	-	2	3	-
C210.2	3	3	3	1	-	-	-	-	1	1	-	2	3	-
C210.3	3	3	3	1	-	-	-	-	1	1	-	2	3	-
C210.4	3	3	3	1	-	-	-	-	1	1	-	2	3	-
C210.5	3	3	3	1	-	-	-	-	1	1	-	2	3	-
Total	15	15	15	5	-	-	-	-	5	5	-	10	15	-
No. of COs Mapping with Pos	5	5	5	5	-	-	-	-	5	5	-	5	-	-
Average	3. 00	3. 00	3. 00	1. 00	-	-	-	-	1. 00	1. 00	-	2. 00	3. 00	1
Round (Average)	3	3	3	1	-	-	-	-	1. 00	1. 00	-	2. 00	3. 00	-



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Subject	t Code :	CS8491	Semester:	IV							
Subject	Name:	COM	COMPUTER ARCHITECTURE								
	Course Outcome										
C211.1	Describe th	Describe the basic structures of a computer system.									
C211.2	Explain the	e various arithmetic operation	ns for computers.								
C211.3	Analyze pi	pelined control units and the	different types of hazards in	the instructions.							
C211.4	211.4 Interpret the concepts of parallel processing architecture										
C211.5	Summarize t	the fundamentals of memory	system and the concepts of l	I/O system							

СО	РО	РО	РО	РО	РО	РО	РО	РО	РО	РО	РО	РО	PS	PS
	1	2	3	4	5	6	7	8	9	10	11	12	01	O2
C211.1	2	1	1	-	-	-	•	1	-	-	•	-	2	•
C211.2	2	1	1	•	•	•	1	ı	•	•	1	•	2	ı
C211.3	3	2	2	-	-	-	•	ı	-	-	•	-	2	2
C211.4	2	1	1	-	-	-	ı	•	-	-	ı	-	2	-
C211.5	2	1	1	-	-	-	ı	•	-	-	ı	-	2	-
Total	11	6	6	-	-	-	•	-	-	-	•	-	10	2
No. of COs Mapping with Pos	5	5	5	-	-	-	•	•	-	-	•	-	5	1
Average	2.2	1.2	1.2	-	-	-	-	-	-	-	ı	-	2	2
Round (Average)	2	1	1	-	-	-	ı	ı	-	-	ı	-	2	2



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Subject	t Code :	CS8492	Semester:	IV						
Subject	Name:	DATABA	SE MANAGEMENT	SYSTEMS						
		Course	Outcome							
C212.1	Classify t	he modern and futuristic	database applications based	on size and complexity						
C212.2	Map ERn	nodel to Relational model	to perform database design	effectively.						
C212.3	Write que	eries using normalization	criteria and optimize querie	S						
C212.4	Compare	and contrast various inde	ntrast various indexing strategies in different database systems							
C212.5	Appraise	how advanced databases	differ from traditional datab	bases.						

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C212.1	3	2	3	-	-	-	-		-	-	-	-	2	2
C212.2	3	2	3	-	-	-	-		-	-	-	-	2	2
C212.3	3	2	3	-	-	-	-		-	-	-	-	3	2
C212.4	3	2	2	-	-	-	-		-	-	-	-	2	2
C212.5	3	2	2	-	-	-	-		-	-	-	-	2	2
Total	15	10	13	-	-	-	-		-	-	-	-	11	10
No. of COs Mapping with Pos	5	5	5	-	-	-	-		-	-	-	-	5	5
Average	3	2	2.6	-	-	-	-		-	-	-	-	2.1	2
Round (Average)	3	2	3	-	-	-	-		-	-	-	-	2	2



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Subject	Code:	CE8403	Semester :	IV						
Subject	Name:	DESIGN AN	D ANALYSIS OF AL	GORITHMS						
	Course Outcome									
C213.1	Interpret t	he fundamental needs of al	gorithms in problem solving	ng.						
C213.2	Classify th	ne different algorithm desig	gn techniques for problem	solving.						
C213.3	Develop a	lgorithms for various comp	outing problems.							
C213.4		ne time and space complex in problem solving.	ity of various algorithms. I	dentify the limitations of						
C213.5	To identify the types of problem, formulate, analyze and compare the efficiency of Algorithms.									

СО	РО	PS	PS											
CO	1	2	3	4	5	6	7	8	9	10	11	12	01	02
C213.1	3	2	-	-	-	-	-	-	-	3	-	-	3	-
C213.2	3	2	-	2	-	-	-	-	-	-	-	2	3	2
C213.3	3	2	2	2	-	2	2	-	-	-	-	-	3	3
C213.4	3	2	2	2	-	2	2	-	-	-	-	-	3	2
C213.5	3	2	-	2	-	-	-	-	-	-	-	-	3	3
Total	15	10	4	8	-	4	4	Ī	-	3	ı	2	15	10
No. of COs Mapping with Pos	5	5	2	4	•	2	2	1	•	1	•	1	5	4
Average	3	2	2	2	-	2	2	ı	-	3	1	2	3	2.5
Round (Average)	3	2	2	2	-	2	2	-	-	3		2	3	2



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Subject	t Code:	CS8493	Semester:	IV							
Subject	Name:	OPERATING SYSTEMS									
		Course	Outcome								
C214.1 Analyze various scheduling algorithms.											
C214.2	Understand dead lock, prevention and avoidance algorithms.										
C214.3	Compare a	nd contrast various memor	y management schemes.								
C214.4	Understand the functionality of file systems.										
C214.5	Perform ad	ministrative tasks on Linu	x Servers.								

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C214.1	2	1	3	-	-	-	-	-	-	-	-	-	2	2
C214.2	3	1	2	-	-	-	-	-	-	-	-	-	2	2
C214.3	3	1	3	-	-	-	-	-	-	-	-	-	2	2
C214.4	2	1	3	-	-	-	-	-	-	-	-	-	2	2
C214.5	3	2	2	-	-	-	-	-	-	-	-	-	2	2
Total	13	6	13	-	-	-	-	-	-	-	-	-	10	10
No. of COs Mapping with Pos	5	5	5	-	-	-	-	-	-	-	-	-	5	5
Average	2.6	1.2	2.6	-		-	ı		-	-	ı	-	2	2
Round (Average)	3	1	3	-	-	-	-	-	-	-	-	-	2	2



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Subject Code :		GE8291	Semester:	IV							
Subject	Name:	ENVIRONMENTAL SCIENCE AND ENGINEERING									
		Course	Outcome								
C215.1											
C215.2											
C215.3											
C215.4											
C215.5											

со	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C215.1														
C215.2														
C215.3														
C215.4														
C215.5														
Total														
No. of COs Mapping with Pos														
Average														
Round (Average)														



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Subject	t Code :	CS8481	Semester:	IV							
Subject	Name:	DATABASE MANAGEMENT SYSTEMS LABORATORY									
		Course	Outcome								
C216.1 The students will have the required knowledge in the area of testing of materials and components of structural elements experimentally.											
C216.2	Apply the knowledge of testing steel rod subjected to tension and torsion and the hardness of different metals.										
C216.3	Exert the	Exert the knowledge about the testing of helical spring and carriage spring.									
C216.4	Acquire th	ne knowledge about double	e shear test on metal and im	pact test on metal.							

со	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C216.1														
C216.2														
C216.3														
C216.4														
Total														
No. of COs Mapping with Pos														
Average														
Round (Average)														



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Subject	t Code :	CS8461	Semester :	IV							
Subject	Name:	OPERATING SYSTEMS LABORATORY									
Course Outcome											
C217.1	Compare the performance of various CPU Scheduling Algorithms										
C217.2	Implemen	t Deadlock avoidance and	Detection Algorithms								
C217.3	Create proc	cesses and implement IPC									
C217.4	Analyze the	e performance of the vario	us Page Replacement Algor	rithms							
C217.5	Implement File Organization and File Allocation Strategies										

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C217.1	3	1	3	-	2	-	-	-	-	-	-	-	1	2
C217.2	3	2	2	-	2	-	-	-	-	-	-	-	2	2
C217.3	2	1	2	-	2	-	-	-	-	-	-	-	1	2
C217.4	3	2	3	-	1	-	-	-	-	-	-	-	1	1
C217.5	3	2	3	-	1	-	-	-	-	-	-	-	1	1
Total	3	1	3	-	2	-	-	-	-	-	-	-	1	2
No. of COs Mapping with Pos	14	7	13	-	9	-	-	-	-	-	-	-	6	9
Average	5	5	5	-	5	-	-	-	-	-	-	-	5	5
Round (Average)	2.8	1.4	2.6	-	1.8	-	-	-	-	-	-	-	1.4	1.8
	3	1	3	-	2	-	-	-	-	-	-	-	1	2



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Subject	Code:	HS8461	Semester :	IV							
Subject	Name:	ADVANC	ADVANCED READING AND WRITIN								
		Course	Outcome								
C218.1	Write diffe	erent types of essays.									
C218.2	Write win	ning job applications	o applications								
C218.3	Read and	evaluate texts critically.	• • • • • • • • • • • • • • • • • • • •								
C218.4	Display cri	tical thinking in various p	rofessional contexts.								

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C218.1														
C218.2														
C218.3														
C218.4														
Total														
No. of COs Mapping with Pos														
Average														
Round (Average)														



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Course Outcome-CO-PO Mapping Fifth Semester

Subject	ect Code: MA8551 Semester: V							
Subject	Name:	ALGE	BRA AND NUMBER TH	IEORY				
		Course	Outcome					
CO1	Apply the related pro	basic notations of groups, oblems.	rings, fields, which will th	en be used to solve				
CO2	-	e fundamental concepts of ics and Applied contexts.	advanced algebra and the	ir role in modern				
CO3	Demonstra	ate accurate and efficient u	se of advanced algebraic t	echniques.				
CO4		ate their mastery by solving simple theorems about the	_					
CO5	11 0	egrated approach to numbe urther reading and study in	•	ra and provide a firm				

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
	1	_		-			,	Ü		10		12	OI	02
CO1	3	3	3	1	-	-	-	-	1	-	-	-	3	-
CO2	3	3	3	1	-	-	-	-	1	-	-	-	3	-
CO3	3	3	3	1	-	-	-	-	1	-	-	-	3	-
CO4	3	3	3	1	-	-	-	-	1	-	-	-	3	-
CO5	3	3	3	1	-	-	-	-	1	-	-	-	3	-
Total	15	15	15	5	-	-	-	-	5	-	-	-	15	-
No. of COs Mapping with Pos	5	5	5	5	-	-	-	-	5	-	-	-	1	1
Average	3. 00	3. 00	3. 00	1. 00	ı	-	ı	ı	1. 00	ı	-	_	3. 00	-
Round (Average)	3	3	3	1	1	-	1	1	1. 00	1	-	-	3. 00	-



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Subject	t Code:	CS8591	Semester:	V						
Subject	Name:	(COMPUTER NETWORKS							
		Course	Outcome							
C302.1	Identify v	arious layers of network a	nd discuss the functions of	physical layer						
C302.2	Discuss he	ow data flows from one no	ode to another node with re	gard to data link						
	Layer									
C302.3	Explain th	e different services of net	work layer							
C302.4	Compare	he different transport laye	r protocols and their applic	cability based on						
	User requi	rements								
C302.5	Describe t	he working of various app	lication layer protocols							

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C302.1	3	3	2	-	-	-	-	-	-	-	-	-	1	-
C302.2	3	3	1	-	-	-	-	-	-	-	-	-	1	-
C302.3	3	3	1	1	-	1	1	-	-	-	-	1	1	-
C302.4	3	3	2	-	-	-	-	-	-	-	-	-	2	2
C302.5	3	3	1	-	-	-	-	-	-	-	-	-	1	-
Total	15	15	7	-	-	-	-	-	-	-	-	-	6	2
No. of COs Mapping with Pos	5	5	5	ı	-	-	-	-	-	-	-	ı	5	1
Average	3	3	1.3 3	-	-	-	-	-	-	-	-	-	1.2	2
Round (Average)	3	3	1	-	-	-	-	-	-	-	-	-	1	2



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Subject	t Code :	EC8691	Semester:	V
Subject	Name:	MICROPROCI	ESSORS AND MICROCO	ONTROLLERS
	·	Course	Outcome	
C303.1				
C303.2				
C303.3				
C303.4				
C303.5				

со	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C303.1														
C303.2														
C303.3														
C303.4														
C303.5														
Total														
No. of COs Mapping with Pos														
Average														
Round (Average)														



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Subject	t Code :	IT8501	Semester :	V						
Subject	Name:		WEB TECHNOLOGY							
	Course Outcome									
C304.1	Design sim	ple web pages using markt	up languages like HTML a	nd XHTML.						
C304.2	Create dyn use.	amic web pages using DH	TML and java script that is	easy to navigate and						
C304.3	Program se pages.	erver side web pages that l	have to process request from	om client side web						
C304.4	Represent	web data using XML and o	sing XML and develop web pages using JSP.							
C304.5	Develop va	rious web services and ho	ces and how these web services interact.							

со	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C304.1	2	1	1	2	3	-	-	-	-	-	-	-	1	-
C304.2	3	2	2	2	3	-	-	-	-	-	-	-	1	-
C304.3	2	1	1	2	3	-	-	-	-	-	-	-	1	-
C304.4	2	1	1	2	3	-	-	-	-	-	-	-	1	-
C304.5	2	1	1	1	2	-	-	-	-	-	-	-	1	-
Total	11	6	6	9	14	•	-	-	-	-	-	-	5	-
No. of COs Mapping with Pos	5	5	5	5	5	-	-	-	-	-	-	-	5	-
Average	2.2	1.2	1.2	1.8	2.8	-	-	-	-	-	-	-	1	-
Round (Average)	2	1	1	2	3	ı	-	-	-	-	-	-	1	-



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Subjec	t Code :	CS8494	Semester:	V			
Subject	t Name :	S	OFTWARE ENGINEERI	NG			
		Course	Outcome				
C305.1	C305.1 Identify the key activities in managing a software project and Compare models.						
C305.2	Demonstrate	software requirements ar	nd analysis				
C305.3	Apply system	atic procedure for software	design and deployment				
C305.4							
C305.5	Discuss abou	at the software integration	and cost effective project n	nanagement			

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C305.1	3	3	-	-	-	-	-	-	-	-	-	2	3	2
C305.2	3	3	2	2	-	2	3	2	-	-	2	-	3	2
C305.3	3	3	3	3	-	-	3	3	3	3	2	2	3	3
C305.4	3	3	3	3	2	2	3	3	3	3	3	3	3	3
C305.5	3	3	2	1	-	2	3	2	1	1	2	2	3	2
Total	15	15	10	9	2	6	12	10	6	6	9	9	15	12
No. of COs Mapping with POs	5	5	4	4	1	3	4	4	2	2	4	4	5	5
Average	3	3	2.5	2.25	2	2	3	2.5	3	3	2.25	2.25	3	2.4
Round (Average)	5	5	4	4	2	3	5	4	4	4	4	4	5	4



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Subjec	t Code :	OMD553	Semester:	V					
Subject	Name:	TEL	EHEALTH TECHNOLO	GY					
	Course Outcome								
C306.1	Describe th	e principles of Telemedic	ne and Health.						
C306.2	Apply vario	ous types of telemedical te	chnology in healthcare.						
C306.3	Elaborate d	ata Security and Standard	s of telemedicine						
C306.4	Discuss the storage and maintenance of patient using mobile telemedicine								
C306.5	Enumerate the telemedical applications.								

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C306.1	3	2	1	-	-	-	-	-	-	-	-	1	1	1
C306.2	3	2	1	1	1	-	-	-	-	1	2	1	2	1
C306.3	3	2	2	1	2	-	-	-	1	-	2	1	2	1
C306.4	3	2	2	2	2	-	-	-	1	-	-	1	1	1
C306.5	2	2	2	2	2	-	-	-	-	-	-	1	2	1
Total	14	10	8	6	7				2	1	4	5	8	5
No. of COs Mapping with Pos	5	5	5	4	4		-		2	1	2	5	5	5
Average	2.8	2.0	1.6	1.5	1.7	0.0	0.0	0-0	1.0	1.0	2.0	1.0	1.6	1.1
Round (Average	3	2	2	2	2	0	0	0	1	1	2	1	2	1



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Subject	Code:	EC8681	Semester:	V							
Subject	Name:	MICROPROC	ESSORS AND MICROC LABORATORY	CONTROLLERS							
	Course Outcome										
C307.1											
C307.2											
C307.3											
C307.4											

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C307.1														
C307.2														
C307.3														
C307.4														
Total														
No. of COs Mapping with Pos														
Average														
Round (Average)														



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Subject	t Code :	CS8581	Semester:	V							
Subject	Name:	NI	ETWORKS LABORATO	RY							
	Course Outcome										
C308.1	Implement	various protocols using T	CP and UDP								
C308.2	Compare t	he performance of differen	t transport layer protocols								
C308.3	Use simula	ation tools to analyze the p	erformance of various netw	ork protocols							
C308.4	Analyze v	Analyze various routing algorithms									
C308.5	Implement error correction codes										

СО	РО	РО	РО	РО	PO	РО	РО	PO	РО	PO	РО	РО	PS	PS
Co	1	2	3	4	5	6	7	8	9	10	11	12	01	O2
C308.1	3	1	2	-	2	-	-	-	-	-	-	-	2	1
C308.2	3	1	3	-	1	-	-	-	-	1	-	-	2	1
C308.3	3	1	3	-	3	-	-	-	-	-	-	-	2	1
C308.4	3	1	3	-	3	-	-	-	-	-	-	-	2	1
C308.5	3	-	2	-	-	-	-	-	-	-	-	-	2	1
Total	15	4	13	-	9								10	5
No. of COs Mapping with Pos	5	4	5	-	4								5	5
Average	3.0	1.0	2.6	-	2.2 5								2.0	1.0
Round (Average)	3	1	2	-	2		-	-	-	-	-	-	2	1



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Subject	et Code: IT8511 Semester: V									
Subject	Name:	WEB TI	ECHNOLOGY LABOR	ATORY						
	Course Outcome									
C309.1	Construct w	eb pages using HTML and sty	le sheet							
C309.2	Design dyna mechanisms	mic web pages with validatio	n using JavaScript and apply	y different event handling						
C309.3	Develop dyr	namic web pages using server	side scripting							
C309.4	Develop Complete web application using Three tier architecture(JDBC)									
C309.5	Construct web application using AJAX and web services									

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C309.1	3	2	2	1	3	-	-	-	-	-	-	-	2	1
C309.2	3	2	2	1	3	-	-	-	-	-	-	-	2	1
C309.3	3	2	2	1	3	ı	ı	ı	ı	ı	-	-	2	1
C309.4	3	2	2	1	3	-	-	-	-	-	-	-	2	1
C309.5	3	2	2	1	3	-	-	-	-	-	-	-	2	1
Total	15	10	10	5	15	-	-	-	-	-	-	-	10	5
No. of COs Mapping with Pos	5	5	5	5	5	-	-	-	-	-	-	-	5	5
Average	3	2	2	1	3	-	-	-	1	1	-	-	2	1
Round (Average)	3	2	2	1	3	-	-	-	-	-	_	_	2	1



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Course Outcome-CO-PO Mapping Sixth Semester

Subject	t Code :	IT8601	Semester :	VI							
Subject	Name:	COMPU	TATIONAL INTELLI	GENCE							
	Course Outcome										
C310.1	Interpret Se	Interpret Search algorithms for any AI Problem									
C310.2	Illustrate a	problem using first order a	nd predicate first order log	gics							
C310.3	Improve prand Neural	oblem solving skills using Networks	the acquired knowledge in	the areas of Fuzzy set							
C310.4		Improve problem solving skills using the acquired knowledge in the areas of Machine learning and statistics									
C310.5	Interpret applications for NLP that uses Artificial Intelligence										

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C310.1	3	2	2	1	2	-	-	-	-	-	-	-	2	2
C310.2	3	2	2	1	2	-	-	-	-	-	-	-	2	2
C310.3	3	2	2	1	2	-	-	-	-	-	-	-	2	1
C310.4	2	2	2	1	2		-	-	-	-	-		2	1
C310.5	2	2	2	1	2	-	-	-	-	-	-	-	2	2
Total	12	10	10	5	10	ı	-	-	-	-	-	ı	10	8
No. of COs Mapping with Pos	5	5	5	5	5	•	-	-	-	-	-	•	5	5
Average	2.67	2	2	1	2	-	-	-	-	-	-	-	2	1.67
Round (Average)	3	2	2	1	2	-	-	-	-	-	-	-	2	2



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Subject	t Code :	CS8592	Semester:	VI						
Subject	Name:	OBJECT O	RIENTED ANALYSIS A	ND DESIGN						
	Course Outcome									
C311.1	Express th	e software design concept	s with UML diagram.							
C311.2	Construct	the domain model and des	ign model to various use ca	ase scenarios						
C311.3	Design soft	tware applications using o	oject oriented concepts.							
C311.4	Transform UML based software design into pattern based design using design patterns.									
C311.5	Explain the various testing methodologies for object oriented software.									

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C311.1	2	1	1	-	-	-	-	-	-	-	-	-	1	1
C311.2	3	2	2	-	-	-	ı	ı	-	ı	ı	-	1	1
C311.3	3	2	2	-	-	-	ı	ı	-	ı	ı	-	3	3
C311.4	3	2	2	-	-	-	ı	ı	-	ı	ı	-	2	2
C311.5	2	1	1	Ī	ı		ı	ı	-	Í	Í	-	3	3
Total	13	8	8	-	-	-	ı	İ	-	ı	ı	-	10	10
No. of COs Mapping with Pos	5	5	5	-	-	-	ı	ı	-	ı	ı	-	5	5
Average	2.6	1.6	1.6	-	_	-	1	_	_	_	-	-	2.0	2.0
Round (Average)	3.0	2.0	2.0	-	_	_	ı	ı	-	ı	ı	ı	2.0	2.0



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Subject	t Code :	IT8602	Semester :	VI							
Subject	Name:	MOBILE COMMUNICATION									
		Course	Outcome								
C312.1	Explain the	basics of mobile telecom	nunication system								
C312.2	Illustrate th	e generations of telecomm	nunication systems in wirele	ess network							
C312.3	Understand	the architecture of Wirele	ess LAN technologies								
C312.4	Determine Ad hoc net	•	rk layer and Identify a routi	ng protocol for a given							
C312.5	Explain the	functionality of Transpor	t and Application layer								

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C312.1	2	1	1	-	-	-	-	-	-	-	-	-		
C312.2	2	1	1	-	-	-	-	-	-	-	-	-		
C312.3	2	1	1	-	-	-	-	-	-	-	-	-		
C312.4	2	1	1	-	-	-	ı	•	-	•	-	-		
C312.5	2	1	1	-	-	-	•	-	-	-	-	-		
Total	10	5	5	-	-	-	•	-	-	-	-	-		
No. of COs Mapping with Pos	5	5	5	-	-	-	•	-	-	-	-	-		
Average	2	1	1	-	-	-	-	-	-	-	-	-		
Round (Average)	2	1	1	-	-	-	-	-	-	-	-	-		



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Subject	t Code :	CS8091	CS8091 Semester:									
Subject	Name:		BIG DATA ANALYTICS									
	Course Outcome											
C313.1	An ability to	o work with big data tools	and its analysis techniques	3								
C313.2	An ability to	o analyse data by utilizing	clustering and classification	on algorithms								
C313.3		o learn and apply differen lumes of data	t mining algorithms and rec	commendation systems								
C313.4 An ability to perform analytics on data streams												
C313.5	An ability to	o learn NoSQL databases	and management.									

со	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PSO 2
C313.1	3	3	3	3	-	2	-	-	-	-	-	-	2	-
C313.2	3	3	3	3	-	2	-	-	-	-	-	-	2	-
C313.3	3	3	3	3	-	2	-	-	-	-	-	-	2	-
C313.4	3	3	3	3	-	2	-	-	-	-	-	-	2	-
C313.5	3	3	3	3	-	2	-	-	-	-	-	-	2	-
Total	15	15	15	15	-	10	-	-	-	-	-	-	10	-
No. of COs Mapping with Pos	5	5	5	5		5							5	
Average	3	3	3	3	-	2	ı	1	ı	1	1	_	2.0	ı
Round (Average)	3.0	3	3.0	3.0	-	2.0	-	-	-	-	-	-	2.0	-



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Subject	Code:	CS8092	Semester:	VI							
Subject	Name:	COMPUTER GRAPHICS AND MULTIMEDIA									
	Course Outcome										
C314.1	Design tw	vo dimensional graphic	e'S								
C314.2	Apply tw	o dimensional transfor	mations								
C314.3	Design th	ree dimensional graph	ics								
C314.4	Understood Different types of Multimedia File Format										
C314.5	Design Basic 3d Scenes using Blender										

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C314.1														
	3	2	1	-	_	_	-	-	-	-	-	-	3	2
C314.2														
	3	2	1	-	-	-	-	-	-	-	-	-	3	2
C314.3														
	3	2	2	-	-	-	-	-	-	-	-	-	3	2
C314.4														
	3	2	2	-	-	-	-	-	1	-	-	-	3	2
C314.5														
	3	2	1	-	-	1	-	-	-	-	-	-	3	2
TOTAL	15	10	7	-	-	1	-	-	1	-	-	-	15	10
No. of COs														
Mapping with POs	5	5	5	-	_	1	-	-	1	-	-	-	5	5
Average	3	2	1.4	-	-	1	-	-	1	-	-	-	3	2
Round (Average)	3	2	1	-	_	1	-	-	1	_	-	-	3	2



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Subjec	et Code:	CS8662			Semes	ter:	VI					
Subjec	t Name :	MOBILE APPLICATION DEVELOPMENT LABORATORY										
		Co	urse (Outco	me							
C315.1		oile application usin t frame work	g GUI	compo	nents ar	nd Layout using N	Mobile appl	ication				
C315.2	Develop mo	bile applications us	ing Eve	nt List	ener.							
C315.3	Develop mo	bile applications us	ing Data	abases								
C315.4	_	Develop mobile applications using RSS Feed, Internal/External Storage, SMS, Multithreading and GPS										
C315.5	Design and	Implement various i	nobile a	applica	tions us	ing emulators.						

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C315.1	3	3	2	-	3	-	-	-	-	-	-	-	3	2
C315.2	3	3	2	-	2	-	-	-	-	-	-	-	3	2
C315.3	3	3	2	ı	2	1	1	1	1	1	1	1	2	3
C315.4	3	3	2	-	3	-	1	-		-	-	-	3	2
C315.5	3	3	2	1	2	1	1	1	1	ı	ı	1	3	3
TOTAL	15	15	10	-	12	-	-	-	-	-	-	-	14	12
No. of COs Mapping with POs	5	5	5	1	5	-	-	-	-	-	-	-	5	5
Average	3	3	2	1	2.4			-	ı	-	-	-	2.8	2.4
Round (Average)	5	5	4	-	4	-	-	-	-	-	-	-	5	4



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Subject	t Code :	CS8582	Semester :	VI								
Subject	Name:	OBJECT ORIENTEI	OBJECT ORIENTED ANALYSIS AND DESIGN LABORATORY									
	Course Outcome											
C316.1	Perform O	O analysis and design for a	given problem specification	on.								
C316.2	Identify and	d map basic software requi	rements in UML mapping.	,								
C316.3		e software quality using de lying specific design patter		n the rationale								
C316.4	Test the compliance of the software with the SRS.											
C316.5	Implement	the modified system and to	est it for various scenarios.									

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C316.1	3	3	2	2	3	-	-	-	-	-	-	-	2	2
C316.2	3	2	3	2	2	-	-	-	-	-	-	-	2	2
C316.3	3	2	3	1	3	-	-	-	-	-	-	-	2	1
C316.4	2	3	2	3	3	-	•	-	-	-	-	-	1	3
C316.5	3	3	3	2	3	-	-	-	-	-	-	-	3	2
Total	14	13	13	10	14	-	-	-	-	-	-	-	10	10
No. of COs Mapping with Pos	5	5	5	5	5	-	-	-	-	-	-	-	5	5
Average	2.8	2.6	2.6	2	2.8	ı	•	•	•	-	-	-	2	2
Round (Average)	3	3	3	2	3	•	•	•	•	-	-	-	2	2



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Subject	t Code :	IT8611	Semester :	VI							
Subject	Name:	MINI PROJECT									
	Course Outcome										
C317.1	Choose pro	oblems with technical im	portance and societal contr	ibution							
C317.2	Identify a	nd survey the relevant lite	erature for getting exposed	to related solutions							
C317.3	Build proj	ect plans with feasible re	quirements								
C317.4	Analyse, d	se, design and develop adaptable and reusable solutions									
C317.5	317.5 Implement and test solutions to trace against the user										

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C317.1	3	2	1	-	-	-	-	-	-	-	-	-	-	-
C317.2	3	2	1	-	-	-	-	-	-	-	-	-	-	-
C317.3	3	2	1	-	-	-	-	-	-	-	-	-	-	-
C317.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C317.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-
No. of COs Mapping with Pos	9	6	3	0	0	0	0	0	0	0	0	0	0	0
Average	3	3	3	0	0	0	0	0	0	0	0	0	0	0
Round (Average)	3	2	1	-	-	-	-	-	-	-	-	-		



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Subject	t Code :	HS8581	Semester:	VI						
Subject	Name:	PROFESSIONAL COMMUNICATION								
		Course	Outcome							
C318.1	Make effe	ctive presentations								
C318.2	Participate	e confidently in Group Di	scussions.							
C318.3	Attend job	interviews and be succes	ews and be successful in them.							
C318.4	Develop a	dequate Soft Skills requir	red for the workplace							

со	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C318.1	-	-	-	-	-	-	-	1	2	3	1	1	1	2
C318.2	-	-	-	-	-	-	-	2	3	3	2	1	2	1
C318.3	-	-	-	-	-	-	-	2	3	2	-	1	2	-
C318.4	-	-	-	-	-	-	-	1	1	3	2	2	1	2
Total	-	-	-	-	-	-	-	6	9	11	5	5	6	5
No. of COs Mapping with Pos	-	-	-	-	-	-		4	4	4	3	4	4	3
Average	-	-	-	-	-	-	-	1.5	2.25	2.75	1.67	1.25	1.5	1.6 7
Round (Average)	-	-	-	-	-	-	-	2	2	3	2	1	2	2



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Course Outcome-CO-PO Mapping Seventh Semester

Subject	Code:	MG8591	Semester :	VII								
Subject Name: PRINCIPLES OF MANAGEMENT												
		Course Outcome										
C401.1												
C401.2												
C401.3												
C401.4												
C401.5												

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C401.1														
C401.2														
C401.3														
C401.4														
C401.5														
Total														
No. of COs Mapping with Pos														
Average														
Round (Average)														





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Subject	t Code :	CS8792	VII							
Subject	Name:	CRYPTOGE	APHY AND NETWORK	X SECURITY						
		Course	Outcome							
C402.1	Understand vulnerabilit		vorks security, security arc	hitecture, threats and						
C402.2	Apply the d	lifferent cryptographic op	erations of symmetric cryp	tographic algorithms						
C402.3	Apply the d	lifferent cryptographic op	erations of public key cryp	tography						
C402.4	Apply the v	various Authentication sch	thentication schemes to simulate different applications.							
C402.5	Understand	various Security practice	s and System security stand	dards						

СО	PO1	PO2	PO3	PO4	PO 5	P O 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C402.1	3	3	2	-	-	-	1	-	-	-	-	-	3	3
C402.2	3	2	3	-	-	-	-	-	-	-	-	-	3	3
C402.3	3	2	3	-	-	1	ı	-	-	ı	-	-	3	2
C402.4	3	2	2	-	-	ı	ı	-	-	1	ı	-	3	3
C402.5	3	3	2	-	-	-	-	-	-	-	-	-	3	3
Total	15	12	12	-	-	-	ı	-	-	-	-	-	15	15
No. of COs Mapping with Pos	5	5	5	-	-	-	1	-	-	1	1	-	5	5
Average	3	2.33	2.33	-	-	ı	1	-	-	1	ı	_	3	3
Round (Average)	3	2	2	-	-	-	-	-	-	-	-	-	3	3



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Subject	t Code :	CS8791	Semester:	VII						
Subject	Name:		CLOUD COMPUTING							
		Course	Outcome							
C403.1	Articulate the computing.	ne main concepts, key tec	hnologies, strengths and li	mitations of cloud						
C403.2	Explain the	key and enabling techno	ogies that help in the deve	lopment of cloud.						
C403.3	Make use of	of NIST cloud computing a	rchitecture to solve archite	ecture design challenges						
C403.4	Explain the	core issues of cloud com	computing such as resource management and security							
C403.5			ogies, Illustrate and choose ches for implementation ar							

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C403.1	2	1	1	_	-	-	-	-	-	-	-	-	2	2
C403.2	2	1	1	-	-	-	-	-	-	-	-	-	2	2
C403.3	3	2	2	1	-	-	1	1	1	1	1	_	2	3
C403.4	2	1	1	-	-	-	ı	ı	ı	ı	ı	-	2	2
C403.5	3	2	2	1	-	-	-	-	-	-	-	-	2	3
Total	12	7	7	2	-	-	ı	ı	ı	ı	ı	-	10	12
No. of COs Mapping with Pos	5	5	5	2	-	-	1	1	1	1	1	-	5	5
Average	2.4	1.4	1.4	1	-	-	-	-	-	-	-	-	2	2.4
Round (Average)	2	1	1	1	-	-	-	-	-	-	-	-	2	2



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Subject	t Code :	OBM752	Semester:	VII						
Subject	Name:	НС	OSPITAL MANAGEMEN	NT						
		Course	Outcome							
C404.1	Explain the	principles of Hospital adm	ninistration.							
C404.2	Identify the	importance of Human res	ource management.							
C404.3	List various	s marketing research techr	iques							
C404.4	Identify Info	ormation management sys	nagement systems and its uses							
C404.5	Understand	safety procedures followed	in hospitals							

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C404.1	3	3	-	3	2	-	-	-	-	ı	-	-	3	-
C404.2	3	3	-	3	2	ı	ı	ı	ı	-	-	ı	3	-
C404.3	3	3	-	2	2	ı	ı	1	ı	ı	-	ı	3	2
C404.4	3	3	-	2	2	-	-	-	-	-	-	-	3	-
C404.5	3	3	2	2	2	ı	ı	ı	ı	ı	-	ı	3	2
Total	15	15	2	12	10	-	-	-	-	-	-	-	15	4
No. of COs Mapping with Pos	5	5	1	5	5	-	-	-	ı	ı	ı	ı	5	2
Average	3	3	2	2.4	2	-	-	-	-	-	-	-	3	2
Round (Average)	3	3	2	2	2	-	_	-	-	-	_	-	3	2



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Subject	Code:	CS8079	Semester :	VII							
Subject	Name:	HUMA	N COMPUTER INTER	RACTION							
		Course	Outcome								
C405.1	Competent	to design effective dialog	for HCI								
C405.2	Apply an in HCI system	teractive design process a	nd universal design princ	iples in designing							
C405.3	Explain the sites.	e HCI implications for o	lesigning multimedia/ ed	commerce/ e-learning Web							
C405.4	Develop me	eaningful user interface	ser interface								
C405.5	_	ion and perception, which in affecting the experience		emory, thought, the "senses"							

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C405.1			2		2								1	2
	3	3	2	-	2	-	-	-	-	-	-	-	1	2
C405.2			3	1	2	3	-	-	-	-	-	-	3	2
	2	3												
C405.3	1	2	-	2	-	2	-	1	-	1	-	-	2	2
C405.4	3	3	3	2	2	2	-	-	1	-	2	-	1	2
C405.5	3	3	2	1	2	2	1	-	-	-	-	-	3	2
Total	12	14	10	6	8	9	1	1	1	1	2	0	10	10
No. of COs Mapping with POs	5	5	4	4	4	4	2	2	2	2	2	0	5	5
Average	4.14	4.71	4.00	2.67	3.33	3.67	1.33	1.33	1.33	1.33	2.00	0.00	3.57	3.57
Round (Average)	4	5	4	3	4	4	1	1	1	1	2	0	4	4





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Subject	t Code :	IT8711	Semester:	VII					
Subject	Name:	FOSS AND C	LOUD COMPUTING LA	BORATORY					
		Course	Outcome						
C406.1		various virtualization tools such as Virtual Box, VMware workstation. Design a web application in a PaaS environment link layer							
C406.2	Learn how	to simulate a cloud enviro	nment to implement new se	chedulers					
C406.3	Demonstra	ate generic cloud environment that can be used as a private cloud							
C406.4	Manipulate	large data sets in a parallel environment.							
C406.5	Apply Hado	oop single node cluster and	d run simple applications						

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C406.1	2	1	1	1	1	-	-	-	-	-	-	-	2	2
C406.2	2	1	1	1	1	ı	-	-	-	-	_	-	2	2
C406.3	3	2	2	1	2	ı	ı	-	-	-	-	-	2	3
C406.4	2	1	1	1	1	1	1	-	-	-	-	-	2	2
C406.5	3	2	2	1	2	ı	ı	ı	ı	ı	-	-	2	3
Total	12	7	7	5	7	ı	ı	ı	ı	ı	-	-	10	12
No. of COs Mapping with Pos	5	5	5	5	5	ı	ı	ı	ı	ı	ı	ı	5	5
Average	2.4	1.4	1.4	1	1.4	_	-	-	-	_	_	_	2	2.4
Round (Average)	2	1	1	1	1	-	-	-	-	-	-	-	2	2



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Subject	t Code :	IT8761	Semester:	VII						
Subject	Name:	SECURITY LABORATORY								
		Course	Outcome							
C407.1	Develop co	ode for classical Encryption	Techniques to solve the pr	roblems.						
C407.2	Build crypt algorithms		metric and public key encry	yption						
C407.3	Construct c	code for authentication algo	algorithms.							
C407.4	Develop a s	signature scheme using Di	eme using Digital signature standard.							
C407.5	Demonstra	te the network security sys	tem using open source tools	S						

СО	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C407.1	3	3	3	-	2	-	-	2	1	2	-	2	2	2
C407.2	3	3	3	-	2	-	-	2	1	1	-	2	1	2
C407.3	3	3	2	1	3	ı	1	3	2	2	1	3	3	1
C407.4	3	3	2	ı	3	ı	ı	3	2	2	ı	3	2	1
C407.5	3	3	2	-	3	-	-	2	2	1	-	2	2	2
Total	15	15	12	I	13	ı	ı	12	8	8		12	10	8
No. of COs Mapping with Pos	5	5	5	ı	5	ı	ı	5	5	5	ı	5	5	5
Average	3.00	3.00	2.33	1	2.67	ı	1	2.33	1.67	1.67	1	2.33	2	1.67
Round (Average)	3	3	2	-	3	-	-	2	2	2	-	2	2	2



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Course Outcome-CO-PO Mapping <u>Eigth Semester</u>

Subject	Code:	GE8076	Semester :	VIII							
Subject	Name:	PROFESSIO	PROFESSIONAL AETHICS IN ENGINEERING								
		Course	Outcome								
C408.1											
C408.2											
C408.3											
C408.4											
C408.5											

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C408.1														
C408.2														
C408.3														
C408.4														
C408.5														
Total														
No. of COs Mapping with Pos														
Average														
Round (Average)														



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Subject	t Code :	IT8005	Semester :	VIII
Subject	Name:		E-COMMERCE	
		Course	Outcome	
C409.1				
C409.2				
C409.3				
C409.4				
C409.5				

со	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C409.1														
C409.2														
C409.3														
C409.4														
C409.5														
Total														
No. of COs Mapping with Pos														
Average														
Round (Average)														



COLLEGE OF ENGINEERING



Near Toll Sriperumbudur, Chennai 602117 Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001: 2015Certified Institution

Subjec	t Code :	IT8811	Semester:	VIII							
Subject	Name:		PROJECT WORK								
		Course	Outcome								
C410.1	Identify tec	hnically and economically	feasible problems of socia	al relevance							
C410.2	Plan and bu	aild the project team with a	assigned responsibilities								
C410.3	Identify and	d survey the relevant litera	ture for getting exposed to	related solutions							
C410.4	Analyze, do		able and reusable solutions of minimal comple								
C410.5	-	ns for better manageability	against the user requirement of the solutions and provide								

со	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C410.1	3	2	2	1	-	2	2	2	2	2	2	1	1	1
C410.2	3	3	3	3	2	2	2	2	2	2	2	1	2	2
C410.3	3	3	3	2	2	2	2	2	2	2	2	1	2	2
C410.4	3	3	3	3	2	2	2	2	2	2	2	1	2	2
C410.5	3	3	3	2	2	2	2	2	2	2	2	1	2	2
Total	15	14	14	11	8	10	10	10	10	10	10	5	9	9
No. of COs Mapping with Pos	5	5	5	5	4	5	5	5	5	5	5	5	5	5
Average	3	2.8	2.8	2.2	2	2	2	2	2	2	2	1	1.8	1.8
Round (Average)	3	3	3	2	2	2	2	2	2	2	2	1	2	2