



## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### COURSE OUTCOME

- C01:** Apply the K-Map techniques to simplify various Boolean expressions.
- C02:** Design different types of combinational and sequential circuits along with Verilog programs.
- C03:** Describe the fundamentals of machine instructions, addressing modes and Processor performance.
- C04:** Explain the approaches involved in achieving communication between processor and I/O devices.
- C05:** Analyze internal Organization of Memory and Impact of cache/Pipelining on Processor Performance.

### PROGRAM OUTCOMES

- P01** Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- P02** Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- P03** Design / development of solutions: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- P04** Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and provide valid conclusions.
- P05** Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling to complex engineering activities.
- P06** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- P07** 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.
- P08** Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- P09** Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- P010** Communication: Communicate effectively on complex engineering activities with the engineering community and with the society.
- P011** Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.
- P012** Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.



COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY														
FACULTY NAME	Mr. CHETHAN M S														
BRANCH	CSE			ACADEMIC YEAR				2023-24							
COURSE	B.E	SEMESTER			III	SECTION			A						
SUBJECT	DIGITAL DESIGN AND COMPUTER ORGANIZATION					SUBJECT CODE			BCS302						
<b>CO &amp; PO MAPPING</b>															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	2	3	3	3						3	2	3	1
CO2	3	3	3	3		2						2	2	2	2
CO3	3		3	3	3	3						3		1	1
CO4	3	1	3	2		3						3	2	1	1
CO5	3		3			1								1	1
AVERAGE	3	2.3	2.8	2.75	3	2.4						2.8	2	1.6	1.2
<b>OVERALL MAPPING OF SUBJECT</b>												2.38			

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	50	1.5	1.5	1	1.5	1.5	1.5						1.5	1	1.5	0.50
CO2	65	1.95	1.95	1.95	1.95		1.3						1.3	1.3	1.3	1.3
CO3	62	1.86		1.86	1.86	1.86	1.86						1.86		0.62	0.62
CO4	62	1.86	0.62	1.86	1.24		1.86								0.62	0.62
CO5	59	1.77		1.77			0.59								0.59	0.59
AVERAGE		1.79	1.36	1.69	1.64	1.68	1.42						1.55	1.15	0.93	0.73
<b>FINAL ATTAINMENT LEVEL</b>													1.39			

*Chethan M S*

*N. Srinivas Kumar*  
 PRINCIPAL  
 SIET, TUMKUR.

*[Signature]*  
 HOD,  
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 SIET, TUMAKURU-06.



**III SEM CSE "A" SEC**

Digital Design and Computer Organization			BCS302		2023-2024					NAME OF THE STAFF :Prof. Chethan M S															TOT AVG				
Roll No.	USN	Name	IA MARKS			T1			T2		T3		ASSIGNMENT 10 + LAB 25					SEE					FINAL						
			T1 (15)	T2 (15)	T3 (15)	CO1- 15	CO2- 7	CO3- 8	CO4- 7	CO5- 8	CO1-7	CO2-7	CO3-7	CO4-7	CO5-7	LAB	ASS	SEE (50)	CO1-10	CO2-10	CO3-10	CO4-10	CO5-10	CO1-22		CO2-24	CO3-25	CO4-24	CO5-25
1	1SV22CS001	ABILASH U K	2	2	0	2	1	1	0	0	7	7	7	7	7	25	10	29	5.80	5.8	5.80	5.80	5.80	15	14	14	13	13	14
2	1SV22CS003	AJAY GONHALMATH	0	5	2	0	3	2	1	1	7	7	7	6	6	23	10	18	3.60	3.60	3.60	3.60	3.60	11	14	13	11	11	12
3	1SV22CS004	AKASH B S	1	5	6	1	3	2	3	3	6	6	6	6	6	20	10	19	3.80	3.80	3.80	3.80	3.80	11	13	12	13	13	12
4	1SV22CS005	AKSHAY B H	0	0	4	0	0	0	2	2	7	7	7	7	7	25	10	13	2.60	2.60	2.60	2.60	2.60	10	10	10	12	12	10
5	1SV22CS006	AKSHAY M S	4	5	2	4	2	3	7	1	7	7	6	6	6	22	10	23	4.60	4.60	4.60	4.60	4.60	16	14	14	12	12	13
6	1SV22CS007	ANALI K N	7	9	12	7	4	5	6	6	7	7	7	7	7	25	10	35	7.00	7.00	7.00	7.00	7.00	21	18	19	20	20	20
7	1SV22CS008	ANUSHA J	3	5	4	3	3	2	2	2	7	7	7	7	7	25	10	32	6.40	6.4	6.40	6.40	6.40	16	16	15	15	15	16
8	1SV22CS009	ASHWINI M L	9	14	10	9	7	7	5	5	7	7	7	7	7	25	10	42	8.40	8.40	8.40	8.40	8.40	24	22	22	20	20	22
9	1SV22CS010	AVULA AMARNATH REDDY	5	8	11	5	4	4	6	5	7	7	7	7	7	25	10	34	6.80	6.80	6.80	6.80	6.80	19	18	18	20	19	19
10	1SV22CS011	BHAGYASHREE IRAIYYA GADGIMATH	3	7	2	3	4	3	1	1	7	7	7	7	7	25	10	28	5.60	5.60	5.60	5.60	5.60	16	17	16	14	14	15
11	1SV22CS012	BHAVANA A	9	13	7	9	6	7	4	3	7	7	7	7	7	25	10	31	6.20	6.20	6.20	6.20	6.20	22	19	20	17	16	19
12	1SV22CS013	BHOOMIKA H E	0	2	2	0	1	1	1	1	5	5	4	4	5	13	10	13	2.60	2.60	2.60	2.60	2.60	8	9	8	8	9	8
13	1SV22CS014	BHUVANA D M	12	9	12	12	5	4	6	6	7	7	7	7	7	25	10	32	6.40	6.4	6.40	6.40	6.40	25	18	17	19	19	20
14	1SV22CS015	BHYRESH A C	9	8	6	9	4	4	3	3	7	7	6	6	6	22	10	31	6.20	6.20	6.20	6.20	6.20	22	17	16	15	15	17
15	1SV22CS016	BI BI FATHIMA	5	13	8	5	6	7	4	4	7	7	7	7	7	25	10	25	5.00	5.00	5.00	5.00	5.00	17	18	19	16	16	17
16	1SV22CS017	CHAITHANYA M	4	14	11	4	7	7	6	5	7	7	7	7	7	25	10	22	4.40	4.40	4.40	4.40	4.40	15	18	18	17	16	17
17	1SV22CS018	CHAITHRA S R	4	11	9	4	6	5	4	5	7	7	7	7	7	25	10	25	5.00	5.00	5.00	5.00	5.00	16	18	17	16	17	17
18	1SV22CS019	CHAITRA B R	7	7	13	7	4	3	7	6	7	7	7	7	7	25	10	38	7.60	7.60	7.60	7.60	7.60	22	19	18	22	21	20
19	1SV22CS021	CHANDAN M	3	7	1	3	3	4	0	1	7	7	7	7	7	25	10	18	3.60	3.6	3.60	3.60	3.60	14	14	15	11	12	13
20	1SV22CS022	CHANDRASHEKHAR PATIL	3	0	0	3	0	0	0	0	5	5	6	5	5	16	10	3	0.60	0.60	0.60	0.60	0.60	9	6	7	6	6	6
21	1SV22CS023	CHANDRASHEKHAR MPatil	0	8	8	0	4	4	4	4	7	7	7	7	7	25	10	18	3.60	3.60	3.60	3.60	3.60	11	15	15	15	15	14
22	1SV22CS024	CHANDRASHEKHAR P	1	0	3	1	0	0	2	1	7	7	7	7	7	25	10	21	4.20	4.20	4.20	4.20	4.20	12	11	11	13	12	12
23	1SV22CS025	CHASMIYABANU G S	2	8	7	2	4	4	4	3	7	7	7	7	7	25	10	20	4.00	4.00	4.00	4.00	4.00	13	15	15	15	14	14
24	1SV22CS026	CHITRA R	3	5	1	3	3	2	0	1	7	7	7	7	7	25	10	29	5.80	5.80	5.80	5.80	5.80	16	16	15	13	14	15
25	1SV22CS027	DEEKSHA J G	5	9	7	5	4	5	4	3	7	7	7	7	7	25	10	21	4.20	4.2	4.20	4.20	4.20	16	15	16	15	14	15
26	1SV22CS028	DHANUSH C N	5	9	2	5	4	5	1	1	7	7	7	7	7	25	10	26	5.20	5.20	5.20	5.20	5.20	17	16	17	13	13	15
27	1SV22CS029	DHARANESH H M	1	6	6	1	3	3	3	3	7	7	6	6	6	22	10	31	6.20	6.20	6.20	6.20	6.20	14	16	15	15	15	15
28	1SV22CS030	DISHA T N	7	13	10	7	6	7	5	5	7	7	7	7	7	25	10	27	5.40	5.40	5.40	5.40	5.40	19	18	19	17	17	18
29	1SV22CS031	DIVYASHREE T D	5	7	6	5	4	3	3	3	7	7	7	7	7	25	10	21	4.20	4.20	4.20	4.20	4.20	16	15	14	14	14	15
30	1SV22CS032	GAGAN P KUMAR	6	5	1	6	3	2	0	1	7	7	7	7	7	25	10	29	5.80	5.80	5.80	5.80	5.80	19	16	15	13	14	15
31	1SV22CS033	GANESH KRISHNA GOUDA	3	11	7	3	6	5	4	3	7	7	7	7	7	25	10	31	6.20	6.2	6.20	6.20	6.20	16	19	18	17	16	17
32	1SV22CS034	GOPI C N	0	4	3	0	2	2	2	1	7	7	7	6	6	23	10	22	4.40	4.40	4.40	4.40	4.40	11	13	13	12	11	12
33	1SV22CS035	GOWDHAM G S PATIL	5	6	6	5	3	3	3	3	7	7	7	7	7	25	10	29	5.80	5.80	5.80	5.80	5.80	18	16	16	16	16	16
34	1SV22CS036	HARISHREE A	10	14	11	10	7	7	5	6	7	7	7	7	7	25	10	28	5.60	5.60	5.60	5.60	5.60	23	20	20	18	19	20
35	1SV22CS037	HARSHITHA H S	2	0	6	2	0	0	3	3	7	7	7	7	7	25	10	30	6.00	6.00	6.00	6.00	6.00	15	13	13	16	16	15
36	1SV22CS038	HARSHITHA K	14	15	13	14	7	6	6	7	7	7	7	7	7	25	10	35	7.00	7.00	7.00	7.00	7.00	28	21	20	20	21	22
37	1SV22CS039	HARSHITHA K R	6	13	11	6	6	7	6	5	7	7	7	7	7	25	10	37	7.40	7.4	7.40	7.40	7.40	20	20	21	20	19	20
38	1SV22CS040	HARSHITHA V	5	6	9	5	3	3	5	4	7	7	7	7	7	25	10	25	5.00	5.00	5.00	5.00	5.00	17	15	15	17	16	16
39	1SV22CS041	HARSHITHA V	14	12	11	14	6	6	6	5	7	7	7	7	7	25	10	33	6.60	6.60	6.60	6.60	6.60	28	20	20	20	19	21
40	1SV22CS042	HEMANTH H A	2	6	4	2	3	3	2	2	7	7	7	7	7	25	10	19	3.80	3.80	3.80	3.80	3.80	13	14	14	13	13	13
41	1SV22CS043	HEMASHREE	5	7	10	5	4	3	5	5	7	7	7	7	7	25	10	38	7.60	7.60	7.60	7.60	7.60	20	19	18	20	20	19
42	1SV22CS044	HUZMA KOLUSER	9	13	10	9	6	7	5	5	7	7	7	7	7	25	10	25	5.00	5.00	5.00	5.00	5.00	21	18	19	17	17	18
43	1SV22CS045	K R OBALESH	6	8	7	6	4	4	4	3	7	7	7	7	6	24	10	24	4.80	4.8	4.80	4.80	4.80	18	16	16	16	14	16
44	1SV22CS046	KANTHARAJU M K	0	0	7	0	0	0	4	3	7	7	7	7	6	24	10	14	2.80	2.80	2.80	2.80	2.80	10	10	10	14	12	11
45	1SV22CS047	KARTHIK M R	0	6	4	0	3	3	2	2	6	6	6	6	6	20	10	20	4.00	4.00	4.00	4.00	4.00	10	13	13	12	12	12
46	1SV22CS048	KISHOR KUMAR T C	0	8	4	0	4	4	2	2	7	7	7	7	7	25	10	23	4.60	4.60	4.60	4.60	4.60	12	16	16	14	14	14
47	1SV22CS049	LAXMI MAHANTESH AMMALAJERI	8	11	5	8	6	5	2	3	7	7	7	7	7	25	10	34	6.80	6.80	6.80	6.80	6.80	22	20	19	16	17	19
48	1SV22CS050	M A ADITYA	0	6	4	0	3	3	2	2	7	7	7	7	6	24	10	23	4.60	4.60	4.60	4.60	4.60	12	15	15	14	13	13
49	1SV22CS051	MADHUMITHA B	4	12	7	4	6	6	4	3	7	7	7	7	7	25	10	25	5.00	5	5.00	5.00	5.00	16	18	18	16	15	17
50	1SV22CS052	MAHADEV	5	7	4	5	4	3	2	2	7	7	7	7	7	25	10	28	5.60	5.60	5.60	5.60	5.60	18	17	16	15	15	16
51	1SV22CS053	MANOJ H	0	7	3	0	4	3	2	1	7	7	7	7	7	25	10	23	4.60	4.60	4.60	4.60	4.60	12	16	15	14	13	14



52	ISV22CS054	MEGRANA P	8	14	11	8	7	7	6	5	7	7	7	7	7	25	10	45	9.00	9.00	9.00	9.00	9.00	24	23	23	22	21	23								
53	ISV22CS055	MOHAMMED AZAM	5	8	10	5	4	4	5	5	7	7	6	6	6	22	10	28	5.60	5.60	5.60	5.60	5.60	18	17	16	17	17	17								
54	ISV22CS056	MOHAMMED HUSSAIN	3	6	4	3	3	3	2	2	7	7	7	7	7	25	10	25	5.00	5.00	5.00	5.00	5.00	15	15	15	14	14	15								
55	ISV22CS057	MOHAN DEVARAJA TOTADA	0	0	4	0	0	0	2	2	7	7	7	7	7	25	10	21	4.20	4.2	4.20	4.20	4.20	11	11	11	13	13	12								
56	ISV22CS058	MONIKA K.M	12	14	13	12	7	7	7	6	7	7	7	7	7	25	10	37	7.40	7.40	7.40	7.40	7.40	26	21	21	21	20	22								
57	ISV22CS059	MONISHA M	8	15	12	8	7	8	6	6	7	7	7	7	7	25	10	26	5.20	5.20	5.20	5.20	5.20	20	19	20	18	18	19								
58	ISV22CS061	MURSHID MONDAL	1	7	6	1	4	3	3	3	7	7	7	6	6	23	10	36	7.20	7.20	7.20	7.20	7.20	15	18	17	16	16	17								
59	ISV22CS062	NAGARAJA M.R	2	10	1	2	5	5	0	1	7	6	6	6	6	21	10	13	2.60	2.60	2.60	2.60	2.60	12	14	14	9	10	11								
60	ISV22CS063	NALINA S.L	0	8	5	0	4	4	2	3	7	7	7	7	6	24	10	18	3.60	3.60	3.60	3.60	3.60	11	15	15	13	13	13								
61	ISV22CS064	NAVEENKUMAR D.H	0	7	1	0	4	3	0	1	7	7	7	7	7	25	10	29	5.80	5.8	5.80	5.80	5.80	13	17	16	13	14	14								
62	ISV22CS127	BALAJI NAIK	9	7	4	9	4	3	2	2	7	7	7	7	7	25	10	18	3.60	3.6	3.6	3.6	3.6	20	15	14	13	13	15								
63	ISV22CS128	CHAITHANYA K.T	0	0	0	0	0	0	0	0	7	7	7	7	7	25	10	33	6.60	6.6	6.6	6.6	6.6	14	14	14	14	14	14								
64	ISV22CS129	NIRANJANGOURA PATIL	0	5	4	0	2	3	2	2	7	6	6	6	6	21	10	19	3.80	3.8	3.8	3.8	3.8	11	12	13	12	12	12								
65	ISV23CS400	ABDULLA AJAZ	0	6	2	0	3	3	1	1	7	7	7	7	7	25	10	5	1.60	1.6	1.6	1.6	1.6	9	12	12	10	10	10								
66	ISV23CS403	DEEPAK H	7	10	8	7	5	5	4	4	7	7	7	7	7	25	10	22	4.40	4.4	4.4	4.4	4.4	18	16	16	15	15	16								
67	ISV23CS408	SANIYA FIRDOSE	0	4	1	0	2	2	0	1	7	7	7	7	7	25	10	25	5.00	5	5	5	5	12	14	14	12	13	13								
68	ISV23CS409	TOUSIF KHAN A	10	9	10	10	5	4	5	5	7	7	7	6	6	22	10	24	4.80	4.8	4.8	4.8	4.8	22	17	16	16	16	17								
69	ISV23CS410	YASHASWINI B.L	2	0	5	2	0	0	2	3	7	7	7	7	7	25	10	24	4.80	4.8	4.8	4.8	4.8	14	12	12	14	15	13								
70	ISV23CS406	NAMRATH G.M	5	8	5	5	4	4	3	2	2	2	2	2	2	0	10	0	0.00	0	0	0	0	7	6	6	5	4	6								
																							16.117	15.660	15.489	14.831	14.689										
																							50%	65%	62%	62%	59%										

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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

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**PROGRAM OUTCOMES**

- PO1** Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- PO2** Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
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CO1	3	3	2	3	3	3						3	2	3	1
CO2	3	3	3	3		2						2	2	2	2
CO3	3		3	3	3	3						3		1	1
CO4	3	1	3	2		3						3	2	1	1
CO5	3		3			1								1	1
AVERAGE	3	2.3	2.8	2.75	3	2.4						2.8	2	1.6	1.2
<b>OVERALL MAPPING OF SUBJECT</b>												2.38			

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	52	1.56	1.56	1.04	1.56	1.56	1.56						1.56	1.04	1.56	0.52
CO2	66	1.98	1.98	1.98	1.98		1.32						1.32	1.32	1.32	1.32
CO3	63	1.89		1.89	1.89	1.89	1.89						1.89		0.63	0.63
CO4	64	1.92	0.64	1.92	1.28		1.92						1.92	1.28	0.64	0.64
CO5	61	1.83		1.83			0.61								0.64	0.64
AVERAGE		1.84	1.39	1.73	1.68	1.73	1.46						1.67	1.21	0.96	0.75
<b>FINAL ATTAINMENT LEVEL</b>													1.44			

*Chethan M S*

*Chethan M S*  
PRINCIPAL  
SIET, TUMKUR.

*Bar*  
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SIET, TUMAKURU-06.



### III SEM CSE "B" SEC

Digital Design and Computer Organization		BCS302			2023-2024			NAME OF THE STAFF :Prof. Chethan M S																		TOT AVG				
Roll No.	USN	Name	IA MARKS			T1	T2		T3		ASSIGNMENT 10 + LAB 25					SEE					FINAL									
			T1 (15)	T2 (15)	T3 (15)	CO1- 15	CO2-7	CO3-8	CO4-7	CO5-8	CO1-7	CO2-7	CO3-7	CO4-7	CO5-7	LAB	ASS	SEE (50)	CO1- 10	CO2- 10	CO3- 10	CO4- 10	CO5- 10	CO1- 32	CO2- 24		CO3- 25	CO4- 24	CO5- 25	
1	1SV22CS065	NEERAJ T R	0	14	9	0	7	7	5	4	7	7	7	7	7	34	24	10	31	6.20	6.20	6.20	6.20	6.20	13	20	20	18	17	18
2	1SV22CS066	NIDHI D K	6	8	9	6	4	4	4	5	7	7	7	6	6	33	23	10	26	5.20	5.20	5.20	5.20	5.20	18	16	16	15	16	16
3	1SV22CS067	NIRMALA MADARI	10	10	11	10	5	5	6	5	7	7	7	7	7	35	25	10	27	5.40	5.40	5.40	5.40	5.40	22	17	17	18	17	19
4	1SV22CS068	NIVEDITHA V	8	10	11	8	5	5	5	6	7	7	7	7	7	35	25	10	37	7.40	7.40	7.40	7.40	7.40	22	19	19	19	20	20
5	1SV22CS069	PAVITHRA M R	11	8	8	11	4	4	4	4	7	7	7	7	7	35	25	10	25	5.00	5.00	5.00	5.00	5.00	23	16	16	16	16	17
6	1SV22CS070	POSHITHA S P	6	7	4	6	4	3	2	2	7	7	7	6	7	34	24	10	24	4.80	4.80	4.80	4.80	4.80	18	16	15	13	14	15
7	1SV22CS071	PRAJWAL B S	1	0	3	1	0	0	1	2	7	7	7	7	7	35	25	10	11	2.20	2.20	2.20	2.20	2.20	10	9	9	10	11	10
8	1SV22CS073	PRASHANTH O	6	4	4	6	2	2	2	2	7	7	7	7	7	35	25	10	11	2.20	2.20	2.20	2.20	2.20	10	9	9	10	11	10
9	1SV22CS074	PRATHIBHA V	4	8	8	4	4	4	4	4	7	7	7	7	7	35	25	10	26	5.20	5.20	5.20	5.20	5.20	18	14	14	14	14	15
10	1SV22CS075	PREETHAM GOWDA B S	2	3	6	2	2	1	3	3	7	7	7	7	6	34	24	10	13	2.60	2.60	2.60	2.60	2.60	12	12	11	13	12	12
11	1SV22CS076	PRIYANKA UMESH CHIGARI	7	12	11	7	6	6	5	6	7	7	7	7	7	35	25	10	30	6.00	6.00	6.00	6.00	6.00	20	19	19	18	19	19
12	1SV22CS077	PUNITH M	4	0	7	4	0	0	4	3	7	7	7	7	7	35	25	10	18	3.60	3.60	3.60	3.60	3.60	15	11	11	15	14	13
13	1SV22CS078	PUSHPA K	3	6	8	3	3	3	4	4	7	6	6	6	6	31	21	10	36	7.20	7.20	7.20	7.20	7.20	17	16	16	17	17	17
14	1SV22CS079	RACHANA C P	5	14	10	5	7	7	5	5	7	7	7	7	7	35	25	10	30	6.00	6.00	6.00	6.00	6.00	18	20	20	18	18	19
15	1SV22CS080	RAKESH HIREMATH	0	0	4	0	0	0	2	2	6	6	6	5	6	29	19	10	27	5.40	5.40	5.40	5.40	5.40	11	11	11	12	13	12
16	1SV22CS081	RAKESH KUMAR M	6	14	11	6	7	7	5	6	7	7	7	7	7	35	25	10	26	5.20	5.20	5.20	5.20	5.20	18	19	19	17	18	18
17	1SV22CS082	RAKSHITH C M	3	8	6	3	4	4	3	3	6	6	6	6	7	31	21	10	28	5.60	5.60	5.60	5.60	5.60	15	16	16	15	16	15
18	1SV22CS083	RAKSHITHA B V	3	5	5	3	2	3	3	2	7	6	6	6	7	32	22	10	23	4.60	4.60	4.60	4.60	4.60	15	13	14	14	14	14
19	1SV22CS084	RAKSHITHA R P	3	4	6	3	2	2	3	3	7	7	7	7	7	35	25	10	20	4.00	4.00	4.00	4.00	4.00	14	13	13	14	14	14
20	1SV22CS085	RANJITA S KATTI	3	0	5	3	0	0	3	2	7	7	7	7	7	35	25	10	20	4.00	4.00	4.00	4.00	4.00	14	11	11	14	13	13
21	1SV22CS086	RANJITHA A	5	9	11	5	5	4	6	5	7	7	7	7	7	35	25	10	25	5.00	5.00	5.00	5.00	5.00	17	17	16	18	17	17
22	1SV22CS087	RASHMITHA H	8	14	4	8	7	7	2	2	5	5	5	5	5	25	15	10	33	6.60	6.60	6.60	6.60	6.60	20	19	19	14	14	17
23	1SV22CS088	RUCHITHA K R	5	2	4	5	1	1	2	2	7	7	7	7	7	35	25	10	22	4.40	4.40	4.40	4.40	4.40	16	12	12	13	13	14
24	1SV22CS089	SAGAR S	4	5	5	4	3	2	3	2	7	7	7	6	6	33	23	10	29	5.80	5.80	5.80	5.80	5.80	17	16	15	15	14	15
25	1SV22CS090	SAGAR V	1	3	3	1	2	1	1	2	7	7	7	7	7	35	25	10	20	4.00	4.00	4.00	4.00	4.00	12	13	12	12	13	12
26	1SV22CS091	SAHANA Y S	3	11	9	3	6	5	5	4	7	7	7	7	7	35	25	10	29	5.80	5.80	5.80	5.80	5.80	16	19	18	18	17	17
27	1SV22CS092	SAHEEL PASHA	7	11	8	7	5	6	4	4	7	7	7	7	7	35	25	10	25	5.00	5.00	5.00	5.00	5.00	19	17	18	16	16	17
28	1SV22CS093	SANGEETHA M	8	8	7	8	4	4	4	3	6	6	6	6	7	31	21	10	28	5.60	5.60	5.60	5.60	5.60	20	16	16	16	16	16
29	1SV22CS094	SANJU S R	5	9	6	5	5	4	3	3	7	7	7	6	7	34	24	10	18	3.60	3.60	3.60	3.60	3.60	16	16	15	13	14	14
30	1SV22CS095	SAVITHA G T	6	14	11	6	7	7	6	5	6	6	5	5	6	29	19	10	31	6.20	6.20	6.20	6.20	6.20	18	19	18	17	17	18
31	1SV22CS096	SHARANAPPA A N	2	10	7	2	5	5	3	4	5	5	5	5	5	25	15	10	18	3.60	3.60	3.60	3.60	3.60	11	14	14	12	13	12
32	1SV22CS097	SHARATH M T	3	14	9	3	7	7	5	4	7	7	7	7	7	35	25	10	27	5.40	5.40	5.40	5.40	5.40	15	19	19	17	16	18
33	1SV22CS098	SHARATH NAYAK R	4	11	8	4	6	5	4	4	7	7	7	7	7	35	25	10	23	4.60	4.60	4.60	4.60	4.60	16	18	17	16	16	16
34	1SV22CS099	SHEETAL H D	1	3	7	1	2	1	4	3	7	7	7	7	7	35	25	10	29	5.80	5.80	5.80	5.80	5.80	14	15	14	17	16	15
35	1SV22CS100	SHEETHAL R	0	4	6	0	2	2	3	3	7	7	7	7	7	35	25	10	20	4.00	4.00	4.00	4.00	4.00	11	13	13	14	14	13
36	1SV22CS101	SHRAVANKUMAR VIJAY CHIMMAD	6	6	7	6	3	3	4	3	7	7	7	7	7	35	25	10	30	6.00	6.00	6.00	6.00	6.00	19	16	16	17	16	17
37	1SV22CS102	SHREYA K	5	15	9	5	7	8	5	4	7	7	7	7	7	35	25	10	32	6.40	6.40	6.40	6.40	6.40	18	20	21	18	17	19
38	1SV22CS103	SHWETHA K	8	9	6	8	4	5	3	3	7	6	6	6	6	31	21	10	27	5.40	5.40	5.40	5.40	5.40	20	15	16	14	14	16
39	1SV22CS104	SHWETHA P C	12	15	12	12	7	8	6	6	7	7	7	7	7	35	25	10	33	6.60	6.60	6.60	6.60	6.60	26	21	22	20	20	21
40	1SV22CS105	SINCHANA D	8	5	4	8	2	3	2	2	7	7	7	7	7	35	25	10	30	6.00	6.00	6.00	6.00	6.00	21	15	16	15	15	16
41	1SV22CS106	SINCHANA G N	1	8	4	1	4	4	2	2	7	7	7	7	7	35	25	10	22	4.40	4.40	4.40	4.40	4.40	12	15	15	13	13	14
42	1SV22CS107	SONU T M	7	9	11	7	5	4	6	5	7	7	7	7	7	35	25	10	30	6.00	6.00	6.00	6.00	6.00	20	18	17	19	18	18
43	1SV22CS108	Soubhagya HATTI	9	9	5	9	4	5	3	2	7	7	7	7	7	35	25	10	34	6.80	6.80	6.80	6.80	6.80	23	18	19	17	16	18
44	1SV22CS109	SRI RAM S	3	8	2	3	4	4	1	1	6	6	6	7	7	32	22	10	25	5.00	5.00	5.00	5.00	5.00	14	15	15	13	13	14



45	ISV22CS110	SRUSHTI SHRISHAIL HUGAR	3	11	11	3	6	5	6	5	7	7	7	7	7	35	25	10	29	5.80	5.80	5.80	5.80	5.80	16	19	18	19	18	18
46	ISV22CS111	SUHAS S	5	6	5	5	3	3	3	2	7	7	6	7	7	34	24	10	18	3.60	3.60	3.60	3.60	3.60	16	14	13	14	13	14
47	ISV22CS112	TARUN R V	3	3	5	3	2	1	2	3	6	6	6	7	7	33	23	10	18	3.60	3.60	3.60	3.60	3.60	13	12	11	13	14	12
48	ISV22CS113	TEJAS T M	7	4	2	7	2	2	1	1	7	7	7	7	7	35	25	10	0	0.00	0.00	0.00	0.00	0.00	14	9	9	8	8	10
49	ISV22CS114	TEJASHWINI SHIVAPPA GANIGER	1	6	10	1	3	3	5	5	7	7	7	7	7	35	25	10	27	5.40	5.40	5.40	5.40	5.40	13	15	15	17	17	16
50	ISV22CS115	TEJASWINI N	1	5	7	1	2	3	4	3	7	7	7	7	7	35	25	10	22	4.40	4.40	4.40	4.40	4.40	12	13	14	15	14	14
51	ISV22CS116	UDAY DRAVID V	0	1	3	0	0	1	2	1	7	7	7	7	7	35	25	10	24	4.80	4.80	4.80	4.80	4.80	12	12	13	14	13	13
52	ISV22CS117	UMME KULSUM	4	11	7	4	6	5	4	3	7	7	7	7	7	35	25	10	28	5.60	5.60	5.60	5.60	5.60	17	19	18	17	16	17
53	ISV22CS118	VARSHITHA G	8	12	10	8	6	6	5	5	7	7	7	7	7	35	25	10	39	7.80	7.8	7.8	7.8	7.8	23	21	21	20	20	21
54	ISV22CS119	VARUN RAJ K R	5	10	7	5	5	5	4	3	6	6	6	6	7	31	21	10	22	4.40	4.4	4.4	4.4	4.4	15	15	15	14	14	15
55	ISV22CS120	VIJAYALAKSHMI N	8	14	10	8	7	7	5	5	7	7	7	7	7	35	25	10	37	7.40	7.4	7.4	7.4	7.4	22	21	21	19	19	21
56	ISV22CS121	VINUTHA J	2	11	10	2	6	5	5	5	7	7	7	7	7	35	25	10	24	4.80	4.8	4.8	4.8	4.8	14	18	17	17	17	16
57	ISV22CS122	VIVEKA G V	9	15	11	9	7	8	6	5	7	7	7	7	7	35	25	10	38	7.60	7.6	7.6	7.6	7.6	24	22	23	21	20	22
58	ISV22CS123	YASHASWINI M	8	10	10	8	5	5	5	5	7	7	7	7	7	35	25	10	36	7.20	7.2	7.2	7.2	7.2	22	19	19	19	19	20
59	ISV22CS125	YOGESH K V	4	6	4	4	3	3	2	2	7	7	7	7	7	35	25	10	23	4.60	4.6	4.6	4.6	4.6	16	15	15	14	14	14
60	ISV22CS126	YOSUF AHMED BAIG	2	12	0	2	6	6	0	0	7	7	6	6	7	33	23	10	22	4.40	4.4	4.4	4.4	4.4	13	17	16	10	11	14
61	ISV23CS401	BHOOMIKA K	5	8	5	5	4	4	2	3	7	7	7	7	7	35	25	10	19	3.80	3.8	3.8	3.8	3.8	16	15	15	13	14	14
62	ISV23CS402	CHANDAN GOVANKOP	2	0	5	2	0	0	2	3	7	7	7	7	7	35	25	10	18	3.60	3.6	3.6	3.6	3.6	13	11	11	13	14	12
63	ISV23CS404	JYOTHI L	10	9	10	10	5	4	5	5	7	7	7	7	7	35	25	10	0	0.00	0	0	0	0	17	12	11	12	12	13
64	ISV23CS405	KAVYA K S	7	10	8	7	5	5	4	4	7	7	7	7	7	35	25	10	23	4.60	4.6	4.6	4.6	4.6	19	17	17	16	16	17
65	ISV23CS407	PAVITHRA D	0	5	4	0	2	3	2	2	7	7	7	7	7	35	25	10	32	6.40	6.4	6.4	6.4	6.4	13	15	16	15	15	15

16.57	15.82	15.71	15.34	15.26
52%	66%	63%	64%	61%

*(Signature)*  
[CHETHAN M.S]

*(Signature)*  
PRINCIPAL  
SIET, TUMKUR.

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-HOD,  
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SIET, TUMAKURU-06.



## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### COURSE OUTCOME

- CO1.** Explain the structure and functionality of operating system
- CO2.** Apply appropriate CPU scheduling algorithms for the given problem.
- CO3.** Analyse the various techniques for process synchronization and deadlock handling.
- CO4.** Apply the various techniques for memory management
- CO5.** Explain file and secondary storage management strategies.
- CO6.** Describe the need for information protection mechanisms.

### PROGRAM OUTCOMES

- PO1** Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- PO2** Problem analysis: Identify, formulate, 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: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- PO4** Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and 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.
- PO6** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- PO7** 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.
- PO8** Ethics: Apply ethical principles and commit to professional ethics and 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 the society.
- PO11** Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.
- PO12** Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.



COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY														
FACULTY NAME	Mrs. RASHMI N														
BRANCH	CSE					ACADEMIC YEAR	2023-24								
COURSE	B.E	SEMESTER	III	SECTION	A										
SUBJECT	OPERATING SYSTEMS					SUBJECT CODE	BCS303								
<b>CO &amp; PO MAPPING</b>															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	1	2											1		
CO2	2	2											1		
CO3		1	2										1		
CO4		2											1		
CO5	2			1									1		
CO6	1		2				2						3		
AVERAGE	1.5	1.75	2	1			2						1.3		
<b>OVERALL MAPPING OF SUBJECT</b>												1.59			

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	71.3	0.71	1.42											0.71		
CO2	67.7	1.35	1.35											0.67		
CO3	67.4		0.67	1.34										0.67		
CO4	70.0		1.4											0.70		
CO5	76.7	1.53			0.76									0.76		
CO6	66.9	0.66		1.33				1.33						0.66		
AVERAGE		1.06	1.21	1.34	0.76			1.33						0.70		
<b>FINAL ATTAINMENT LEVEL</b>													1.17			

*Rashmi N*

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*Bas*  
COMPUTER  
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SUB:Operating System			Sem:III 'A' SEC			2023-24				ODD		FACULTY: Mrs.Rashmi																						
Roll No.	USN	Name	BCS303			T1		T2		T3		ASSIGNMENT 10 + LAB 25							EXTERNAL						Final						TOTAL AVG			
			T1	T2	T3	CO 1-7	CO 2-8	CO 3-8	CO 4-7	CO 5-7	CO 6-8	CO 1-6	CO 2-6	CO 3-6	CO 4-6	CO 5-6	CO 6-5	Lab	ASS	SEE (50)	CO 1-8	CO 2-8	CO 3-8	CO 4-8	CO 5-8	CO 6-10	CO1-21	CO2-22	CO3-22	CO4-21		CO5-21	CO6-23	
1	ISV22CS001	ABILASH U K	5	5	11	2.5	2.5	2.5	2.5	5.5	5.5	6	6	6	6	4	5	23	10	24	4.0	4.0	4.0	4.0	4.0	4	12.5	12.5	12.5	12.5	13.5	14.5	13.0	
2	ISV22CS002	ADARSHA T	7	7	6	3.5	3.5	3.5	3.5	3	3	6	6	4	6	6	5	23	10	35	5.8	5.8	5.8	5.8	5.8	5.83	15.3	15.3	13.3	15.3	14.8	13.8	14.7	
3	ISV22CS003	AJAY GONHALMATH	6	6	7	3	3	3	3	3.5	3.5	6	6	6	4	6	5	23	10	23	3.8	3.8	3.8	3.8	3.8	3.83	12.8	12.8	12.8	10.8	13.3	12.3	12.5	
4	ISV22CS004	AKASH B S	4	4	3	2	2	2	2	1.5	1.5	6	4	6	6	6	5	23	10	9	1.5	1.5	1.5	1.5	1.5	1.5	9.5	7.5	9.5	9.5	9.0	8.0	8.8	
5	ISV22CS005	AKSHAY B H	6	6	7	3	3	3	3	3.5	3.5	6	6	6	6	6	5	25	10	21	3.5	3.5	3.5	3.5	3.5	3.5	12.5	12.5	12.5	12.5	13.0	12.0	12.5	
6	ISV22CS006	AKSHAY M S	10	10	12	5	5	5	5	6	6	6	6	6	6	6	5	25	10	21	3.5	3.5	3.5	3.5	3.5	3.5	14.5	14.5	14.5	14.5	15.5	14.5	14.7	
7	ISV22CS007	ANJALI K N	12	12	12	6	6	6	6	6	6	6	6	6	6	6	5	25	10	23	3.8	3.8	3.8	3.8	3.8	3.83	15.8	15.8	15.8	15.8	15.8	14.8	15.7	
8	ISV22CS008	ANUSHA J	13	13	14	6.5	6.5	6.5	6.5	7	7	6	6	6	6	6	5	25	10	38	6.3	6.3	6.3	6.3	6.3	6.33	18.8	18.8	18.8	18.8	19.3	18.3	18.8	
9	ISV22CS009	ASHWINI M L	13	13	14	6.5	6.5	6.5	6.5	7	7	6	6	6	6	6	5	25	10	31	5.2	5.2	5.2	5.2	5.2	5.17	17.7	17.7	17.7	17.7	18.2	17.2	17.7	
10	ISV22CS010	AVULA AMARNATH REDDY	8	8	9	4	4	4	4	4.5	4.5	6	6	6	6	4	5	23	10	32	5.3	5.3	5.3	5.3	5.3	5.33	15.3	15.3	15.3	15.3	13.8	14.8	15.0	
11	ISV22CS011	BHAGYASHREE IRAIYYA GADGIMATH	8	8	13	4	4	4	4	6.5	6.5	6	6	6	6	6	5	25	10	32	5.3	5.3	5.3	5.3	5.3	5.33	15.3	15.3	15.3	15.3	17.8	16.8	16.0	
12	ISV22CS012	BHAVANA A	4	4	12	2	2	2	2	6	6	6	6	4	5	6	5	22	10	26	4.3	4.3	4.3	4.3	4.3	4.33	12.3	12.3	10.3	11.3	16.3	15.3	13.0	
13	ISV22CS013	BHOOMIKA H E	12	12	14	6	6	6	6	7	7	6	6	6	6	6	5	25	10	31	5.2	5.2	5.2	5.2	5.2	5.17	17.2	17.2	17.2	17.2	18.2	17.2	17.3	
14	ISV22CS014	BHUVANA D M	9	9	13	4.5	4.5	4.5	4.5	6.5	6.5	6	6	6	6	6	5	25	10	35	5.8	5.8	5.8	5.8	5.8	5.83	16.3	16.3	16.3	16.3	18.3	17.3	16.8	
15	ISV22CS015	BHYRESH A C	11	11	11	5.5	5.5	5.5	5.5	5.5	5.5	6	6	6	6	6	5	25	10	30	5.0	5.0	5.0	5.0	5.0	5	16.5	16.5	16.5	16.5	16.5	15.5	16.3	
16	ISV22CS016	BI BI FATHIMA	10	10	13	5	5	5	5	6.5	6.5	6	6	6	6	6	5	25	10	33	5.5	5.5	5.5	5.5	5.5	5.5	16.5	16.5	16.5	16.5	18.0	17.0	16.8	
17	ISV22CS017	CHAITHANYA M	12	12	15	6	6	6	6	7.5	7.5	6	6	6	6	5	6	5	24	10	30	5.0	5.0	5.0	5.0	5.0	5	17.0	17.0	17.0	16.0	18.5	17.5	17.2
18	ISV22CS018	CHAITHRA S R	11	11	12	5.5	5.5	5.5	5.5	6	6	6	6	6	6	6	5	25	10	25	4.2	4.2	4.2	4.2	4.2	4.17	15.7	15.7	15.7	15.7	16.2	15.2	15.7	
19	ISV22CS019	CHAITRA B R	5	5	12	2.5	2.5	2.5	2.5	6	6	6	6	6	6	6	5	25	10	18	3.0	3.0	3.0	3.0	3.0	3	11.5	11.5	11.5	11.5	15.0	14.0	12.5	
20	ISV22CS020	CHANDAN A J	1	1	9	0.5	0.5	0.5	0.5	4.5	4.5	6	5	6	3	6	5	21	10	5	0.8	0.8	0.8	0.8	0.8	0.83	7.3	6.3	7.3	4.3	11.3	10.3	7.8	
21	ISV22CS021	CHANDAN M	8	8	12	4	4	4	4	6	6	6	6	6	6	6	5	25	10	27	4.5	4.5	4.5	4.5	4.5	4.5	14.5	14.5	14.5	14.5	16.5	15.5	15.0	
22	ISV22CS022	CHANDRASHEKHAR	3	3	11	1.5	1.5	1.5	1.5	5.5	5.5	6	6	5	4	6	5	22	10	18	3.0	3.0	3.0	3.0	3.0	3	10.5	10.5	9.5	8.5	14.5	13.5	11.2	
23	ISV22CS023	CHANDRASHEKHAR M PATIL	12	12	12	6	6	6	6	6	6	6	6	6	6	6	5	25	10	24	4.0	4.0	4.0	4.0	4.0	4	16.0	16.0	16.0	16.0	16.0	15.0	15.8	
24	ISV22CS024	CHANDRASHEKHAR P	10	10	11	5	5	5	5	5.5	5.5	6	6	5	6	6	5	24	10	33	5.5	5.5	5.5	5.5	5.5	5.5	16.5	16.5	15.5	16.5	17.0	16.0	16.3	
25	ISV22CS025	CHASMIYABANU G S	10	10	12	5	5	5	5	6	6	6	6	6	6	6	5	25	10	21	3.5	3.5	3.5	3.5	3.5	3.5	14.5	14.5	14.5	14.5	15.5	14.5	14.7	
26	ISV22CS026	CHITRA R	7	7	14	3.5	3.5	3.5	3.5	7	7	6	6	6	6	6	5	25	10	31	5.2	5.2	5.2	5.2	5.2	5.17	14.7	14.7	14.7	14.7	18.2	17.2	15.7	
27	ISV22CS027	DEEKSHA J G	10	10	11	5	5	5	5	5.5	5.5	6	6	6	6	6	5	25	10	21	3.5	3.5	3.5	3.5	3.5	3.5	14.5	14.5	14.5	14.5	15.0	14.0	14.5	
28	ISV22CS028	DHANUSH C N	13	13	14	6.5	6.5	6.5	6.5	7	7	6	6	6	6	6	5	25	10	36	6.0	6.0	6.0	6.0	6.0	6	18.5	18.5	18.5	18.5	19.0	18.0	18.5	



Roll No.	USN	Name	BCS303			T1		T2		T3		ASSIGNMENT 10 + LAB 25								EXTERNAL						Final						TOTAL AVG	
			T1	T2	T3	CO 1-7	CO 2-8	CO 3-8	CO 4-7	CO 5-7	CO 6-8	CO 1-6	CO 2-6	CO 3-6	CO 4-6	CO 5-6	CO 6-5	Lab	ASS	SEE (50)	CO 1-8	CO 2-8	CO 3-8	CO 4-8	CO 5-8	CO 6-10	CO1-21	CO2-22	CO3-22	CO4-21	CO5-21		CO6-23
29	1SV22CS029	DHARANESH H M	11	11	14	5.5	5.5	5.5	5.5	7	7	6	6	6	6	6	5	25	10	24	4.0	4.0	4.0	4.0	4.0	4	15.5	15.5	15.5	15.5	17.0	16.0	15.8
30	1SV22CS030	DISHA T N	11	11	7	5.5	5.5	5.5	5.5	3.5	3.5	6	6	6	6	5	5	24	10	36	6.0	6.0	6.0	6.0	6.0	6	17.5	17.5	17.5	17.5	14.5	14.5	16.5
31	1SV22CS031	DIVYASHREE T D	11	11	14	5.5	5.5	5.5	5.5	7	7	6	6	6	6	6	5	25	10	24	4.0	4.0	4.0	4.0	4.0	4	14.5	14.5	14.5	14.5	17.0	16.0	15.2
32	1SV22CS032	GAGAN P KUMAR	9	9	14	4.5	4.5	4.5	4.5	7	7	6	6	6	6	6	5	25	10	24	4.0	4.0	4.0	4.0	4.0	4	14.5	14.5	14.5	14.5	17.0	16.0	15.2
33	1SV22CS033	GANESH KRISHNA GOUDA	12	12	15	6	6	6	6	7.5	7.5	6	6	6	5	6	5	24	10	29	4.8	4.8	4.8	4.8	4.8	4.83	16.8	16.8	16.8	15.8	18.3	17.3	17.0
34	1SV22CS034	GOPI C N	14	14	12	7	7	7	7	6	6	6	6	6	6	5	25	10	36	6.0	6.0	6.0	6.0	6.0	6	19.0	19.0	19.0	19.0	18.0	17.0	18.5	
35	1SV22CS035	GOWTHAM G S PATIL	11	11	12	5.5	5.5	5.5	5.5	6	6	6	6	6	6	5	25	10	36	6.0	6.0	6.0	6.0	6.0	6	19.0	19.0	19.0	19.0	18.0	17.0	18.5	
36	1SV22CS036	HARISHREE A	14	14	15	7	7	7	7	7.5	7.5	6	6	5	6	6	5	24	10	37	6.2	6.2	6.2	6.2	6.2	6.17	17.7	17.7	17.7	16.7	18.2	17.2	17.5
37	1SV22CS037	HARSHITHA H S	11	11	15	5.5	5.5	5.5	5.5	7.5	7.5	6	6	6	6	5	24	10	32	5.3	5.3	5.3	5.3	5.3	5.33	18.3	18.3	17.3	18.3	18.8	17.8	18.2	
38	1SV22CS038	HARSHITHA K	14	14	10	7	7	7	7	5	5	6	6	5	6	6	5	24	10	26	4.3	4.3	4.3	4.3	4.3	4.33	17.3	17.3	16.3	17.3	15.3	14.3	16.3
39	1SV22CS039	HARSHITHA K R	14	14	14	7	7	7	7	7	7	6	6	6	6	6	5	25	10	35	5.8	5.8	5.8	5.8	5.8	5.83	18.8	18.8	18.8	18.8	18.8	17.8	18.7
40	1SV22CS040	HARSHITHA V	11	11	13	5.5	5.5	5.5	5.5	6.5	6.5	6	6	6	6	4	5	23	10	24	4.0	4.0	4.0	4.0	4.0	4	15.5	15.5	15.5	15.5	14.5	15.5	15.3
41	1SV22CS041	HARSHITHA V	13	13	14	6.5	6.5	6.5	6.5	7	7	6	6	6	6	6	5	25	10	40	6.7	6.7	6.7	6.7	6.7	6.67	19.2	19.2	19.2	19.2	19.7	18.7	19.2
42	1SV22CS042	HEMANTH H A	12	12	15	6	6	6	6	7.5	7.5	6	6	6	6	6	5	25	10	37	6.2	6.2	6.2	6.2	6.2	6.17	18.2	18.2	18.2	18.2	19.7	18.7	18.5
43	1SV22CS043	HEMASHREE	12	12	12	6	6	6	6	6	6	6	6	6	6	5	25	10	37	6.2	6.2	6.2	6.2	6.2	6.17	18.2	18.2	18.2	18.2	19.7	18.7	18.5	
44	1SV22CS044	HUZMA KOUSER	10	10	10	5	5	5	5	5	5	6	5	6	5	4	5	21	10	20	3.3	3.3	3.3	3.3	3.3	3.33	14.3	13.3	14.3	13.3	12.3	13.3	13.5
45	1SV22CS045	K R OBALESH	5	5	7	2.5	2.5	2.5	2.5	3.5	3.5	6	6	5	4	6	5	22	10	24	4.0	4.0	4.0	4.0	4.0	4	12.5	12.5	11.5	10.5	13.5	12.5	12.2
46	1SV22CS046	KANTHARAJU M K	5	5	9	2.5	2.5	2.5	2.5	4.5	4.5	6	6	6	4	6	5	23	10	29	4.8	4.8	4.8	4.8	4.8	4.83	13.3	13.3	13.3	11.3	15.3	14.3	13.5
47	1SV22CS047	KARTHIK M R	14	14	15	7	7	7	7	7.5	7.5	6	6	6	6	6	5	25	10	36	6.0	6.0	6.0	6.0	6.0	6	19.0	19.0	19.0	19.0	19.5	18.5	19.0
48	1SV22CS048	KISHOR KUMAR T C	8	8	15	4	4	4	4	7.5	7.5	6	6	6	4	6	5	23	10	39	6.5	6.5	6.5	6.5	6.5	6.5	16.5	16.5	16.5	14.5	20.0	19.0	17.2
49	1SV22CS049	LAXMI MAHANTESH AMMALAJERI	10	10	12	5	5	5	5	6	6	6	6	6	6	5	25	10	34	5.7	5.7	5.7	5.7	5.7	5.67	16.7	16.7	16.7	16.7	17.7	16.7	16.8	
50	1SV22CS050	M A ADITYA	6	6	9	3	3	3	3	4.5	4.5	6	6	6	6	5	5	24	10	34	5.7	5.7	5.7	5.7	5.7	5.67	14.7	14.7	14.7	14.7	15.2	15.2	14.8
51	1SV22CS051	MADHUMITHA B	5	5	10	2.5	2.5	2.5	2.5	5	5	6	6	5	5	5	5	22	10	22	3.7	3.7	3.7	3.7	3.7	3.67	12.2	12.2	11.2	11.2	13.7	13.7	12.3
52	1SV22CS052	MAHADEV	11	11	15	5.5	5.5	5.5	5.5	7.5	7.5	6	6	6	6	6	5	25	10	35	5.8	5.8	5.8	5.8	5.8	5.83	17.3	17.3	17.3	17.3	19.3	18.3	17.8
53	1SV22CS053	MANOJ H	5	5	12	2.5	2.5	2.5	2.5	6	6	6	6	6	6	5	25	10	26	4.3	4.3	4.3	4.3	4.3	4.33	12.8	12.8	12.8	12.8	16.3	15.3	13.8	
54	1SV22CS054	MEGHANA P	8	8	12	4	4	4	4	6	6	6	6	6	6	5	24	10	18	3.0	3.0	3.0	3.0	3.0	3	13.0	13.0	13.0	13.0	14.0	14.0	13.3	
55	1SV22CS055	MOHAMMED AZAM	0	0	9	0	0	0	0	4.5	4.5	6	5	4	5	6	5	21	10	19	3.2	3.2	3.2	3.2	3.2	3.17	9.2	8.2	7.2	8.2	13.7	12.7	9.8
56	1SV22CS056	MOHAMMED HUSSAIN	14	14	15	7	7	7	7	7.5	7.5	6	6	6	6	6	5	25	10	40	6.7	6.7	6.7	6.7	6.7	6.67	19.7	19.7	19.7	19.7	20.2	19.2	19.7
57	1SV22CS057	MOHAN DEVARAJA	14	14	15	7	7	7	7	7.5	7.5	6	6	6	6	6	5	25	10	40	6.7	6.7	6.7	6.7	6.7	6.67	19.7	19.7	19.7	19.7	20.2	19.2	19.7
58	1SV22CS058	MONIKA K M	6	6	10	3	3	3	3	5	5	6	6	6	6	5	25	10	33	5.5	5.5	5.5	5.5	5.5	5.5	18.5	18.5	18.5	18.5	19.0	18.0	18.5	
59	1SV22CS059	MONISHA M	5	5	9	2.5	2.5	2.5	2.5	4.5	4.5	6	6	6	6	4	5	23	10	25	4.2	4.2	4.2	4.2	4.2	4.17	13.2	13.2	13.2	13.2	13.2	14.2	13.3
60	1SV22CS061	MURSHID MONDAL	6	6	11	3	3	3	3	5.5	5.5	6	6	6	6	6	5	25	10	20	3.3	3.3	3.3	3.3	3.3	3.33	12.3	12.3	12.3	12.3	14.8	13.8	13.0



Roll No.	USN	Name	BCS303			T1		T2		T3		ASSIGNMENT 10 + LAB 25								EXTERNAL						Final						TOTAL AVG					
			T1	T2	T3	CO 1-7	CO 2-8	CO 3-8	CO 4-7	CO 5-7	CO 6-8	CO 1-6	CO 2-6	CO 3-6	CO 4-6	CO 5-6	CO 6-5	Lab	ASS	SEE (50)	CO 1-8	CO 2-8	CO 3-8	CO 4-8	CO 5-8	CO 6-10	CO1-21	CO2-22	CO3-22	CO4-21	CO5-21		CO6-23				
61	ISV22CS062	NAGARAJA M R	9	9	15	4.5	4.5	4.5	4.5	7.5	7.5	6	6	6	6	6	5	25	10	27	4.5	4.5	4.5	4.5	4.5	4.5	15.0	15.0	15.0	15.0	18.0	17.0	15.8				
62	ISV22CS063	NALINA S L	3	8	8	1.5	1.5	4	4	4	4	6	6	5	5	5	5	22	10	20	3.3	3.3	3.3	3.3	3.3	3.33	10.8	10.8	12.3	12.3	12.3	12.3	11.8				
63	ISV22CS064	NAVEENKUMAR D H	8	8	6	4	4	4	4	3	3	6	6	6	5	5	5	23	10	27	4.5	4.5	4.5	4.5	4.5	4.5	14.5	14.5	14.5	13.5	12.5	12.5	13.7				
64	ISV22CS12	BALAJI NAIK	0	6	13	0	0	3	3	6.5	6.5	6	6	5	5	5	5	22	10	27	4.5	4.5	4.5	4.5	4.5	4.5	10.5	10.5	12.5	12.5	16.0	16.0	13.0				
65	ISV22CS12	CHAITHANYA K T	2	8	10	1	1	4	4	5	5	6	6	6	5	5	5	23	10	29	4.8	4.8	4.8	4.8	4.8	4.83	11.8	11.8	14.8	13.8	14.8	14.8	13.7				
66	ISV22CS12	NIRANJANGOURA PATIL	6	7	8	3	3	3.5	3.5	4	4	6	6	6	4	6	5	23	10	22	3.7	3.7	3.7	3.7	3.7	3.67	12.7	12.7	13.2	11.2	13.7	12.7	12.7				
67	ISV23CS40	ABDULLA AJAZ	5	6	9	2.5	2.5	3	3	4.5	4.5	6	6	4	6	6	5	23	10	11	1.8	1.8	1.8	1.8	1.8	1.83	10.3	10.3	8.8	10.8	12.3	11.3	10.7				
																										15.0	14.9	14.8	14.7	16.1	15.4						
																										71.3%	67.7%	67.4%	70.0%	76.7%	66.9%						

*R. N*

*M. S. K.*  
PRINCIPAL  
SIET. TUMKUR.

HOD.  
COMPUTER SCIENCE & ENGE  
SIET, TUMAKUR

*B. S.*



## DEPARTMENT OF COMPUTERSCIENCE AND ENGINEERING

### COURSE OUTCOME

- CO1. Explain the structure and functionality of operating system
- CO2. Apply appropriate CPU scheduling algorithms for the given problem.
- CO3. Analyse the various techniques for process synchronization and deadlock handling.
- CO4. Apply the various techniques for memory management
- CO5. Explain file and secondary storage management strategies.
- CO6. Describe the need for information protection mechanisms.

### PROGRAM OUTCOMES

- PO1 Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- PO2 Problem analysis: Identify, formulate, 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: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- PO4 Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and 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.
- PO6 The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- PO7 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.
- PO8 Ethics: Apply ethical principles and commit to professional ethics and 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 the society.
- PO11 Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.
- PO12 Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.



COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY														
FACULTY NAME	Mrs. RASHMI N														
BRANCH	CSE			ACADEMIC YEAR				2023-24							
COURSE	B. E	SEMESTER		III	SECTION			B							
SUBJECT	OPERATING SYSTEMS					SUBJECT CODE			BCS303						
<b>CO &amp; PO MAPPING</b>															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	1	2											1		
CO2	2	2											1		
CO3		1	2										1		
CO4		2											1		
CO5	2			1									1		
CO6	1		2				2						3		
AVERAGE	1.5	1.75	2	1			2						1.3		
<b>OVERALL MAPPING OF SUBJECT</b>												1.59			

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	68.7	0.68	1.37											0.68		
CO2	65.2	1.30	1.30											0.65		
CO3	70.9		0.70	1.41										0.70		
CO4	73.8		1.47											0.73		
CO5	77.5	1.55			0.77									0.77		
CO6	67.2	0.67		1.34				1.34						0.67		
AVERAGE	1.05	1.21	1.375	0.77				1.34						0.7		
<b>FINAL PRINCIPALMENT LEVEL</b>													1.07			

*Rashmi N*

*Bas*  
 COMPUTER SCIENCE & ENGG.  
 SIET, TUMKUR



SUB: Operating System			Sem: III 'B' SEC					2023-24		ODD		FACULTY: Mrs. RASHMI N																					
Roll No.	USN	Name	BCS303			T1		T2		T3		ASSIGNMENT 10 + LAB 25								EXTERNAL						Final						TOTAL AVG	
			T1	T2	T3	CO1-7	CO2-8	CO3-8	CO4-7	CO5-7	CO6-8	CO1-6	CO2-6	CO3-6	CO4-6	CO5-6	CO6-5	Lab	ASS	SEE (50)	CO1-8	CO2-8	CO3-8	CO4-8	CO5-8	CO6-10	CO1-21	CO2-22	CO3-22	CO4-21	CO5-21		CO6-23
1	1SV22CS065	NEERAJ T R	11	14	15	5.5	5.5	7	7	7.5	7.5	6	6	6	6	6	4	24	10	25	4.2	4.2	4.2	4.2	4.2	4.2	15.7	15.7	17.2	17.2	17.7	15.7	16.4
2	1SV22CS066	NIDHI D K	8	8	15	4	4	4	4	7.5	7.5	6	6	6	6	5	5	24	10	31	5.2	5.2	5.2	5.2	5.2	5.2	15.2	15.2	15.2	15.2	17.7	17.7	15.2
3	1SV22CS067	NIRMALA MADARI	10	14	15	5	5	7	7	7.5	7.5	6	6	6	6	5	6	24	10	36	6.0	6.0	6.0	6.0	6.0	6.0	17.0	17.0	19.0	18.0	19.5	18.5	17.8
4	1SV22CS068	NIVEDITHA V	5	13	15	2.5	2.5	6.5	6.5	7.5	7.5	6	6	6	6	4	5	23	10	33	5.5	5.5	5.5	5.5	5.5	5.5	14.0	14.0	18.0	18.0	17.0	18.0	16.0
5	1SV22CS069	PAVITHRA M R	6	11	12	3	3	5.5	5.5	6	6	6	6	6	4	6	5	23	10	28	4.7	4.7	4.7	4.7	4.7	4.7	13.7	13.7	16.2	14.2	16.7	15.7	14.4
6	1SV22CS070	POSHITHA S P	7	12	11	3.5	3.5	6	6	5.5	5.5	6	6	4	6	6	5	23	10	23	3.8	3.8	3.8	3.8	3.8	3.8	13.3	13.3	13.8	15.8	15.3	14.3	14.1
7	1SV22CS071	PRAJWAL B S	4	12	11	2	2	6	6	5.5	5.5	6	3	6	6	6	4	21	10	7	1.2	1.2	1.2	1.2	1.2	1.2	9.2	6.2	13.2	13.2	12.7	10.7	10.4
8	1SV22CS073	PRASHANTHI O	11	12	13	5.5	5.5	6	6	6.5	6.5	6	6	6	6	5	5	24	10	22	3.7	3.7	3.7	3.7	3.7	3.7	15.2	15.2	15.7	15.7	15.2	15.2	15.4
9	1SV22CS074	PRAITHIBHA V	7	12	12	3.5	3.5	6	6	6	6	6	6	6	5	6	5	24	10	35	5.8	5.8	5.8	5.8	5.8	5.8	15.3	15.3	17.8	16.8	17.8	16.8	16.3
10	1SV22CS075	PREETHAM GOWDA B S	5	11	12	2.5	2.5	5.5	5.5	6	6	6	4	6	6	6	5	23	10	22	3.7	3.7	3.7	3.7	3.7	3.7	12.2	10.2	15.2	15.2	15.7	14.7	13.2
11	1SV22CS076	PRIYANKA UMESH	9	10	14	4.5	4.5	5	5	7	7	6	6	6	5	6	5	24	10	36	6.0	6.0	6.0	6.0	6.0	6.0	16.5	16.5	17.0	16.0	19.0	18.0	16.5
12	1SV22CS077	PUNITH M	3	8	9	1.5	1.5	4	4	4.5	4.5	3	6	6	6	6	4	21	10	19	3.2	3.2	3.2	3.2	3.2	3.2	7.7	10.7	13.2	13.2	13.7	11.7	11.2
13	1SV22CS078	PUSHPA K	12	12	14	6	6	6	6	7	7	6	6	6	6	5	5	24	10	18	3.0	3.0	3.0	3.0	3.0	3.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
14	1SV22CS079	RACHANA C P	13	14	15	6.5	6.5	7	7	7.5	7.5	6	6	6	6	6	5	25	10	42	7.0	7.0	7.0	7.0	7.0	7.0	19.5	19.5	20.0	20.0	20.5	19.5	19.8
15	1SV22CS080	RAKESH HIREMATH	5	6	10	2.5	2.5	3	3	5	5	6	6	6	5	6	5	24	10	20	3.3	3.3	3.3	3.3	3.3	3.3	11.8	11.8	12.3	11.3	14.3	13.3	11.8
16	1SV22CS081	RAKESH KUMAR M	8	12	14	4	4	6	6	7	7	6	6	6	6	6	5	25	10	18	3.0	3.0	3.0	3.0	3.0	3.0	13.0	13.0	15.0	15.0	16.0	15.0	14.0
17	1SV22CS082	RAKSHITH C M	9	10	12	4.5	4.5	5	5	6	6	6	6	5	6	6	5	24	10	19	3.2	3.2	3.2	3.2	3.2	3.2	13.7	13.7	13.2	14.2	15.2	14.2	13.7
18	1SV22CS083	RAKSHITHA B V	11	11	15	5.5	5.5	5.5	5.5	7.5	7.5	6	6	6	6	6	5	25	10	40	6.7	6.7	6.7	6.7	6.7	6.7	18.2	18.2	18.2	18.2	20.2	19.2	18.2
19	1SV22CS084	RAKSHITHA R P	14	11	11	7	7	5.5	5.5	5.5	5.5	6	6	6	5	6	5	24	10	18	3.0	3.0	3.0	3.0	3.0	3.0	16.0	16.0	14.5	13.5	14.5	13.5	15.0
20	1SV22CS085	RANJITA S KATTI	7	8	12	3.5	3.5	4	4	6	6	6	6	5	6	6	5	24	10	23	3.8	3.8	3.8	3.8	3.8	3.8	13.3	13.3	12.8	13.8	15.8	14.8	13.3
21	1SV22CS086	RANJITHA A	12	11	14	6	6	5.5	5.5	7	7	6	6	6	5	6	5	24	10	28	4.7	4.7	4.7	4.7	4.7	4.7	16.7	16.7	16.2	15.2	17.7	16.7	16.2
22	1SV22CS087	RASHMITHA H	11	12	13	5.5	5.5	6	6	6.5	6.5	6	6	6	4	6	5	23	10	26	4.3	4.3	4.3	4.3	4.3	4.3	15.8	15.8	16.3	14.3	16.8	15.8	15.6
23	1SV22CS088	RUCHITHA K R	5	11	9	2.5	2.5	5.5	5.5	4.5	4.5	6	6	6	6	5	5	24	10	18	3.0	3.0	3.0	3.0	3.0	3.0	11.5	11.5	14.5	14.5	12.5	12.5	13.0
24	1SV22CS089	SAGAR S	7	11	11	3.5	3.5	5.5	5.5	5.5	5.5	6	6	6	6	4	5	23	10	22	3.7	3.7	3.7	3.7	3.7	3.7	13.2	13.2	15.2	15.2	13.2	14.2	14.2
25	1SV22CS090	SAGAR V	5	8	10	2.5	2.5	4	4	5	5	6	6	4	6	6	5	23	10	18	3.0	3.0	3.0	3.0	3.0	3.0	11.5	11.5	11.0	13.0	14.0	13.0	11.8
26	1SV22CS091	SAHANA Y S	9	12	15	4.5	4.5	6	6	7.5	7.5	6	6	6	5	6	5	24	10	28	4.7	4.7	4.7	4.7	4.7	4.7	15.2	15.2	16.7	15.7	18.2	17.2	15.7
27	1SV22CS092	SAHEEL PASHA	8	10	12	4	4	5	5	6	6	6	6	6	5	5	24	10	35	5.8	5.8	5.8	5.8	5.8	5.8	15.8	15.8	16.8	16.8	16.8	16.8	16.3	
28	1SV22CS093	SANGEETHA M	11	12	7	5.5	5.5	6	6	3.5	3.5	6	6	4	6	6	5	23	10	42	7.0	7.0	7.0	7.0	7.0	7.0	18.5	18.5	17.0	19.0	16.5	15.5	18.3
29	1SV22CS094	SANJU S R	11	12	12	5.5	5.5	6	6	6	6	6	6	6	6	5	5	24	10	18	3.0	3.0	3.0	3.0	3.0	3.0	14.5	14.5	15.0	15.0	14.0	14.0	14.8
30	1SV22CS095	SAVITHA G T	8	11	7	4	4	5.5	5.5	3.5	3.5	6	6	6	6	6	5	25	10	29	4.8	4.8	4.8	4.8	4.8	4.8	14.8	14.8	16.3	16.3	14.3	13.3	15.6
31	1SV22CS096	SHARANAPPA A N	5	12	11	2.5	2.5	6	6	5.5	5.5	6	6	6	4	6	5	23	10	24	4.0	4.0	4.0	4.0	4.0	4.0	12.5	12.5	16.0	14.0	15.5	14.5	13.8
32	1SV22CS097	SHARATH M T	6	12	13	3	3	6	6	6.5	6.5	6	6	6	6	6	5	25	10	28	4.7	4.7	4.7	4.7	4.7	4.7	13.7	13.7	16.7	16.7	17.2	16.2	15.2
33	1SV22CS098	SHARATH NAYAK R	13	15	15	6.5	6.5	7.5	7.5	7.5	7.5	6	6	6	6	6	5	25	10	30	5.0	5.0	5.0	5.0	5.0	5.0	17.5	17.5	18.5	18.5	18.5	17.5	18.0
34	1SV22CS099	SHEETAL H D	2	11	12	1	1	5.5	5.5	6	6	6	6	6	5	5	24	10	26	4.3	4.3	4.3	4.3	4.3	4.3	11.3	11.3	15.8	15.8	15.3	15.3	13.6	
35	1SV22CS100	SHEETAL R	1	8	12	0.5	0.5	4	4	6	6	6	6	6	4	6	5	23	10	24	4.0	4.0	4.0	4.0	4.0	4.0	10.5	10.5	14.0	12.0	16.0	15.0	11.8
36	1SV22CS101	SHRAVANKUMAR VIJAY	0	11	12	0	0	5.5	5.5	6	6	6	6	6	4	5	23	10	25	4.2	4.2	4.2	4.2	4.2	4.2	10.2	10.2	15.7	15.7	14.2	15.2	12.9	
37	1SV22CS102	SHREYA K	10	12	13	5	5	6	6	6.5	6.5	6	6	6	6	5	25	10	28	4.7	4.7	4.7	4.7	4.7	4.7	15.7	15.7	16.7	16.7	17.2	16.2	16.2	
38	1SV22CS103	SHWETHA K	9	7	11	4.5	4.5	3.5	3.5	5.5	5.5	6	6	6	6	5	5	24	10	25	4.2	4.2	4.2	4.2	4.2	4.2	14.7	14.7	13.7	13.7	14.7	14.7	14.2
39	1SV22CS104	SHWETHA P C	14	15	15	7	7	7.5	7.5	7.5	7.5	6	6	6	6	6	5	25	10	38	6.3	6.3	6.3	6.3	6.3	6.3	19.3	19.3	19.8	19.8	19.8	18.8	19.6
40	1SV22CS105	SINCHANA D	7	11	15	3.5	3.5	5.5	5.5	7.5	7.5	6	6	6	5	6	5	24	10	27	4.5	4.5	4.5	4.5	4.5	4.5	14.0	14.0	16.0	15.0	18.0	17.0	14.8
41	1SV22CS106	SINCHANA G N	6	11	9	3	3	5.5	5.5	4.5	4.5	6	6	5	6	6	5	24	10	23	3.8	3.8	3.8	3.8	3.8	3.8	12.8	12.8	14.3	15.3	14.3	13.3	13.8
42	1SV22CS107	SONU T M	12	14	15	6	6	7	7	7.5	7.5	6	6	6	6	6	5	25	10	26	4.3	4.3	4.3	4.3	4.3	4.3	16.3	16.3	17.3	17.3	17.8	16.8	16.8
43	1SV22CS108	SOUBHAGYA HATTI	12	8	13	6	6	4	4	6.5	6.5	6	6	6	6	5	25	10	24	4.0	4.0	4.0	4.0	4.0	4.0	16.0	16.0	14.0	14.0	16.5	15.5	15.0	
44	1SV22CS109	SRI RAM S	9	12	11	4.5	4.5	6	6	5.5	5.5	6	6	6	4	6	5	23	10	27	4.5	4.5	4.5	4.5	4.5	4.5	15.0	15.0	16.5	14.5	16.0	15.0	15.3
45	1SV22CS110	SRUSHTI SHRUSHAIL	9	12	13	4.5	4.5	6	6	6.5	6.5	6	6	6	6	5	24	10	28	4.7	4.7	4.7	4										



47	ISV22CS112	TARUN R V	5	8	8	2.5	2.5	4	4	4	4	6	6	6	5	6	5	24	10	21	3.5	3.5	3.5	3.5	3.5	3.5	12.0	12.0	13.5	12.5	13.5	12.5	12.5
48	ISV22CS113	TEJAS T M	4	11	15	2	2	5.5	5.5	7.5	7.5	6	6	6	6	6	5	25	10	20	3.3	3.3	3.3	3.3	3.3	3.3	11.3	11.3	14.8	14.8	16.8	15.8	13.1
49	ISV22CS114	TEJASHWINI SHIVAPPA	8	11	14	4	4	5.5	5.5	7	7	6	6	5	6	6	5	24	10	26	4.3	4.3	4.3	4.3	4.3	4.3	14.3	14.3	14.8	15.8	17.3	16.3	14.8
50	ISV22CS115	TEJASWINI N	8	12	13	4	4	6	6	6.5	6.5	6	6	6	5	6	5	24	10	23	3.8	3.8	3.8	3.8	3.8	3.8	13.8	13.8	15.8	14.8	16.3	15.3	14.6
51	ISV22CS116	UDAY DRAVID V	0	4	12	0	0	2	2	6	6	6	3	6	5	6	5	23	10	29	4.8	4.8	4.8	4.8	4.8	4.8	10.8	7.8	12.8	11.8	16.8	15.8	10.8
52	ISV22CS117	UMME KULSUM	6	9	11	3	3	4.5	4.5	5.5	5.5	6	6	5	6	6	5	24	10	33	5.5	5.5	5.5	5.5	5.5	5.5	14.5	14.5	15.0	16.0	17.0	16.0	15.0
53	ISV22CS118	VARSHITHA G	12	11	14	6	6	5.5	5.5	7	7	6	6	6	6	6	5	25	10	35	5.8	5.8	5.8	5.8	5.8	5.8	17.8	17.8	17.3	17.3	18.8	17.8	17.6
54	ISV22CS119	VARUN RAJ K R	8	12	11	4	4	6	6	5.5	5.5	6	6	6	6	6	5	25	10	20	3.3	3.3	3.3	3.3	3.3	3.3	13.3	13.3	15.3	15.3	14.8	13.8	14.3
55	ISV22CS120	VIJAYALAKSHMIN	11	6	14	5.5	5.5	3	3	7	7	6	6	6	6	6	5	25	10	39	6.5	6.5	6.5	6.5	6.5	6.5	18.0	18.0	15.5	15.5	19.5	18.5	16.8
56	ISV22CS121	VINUTHA J	11	8	11	5.5	5.5	4	4	5.5	5.5	0	6	6	6	6	5	25	10	25	4.2	4.2	4.2	4.2	4.2	4.2	15.7	15.7	14.2	14.2	15.7	14.7	14.9
57	ISV22CS122	VIVEKA G V	12	13	15	6	6	6.5	6.5	7.5	7.5	6	6	6	6	6	5	25	10	43	7.2	7.2	7.2	7.2	7.2	7.2	19.2	19.2	19.7	19.7	20.7	19.7	19.4
58	ISV22CS123	YASHASWINI M	12	15	11	6	6	7.5	7.5	5.5	5.5	6	6	6	6	6	5	25	10	40	6.7	6.7	6.7	6.7	6.7	6.7	18.7	18.7	20.2	20.2	18.2	17.2	19.4
59	ISV22CS125	YOGESH K V	6	8	10	3	3	4	4	5	5	6	6	6	6	6	5	25	10	31	5.2	5.2	5.2	5.2	5.2	5.2	14.2	14.2	15.2	15.2	16.2	15.2	14.7
60	ISV22CS126	YOSUF AHMED BAIG	6	11	0	3	3	5.5	5.5	0	0	6	6	5	6	6	4	23	10	19	3.2	3.2	3.2	3.2	3.2	3.2	12.2	12.2	13.7	14.7	9.2	7.2	13.2
61	ISV22CS127	BALAJI NAIK	6	8	8	3	3	4	4	4	4	6	6	6	5	6	5	24	10	27	4.5	4.5	4.5	4.5	4.5	4.5	13.5	13.5	14.5	13.5	14.5	13.5	13.8
62	ISV22CS128	CHAITHANYA K T	10	11	14	5	5	5.5	5.5	7	7	6	6	6	6	6	5	25	10	29	4.8	4.8	4.8	4.8	4.8	4.8	15.8	15.8	16.3	16.3	17.8	16.8	16.1
63	ISV22CS129	NIRANJANGOUDA	9	9	13	4.5	4.5	4.5	4.5	6.5	6.5	6	6	5	6	6	5	24	10	22	3.7	3.7	3.7	3.7	3.7	3.7	14.2	14.2	13.2	14.2	16.2	15.2	13.9
																												14.43	14.35	15.59	15.50	16.28	15.45
																												68.7%	65.2%	70.9%	73.8%	77.5%	67.2%

*R. R. N*

*Niranjangaouda*  
PRINCIPAL  
SIET. TUMKUR.

H.O.D.  
COMPUTER SCIENCE & ENGG.  
SIET. TUMAKURU-08

*Bas*



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

<b>COLLEGE</b>	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY														
<b>FACULTY NAME</b>	PROF. SHANMUKASWAMY C V														
<b>BRANCH</b>	CS					ACADEMIC YEAR					2023-24				
<b>PROGRAM</b>	B.E	SEMESTER			III	SECTION		A [CSE]							
<b>COURSE NAME</b>	DATA STRUCTURES AND APPLICATIONS							COURSE CODE		BCS304					

**CO & PO MAPPING**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3											1	2		
CO2	3	3	3	2	1							1	2		
CO3	3	2	3	3	1	2						1	2		
CO4	3	3	3	3	1	3						2	2		
CO5	3	2	3	1	1							2	1		
<b>AVERAGE</b>	<b>3.0</b>	<b>2.5</b>	<b>3.0</b>	<b>2.25</b>	<b>1.0</b>	<b>2.5</b>						<b>2.0</b>	<b>1.8</b>		

**OVERALL MAPPING OF COURSE 2.25**

**CO AND PO ATTAINMENT**

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	69	2.1											0.7	1.1		
CO2	57	1.7	1.7	1.7	1.1	0.6							0.6	1.1		
CO3	61	1.8	1.2	1.8	1.8	0.6	1.2						0.6	1.2		
CO4	67	2.0	2.0	2.0	2.0	0.7	2.0						1.3	1.3		
CO5	67	2.0	1.3	2.0	0.7	0.7							1.3	0.7		
<b>AVERAGE</b>	<b>64.2</b>	<b>1.92</b>	<b>1.55</b>	<b>1.88</b>	<b>1.4</b>	<b>0.7</b>	<b>1.6</b>						<b>0.9</b>	<b>1.1</b>		

**FINAL ATTAINMENT LEVEL 1.38**

*Prof. Shanmukaswamy CV*  
 Staff Signature  
 Prof. Shanmukaswamy CV

*N. Chandrashekhara*  
 PRINCIPAL  
 SIET, TUMKUR.

*Dr. Basavesha D*  
 HOD,  
 COMPUTER SCIENCE & ENGG.,  
 SIET, TUMAKURU-06.



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

COURSE NAME	DATA STRUCTURES AND APPLICATIONS	COURSE CODE	BCS304
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**COURSE OUTCOME**

- CO 1. Explain different data structures and their applications.
- CO 2. Apply Arrays, Stacks and Queue data structures to solve the given problems.
- CO 3. Use the concept of linked list in problem solving.
- CO 4. Develop solutions using trees and graphs to model the real-world problem.
- CO 5. Explain the advanced Data Structures concepts such as Hashing Techniques and Optimal Binary Search Trees.

**PROGRAM OUTCOMES**

PO1:	<b>Engineering knowledge:</b> An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge
PO2:	<b>Problem analysis:</b> Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3:	<b>Design / development of solutions:</b> An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
PO4:	<b>Conduct investigations of complex Problem:</b> An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and provide valid conclusions.
PO5:	<b>Modern tool usage:</b> Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling to complex engineering activities.
PO6:	<b>The engineer and society:</b> Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
PO7:	<b>Environment and sustainability:</b> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8:	<b>Ethics:</b> Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9:	<b>Individual and team work:</b> Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10:	<b>Communication:</b> Communicate effectively on complex engineering activities with the engineering community and with the society
PO11:	<b>Project management and finance:</b> An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.
PO12:	<b>Life-long learning:</b> A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

COsPOs ATTAINMENT

ACADEMIC YEAR -2023-24[ODD SEM]

CLASS:3rd SEM A section CSE

Course Name :Data Structures and Applications[24CS21] 24CS21 BC 304

Roll No.	USN	Name	IA Test			IA TEST I					IA TEST II					Assignment(15/5)					Quiz (10/5)					SEE (50)					Final COs					Individual student %
			IA1 25	IA2 25	IA3 25	CO1 15	CO2 10	CO2 10	CO3 15	CO4 12	CO5 13	CO1 3	CO2 3	CO3 3	CO4 3	CO5 3	CO1 2	CO2 2	CO3 2	CO4 2	CO5 2	SEE	CO1 10	CO2 10	CO3 10	CO4 10	CO5 10	CO1 30	CO2 35	CO3 30	CO4 27	CO5 28				
1	1SV22CS001	ABILASH U K	14	8	19	9	5	3	5	9	10	0	1	3	3	3	2	2	2	2	2	30	6	6	6	6	6	17	16	16	20	21	61			
2	1SV22CS003	AJAY GONHALMATH	16	11	3	11	5	4	7	1	2	15	3	3	3	3	2	2	2	2	2	18	4	4	4	3	3	31	18	15	9	10	55			
3	1SV22CS004	AKASH B S	9	11	9	6	3	4	7	4	5	0	3	3	3	3	2	2	2	2	2	3	1	1	0	0	0	8.6	12	12	9	10	35			
4	1SV22CS005	AKSHAY B H	16	11	14	11	5	4	7	7	7	15	3	3	3	3	2	2	2	2	2	7	1	1	2	2	1	29	15	14	14	14	57			
5	1SV22CS006	AKSHAY M S	17	17	17	11	6	6	11	8	9	0	3	3	3	3	2	2	2	2	2	13	3	3	3	2	2	16	19	18	15	16	56			
6	1SV22CS007	ANJALI K N	19	16	21	13	6	5	11	10	11	0	3	3	3	3	2	2	2	2	2	39	8	8	8	8	7	22	24	23	23	23	77			
7	1SV22CS008	ANUSHA J	18	13	23	12	6	4	9	11	12	0	3	3	3	3	2	2	2	2	2	34	6	7	7	7	7	20	22	20	23	24	73			
8	1SV22CS009	ASHWINI M L	23	22	25	15	8	7	15	12	13	15	3	3	3	3	2	2	2	2	2	35	7	7	7	7	7	39	27	27	24	25	95			
9	1SV22CS010	AVULA AMARNATH REDDY	18	22	22	12	6	7	15	11	11	0	3	3	3	3	2	2	2	2	2	18	4	3	3	4	4	18	21	23	19	20	68			
10	1SV22CS011	BHAGYASHREE IRAIYYA GADGIMATH	18	15	17	12	6	5	10	8	9	15	3	3	3	3	2	2	2	2	2	18	3	3	4	4	4	32	19	19	17	17	69			
11	1SV22CS012	BHAVANA A	17	11	16	11	6	4	7	8	8	15	3	3	3	3	2	2	2	2	2	30	6	6	6	6	6	34	20	18	19	19	74			
12	1SV22CS013	BHOOMIKA H E	16	10	15	11	5	3	7	7	8	0	3	3	3	3	2	2	2	2	2	9	2	2	2	1	2	14	15	13	13	15	47			
13	1SV22CS014	BHUVANA D M	19	23	23	13	6	8	15	11	12	0	3	3	3	3	2	2	2	2	2	28	6	6	6	5	5	20	25	25	21	22	75			
14	1SV22CS015	BHYRESH A C	16	15	23	11	5	5	10	11	12	0	3	3	3	3	2	2	2	2	2	24	4	5	5	5	5	17	20	20	21	22	66			
15	1SV22CS016	BI BI FATHIMA	19	12	22	13	6	4	8	11	11	0	3	3	3	3	2	2	2	2	2	27	6	6	5	5	5	21	21	18	21	22	69			
16	1SV22CS017	CHAITHANYA M	17	18	18	11	6	6	12	9	9	3	3	3	3	3	2	2	2	2	2	30	6	6	6	6	6	22	23	23	20	20	72			
17	1SV22CS018	CHAITHRA S R	20	21	24	13	7	7	14	12	12	3	3	3	3	3	2	2	2	2	2	21	4	4	4	5	4	23	23	24	22	22	75			
18	1SV22CS019	CHAITRA B R	19	22	21	13	6	7	15	10	11	3	3	3	3	3	2	2	2	2	2	21	4	4	4	5	4	23	23	24	22	22	75			
19	1SV22CS021	CHANDAN M	17	11	12	11	6	4	7	6	6	0	3	3	3	3	2	2	2	2	2	18	4	4	3	3	4	21	22	23	18	20	69			
20	1SV22CS022	CHANDRASHEKHAR	8	1	10	5	3	0	1	5	5	0	3	3	3	3	2	2	2	2	2	24	5	5	4	5	5	18	19	17	16	16	57			
21	1SV22CS023	CHANDRASHEKHAR M PATIL	16	8	18	11	5	3	5	9	9	0	3	3	3	3	2	2	2	2	2	13	3	2	2	3	3	9.9	10	8.3	12	13	36			
22	1SV22CS024	CHANDRASHEKHAR P	13	AB	16	9	4	0	0	8	8	0	1	3	3	3	2	2	2	2	2	18	4	4	3	3	4	16	17	13	17	18	54			
23	1SV22CS025	CHASMIYABANU G S	19	17	20	13	6	6	11	10	10	0	3	3	3	3	2	2	2	2	2	18	4	3	3	4	4	14	10	8.6	16	17	44			
24	1SV22CS026	CHITRA R	16	20	24	11	5	7	13	12	12	0	3	3	3	3	2	2	2	2	2	12	2	2	3	3	2	17	19	19	18	18	61			
25	1SV22CS027	DEEKSHA J G	20	17	22	13	7	6	11	11	11	0	3	3	3	3	2	2	2	2	2	25	5	5	5	5	5	18	22	23	22	22	71			
26	1SV22CS028	DHANUSH C N	22	20	23	15	7	7	13	11	12	0	3	3	3	3	2	2	2	2	2	12	2	2	2	3	3	19	21	21	19	20	67			
27	1SV22CS029	DHARANESH H M	22	12	20	15	7	4	8	10	10	0	3	3	3	3	2	2	2	2	2	21	4	4	4	4	4	21	21	17	19	20	65			
28	1SV22CS030	DISHA T N	18	20	21	12	6	7	13	10	11	3	3	3	3	3	2	2	2	2	2	19	4	4	4	4	4	21	21	22	19	19	68			
29	1SV22CS031	DIVYASHREE T D	18	14	15	12	6	5	9	7	8	3	3	3	3	3	2	2	2	2	2	24	5	5	5	4	5	22	20	18	16	18	63			
30	1SV22CS032	GAGAN P KUMAR	17	11	19	11	6	4	7	9	10	0	1	3	3	3	2	2	2	2	2	25	5	5	5	5	5	18	17	17	19	20	61			
31	1SV22CS033	GANESH KRISHNA GOUDA	22	23	24	15	7	8	15	12	12	0	3	3	3	3	2	2	2	2	2	33	7	7	6	6	7	23	27	26	23	24	82			
32	1SV22CS034	GOPI C N	13	17	21	9	4	6	11	10	11	0	3	3	3	3	2	2	2	2	2	18	4	4	3	3	4	14	19	19	18	20	60			
33	1SV22CS035	GOWTHAM G S PATIL	23	19	20	15	8	6	13	10	10	0	3	3	3	3	2	2	2	2	2	26	5	5	6	5	5	23	24	23	20	21	73			
34	1SV22CS036	HARISHREE A	20	18	21	13	7	6	12	10	11	0	3	3	3	3	2	2	2	2	2	20	4	4	4	4	4	19	22	21	19	20	67			
35	1SV22CS037	HARSHITHA H S	23	18	21	15	8	6	12	10	11	3	3	3	3	3	2	2	2	2	2	31	6	6	6	6	7	27	25	23	21	23	79			
36	1SV22CS038	HARSHITHA K	24	20	21	16	8	7	13	10	11	3	3	3	3	3	2	2	2	2	2	24	5	4	5	5	5	26	24	23	20	21	75			
37	1SV22CS039	HARSHITHA K R	23	19	21	15	8	6	13	10	11	3	3	3	3	3	2	2	2	2	2	31	6	7	6	6	6	27	26	24	21	22	80			



38	1SV22CS040	HARSHITHA V	23	12	22	15	8	4	8	11	11	0	3	3	3	3	2	2	2	2	2	29	6	6	5	6	6	23	22	19	21	22	72
39	1SV22CS041	HARSHITHA V	23	23	25	15	8	8	15	12	13	3	3	3	3	3	2	2	2	2	2	35	7	7	7	7	7	27	27	27	24	25	87
40	1SV22CS042	HEMANTH H A	20	12	21	13	7	4	8	10	11	0	3	3	3	3	2	2	2	2	2	18	4	4	3	3	4	19	19	16	18	20	61
41	1SV22CS043	HEMASHREE	14	20	20	9	5	7	13	10	10	3	3	3	3	3	2	2	2	2	2	30	6	6	6	6	6	20	22	24	21	21	73
42	1SV22CS044	HUZMA KOUSER	23	24	25	15	8	8	16	12	13	3	3	3	3	3	2	2	2	2	2	33	7	7	7	6	6	27	27	27	23	24	85
43	1SV22CS045	K R OBALESH	17	7	17	11	6	2	5	8	9	0	3	3	3	3	2	2	2	2	2	24	5	5	5	5	4	18	18	14	18	18	57
44	1SV22CS046	KANTHARAJU M K	17	AB	13	11	6	0	0	6	7	0	2	2	2	2	2	2	2	2	2	21	4	4	4	4	5	18	14	8.2	14	16	47
45	1SV22CS047	KARTHIK M R	19	5	16	13	6	2	3	8	8	0	2	2	2	2	2	2	2	2	2	18	4	3	3	4	4	18	15	11	15	16	50
46	1SV22CS048	KISHOR KUMAR T C	20	4	14	13	7	1	3	7	7	0	2	2	2	2	2	2	2	2	2	18	4	4	3	3	4	19	16	9.7	14	15	49
47	1SV22CS049	LAXMI MAHANTESH AMMALAJERI	24	20	24	16	8	7	13	12	12	3	3	3	3	3	2	2	2	2	2	18	4	4	4	3	3	25	23	21	20	20	73
48	1SV22CS050	M A ADITYA	11	8	19	7	4	3	5	9	10	0	2	2	2	2	2	2	2	2	2	34	7	7	7	7	6	16	17	16	20	20	59
49	1SV22CS051	MADHUMITHA B	21	18	17	14	7	6	12	8	9	0	3	3	3	3	2	2	2	2	2	18	3	3	4	4	4	19	21	21	17	17	63
50	1SV22CS052	MAHADEV	18	14	21	12	6	5	9	10	11	0	3	3	3	3	2	2	2	2	2	10	2	2	2	2	2	16	18	16	17	18	57
51	1SV22CS053	MANOJ H	13	6	10	9	4	2	4	5	5	0	2	2	2	2	2	2	2	2	2	18	4	3	3	4	4	14	13	12	12	13	43
52	1SV22CS054	MEGHANA P	23	23	25	15	8	8	15	12	13	3	3	3	3	3	2	2	2	2	2	38	8	8	8	7	7	28	28	27	24	25	88
53	1SV22CS055	MOHAMMED AZAM	18	10	14	12	6	3	7	7	7	0	3	3	3	3	2	2	2	2	2	18	4	4	3	3	4	18	18	15	15	16	54
54	1SV22CS056	MOHAMMED	22	12	19	15	7	4	8	9	10	3	3	3	3	3	2	2	2	2	2	18	4	3	3	4	4	23	19	17	18	18	64
55	1SV22CS057	MOHAN DEVARAJA TOTADA	11	4	14	7	4	1	3	7	7	0	3	3	3	3	2	2	2	2	2	8	2	2	2	1	1	11	12	8.7	13	13	38
56	1SV22CS058	MONIKA K M	22	15	24	15	7	5	10	12	12	3	3	3	3	3	2	2	2	2	2	37	8	8	7	7	7	28	25	22	24	25	83
57	1SV22CS059	MONISHA M	23	12	16	15	8	4	8	8	8	3	3	3	3	3	2	2	2	2	2	26	6	5	5	5	5	26	22	18	18	19	69
58	1SV22CS061	MURSHID MONDAL	13	13	17	9	4	4	9	8	9	0	3	3	3	3	2	2	2	2	2	18	3	3	4	4	4	14	17	17	17	17	55
59	1SV22CS062	NAGARAJA M R	18	11	19	12	6	4	7	9	10	0	3	3	3	3	2	2	2	2	2	18	4	3	3	4	4	18	18	16	18	18	58
60	1SV22CS063	NALINA S L	16	15	17	11	5	5	10	8	9	3	3	3	3	3	2	2	2	2	2	19	4	4	4	3	4	19	19	18	16	18	60
61	1SV22CS064	NAVEENKUMAR D H	20	14	17	13	7	5	9	8	9	0	3	3	3	3	2	2	2	2	2	24	5	5	4	5	5	20	21	19	18	19	65
62	1SV22CS127	BALAJI NAJK	19	13	14	13	6	4	9	7	7	3	3	3	3	3	2	2	2	2	2	14	3	3	3	3	2	21	19	17	15	14	57
63	1SV22CS128	CHAITHANYA K T	24	18	23	16	8	6	12	11	12	3	3	3	3	3	2	2	2	2	2	36	8	7	7	7	7	29	26	24	23	24	84
64	1SV22CS129	NIRANJANGUDA RUDRAGOUA PATIL	19	14	18	13	6	5	9	9	9	3	3	3	3	3	2	2	2	2	2	20	4	4	4	4	4	22	20	18	18	18	64
65	1SV23CS400	ABDULLA AJAZ	16	6	17	11	5	2	4	8	9	0	3	3	3	3	2	2	2	2	2	7	1	2	2	1	1	14	14	10	14	15	45
66	1SV23CS403	DEEPAK H	18	4	11	12	6	1	3	5	6	3	3	3	3	3	2	2	2	2	2	23	5	5	5	4	4	22	17	12	14	15	53
67	1SV23CS408	SANIYA FIRDOSE	23	13	13	15	8	4	9	6	7	3	3	3	3	3	2	2	2	2	2	18	3	3	4	4	4	23	20	18	15	16	61
68	1SV23CS409	TOUSIF KHAN A	18	4	10	12	6	1	3	5	5	0	3	3	3	3	2	2	2	2	2	6	1	2	1	1	1	15	14	8.7	11	11	40
69	1SV23CS410	YASHASWINI B L	22	15	15	15	7	5	10	7	8	3	3	3	3	3	2	2	2	2	2	19	4	4	4	4	3	24	21	19	16	16	64

Total students

69

Attainment

21	20	18	18	19
69	57	61	67	67

2.1	1.7	1.8	2.0	2.0
1.4	1.1	1.2	1.3	1.3
0.7	0.6	0.6	0.7	0.7

*CV Sharmukha Swamy*  
*[Prof. Sharmukha Swamy cv]*

PRINCIPAL  
 TUMKUR.

HOD.  
 COMPUTER SCIENCE & ENGG.,  
 SIET, TUMAKURU-06.



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

<b>COLLEGE</b>	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY														
<b>FACULTY NAME</b>	PROF. SHANMUKASWAMY C V														
<b>BRANCH</b>	CS					<b>ACADEMIC YEAR</b>					2023-24				
<b>PROGRAM</b>	B.E	<b>SEMESTER</b>				III	<b>SECTION</b>				B [CSE]				
<b>COURSE NAME</b>	DATA STRUCTURES AND APPLICATIONS							<b>COURSE CODE</b>				BCS304			

**CO & PO MAPPING**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3											1	2		
CO2	3	3	3	2	1							1	2		
CO3	3	2	3	3	1	2						1	2		
CO4	3	3	3	3	1	3						2	2		
CO5	3	2	3	1	1							2	1		
<b>AVERAGE</b>	<b>3.0</b>	<b>2.5</b>	<b>3.0</b>	<b>2.25</b>	<b>1.0</b>	<b>2.5</b>						<b>2.0</b>	<b>1.8</b>		

**OVERALL MAPPING OF COURSE 2.25**

**CO AND PO ATTAINMENT**

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	74	2.2											0.7	1.5		
CO2	65	2.0	2.0	2.0	1.3	0.7							0.7	1.5		
CO3	68	2.1	1.4	2.1	2.1	0.7	1.4						0.7	1.4		
CO4	74	2.2	2.2	2.2	2.2	1.5	2.2						1.5	1.5		
CO5	74	2.2	1.5	2.2	0.7	0.7							1.5	0.7		
<b>AVERAGE</b>	<b>71</b>	<b>2.14</b>	<b>1.78</b>	<b>2.13</b>	<b>1.58</b>	<b>0.9</b>	<b>1.8</b>						<b>1.02</b>	<b>1.32</b>		

**FINAL ATTAINMENT LEVEL 1.58**

*Prof. Shanmukaswamy CV*  
 Staff Signature  
 Prof. Shanmukaswamy CV

*M. Srinivas Kumar*  
 PRINCIPAL  
 SIET, TUMKUR.

*Dr. Basaveshwara*  
 Dr. Basaveshwara  
 COORDINATOR  
 DEPARTMENT OF COMPUTER SCIENCE & ENGG.,  
 SIET, TUMAKURU-05.



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

COURSE NAME	DATA STRUCTURES AND APPLICATIONS	COURSE CODE	BCS304
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**COURSE OUTCOME**

- CO 1. Explain different data structures and their applications.
- CO 2. Apply Arrays, Stacks and Queue data structures to solve the given problems.
- CO 3. Use the concept of linked list in problem solving.
- CO 4. Develop solutions using trees and graphs to model the real-world problem.
- CO 5. Explain the advanced Data Structures concepts such as Hashing Techniques and Optimal Binary Search Trees.

**PROGRAM OUTCOMES**

PO1:	<b>Engineering knowledge:</b> An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge
PO2:	<b>Problem analysis:</b> Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3:	<b>Design / development of solutions:</b> An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
PO4:	<b>Conduct investigations of complex Problem:</b> An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and provide valid conclusions.
PO5:	<b>Modern tool usage:</b> Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling to complex engineering activities.
PO6:	<b>The engineer and society:</b> Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
PO7:	<b>Environment and sustainability:</b> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8:	<b>Ethics:</b> Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
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PO10:	<b>Communication:</b> Communicate effectively on complex engineering activities with the engineering community and with the society
PO11:	<b>Project management and finance:</b> An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.
PO12:	<b>Life-long learning:</b> A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning



## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

## COsPOs ATTAINMENT

## ACADEMIC YEAR -2023-24[ODD SEM]

CLASS:3rd SEM B section CSE

Course Name :Data Structures and Applications[BCS304]

Roll No.	USN	Name	IA Test					IA TEST I					IA TEST II					Assignment[15/5]					Quiz [10/5]					SEE [50]					Final COs					Ind student %
			IA1 25	IA2 25	IA3 25	CO1 15	CO2 10	CO2 10	CO3 15	CO4 12	CO5 13	CO1 3	CO 2 3	CO3 3	CO4 3	CO 5 3	CO1 2	CO2 2	CO3 2	CO4 2	CO5 2	SEE	CO1 10	CO2 10	CO3 10	CO4 10	CO5 10	CO1 30	CO2 35	CO3 30	CO4 27	CO5 28						
1	ISV22CS065	NEERAJ T R	21	21	20	14	7	7	14	10	10	3	3	3	3	3	2	2	2	2	2	35	7	7	7	7	7	26	26	26	22	22	81					
2	ISV22CS066	NIDHI D K	23	9	19	15	8	3	6	9	10	0	3	3	3	3	2	2	2	2	2	36	8	7	7	7	7	25	23	18	21	22	73					
3	ISV22CS067	NIRMALA MADARI	21	18	23	14	7	6	12	11	12	0	1	3	3	3	2	2	2	2	2	23	5	5	5	4	4	21	21	21	20	21	69					
4	ISV22CS068	NIVEDITHA V	21	16	22	14	7	5	11	11	11	0	3	3	3	3	2	2	2	2	2	38	8	8	8	7	7	24	25	23	23	23	79					
5	ISV22CS069	PAVITHRA M R	24	19	20	16	8	6	13	10	10	3	3	3	3	3	2	2	2	2	2	28	5	5	6	6	6	26	24	24	21	21	77					
6	ISV22CS070	POSHITHA S P	18	18	17	12	6	6	12	8	9	0	3	3	3	3	2	2	2	2	2	24	5	5	5	5	4	19	22	22	18	18	66					
7	ISV22CS071	PRAJWAL B S	20	14	13	13	7	5	9	6	7	3	3	3	3	3	2	2	2	2	2	10	2	2	2	2	2	20	18	16	13	14	55					
8	ISV22CS073	PRASHANTHI O	23	16	17	15	8	5	11	8	9	3	3	3	3	3	2	2	2	2	2	22	4	4	4	5	5	24	22	21	18	19	69					
9	ISV22CS074	PRATHIBHA V	23	16	21	15	8	5	11	10	11	3	3	3	3	3	2	2	2	2	2	19	4	4	4	4	3	24	22	20	19	19	69					
10	ISV22CS075	PREETHAM GOWDA B S	15	13	16	10	5	4	9	8	8	0	0	1	3	3	2	2	2	2	2	18	3	3	4	4	4	15	14	18	17	17	54					
11	ISV22CS076	PRIYANKA UMESH CHIGARI	23	13	18	15	8	4	9	9	9	0	1	3	3	3	2	2	2	2	2	23	5	5	5	4	4	22	20	18	18	18	64					
12	ISV22CS077	PUNITH M	21	14	17	14	7	5	9	8	9	0	0	1	3	3	2	2	2	2	2	20	4	4	4	4	4	20	18	18	17	18	61					
13	ISV22CS078	PUSHPA K	23	17	22	15	8	6	11	11	11	3	3	3	3	3	2	2	2	2	2	29	6	6	6	6	5	26	24	22	22	21	77					
14	ISV22CS079	RACHANA C P	22	21	23	15	7	7	14	11	12	3	3	3	3	3	2	2	2	2	2	24	5	5	5	5	4	25	24	24	21	21	77					
15	ISV22CS080	RAKESH HIREMATH	17	17	17	11	6	6	11	8	9	3	3	3	3	3	2	2	2	2	2	25	5	5	5	5	5	21	21	21	18	19	67					
16	ISV22CS081	RAKESH KUMAR M	24	18	24	16	8	6	12	12	12	3	3	3	3	3	2	2	2	2	2	28	6	6	6	5	5	27	25	22	22	22	79					
17	ISV22CS082	RAKSHITH C M	21	17	21	14	7	6	11	10	11	3	3	3	3	3	2	2	2	2	2	18	3	3	4	4	4	22	21	20	19	20	68					
18	ISV22CS083	RAKSHITHA B V	23	11	17	15	8	4	7	8	9	3	3	3	3	3	2	2	2	2	2	18	3	3	4	4	4	23	19	16	17	18	63					
19	ISV22CS084	RAKSHITHA R P	19	4	12	13	6	1	3	6	6	3	3	3	3	3	2	2	2	2	2	19	4	3	4	4	4	22	16	12	15	15	53					
20	ISV22CS085	RANJITA S KATTI	13	13	19	9	4	4	9	9	10	0	3	3	3	3	2	2	2	2	2	8	2	2	2	1	1	13	16	15	15	16	49					
21	ISV22CS086	RANJITHA A	24	22	25	16	8	7	15	12	13	3	3	3	3	3	2	2	2	2	2	25	5	5	5	5	5	26	25	25	22	23	81					
22	ISV22CS087	RASHMITHA H	24	16	22	16	8	5	11	11	11	3	3	3	3	3	2	2	2	2	2	20	4	4	4	4	4	25	22	20	20	20	71					
23	ISV22CS088	RUCHITHA K R	24	13	22	16	8	4	9	11	11	3	3	3	3	3	2	2	2	2	2	22	5	5	4	4	4	26	22	18	20	20	71					
24	ISV22CS089	SAGAR S	19	AB	20	13	6	0	0	10	10	0	3	3	3	3	2	2	2	2	2	10	2	2	2	2	2	17	13	7	17	17	47					
25	ISV22CS090	SAGAR V	14	AB	16	9	5	0	0	8	8	0	3	3	3	3	2	2	2	2	2	12	2	2	2	3	3	13	12	8	16	16	43					
26	ISV22CS091	SAHANA Y S	14	13	19	9	5	4	9	9	10	3	3	3	3	3	2	2	2	2	2	22	5	5	4	4	4	19	19	18	18	19	62					
27	ISV22CS092	SAHEEL PASHA	14	18	24	9	5	6	12	12	12	3	3	3	3	3	2	2	2	2	2	26	5	5	5	5	6	19	21	22	22	23	71					
28	ISV22CS093	SANGEETHA M	19	16	17	13	6	5	11	8	9	3	3	3	3	3	2	2	2	2	2	21	4	4	4	4	5	22	21	20	17	19	65					
29	ISV22CS094	SANJU S R	18	19	19	12	6	6	13	9	10	3	3	3	3	3	2	2	2	2	2	18	4	4	3	3	3	21	21	21	17	18	65					
30	ISV22CS095	SAVITHA G T	24	17	19	16	8	6	11	9	10	3	3	3	3	3	2	2	2	2	2	28	6	6	6	5	5	27	25	21	19	20	75					
31	ISV22CS096	SHARANAPPA A N	20	13	20	13	7	4	9	10	10	3	3	3	3	3	2	2	2	2	2	18	4	4	4	3	3	22	20	17	18	18	63					
32	ISV22CS097	SHARATH M T	19	11	19	13	6	4	7	9	10	3	3	3	3	3	2	2	2	2	2	14	3	3	2	3	3	21	18	15	17	18	59					
33	ISV22CS098	SHARATH NAYAK R	23	21	21	15	8	7	14	10	11	3	3	3	3	3	2	2	2	2	2	33	7	7	6	6	7	27	27	25	21	23	82					
34	ISV22CS099	SHEETAL H D	14	8	8	9	5	3	5	4	4	3	3	3	3	3	2	2	2	2	2	11	2	2	2	2	3	16	14	12	11	12	44					
35	ISV22CS100	SHEETAL R	19	6	12	13	6	2	4	6	6	0	3	3	3	3	2	2	2	2	2	9	2	2	2	2	1	17	15	11	13	12	45					
36	ISV22CS101	SHRAVANKUMAR VIJAY CHIMMAD	16	15	19	11	5	5	10	9	10	3	3	3	3	3	2	2	2	2	2	24	5	4	5	5	5	21	19	20	19	20	66					



37	ISV22CS102	SHREYA K	22	17	23	15	7	6	11	11	12	3	3	3	3	3	2	2	2	2	2	26	6	5	5	5	5	26	23	21	21	22	75		
38	ISV22CS103	SHWETHA K	24	14	17	16	8	5	9	8	9	3	3	3	3	3	2	2	2	2	2	18	3	3	4	4	4	24	21	18	17	18	65		
39	ISV22CS104	SHWETHA P C	24	24	25	16	8	8	16	12	13	3	3	3	3	3	2	2	2	2	2	41	8	8	8	8	9	29	29	29	25	27	93		
40	ISV22CS105	SINCHANA D	23	14	20	15	8	5	9	10	10	3	3	3	3	3	2	2	2	2	2	26	5	5	5	5	6	25	22	19	20	21	72		
41	ISV22CS106	SINCHANA G N	19	9	16	13	6	3	6	8	8	3	3	3	3	3	2	2	2	2	2	18	4	4	4	3	3	22	18	14	16	16	57		
42	ISV22CS107	SONU T M	23	20	23	15	8	7	13	11	12	3	3	3	3	3	2	2	2	2	2	18	4	4	4	3	3	22	18	14	16	16	57		
43	ISV22CS108	SOUBHAGYA HATTI	23	13	19	15	8	4	9	9	10	0	3	3	3	3	2	2	2	2	2	29	6	6	6	6	5	26	25	24	22	22	80		
44	ISV22CS109	SRI RAM S	20	19	23	13	7	6	13	11	12	0	3	3	3	3	2	2	2	2	2	33	7	7	7	6	6	24	24	20	20	21	73		
45	ISV22CS110	SRUSHTI SHRISHAIL HUGAR	20	14	18	13	7	5	9	9	9	0	3	3	3	3	2	2	2	2	2	8	2	2	2	2	0	17	20	20	18	17	61		
46	ISV22CS111	SUHAS S	17	12	18	11	6	4	8	9	9	0	3	3	3	3	2	2	2	2	2	32	6	6	7	7	6	21	22	21	21	20	71		
47	ISV22CS112	TARUN R V	15	10	19	10	5	3	7	9	10	3	3	3	3	3	2	2	2	2	2	24	5	5	5	5	4	18	20	18	19	18	62		
48	ISV22CS113	TEJAS T M	19	AB	22	13	6	0	0	11	11	0	3	3	3	3	2	2	2	2	2	21	4	4	4	4	3	19	17	16	18	18	59		
49	ISV22CS114	TEJASHWINI SHIVAPPA GANIGER	19	13	24	13	6	4	9	12	12	3	3	3	3	3	2	2	2	2	2	20	4	4	4	4	4	19	15	9	20	20	55		
50	ISV22CS115	TEJASWINI N	13	16	19	9	4	5	11	9	10	0	3	3	3	3	2	2	2	2	2	22	5	5	4	4	4	23	21	18	21	21	69		
51	ISV22CS116	UDAY DRAVID V	16	8	18	11	5	3	5	9	9	0	3	3	3	3	2	2	2	2	2	25	5	5	5	5	5	16	20	21	19	20	63		
52	ISV22CS117	UMME KULSUM	23	16	23	15	8	5	11	11	12	0	3	3	3	3	2	2	2	2	2	18	4	4	3	3	4	17	17	13	17	18	55		
53	ISV22CS118	VARSHITHA G	24	19	22	16	8	6	13	11	11	3	3	3	3	3	2	2	2	2	2	12	3	3	2	2	2	20	21	18	18	19	64		
54	ISV22CS119	VARUN RAJ K R	23	20	23	15	8	7	13	11	12	3	3	3	3	3	2	2	2	2	2	21	4	4	4	4	4	5	25	23	22	20	21	74	
55	ISV22CS120	VIJAYALAKSHMI N	24	14	23	16	8	5	9	11	12	3	3	3	3	3	2	2	2	2	2	18	3	3	4	4	4	23	22	22	20	21	73		
56	ISV22CS121	VINUTHA J	24	14	16	16	8	5	9	8	8	3	3	3	3	3	2	2	2	2	2	25	5	5	5	5	5	26	23	19	21	22	74		
57	ISV22CS122	VIVEKA G V	23	20	25	15	8	7	13	12	13	3	3	3	3	3	2	2	2	2	2	20	4	4	4	4	4	25	22	18	17	17	66		
58	ISV22CS123	YASHASWINI M	22	14	5	15	7	5	9	2	3	3	3	3	3	3	2	2	2	2	2	37	8	8	7	7	7	28	27	25	24	25	87		
59	ISV22CS125	YOGESH K V	23	17	17	15	8	6	11	8	9	3	3	3	3	3	2	2	2	2	2	28	5	5	6	6	6	25	22	20	13	14	63		
60	ISV22CS126	YOSUF AHMED BAIG	24	12	AB	16	8	4	8	0	0	3	3	3	3	3	2	2	2	2	2	19	4	4	4	4	3	24	22	20	17	17	67		
61	ISV23CS401	BHOOMIKA K	23	9	12	15	8	3	6	0	0	3	3	3	3	3	2	2	2	2	2	9	1	2	2	2	2	22	19	15	7	7	47		
62	ISV23CS402	CHANDAN GOVANKOP	19	9	14	13	6.3	3	6	7	7	0	3	3	3	3	2	2	2	2	2	15	3	3	3	3	3	23	19	14	8	8	48		
63	ISV23CS404	JYOTHI L	21	9	15	14	7	3	6	7	8	3	3	3	3	3	2	2	2	2	2	15	3	3	3	3	3	18	17	14	15	15	53		
64	ISV23CS405	KAVYA K S	23	15	22	15	8	5	10	11	11	3	3	3	3	3	2	2	2	2	2	AB	0	0	0	0	0	19	15	11	12	13	47		
65	ISV23CS407	PAVITHRA D	19	13	12	13	6	4	9	6	7	3	3	3	3	3	2	2	2	2	2	19	5	4	4	4	4	25	22	19	20	20	71		
<b>TOTAL</b>																	2	2	2	2	2	23	5	5	5	4	4	23	21	18	15	16	61		
Total students																																			

65

Attainment

22	23	21	20	21
74	65	68	74	74

2.2	2.0	2.1	2.2	2.2
1.5	1.3	1.4	1.5	1.5
0.7	0.7	0.7	0.7	0.7

*Dr. Shanmuga Swamy*  
 (Dr. Shanmuga Swamy cv.)

*N. Shanmuga Swamy*  
 PRINCIPAL  
 SIET. TUMKUR.

*Bal*  
 HOD.  
 COMPUTER SCIENCE & ENGG.,  
 SIET, TUMAKURU-06.





## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

3<sup>rd</sup> A1 Sec

### COURSE OUTCOME

- 1 Illustrate the basic concepts of object-oriented programming.
- 2 Design appropriate classes for the given real world scenario.
- 3 Apply the knowledge of compile-time / run-time polymorphism to solve the given problem
- 4 Use the knowledge of inheritance for developing optimized solutions
- 5 Apply the concepts of templates and exception handling for the given problem
- 6 Use the concepts of input output streams for file operations

### PROGRAM OUTCOMES

**PO1** Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.

**PO2** Problem analysis: Identify, formulate, 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: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.

**PO4** Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and 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.

**PO6** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.

**PO7** 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.

**PO8** Ethics: Apply ethical principles and commit to professional ethics and 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 the society.

**PO11** Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.

**PO12** Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.



COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY														
FACULTY NAME	Mrs. SANDHYA K														
BRANCH	CSE	ACADEMIC YEAR					2023-24								
COURSE	B.E	SEMESTER	III	SECTION				A							
SUBJECT	OOPS WITH C++					SUBJECT CODE			BCS306B						
CO & PO MAPPING															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2			1		1		1		2	2		
CO2	3	2	2		2						2	2		2	
CO3	3	2			1	2		2				2	2		
CO4	3	2	2		1					1	1		2		
CO5	3	2				1		1						1	
CO6	3	2	1												
AVERAGE	15.5	2	1.16		0.66	0.6		0.6		0.33	0.5	1	1	0.5	
OVERALL MAPPING OF SUBJECT												1.59			

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	77	2.31	1.54	1.54			0.77		0.77		0.77		1.54	1.54		
CO2	70	2.1	1.4	1.4		1.4						1.4	1.4		1.4	
CO3	68	2.04	1.32			0.68	1.32		1.32				1.32	1.32		
CO4	69	2.07	1.38	1.38		0.69					0.69	0.69		1.38		
CO5	70	2.1	1.4				0.70		0.70						0.70	
CO6	64	1.92	1.28													
AVERAGE		2.09	1.38	0.72		0.46	0.46		0.46		0.24	0.34	0.71	0.70	0.35	
FINAL ATTAINMENT LEVEL													0.527			

*Sandhya K*  
MRS. SANDHYA K  
STAFF INCHARGE

*Nandhu*  
PRINCIPAL  
SIET, TUMKUR.

*Bas*  
DR. BASAVESHA D  
HOD, CSE  
COMPUTER SCIENCE & ENGG.,  
SIET, TUMAKURU-06.



Roll No.	USN	Name	FACULTY: Mrs.Sandhya K																								TOTA L						
			BCS306B			m:III 'A' S# 2023-24			ODD			ASSIGNMENT 10 + LAB 25					EXTERNAL								Final								
			T1	T2	T3	CO	CO2-	CO3-	CO4-	CO5-	CO6-8	CO1-	CO2-	CO3-	CO4-6	CO5-	CO6-	Lab	ASS	SEE/	CO1-8	CO2-8	CO3-9	CO4-9	CO5-8	CO6-8		CO1-	CO2-	CO3-	CO4-	CO5-	CO6-
1	ISV22CS001	ABILASH U K	13	15	10	6	7	8	7	3	2	6	6	6	6	5	5	24	10	38	6	6	6	6	7	7	18	19	20	19	18	17	18
3	ISV22CS003	AJAY GONHALMATH	14	15	5	7	7	8	7	3	2	6	6	6	6	5	5	24	10	21	4	4	4	4	4	4	16	16	17	16	11	11	15
4	ISV22CS004	AKASH B S	13	14	12	6	7	7	7	6	6	6	6	6	5	5	24	10	9	2	2	2	2	2	2	13	14	14	14	12	12	13	
5	ISV22CS005	AKSHAY B H	12	9	7	6	6	5	4	4	3	6	6	6	6	5	5	24	10	28	5	5	5	5	5	5	16	16	15	14	13	13	15
6	ISV22CS006	AKSHAY M S	13	14	12	7	6	7	7	6	6	6	6	6	5	5	24	10	9	2	2	2	2	2	2	14	13	14	14	12	12	13	
7	ISV22CS007	ANJALI K N	14	15	13	7	7	8	7	7	6	6	6	6	5	5	24	10	19	3	3	3	3	3	3	16	16	16	16	15	14	15	
8	ISV22CS008	ANUSHA J	14	15	13	7	7	8	7	7	6	6	6	6	5	5	24	10	18	3	3	3	3	3	3	16	16	16	16	15	14	15	
9	ISV22CS009	ASHWINI M L	14	15	15	7	7	8	7	8	7	6	6	6	6	5	5	24	10	27	5	5	5	5	5	5	17	17	18	17	17	17	17
10	ISV22CS010	AVULA AMARNATH REDDY	14	15	15	7	7	8	7	8	7	6	6	6	6	5	5	24	10	21	4	4	4	4	4	4	16	16	17	16	16	16	16
11	ISV22CS011	BHAGYASHREE IRAIYYA GADGIMATH	13	15	14	6	7	8	7	7	7	6	6	6	6	5	5	24	10	23	4	4	4	4	4	4	16	17	17	17	16	16	16
12	ISV22CS012	BHAVANA A	14	15	15	7	7	8	7	8	7	6	6	6	6	5	5	25	10	32	5	5	5	5	6	6	18	18	19	18	19	18	18
13	ISV22CS013	BHOOMIKA H E	9	11	10	5	4	6	5	5	5	6	6	6	6	5	5	24	10	18	3	3	3	3	3	14	13	15	14	13	13	14	
14	ISV22CS014	BHUVANA D M	14	15	14	7	7	8	7	7	7	6	6	6	6	6	5	25	10	29	5	5	5	5	5	5	18	18	18	18	18	17	18
15	ISV22CS015	BHYRESH A C	14	15	15	7	7	8	7	8	7	6	6	6	6	6	5	25	10	18	3	3	3	3	3	3	16	16	17	16	17	15	16
16	ISV22CS016	BI BI FATHIMA	14	15	14	7	7	8	7	7	7	6	6	6	6	6	5	25	10	23	4	4	4	4	4	4	17	17	17	17	16	17	17
17	ISV22CS017	CHAITHANYA M	11	15	13	5	6	8	7	7	6	6	6	6	6	5	5	24	10	31	5	5	5	5	6	6	16	17	19	18	17	17	17
18	ISV22CS018	CHAITHRA S R	11	15	15	5	6	8	7	8	7	6	6	6	6	5	5	24	10	31	5	5	5	5	6	6	16	17	19	18	18	18	18
19	ISV22CS019	CHAITRA B R	15	15	13	7	8	8	7	7	6	6	6	6	6	5	25	10	21	4	4	4	4	4	4	17	18	17	17	16	15	16	
21	ISV22CS021	CHANDAN M	14	15	9	7	7	8	7	5	4	6	6	6	6	6	5	25	10	28	5	5	5	5	5	5	18	18	18	18	16	14	17
22	ISV22CS022	CHANDRASHEKHAR PATIL	7	6	8	4	3	3	3	4	4	6	6	6	6	5	4	23	10	3	1	1	1	1	1	11	10	10	10	10	9	10	
23	ISV22CS023	CHANDRASHEKHAR MPatil	14	15	13	7	7	8	7	7	6	6	6	6	6	5	4	23	10	21	4	4	4	4	4	4	17	17	17	17	15	14	16
24	ISV22CS024	CHANDRASHEKHAR P	12	10	9	6	6	5	5	5	4	6	6	6	6	4	5	23	10	11	2	2	2	2	2	2	14	14	13	13	11	11	12
25	ISV22CS025	CHASMIYABANU G S	12	14	11	6	6	7	7	6	5	6	6	6	6	5	5	24	10	18	3	3	3	3	3	3	15	15	16	16	14	13	15
26	ISV22CS026	CHITRA R	12	14	13	6	6	7	7	7	6	6	6	6	6	5	5	24	10	23	4	4	4	4	4	4	16	16	17	17	16	15	16
27	ISV22CS027	DEEKSHA J G	14	14	12	7	7	7	7	6	6	6	6	6	5	5	24	10	18	3	3	3	3	3	3	16	16	16	16	14	14	15	
28	ISV22CS028	DHANUSH C N	14	15	15	7	7	8	7	8	7	6	6	6	6	5	5	24	10	10	2	2	2	2	2	2	15	15	15	15	14	14	15
29	ISV22CS029	DHARANESH H M	11	15	13	5	6	8	7	7	6	6	6	6	6	5	4	23	10	18	3	3	3	3	3	14	15	17	16	15	13	15	
30	ISV22CS030	DISHA T N	13	15	14	6	7	8	7	7	7	6	6	6	6	5	5	24	10	20	3	3	3	3	4	4	15	16	17	16	16	16	16
31	ISV22CS031	DIVYASHREE T D	12	14	13	6	6	7	7	7	6	6	6	6	6	5	25	10	18	3	3	3	3	3	3	15	15	16	16	16	14	15	
32	ISV22CS032	GAGAN P KUMAR	13	15	9	6	7	8	7	5	4	6	6	6	6	5	4	23	10	20	3	3	3	3	4	4	15	16	17	16	13	12	15
33	ISV22CS033	GANESH KRISHNA GOUDA	12	15	12	6	6	8	7	6	6	6	6	6	6	5	5	24	10	25	4	4	4	4	5	5	16	16	18	17	16	16	16
34	ISV22CS034	GOPI C N	13	14	13	6	7	7	7	7	6	6	6	6	6	5	5	24	10	19	3	3	3	3	3	3	15	16	16	16	15	14	16
35	ISV22CS035	GOWTHAM G S PATIL	14	15	14	7	7	8	7	7	7	6	6	6	6	5	6	25	10	31	5	5	5	5	6	6	18	18	19	18	18	19	18
36	ISV22CS036	HARISHREE A	15	15	14	7	8	8	7	7	7	6	6	6	6	6	5	25	10	24	4	4	4	4	4	4	17	18	18	17	17	16	17
37	ISV22CS037	HARSHITHA H S	14	15	14	7	7	8	7	7	7	6	6	6	6	5	4	23	10	18	3	3	3	3	3	3	16	16	17	16	15	14	16
38	ISV22CS038	HARSHITHA K	14	15	15	7	7	8	7	8	7	6	6	6	6	5	5	24	10	31	5	5	5	5	6	6	18	18	19	18	18	18	18
39	ISV22CS039	HARSHITHA K R	14	15	13	7	7	8	7	7	6	6	6	6	6	5	25	10	33	6	6	6	6	6	6	19	19	19	19	19	17	18	
40	ISV22CS040	HARSHITHA V	10	15	14	5	5	8	7	7	7	6	6	6	6	5	5	24	10	20	3	3	3	3	4	4	14	14	17	16	16	16	16
41	ISV22CS041	HARSHITHA V	14	15	14	7	7	8	7	7	7	6	6	6	6	5	5	24	10	35	6	6	6	6	6	6	19	19	19	19	18	18	19
42	ISV22CS042	HEMANTH H A	11	15	10	5	6	8	7	5	5	6	6	6	6	5	5	24	10	24	4	4	4	4	4	4	15	16	18	17	14	14	16
43	ISV22CS043	HEMASHREE	14	15	14	7	7	8	7	7	7	6	6	6	6	6	5	25	10	35	6	6	6	6	6	6	19	19	19	19	19	18	19
44	ISV22CS044	HUZMA KOUSER	14	15	13	7	7	8	7	7	6	6	6	6	6	5	5	24	10	35	6	6	6	6	6	6	19	19	19	19	18	17	19
45	ISV22CS045	K R OBALESH	11	15	11	6	5	8	7	6	5	6	6	6	6	5	5	24	10	29	5	5	5	5	5	5	17	16	18	18	16	15	17









SHRIDEVI  
EDUCATION

# SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

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(Approved by AICTE, New Delhi, Recognised by Govt. of Karnataka and Affiliated to Visvesvaraya Technological University, Belagavi)

ESTD: 2002



## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

3<sup>rd</sup> B Sec

### COURSE OUTCOME

- 1 Illustrate the basic concepts of object-oriented programming.
- 2 Design appropriate classes for the given real world scenario.
- 3 Apply the knowledge of compile-time / run-time polymorphism to solve the given problem
- 4 Use the knowledge of inheritance for developing optimized solutions
- 5 Apply the concepts of templates and exception handling for the given problem
- 6 Use the concepts of input output streams for file operations

**PO1 Engineering knowledge:** An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.

**PO2 Problem analysis:** Identify, formulate, 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:** An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.

**PO4 Conduct investigations of complex Problem:** An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and 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.

**PO6 The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.

**PO7 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.

**PO8 Ethics:** Apply ethical principles and commit to professional ethics and 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 the society.

**PO11 Project management and finance:** An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.

**PO12 Life-long learning:** A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.



COLLEGE		SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY													
FACULTY NAME		Mrs. SANDHYA K													
BRANCH		CSE			ACADEMIC YEAR				2023-24						
COURSE	B. E	SEMESTER			III	SECTION			B						
SUBJECT	OOPS WITH C++					SUBJECT CODE			BCS306B						
<b>CO &amp; PO MAPPING</b>															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2			1		1		1		2	2		
CO2	3	2	2		2						2	2		2	
CO3	3	2			1	2		2				2	2		
CO4	3	2	2		1					1	1		2		
CO5	3	2				1		1						1	
CO6	3	2	1												
AVERAGE	15.5	2	1.16		0.66	0.6		0.6		0.33	0.5	1	1	0.5	
OVERALL MAPPING OF SUBJECT												1.59			

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	76	2.28	1.52	1.52			0.76		0.76							
CO2	68	2.04	1.36	1.36		1.36										
CO3	65	1.95	1.3			0.65	1.3		1.3							
CO4	67	2.01	1.34	1.34		0.67					0.67	0.67		1.34		
CO5	74	2.22	1.48				0.74		0.74						0.74	
CO6	67	2.01	1.34	0.67												
AVERAGE	2.085	1.39	0.81			0.44	0.46		0.46		0.67	0.67		1.34	0.74	
FINAL ATTAINMENT LEVEL													0.572			

*Sandhya K*  
MRS. SANDHYA K  
STAFF INCHARGE

*Mrs. Sandhya K*  
PRINCIPAL  
SIET, TUMKUR.

*Bas*  
DR. BASAVESHA D  
HOD, CSE  
COMPUTER SCIENCE & ENGG.,  
SIET, TUMAKURU-06.




Roll No.	USN	Name	BCS3(III 'B')2023-2			ODD	FACULTY: Mrs.Sandhya K																EXTERNAL												Final	TOT AL
			SUB:Oops with C+			T1	T2			T3			ASSIGNMENT 10 + LAB 25																							
			T1	T2	T3	CO1	CO2	CO3	CO4	CO5	CO6	CO1	CO2	CO3	CO4	CO5	CO6	Lab	ASS	SEE	CO1	CO2	CO3	CO4	CO5	CO6	CO1	CO2	CO3	CO4	CO5	CO6				
1	1SV22CS06	NEERAJ T R	13	14	15	7	6	7	7	8	7	6	6	6	6	5	25	10	25	4	4	4	4	4	5	5	17	16	17	17	17	17				
2	1SV22CS06	NIDHI D K	11	15	15	6	5	8	7	8	7	6	6	6	6	5	24	10	27	5	5	5	5	5	5	16	15	18	17	17	17					
3	1SV22CS06	NIRMALA MADARI	12	15	15	6	6	8	7	8	7	6	6	6	6	5	24	10	21	4	4	4	4	4	4	15	15	17	16	16	16					
4	1SV22CS06	NIVEDITHA V	11	15	15	6	5	8	7	8	7	6	6	6	6	5	24	10	25	4	4	4	4	4	5	5	15	15	17	17	17	16				
5	1SV22CS06	PAVITHRA M R	14	14	15	7	7	7	7	8	7	6	6	6	6	5	24	10	25	4	4	4	4	4	5	5	15	15	17	17	17	16				
6	1SV22CS07	POSHITHA S P	13	14	13	7	6	7	7	7	7	6	6	6	6	5	24	10	25	4	4	4	4	4	5	5	17	17	17	17	17	16				
7	1SV22CS07	PRAJWAL B S	13	6	13	7	6	3	3	7	7	6	6	6	6	5	24	10	11	2	2	2	2	2	2	14	14	11	11	13	13					
8	1SV22CS07	PRASHANTHI O	14	14	15	7	7	7	7	8	7	6	6	6	6	5	24	10	7	1	1	1	1	1	1	14	14	14	14	14	13					
9	1SV22CS07	PRATHIBHA V	12	15	15	6	6	8	7	8	7	6	6	6	6	5	24	10	32	5	5	5	5	6	6	17	17	19	18	18	18					
10	1SV22CS07	PREETHAM GOWDA B S	13	10	12	7	6	5	5	6	6	6	6	6	6	5	24	10	13	2	2	2	2	2	2	14	14	13	13	13	13					
11	1SV22CS07	PRIYANKA UMESH CHIGARI	11	15	15	6	5	8	7	8	7	6	6	6	6	5	25	10	32	5	5	5	5	6	6	17	16	19	18	19	18					
12	1SV22CS07	PUNITH M	14	13	13	7	7	7	6	7	6	6	6	6	6	5	24	10	14	2	2	2	2	3	3	15	15	15	14	14	14					
13	1SV22CS07	PUSHPA K	13	15	15	7		8	7	8	7	6	6	6	6	5	25	10	25	4	4	4	4	5	5	17	10	18	17	18	17					
14	1SV22CS07	RACHANA C P	14	15	15	7	7	8	7	8	7	6	6	6	6	5	25	10	20	3	3	3	3	4	4	16	16	17	16	17	16					
15	1SV22CS08	RAKESH HIREMATH	9	10	11	5	4	5	5	6	5	6	6	6	6	5	25	10	29	5	5	5	5	5	5	15	15	16	16	17	15					
16	1SV22CS08	RAKESH KUMAR M	14	15	14	7	7	8	7	7	7	6	6	6	6	5	24	10	34	6	6	6	6	6	6	19	19	19	19	18	19					
17	1SV22CS08	RAKSHITH C M	13	15	15	7	6	8	7	8	7	6	6	6	6	5	24	10	21	4	4	4	4	4	4	16	16	17	17	16	16					
18	1SV22CS08	RAKSHITHA B V	13	15	15	7	6	8	7	8	7	6	6	6	6	5	25	10	24	4	4	4	4	4	4	17	16	18	17	18	17					
19	1SV22CS08	RAKSHITHA R P	13	12	15	7	6	6	6	8	7	6	6	6	6	5	25	10	32	5	5	5	5	6	6	18	17	17	19	18	18					
20	1SV22CS08	RANJITA S KATTI	12	14	15	6	6	7	7	8	7	6	6	6	6	5	23	10	24	4	4	4	4	4	4	16	16	17	17	17	15					
21	1SV22CS08	RANJITHA A	15	15	15	8	7	8	7	8	7	6	6	6	6	5	24	10	35	6	6	6	6	6	6	19	19	19	19	19	17					
22	1SV22CS08	RASHMITHA H	14	14	14	7	7	7	7	7	7	6	6	6	6	5	23	10	23	4	4	4	4	4	4	17	17	17	17	15	16					
23	1SV22CS08	RUCHITHA K R	12	13	15	6	6	7	6	8	7	6	6	6	6	4	23	10	22	4	4	4	4	4	4	16	16	16	16	17	16					
24	1SV22CS08	SAGAR S	12	14	14	6	6	7	7	7	7	6	6	6	6	5	24	10	4	1	1	1	1	1	13	13	14	14	13	13						
25	1SV22CS09	SAGAR V	13	11	15	7	6	6	5	8	7	6	6	6	6	5	24	10	11	2	2	2	2	2	2	14	14	13	13	15	14					
26	1SV22CS09	SAHANA Y S	12	15	15	6	6	8	7	8	7	6	6	6	6	5	24	10	27	5	5	5	5	5	5	17	17	18	18	17	17					
27	1SV22CS09	SAHEEL PASHA	12	14	13	6	6	7	7	7	6	6	6	6	6	5	23	10	18	3	3	3	3	3	3	15	15	16	16	15	15					
28	1SV22CS09	SANGEETHA M	13	14	13	7	6	7	7	7	6	6	6	6	6	5	24	10	24	4	4	4	4	4	4	17	16	17	17	16	15					
29	1SV22CS09	SANJU S R	12	15	15	6	6	8	7	8	7	6	6	6	6	5	25	10	20	3	3	3	3	4	4	15	15	17	16	17	16					
30	1SV22CS09	SAVITHA G T	13	15	15	7	6	8	7	8	8	6	6	6	6	5	24	10	19	3	3	3	3	3	3	16	15	17	16	16	15					
31	1SV22CS09	SHARANAPPA A N	13	15	13	7	6	8	7	7	7	6	6	6	6	5	24	10	24	4	4	4	4	4	4	17	16	18	17	16	16					
32	1SV22CS09	SHARATH M T	13	14	15	7	6	7	7	8	7	6	6	6	6	5	24	10	23	4	4	4	4	4	4	16	16	17	17	17	16					
33	1SV22CS09	SHARATH NAYAK R	14	14	15	7	7	7	7	8	7	6	6	6	6	5	25	10	22	4	4	4	4	4	4	16	16	17	17	17	16					
34	1SV22CS09	SHEETAL H D	14	14	15	7	7	7	7	8	7	6	6	6	6	5	25	10	18	3	3	3	3	3	3	16	16	16	16	17	17					
35	1SV22CS10	SHEETHAL R	14	12	15	7	7	6	6	8	7	6	6	6	6	5	23	10	13	2	2	2	2	2	2	15	15	14	14	15	13					
36	1SV22CS10	SHRAVANKUMAR VIJAY CHIMMAD	13	14	14	7	6	7	7	7	7	6	6	6	6	5	24	10	18	3	3	3	3	3	3	16	15	16	16	15	15					
37	1SV22CS10	SHREYA K	14	14	15	7	7	7	7	8	7	6	6	6	6	5	25	10	22	4	4	4	4	4	4	17	17	17	17	18	16					
38	1SV22CS10	SHWETHA K	13	14	14	7	6	7	7	7	7	6	6	6	6	5	24	10	21	4	4	4	4	4	4	16	16	17	17	16	16					
39	1SV22CS10	SHWETHA P C	15	15	15	8	7	8	7	8	7	6	6	6	6	5	24	10	39	7	7	7	7	7	7	20	20	20	20	19	20					
40	1SV22CS10	SINCHANA D	13	15	15	7	6	8	7	8	7	6	6	6	6	5	24	10	28	5	5	5	5	5	5	17	17	18	18	17	17					
41	1SV22CS10	SINCHANA G N	14	13	13	7	7	7	7	7	7	6	6	6	6	5	25	10	18	3	3	3	3	3	3	16	16	16	16	16	15					
42	1SV22CS10	SONU T M	15	15	15	8	7	8	7	8	7	6	6	6	6	5	24	10	20	3	3	3	3	4	4	17	16	17	16	16	16					
43	1SV22CS10	SOUBHAGYA HATTI	14	15	15	7	7	8	7	8	7	6	6	6	6	5	24	10	24	4	4	4	4	4	4	17	17	18	17	17	16					
44	1SV22CS10	SRI RAM S	13	15	14	7	6	8	7	7	7	6	6	6	6	5	23	10	7	1	1	1	1	1	1	14	13	15	14	13	12					
45	1SV22CS11	SRUSHTI SHRISHAIL HUGAR	12	15	15	6	6	8	7	8	7	6	6	6	6	5	24	10	19	3	3	3	3	3	3	15	15	17	16	16	14					
46	1SV22CS11	SUHAS S	14	14	12	7	7	7	7	6	6	6	6	6	6	5	23	10	4	1	1	1	1	1	1	14	14	14	14	12	11					
47	1SV22CS11	TARUN R V	11	11	12	6	5	6	6	6	6	6	6	6	6	5	25	10	18	3	3	3	3	3	3	15	14	15	15	15	14					
48	1SV22CS11	TEJAS T M	11	15	14	6	5	8	7	7	7	6	6	6	6	5	23	10	0	0	0	0	0	0	0	12	11	14	13	12	12					
49	1SV22CS11	TEJASHWINI SHIVAPPA GANIGER	13	14	15	7	6	7	7	8	7	6	6	6	6	5	25	10	23	4	4	4	4	4	4	16	16	17	17	18	16					



50	ISV22CS115	TEJASWINI N	13	15	15	7	6	8	7	8	7	6	6	6	6	5	25	10	33	6	6	6	6	6	6	18	18	19	19	20	18	18
51	ISV22CS116	UDAY DRAVID V	7	8	14	4	3	4	4	7	7	6	6	6	5	4	23	10	24	4	4	4	4	4	4	14	13	14	14	16	15	14
52	ISV22CS117	UMME KULSUM	13	15	15	7	6	8	7	8	7	6	6	6	6	5	25	10	25	4	4	4	4	5	5	17	16	18	17	18	17	17
53	ISV22CS118	VARSHITHA G	14	14	15	7	7	7	7	8	7	6	6	6	5	4	23	10	20	3	3	3	3	4	4	16	16	16	16	16	15	16
54	ISV22CS119	VARUN RAJ K R	12	13	12	6	6	7	7	6	6	6	6	6	5	5	24	10	20	3	3	3	3	4	4	15	15	16	16	15	15	15
55	ISV22CS120	VIJAYALAKSHMI N	14	15	15	7	7	8	7	8	7	6	6	6	5	4	23	10	40	7	7	7	7	7	7	20	20	20	20	20	18	20
56	ISV22CS121	VINUTHA J	14	15	15	7	7	8	7	8	7	6	6	6	5	5	24	10	25	4	4	4	4	5	5	17	17	18	17	17	17	17
57	ISV22CS122	VIVEKA G V	14	15	15	7	7	8	7	8	7	6	6	6	5	5	24	10	39	7	7	7	7	7	7	20	20	20	20	19	20	20
58	ISV22CS123	YASHASWINI M	14	14	15	7	7	7	7	8	7	6	6	6	5	5	24	10	21	4	4	4	4	4	4	17	17	17	17	16	16	16
59	ISV22CS125	YOGESH K V	13	13	13	7	6	7	7	7	7	6	6	6	5	5	24	10	18	3	3	3	3	3	3	16	15	16	16	15	15	15
60	ISV22CS126	YOSUF AHMED BAIG	12	13	12	6	6	7	7	6	6	6	6	6	5	4	23	10	13	2	2	2	2	2	2	14	14	15	15	13	12	14
61	ISV23CS407	PAVITHRA D	11	7	12	6	6	4	7	6	6	6	6	6	5	4	23	10	25	4	4	4	4	5	5	16	16	14	17	16	15	15
62	ISV23CS404	JYOTHI L	14	14	14	7	6	7	7	7	7	6	6	6	5	4	23	10	0	0	0	0	0	0	13	12	13	13	12	11	12	
63	ISV23CS402	CHANDAN GOVANKOP	12	9	12	6	6	5	7	6	6	6	6	6	5	4	23	10	3	1	1	1	1	1	1	13	13	11	14	12	11	12
64	ISV23CS401	BHOOMIKA K	13	14	14	7	6	7	7	7	7	6	6	6	5	4	23	10	13	2	2	2	2	2	2	15	14	15	15	14	13	14
65	ISV23CS405	KAVYA K S	14	14	13	7	6	7	7	7	7	6	6	6	5	4	23	10	18	3	3	3	3	3	3	16	15	16	16	15	14	15
																									15.3	14.9	15.7	15.5	15.5	14.8		
																									76%	68%	65%	67%	74%	67%		

Sandhya K

M. Srinivas Kumar  
PRINCIPAL  
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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### COURSE OUTCOME

- C01.** Acquire fundamental understanding of the core concepts in automata theory and Theory of Computation
- C02.** Design and develop lexical analyzers, parsers and code generators
- C03.** Design Grammars and Automata (recognizers) for different language classes and become knowledgeable about restricted models of Computation and their relative powers.
- C04.** Acquire fundamental understanding of the structure of a Compiler and Apply concepts automata theory and Theory of Computation to design Compilers.
- C05.** Design computations models for problems in Automata theory and adaption of such model in the field of compilers.

### PROGRAM OUTCOMES

- PO1** Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- PO2** Problem analysis: Identify, formulate, 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: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- PO4** Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and 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.
- PO6** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- PO7** 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.
- PO8** Ethics: Apply ethical principles and commit to professional ethics and 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 the society.
- PO11** Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.
- PO12** Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.



COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY														
FACULTY NAME	Dr. KIRAN G M														
BRANCH	CSE			ACADEMIC YEAR				2023-24							
COURSE	B.E	SEMESTER			V	SECTION			A						
SUBJECT	AUTOMATA THEORY & COMPLIER DESIGN					SUBJECT CODE			21CS51						
<b>CO &amp; PO MAPPING</b>															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	2								2	3	1	
CO2	2	2	3									2	2	2	
CO3	2	2	2	2								1	2	2	
CO4	1	3		1								2	2	2	
CO5	2	3	2									3	2	2	
AVERAGE	2	2.6	2.5	1.6								2	2.2	1.8	
<b>OVERALL MAPPING OF SUBJECT</b>												2.1			

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	81.6	2.44	2.44	2.44	1.63								1.63	2.44	0.81	
CO2	66.7	1.33	1.33	2.00									1.33	1.33	1.33	
CO3	66.7	1.33	1.33	1.33	1.33								0.66	1.33	1.33	
CO4	67.4	0.67	2.02		0.67								1.34	1.34	1.34	
CO5	67.4	1.34	2.02	1.34									2.02	1.34	1.34	
AVERAGE		1.42	1.82	1.77	1.21								1.39	1.55	1.23	
<b>FINAL ATTAINMENT LEVEL</b>													1.48			

1/2/24

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**V SEM "A" SECTION (CSE)**

Sub: Automata Theory & Compiler Design		21CS54					2023-2024					EVEN		NAME OF THE STAFF					Dr. Kiran G M								
Roll No.	USN	Name	IA MARKS			T1		T2		T3		Assign 10 + Seminar 20 = 30/5					External Marks					FINAL					TOTAL AVG
			T1 (20)	T2 (20)	T3 (20)	CO1-20	CO2-15	CO3-15	CO4-15	CO5-15	CO1-6	CO2-6	CO3-6	CO4-6	CO5-6	SEE (50)	CO1-10	CO2-10	CO3-10	CO4-10	CO5-10	CO1-36	CO2-31	CO3-31	CO4-31	CO5-31	
1	ISV21CS001	AASTHA PANDEY	20	19	19	20	9.5	9.5	9.5	9.5	5	6	6	6	6	18	4	4	4	4	4	29	19	19	19	19	21.0
2	ISV21CS002	ABDUL MOHSIN J KHAN	19	19	19	19	9.5	9.5	9.5	9.5	6	6	6	6	6	41	8	8	8	8	8	33	24	24	24	24	25.6
3	ISV21CS003	ABHINAV DEVARAJ T R	15	18	19	15	9	9	9.5	9.5	6	6	6	6	6	12	2	2	2	2	2	23	17	17	17	18	18.8
4	ISV21CS004	ABHISHEK RANJAN	16	18	19	16	9	9	9.5	9.5	6	6	6	6	6	45	9	9	9	9	9	31	24	24	25	25	25.6
5	ISV21CS005	ABRAR AHAMED I	18	18	19	18	9	9	9.5	9.5	6	6	6	6	6	18	4	4	4	4	4	28	19	19	19	19	20.6
6	ISV21CS006	AISHWARYA S	15	19	19	15	9.5	9.5	9.5	9.5	6	6	6	6	6	18	4	4	4	4	4	25	19	19	19	19	20.2
7	ISV21CS008	ANANYA M J	17	18	19	17	9	9	9.5	9.5	6	6	6	6	6	40	8	8	8	8	8	31	23	23	24	24	24.8
8	ISV21CS009	ARSHIYA NAAZ	16	19	19	16	9.5	9.5	9.5	9.5	6	6	6	6	6	21	4	4	4	4	4	26	20	20	20	20	21.0
9	ISV21CS010	BHARATH M H	12	19	19	12	9.5	9.5	9.5	9.5	6	6	6	6	6	32	6	6	6	6	6	24	22	22	22	22	22.4
10	ISV21CS011	BHAVANA M R	19	19	19	19	9.5	9.5	9.5	9.5	6	6	6	6	6	33	7	7	7	7	7	32	22	22	22	22	24.0
11	ISV21CS012	BHAVYA A	20	19	19	20	9.5	9.5	9.5	9.5	6	6	6	6	6	25	5	5	5	5	5	31	21	21	21	21	22.6
12	ISV21CS013	BHAVYA S	17	19	20	17	9.5	9.5	10	10	6	6	6	6	6	21	4	4	4	4	4	27	20	20	20	20	21.4
13	ISV21CS014	BHOOMIKA Y	19	19	19	19	9.5	9.5	9.5	9.5	6	6	6	6	6	31	6	6	6	6	6	31	22	22	22	22	23.6
14	ISV21CS015	BHUVAN G RAMALADA	18	19	19	18	9.5	9.5	9.5	9.5	6	6	6	6	6	48	10	10	10	10	10	34	25	25	25	25	26.8
15	ISV21CS016	BIMMI KUMARI	19	19	19	19	9.5	9.5	9.5	9.5	6	6	6	6	6	38	8	8	8	8	8	33	23	23	23	23	25.0
16	ISV21CS017	BINDHUSHREE R	19	19	19	19	9.5	9.5	9.5	9.5	6	6	6	6	6	18	4	4	4	4	4	29	19	19	19	19	21.0
17	ISV21CS018	CHAITHRA P	18	19	19	18	9.5	9.5	9.5	9.5	6	6	6	6	6	50	10	10	10	10	10	34	26	26	26	26	27.2
18	ISV21CS019	CHAITHRA V	18	19	19	18	9.5	9.5	9.5	9.5	6	6	6	6	6	32	6	6	6	6	6	30	22	22	22	22	23.6
19	ISV21CS020	CHANDANA G	16	19	19	16	9.5	9.5	9.5	9.5	6	6	6	6	6	21	4	4	4	4	4	26	20	20	20	20	21.0
20	ISV21CS021	CHANDANA N H	12	18	19	12	9	9	9.5	9.5	6	6	6	6	6	4	1	1	1	1	1	19	16	16	16	16	16.6
21	ISV21CS022	CHANDU P	19	19	19	19	9.5	9.5	9.5	9.5	6	6	6	6	6	24	5	5	5	5	5	30	20	20	20	20	22.2
22	ISV21CS023	CHITHRA J P	17	18	20	17	9	9	10	10	6	6	6	6	6	29	6	6	6	6	6	29	21	21	22	22	22.8
23	ISV21CS024	D P HARSHITHA	18	18	19	18	9	9	9.5	9.5	6	6	6	6	6	28	6	6	6	6	6	30	21	21	21	21	22.6
24	ISV21CS025	DARSHAN K	19	19	18	19	9.5	9.5	9	9	6	6	6	6	6	29	6	5.8	5.8	5.8	5.8	31	21	21	21	21	23.0
25	ISV21CS026	DHANUSH K R	20	20	20	20	10	10	10	10	6	6	6	6	6	26	5	5.2	5.2	5.2	5.2	31	21	21	21	21	23.2
26	ISV21CS027	DHEERAJ S	18	16	20	18	8	8	10	10	6	6	6	6	6	18	4	3.6	3.6	3.6	3.6	28	18	18	20	20	20.4
27	ISV21CS028	DIPENDU KUMBHAKAR	18	18	19	18	9	9	9.5	9.5	6	6	6	6	6	49	10	9.8	9.8	9.8	9.8	34	25	25	25	25	26.8
28	ISV21CS029	DIVYA A C	18	18	19	18	9	9	9.5	9.5	6	6	6	6	6	45	9	9	9	9	9	33	24	24	25	25	26.0
29	ISV21CS030	DIVYA D R	19	19	19	19	9.5	9.5	9.5	9.5	6	6	6	6	6	34	7	6.8	6.8	6.8	6.8	32	22	22	22	22	24.2
30	ISV21CS032	HARSHITHA B	18	18	19	18	9	9	9.5	9.5	6	6	6	6	6	21	4	4.2	4.2	4.2	4.2	28	19	19	20	20	21.2
31	ISV21CS033	HEMANTH YALLAPPA	18	18	15	18	9	9	7.5	7.5	6	6	6	6	6	25	5	5	5	5	5	29	20	20	19	19	21.2
32	ISV21CS034	HEMASHREE M	18	19	19	18	9.5	9.5	9.5	9.5	6	6	6	6	6	7	1	1.4	1.4	1.4	1.4	25	17	17	17	17	18.6
33	ISV21CS035	HENJESH K O	18	18	19	18	9	9	9.5	9.5	6	6	6	6	6	33	7	6.6	6.6	6.6	6.6	31	22	22	22	22	23.6
34	ISV21CS036	KARUNAKARA L	18	19	19	18	9.5	9.5	9.5	9.5	6	6	6	6	6	47	9	9.4	9.4	9.4	9.4	33	25	25	25	25	26.6
35	ISV21CS037	KIRAN S	18	18	19	18	9	9	9.5	9.5	6	6	6	6	6	31	6	6.2	6.2	6.2	6.2	30	21	21	22	22	23.2
36	ISV21CS038	KISHOR N	18	19	19	18	9.5	9.5	9.5	9.5	6	6	6	6	6	37	7	7.4	7.4	7.4	7.4	31	23	23	23	23	24.6
37	ISV21CS039	KUSUMA R	14	18	18	14	9	9	9	9	6	6	6	6	6	13	3	2.6	2.6	2.6	2.6	23	18	18	18	18	18.6
38	ISV21CS040	LAXMI SONNAD	19	20	19	19	10	10	9.5	9.5	6	6	6	6	6	35	7	7	7	7	7	32	23	23	23	23	24.6
39	ISV21CS041	LIKITHA T P	19	19	19	19	9.5	9.5	9.5	9.5	6	6	6	6	6	38	8	7.6	7.6	7.6	7.6	33	23	23	23	23	25.0
40	ISV21CS042	MAMATHA H R	19	19	19	19	9.5	9.5	9.5	9.5	6	6	6	6	6	18	4	3.6	3.6	3.6	3.6	29	19	19	19	19	21.0
41	ISV21CS043	MANDARA H	18	18	19	18	9	9	9.5	9.5	6	6	6	6	6	19	4	3.8	3.8	3.8	3.8	28	19	19	19	19	20.8
42	ISV21CS044	MANIKANTA M	18	18	19	18	9	9	9.5	9.5	6	6	6	6	6	31	6	6.2	6.2	6.2	6.2	30	21	21	22	22	23.2



Sub: Automata Theory & Compiler Design			21CS54					2023-2024					EVEN		NAME OF THE STAFF					Dr. Kiran G M							
Roll No.	USN	Name	IA MARKS			T1		T2		T3		Assign 10 + Seminar 20 = 30/5					External Marks					FINAL					TOTAL AVG
			T1 (20)	T2 (20)	T3 (20)	CO1-20	CO2-15	CO3-15	CO4-15	CO5-15	CO1-6	CO2-6	CO3-6	CO4-6	CO5-6	SEE (50)	CO1-10	CO2-10	CO3-10	CO4-10	CO5-10	CO1-36	CO2-31	CO3-31	CO4-31	CO5-31	
43	1SV21CS045	MANU S	18	18	19	18	9	9	9.5	9.5	6	6	6	6	6	24	5	4.8	4.8	4.8	4.8	29	20	20	20	20	21.8
44	1SV21CS046	MAYUR KUSHAL PATIL	18	20	19	18	10	10	9.5	9.5	6	6	6	6	6	21	4	4.2	4.2	4.2	4.2	28	20	20	20	20	21.6
45	1SV21CS048	MOHAMMED JUNAID	16	18	19	16	9	9	9.5	9.5	6	6	6	6	6	20	4	4	4	4	4	26	19	19	20	20	20.6
46	1SV21CS049	NAGAPOOJA M	20	20	20	20	10	10	10	10	6	6	6	6	6	26	5	5.2	5.2	5.2	5.2	31	21	21	21	21	23.2
47	1SV21CS050	NAHIDA K	19	20	20	19	10	10	10	10	6	6	6	6	6	18	4	3.6	3.6	3.6	3.6	29	20	20	20	20	21.4
48	1SV21CS051	NANDAN L	17	19	19	17	9.5	9.5	9.5	9.5	6	6	6	6	6	18	4	3.6	3.6	3.6	3.6	27	19	19	19	19	20.6
49	1SV21CS052	P A NIVEDITHA	19	19	20	19	9.5	9.5	10	10	6	6	6	6	6	49	10	9.8	9.8	9.8	9.8	35	25	25	26	26	27.4
50	1SV21CS053	PANEENDRA E	19	14	20	19	7	7	10	10	6	6	6	6	6	25	5	5	5	5	5	30	18	18	21	21	21.6
51	1SV21CS054	POOJA G	19	19	19	19	9.5	9.5	9.5	9.5	6	6	6	6	6	23	5	4.6	4.6	4.6	4.6	30	20	20	20	20	22.0
52	1SV21CS055	PRADEEP KUMAR H G	19	19	19	19	9.5	9.5	9.5	9.5	6	6	6	6	6	33	7	6.6	6.6	6.6	6.6	32	22	22	22	22	24.0
53	1SV21CS056	PRIYANSHU PRASHAD	18	18	19	18	9	9	9.5	9.5	6	6	6	6	6	31	6	6.2	6.2	6.2	6.2	30	21	21	22	22	23.2
54	1SV21CS057	PUNEETH KUMAR R	19	19	19	19	9.5	9.5	9.5	9.5	6	6	6	6	6	26	5	5.2	5.2	5.2	5.2	30	21	21	21	21	22.6
55	1SV21CS058	PUNEETH N	19	18	19	19	9	9	9.5	9.5	6	6	6	6	6	37	7	7.4	7.4	7.4	7.4	32	22	22	23	23	24.6
56	1SV21CS059	PUNITH KUMAR H S	19	19	19	19	9.5	9.5	9.5	9.5	6	6	6	6	6	22	4	4.4	4.4	4.4	4.4	29	20	20	20	20	21.8
57	1SV21CS060	RAJAN KUMAR SAH	16	18	19	16	9	9	9.5	9.5	6	6	6	6	6	12	2	2.4	2.4	2.4	2.4	24	17	17	18	18	19.0
58	1SV21CS062	RAKSHITHA P B	16	17	19	16	8.5	8.5	9.5	9.5	6	6	6	6	6	15	3	3	3	3	3	25	18	18	19	19	19.4
59	1SV21CS063	RAMYASHREE N	20	20	20	20	10	10	10	10	6	6	6	6	6	40	8	8	8	8	8	34	24	24	24	24	26.0
60	1SV22CS401	CHANDANA T	20	19	19	20	9.5	9.5	9.5	9.5	6	6	6	6	6	18	4	3.6	3.6	3.6	3.6	30	19	19	19	19	21.2
61	1SV22CS402	DEEPA S M	18	19	20	18	9.5	9.5	10	10	6	6	6	6	6	21	4	4.2	4.2	4.2	4.2	28	20	20	20	20	21.6
62	1SV22CS403	HANUMANTHARAYA J	17	19	19	17	9.5	9.5	9.5	9.5	6	6	6	6	6	7	1	1.4	1.4	1.4	1.4	24	17	17	17	17	18.4
63	1SV22CS404	HITESH KUMAR H	18	19	19	18	9.5	9.5	9.5	9.5	6	6	6	6	6	18	4	3.6	3.6	3.6	3.6	28	19	19	19	19	20.8
64	1SV22CS405	JYOTHSNA M V	20	19	19	20	9.5	9.5	9.5	9.5	6	6	6	6	6	18	4	3.6	3.6	3.6	3.6	30	19	19	19	19	21.2
65	1SV22CS406	LAXMI S	20	20	19	20	10	10	9.5	9.5	6	6	6	6	6	18	4	3.6	3.6	3.6	3.6	30	20	20	19	19	21.4
66	1SV22CS407	PUNITH G R	20	18	19	20	9	9	9.5	9.5	6	6	6	6	6	30	6	6	6	6	6	32	21	21	22	22	23.4
67	1SV22CS408	ROHITH I M	17	18	19	17	9	9	9.5	9.5	6	6	6	6	6	18	4	3.6	3.6	3.6	3.6	27	19	19	19	19	20.4
68	1SV22CS409	SAHANA S	16	19	19	16	9.5	9.5	9.5	9.5	6	6	6	6	6	24	5	4.8	4.8	4.8	4.8	27	20	20	20	20	21.6
69	1SV22CS410	SANJAY S	19	19	19	19	9.5	9.5	9.5	9.5	6	6	6	6	6	26	5	5.2	5.2	5.2	5.2	30	21	21	21	21	22.6
70	1SV22CS411	SREE VANI R	20	19	19	20	9.5	9.5	9.5	9.5	6	6	6	6	6	46	9	9.2	9.2	9.2	9.2	35	25	25	25	25	26.8
71	1SV22CS412	YASHASWINI K	19	19	20	19	9.5	9.5	10	10	6	6	6	6	6	24	5	4.8	4.8	4.8	4.8	30	20	20	21	21	22.4
72	1SV22CS413	MANOJ KUMAR M	20	19	19	20	9.5	9.5	9.5	9.5	6	6	6	6	6	18	4	3.6	3.6	3.6	3.6	30	19	19	19	19	21.2

29.4	20.7	20.7	20.9	20.9
81.6%	66.7%	66.7%	67.4%	67.4%

  
Dr. Kiran G M  
Staff Signature

  
PRINCIPAL  
SIET. TUMKUR.

  
Dr. Basavesh D  
HOD, CSE  
HOD.  
COMPUTER SCIENCE & ENGG.,  
SIET, TUMAKURU-06.





## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### COURSE OUTCOME

- CO1.** Acquire fundamental understanding of the core concepts in automata theory and Theory of Computation
- CO2.** Design and develop lexical analyzers, parsers and code generators
- CO3.** Design Grammars and Automata (recognizers) for different language classes and become knowledgeable about restricted models of Computation and their relative powers.
- CO4.** Acquire fundamental understanding of the structure of a Compiler and Apply concepts automata theory and Theory of Computation to design Compilers.
- CO5.** Design computations models for problems in Automata theory and adaption of such model in the field of compilers.

### PROGRAM OUTCOMES

- PO1** Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- PO2** Problem analysis: Identify, formulate, 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: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- PO4** Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and 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.
- PO6** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- PO7** 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.
- PO8** Ethics: Apply ethical principles and commit to professional ethics and 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 the society.
- PO11** Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.
- PO12** Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.



COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY														
FACULTY NAME	Mr. VENUGOPAL D														
BRANCH	CSE			ACADEMIC YEAR				2023-24							
COURSE	B.E	SEMESTER			V	SECTION			B						
SUBJECT	AUTOMATA THEORY & COMPLIER DESIGN					SUBJECT CODE			21CS51						
<b>CO &amp; PO MAPPING</b>															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	2								2	3	1	
CO2	2	2	3									2	2	2	
CO3	2	2	2	2								1	2	2	
CO4	1	3	1									2	2	2	
CO5	2	3	2									3	2	2	
AVERAGE	2	2.6	2.2	2								2	2.2	1.8	
<b>OVERALL MAPPING OF SUBJECT</b>												2.11			

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	67.4	2.02	2.02	2.02	1.34								1.34	2.02	0.67	
CO2	60.1	1.20	1.20	1.80									1.20	1.20	1.20	
CO3	60	1.2	1.2	1.2	1.2								0.60	1.2	1.2	
CO4	57.6	0.57	1.72	0.57									1.15	1.15	1.15	
CO5	57.5	1.15	1.72	1.15									1.72	1.15	1.15	
AVERAGE		1.23	1.57	1.35	1.27								1.20	1.34	1.07	
<b>FINAL ATTAINMENT LEVEL</b>													1.29			

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 COMPUTER SCIENCE & ENGG.,  
 SIET TUMAKURU-08.



**V SEM "B" SECTION (CSE)**

Sub: Automata Theory & Compiler Design		21CS54					2023-2024					EVEN		NAME OF THE STAFF					Mr. Venugopal D																					
Roll No.	USN	Name	IA MARKS			T1	T2			T3			Assign 10 + Seminar 20 = 30/5					External Marks					FINAL					TOTAL AVG												
			T1 (20)	T2 (20)	T3 (20)		CO1-20	CO2-15	CO3-15	CO4-15	CO5-15	CO1-6	CO2-6	CO3-6	CO4-6	CO5-6	SEE (50)	CO1-10	CO2-10	CO3-10	CO4-10	CO5-10	CO1-36	CO2-31	CO3-31	CO4-31	CO5-31													
1	1SV21CS064	ROJA G	10	17	11	10	8.5	8.5	5.5	5.5	5	6	6	6	6	9	2	2	2	2	2	17	16	16	13	13	15.2													
2	1SV21CS065	SAHANA D N	8	13	15	8	6.5	6.5	7.5	7.5	6	6	6	6	6	23	5	5	5	5	5	19	17	17	18	18	17.8													
3	1SV21CS066	SAHIL MUBARAK	17	8	AB	17	4	4	0	0	6	6	6	6	6	30	6	6	6	6	6	29	16	16	12	12	17.0													
4	1SV21CS067	SANJAY RAMESH	12	15	13	12	7.5	7.5	6.5	6.5	6	6	6	6	6	27	5	5	5	5	5	23	19	19	18	18	19.4													
5	1SV21CS068	SARANYA B	17	15	20	17	7.5	7.5	10	10	6	6	6	6	6	29	6	6	6	6	6	29	19	19	22	22	22.2													
6	1SV21CS069	SHASHIREKHA K N	16	16	15	16	8	8	7.5	7.5	6	6	6	6	6	25	5	5	5	5	5	27	19	19	19	19	20.4													
7	1SV21CS070	SHREYA T S	19	18	20	19	9	9	10	10	6	6	6	6	6	34	7	7	7	7	7	32	22	22	23	23	24.2													
8	1SV21CS071	SHREYAS SURESH SA	15	16	20	15	8	8	10	10	6	6	6	6	6	40	8	8	8	8	8	29	22	22	24	24	24.2													
9	1SV21CS072	SNEHA G	20	20	20	20	10	10	10	10	6	6	6	6	6	26	5	5	5	5	5	31	21	21	21	21	23.2													
10	1SV21CS073	SOUMYA	19	17	19	19	8.5	8.5	9.5	9.5	6	6	6	6	6	29	6	6	6	6	6	31	20	20	21	21	22.8													
11	1SV21CS074	SOWMYASHRI S	15	14	10	15	7	7	5	5	6	6	6	6	6	28	6	6	6	6	6	27	19	19	17	17	19.4													
12	1SV21CS075	SOWNDARYA K A	14	18	13	14	9	9	0	0	6	6	6	6	6	18	4	4	4	4	4	24	19	19	10	10	16.0													
13	1SV21CS076	SPANDANA B	19	18	20	19	9	9	10	10	6	6	6	6	6	39	8	8	8	8	8	33	23	23	24	24	25.2													
14	1SV21CS077	SUJAN TIMMAPPA NA	17	14	17	17	7	7	8.5	8.5	6	6	6	6	6	33	7	7	7	7	7	30	20	20	21	21	22.2													
15	1SV21CS078	SUMA M T	19	17	20	19	8.5	8.5	10	10	6	6	6	6	6	31	6	6	6	6	6	31	21	21	22	22	23.4													
16	1SV21CS080	TASMIYA BANU	19	13	17	19	6.5	6.5	8.5	8.5	6	6	6	6	6	11	2	2	2	2	2	27	15	15	17	17	18.0													
17	1SV21CS081	UMESH	AB	15	16	0	7.5	7.5	8	8	6	6	6	6	6	25	5	5	5	5	5	11	19	19	19	19	17.2													
18	1SV21CS082	VEENA N	18	16	20	18	8	8	10	10	6	6	6	6	6	29	6	6	6	6	6	30	20	20	22	22	22.6													
19	1SV21CS083	VIDHYA S	AB	17	20	0	8.5	8.5	0	0	6	6	6	6	6	18	4	4	4	4	4	10	18	18	10	10	13.0													
20	1SV21CS084	VINAY KUMAR R	15	15	15	15	7.5	7.5	7.5	7.5	6	6	6	6	6	7	1	1	1	1	1	22	15	15	15	15	16.4													
21	1SV21CS085	VISHNU THIRTHA TAL	AB	13	14	0	6.5	6.5	7	7	6	6	6	6	6	5	1	1	1	1	1	7	14	14	14	14	12.4													
22	1SV21CS086	YOJITH	AB	16	18	0	8	8	0	0	6	6	6	6	6	26	5	5	5	5	5	11	19	19	11	11	14.4													
23	1SV21CS087	ZAINAB FAKRUDDIN	20	16	20	20	8	8	10	10	6	6	6	6	6	18	4	4	4	4	4	30	18	18	20	20	20.8													
																					<b>24.3</b>	<b>18.6</b>	<b>18.6</b>	<b>17.9</b>	<b>17.9</b>															
																					<b>67.4%</b>	<b>60.1%</b>	<b>60.0%</b>	<b>57.6%</b>	<b>57.6%</b>															

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H.O.D.,  
COMPUTER SCIENCE & ENGG.,  
SIET, TUMAKURU-06.



## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### COURSE OUTCOME

- CO 1. Fundamentals of data communication networks.
- CO 2. Software and hardware interfaces
- CO 3. Application of various physical components and protocols
- CO 4. Communication challenges and remedies in the networks.

### PROGRAM OUTCOMES

- PO1** Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- PO2** Problem analysis: Identify, formulate, 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: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- PO4** Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and 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.
- PO6** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- PO7** 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.
- PO8** Ethics: Apply ethical principles and commit to professional ethics and 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 the society.
- PO11** Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.
- PO12** Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.

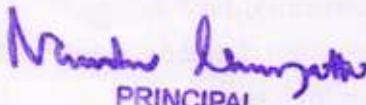


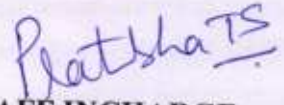
COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY														
FACULTY NAME	Mrs. PRATHIBHA T S														
BRANCH	CSE			ACADEMIC YEAR				2023-24							
COURSE	B.E	SEMESTER			V	SECTION				A					
SUBJECT	COMPUTER NETWORKS					SUBJECT CODE				21CS52					
<b>CO &amp; PO MAPPING</b>															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	2	3	2	3	3	1	1	2	3	2	2	3	2	3
CO2	2	2	3	1	3	2	1	1	2	3	2	2	3	3	2
CO3	2	3	3	2	3	3	1	1	3	3	3	2	3	3	2
CO4	2	3	3	2	3	3	1	1	2	3	2	2	3	3	3
AVG	2	2.5	3	1.75	3	2.75	1	1	2.25	3	2.25	2	3	2.75	2.5
<b>OVERALL MAPPING OF SUBJECT</b>												2.31			

### CO - PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	70%	1.4	1.4	2.1	1.4	2.1	2.1	0.7	0.7	1.4	2.1	1.4	1.4	2.1	1.4	2.1
CO2	69%	1.3	1.3	2.07	0.6	2.07	1.3	0.6	0.6	1.3	2.07	1.3	1.3	2.07	2.07	1.3
CO3	70%	1.4	2.1	2.1	1.4	2.1	2.1	0.7	0.7	2.1	2.1	1.4	1.4	2.1	2.1	1.4
CO4	74%	1.5	2.2	2.2	1.5	2.2	2.2	0.7	0.7	1.5	2.2	1.5	1.5	2.2	2.2	2.2
AVERAGE		1.40	1.75	2.12	1.17	2.12	1.93	0.67	0.68	1.58	2.12	1.40	1.40	2.12	1.94	1.75
<b>FINAL ATTAINMENT LEVEL</b>													1.61			

  
**HOD,**  
**COMPUTER SCIENCE & ENGG.,**  
**SIET, TUMAKURU-06.**

  
**PRINCIPAL**  
**SIET, TUMKUR.**

  
**STAFF INCHARGE**



**V SEM "A" SECTION (CSE)**

Computer Networks(CN)			21CS52	2023-2024			ODD SEM			NAME OF THE STAFF					Prof.Prathibha T S										TOT AVG
Roll No.	USN	Name	IA MARKS			T1	T2			T3		ASSIGNMENT 10/10				SEE				FINAL					
			T1 (20)	T2 (20)	T3 (20)	CO1- 20	CO2- 10	CO3- 10	CO3- 10	CO4- 10	CO1- 2.5	CO2- 2.5	CO3- 2.5	CO4- 2.5	Lab (20)	SEE (50)	CO1- 13	CO2- 13	CO3- 12	CO4- 12	CO1- 36	CO2- 26	CO3- 25	CO4- 25	
1	1SV21CS001	AASTHA PANDEY	20	17	20	20	10	7	10	10	2.5	2.5	2.5	2.5	20	29	7	7	7	7	30	20	17	20	22
2	1SV21CS002	ABDUL MOHSIN J KHAN	18	19	19	18	10	9	10	9	2.5	2.5	2.5	2.5	20	26	7	7	7	7	27	19	18	19	21
3	1SV21CS003	ABHINAV DEVARAJ T R	14	19	19	14	10	9	10	9	2.5	2.5	2.5	2.5	20	18	5	5	5	5	21	17	16	17	18
4	1SV21CS004	ABHISHEK RANJAN	10	11	18	10	5	6	9	9	2.5	2.5	2.5	2.5	20	21	5	5	5	5	18	13	14	17	15
5	1SV21CS005	ABRAR AHAMED I	19	19	20	19	10	9	10	10	2.5	2.5	2.5	2.5	20	27	7	7	7	7	28	19	18	19	21
6	1SV21CS006	AISHWARYA S	14	19	20	14	10	9	10	10	2.5	2.5	2.5	2.5	20	21	5	5	5	5	22	18	17	18	19
7	1SV21CS008	ANANYA M J	17	19	19	17	10	9	10	9	2.5	2.5	2.5	2.5	20	31	8	8	8	8	27	20	19	20	22
8	1SV21CS009	ARSHIYA NAAZ	16	18	20	16	10	8	10	10	2.5	2.5	2.5	2.5	20	12	3	3	3	3	22	16	14	16	17
9	1SV21CS010	BHARATH M H	17	18	20	17	10	8	10	10	2.5	2.5	2.5	2.5	20	21	5	5	5	5	25	18	16	18	19
10	1SV21CS011	BHAVANA M R	20	19	19	20	10	9	10	9	2.5	2.5	2.5	2.5	20	18	5	5	5	5	27	17	16	17	19
11	1SV21CS012	BHAVYA A	15	14	0	15	7	7	0	0	2.5	2.5	2.5	2.5	20	34	9	9	9	9	26	18	18	11	18
12	1SV21CS013	BHAVYA S	15	11	19	15	6	5	10	9	2.5	2.5	2.5	2.5	20	25	6	6	6	6	24	15	14	19	18
13	1SV21CS014	BHOOMIKA Y	19	15	15	19	7	8	7	8	2.5	2.5	2.5	2.5	20	22	6	6	6	6	27	15	16	15	18
14	1SV21CS015	BHUVAN G RAMALADA	18	20	20	18	10	10	10	10	2.5	2.5	2.5	2.5	20	24	6	6	6	6	27	19	19	19	21
15	1SV21CS016	BIMMI KUMARI	20	20	20	20	10	10	10	10	2.5	2.5	2.5	2.5	20	31	8	8	8	8	30	20	20	20	23
16	1SV21CS017	BINDHUSHREE R	19	20	20	19	10	10	10	10	2.5	2.5	2.5	2.5	20	23	6	6	6	6	27	18	18	18	21
17	1SV21CS018	CHAITHRA P	14	19	19	14	10	9	10	9	2.5	2.5	2.5	2.5	20	19	5	5	5	5	21	17	16	17	18
18	1SV21CS019	CHAITHRA V	19	19	19	19	10	9	10	9	2.5	2.5	2.5	2.5	20	28	7	7	7	7	29	20	19	20	22
19	1SV21CS020	CHANDANA G	14	19	19	14	10	9	10	9	2.5	2.5	2.5	2.5	20	25	6	6	6	6	23	19	18	19	20
20	1SV21CS021	CHANDANA N H	14	10	18	14	5	5	9	9	2.5	2.5	2.5	2.5	20	18	5	5	5	5	21	12	12	16	15
21	1SV21CS022	CHANDU P	15	14	19	15	7	7	10	9	2.5	2.5	2.5	2.5	20	27	7	7	7	7	24	16	16	19	19
22	1SV21CS023	CHITHRA J P	19	19	20	19	10	9	10	10	2.5	2.5	2.5	2.5	20	24	6	6	6	6	28	19	18	19	21
23	1SV21CS024	D P HARSHITHA	19	14	19	19	7	7	10	9	2.5	2.5	2.5	2.5	20	24	6	6	6	6	28	16	16	19	19
24	1SV21CS025	DARSHAN K	15	15	19	15	7	8	10	9	2.5	2.5	2.5	2.5	20	20	5	5	5	5	23	15	16	18	18
25	1SV21CS026	DHANUSH K R	14	19	20	14	10	9	10	10	2.5	2.5	2.5	2.5	20	38	10	10	10	10	26	22	21	22	23
26	1SV21CS027	DHEERAJ S	11	17	18	11	10	7	9	9	2.5	2.5	2.5	2.5	20	25	6	6	6	6	20	19	16	18	18
27	1SV21CS028	DIPENDU KUMBHAKAR	13	17	20	13	10	7	10	10	2.5	2.5	2.5	2.5	20	34	9	9	9	9	24	21	18	21	21
28	1SV21CS029	DIVYA A C	17	20	19	17	10	10	10	9	2.5	2.5	2.5	2.5	20	22	6	6	6	6	25	18	18	18	20
29	1SV21CS030	DIVYA D R	18	20	20	18	10	10	10	10	2.5	2.5	2.5	2.5	20	27	7	7	7	7	27	19	19	19	21
30	1SV21CS032	HARSHITHA B	18	16	18	18	8	8	9	9	2.5	2.5	2.5	2.5	20	22	6	6	6	6	26	16	16	17	19
31	1SV21CS033	HEMANTH YALLAPPA	18	19	19	18	10	9	10	9	2.5	2.5	2.5	2.5	20	19	5	5	5	5	25	17	16	17	19
32	1SV21CS034	HEMASHREE M	18	19	20	18	10	9	10	10	2.5	2.5	2.5	2.5	20	23	6	6	6	6	26	18	17	18	20
33	1SV21CS035	HENJESH K O	18	20	20	18	10	10	10	10	2.5	2.5	2.5	2.5	20	30	8	8	8	8	28	20	20	20	22
34	1SV21CS036	KARUNAKARA L	20	20	20	20	10	10	10	10	2.5	2.5	2.5	2.5	20	34	9	9	9	9	31	21	21	21	24
35	1SV21CS037	KIRAN S	15	18	20	15	10	8	10	10	2.5	2.5	2.5	2.5	20	35	9	9	9	9	26	21	19	21	22
36	1SV21CS038	KISHOR N	19	20	20	19	10	10	10	10	2.5	2.5	2.5	2.5	20	32	8	8	8	8	30	21	21	21	23
37	1SV21CS039	KUSUMA R	12	12	18	12	6	6	9	9	2.5	2.5	2.5	2.5	20	20	5	5	5	5	20	14	14	17	16
38	1SV21CS040	LAXMI SONNAD	19	20	20	19	10	10	10	10	2.5	2.5	2.5	2.5	20	27	7	7	7	7	28	19	19	19	22



39	1SV21CS041	LIKITHA T P	19	20	19	19	10	10	10	9	2.5	2.5	2.5	2.5	20	31	8	8	8	8	29	20	20	20	23
40	1SV21CS042	MAMATHA H R	14	20	19	14	10	10	10	9	2.5	2.5	2.5	2.5	20	25	6	6	6	6	23	19	19	19	20
41	1SV21CS043	MANDARA H	15	19	20	15	10	9	10	10	2.5	2.5	2.5	2.5	20	28	7	7	7	7	25	20	19	20	21
42	1SV21CS044	MANIKANTA M	10	15	16	10	7	8	8	8	2.5	2.5	2.5	2.5	20	20	5	5	5	5	18	15	16	16	16
43	1SV21CS045	MANU S	19	18	20	19	9	9	10	10	2.5	2.5	2.5	2.5	20	29	7	7	7	7	29	19	19	20	22
44	1SV21CS046	MAYUR KUSHAL PATIL	18	19	20	18	10	9	10	10	2.5	2.5	2.5	2.5	20	31	8	8	8	8	28	20	19	20	22
45	1SV21CS048	MOHAMMED JUNAID PASHA	13	18	19	13	9	9	10	9	2.5	2.5	2.5	2.5	20	19	5	5	5	5	20	16	16	17	18
46	1SV21CS049	NAGAPOOJA M	20	20	20	20	10	10	10	10	2.5	2.5	2.5	2.5	20	30	8	8	8	8	30	20	20	20	23
47	1SV21CS050	NAHIDA K	17	20	20	17	10	10	10	10	2.5	2.5	2.5	2.5	20	34	9	9	9	9	28	21	21	21	23
48	1SV21CS051	NANDAN L	15	18	18	15	9	9	10	8	2.5	2.5	2.5	2.5	20	19	5	5	5	5	22	16	16	17	18
49	1SV21CS052	P A NIVEDITHA	19	19	20	19	10	9	10	10	2.5	2.5	2.5	2.5	20	32	8	8	8	8	30	21	20	21	23
50	1SV21CS053	PANEENDRA E	18	18	19	18	9	9	10	9	2.5	2.5	2.5	2.5	20	18	5	5	5	5	25	16	16	17	19
51	1SV21CS054	POOJA G	19	20	20	19	10	10	10	10	2.5	2.5	2.5	2.5	20	35	9	9	9	9	30	21	21	21	24
52	1SV21CS055	PRADEEP KUMAR H G	14	17	19	14	10	7	10	9	2.5	2.5	2.5	2.5	20	27	7	7	7	7	23	19	16	19	20
53	1SV21CS056	PRIYANSHU PRASHAD	18	19	20	18	10	9	10	10	2.5	2.5	2.5	2.5	20	24	6	6	6	6	27	19	18	19	20
54	1SV21CS057	PUNEETH KUMAR R	18	19	19	18	10	9	10	9	2.5	2.5	2.5	2.5	20	28	7	7	7	7	28	20	19	20	21
55	1SV21CS058	PUNEETH N	13	18	19	13	9	9	10	9	2.5	2.5	2.5	2.5	20	30	8	8	8	8	23	19	19	20	20
56	1SV21CS059	PUNITH KUMAR H S	19	19	20	19	10	9	10	10	2.5	2.5	2.5	2.5	20	25	6	6	6	6	28	19	18	19	21
57	1SV21CS060	RAJAN KUMAR SAH	14	17	15	14	10	7	8	7	2.5	2.5	2.5	2.5	20	20	5	5	5	5	22	18	15	16	17
58	1SV21CS062	RAKSHITHA P B	13	13	18	13	6	7	9	9	2.5	2.5	2.5	2.5	20	13	3	3	3	3	19	12	13	15	15
59	1SV21CS063	RAMYASHREE N	20	20	20	20	10	10	10	10	2.5	2.5	2.5	2.5	20	35	9	9	9	9	31	21	21	21	24
60	1SV22CS401	CHANDANA T	13	19	18	13	10	9	9	9	2.5	2.5	2.5	2.5	20	23	6	5.75	5.75	5.75	21	18	17	17	19
61	1SV22CS402	DEEPA S M	19	20	19	19	10	10	9	10	2.5	2.5	2.5	2.5	20	21	5	5.25	5.25	5.25	27	18	18	17	20
62	1SV22CS403	HANUMANTHARAYA J	18	20	20	18	10	10	10	10	2.5	2.5	2.5	2.5	20	28	7	7	7	7	28	20	20	20	22
63	1SV22CS404	HITESH KUMAR H	14	19	15	14	10	9	7	8	2.5	2.5	2.5	2.5	20	18	5	4.5	4.5	4.5	21	17	16	14	17
64	1SV22CS405	JYOTHSNA M V	15	16	19	15	8	8	10	9	2.5	2.5	2.5	2.5	20	28	7	7	7	7	25	18	18	20	20
65	1SV22CS406	LAXMI S	13	18	18	13	9	9	9	9	2.5	2.5	2.5	2.5	20	23	6	5.75	5.75	5.75	21	17	17	17	18
66	1SV22CS407	PUNITH G R	16	16	17	16	8	8	9	8	2.5	2.5	2.5	2.5	20	20	5	5	5	5	24	16	16	17	18
67	1SV22CS408	ROHITH I M	14	16	18	14	8	8	9	9	2.5	2.5	2.5	2.5	20	18	5	4.5	4.5	4.5	21	15	15	16	17
68	1SV22CS409	SAHANA S	19	20	20	19	10	10	10	10	2.5	2.5	2.5	2.5	20	26	7	6.5	6.5	6.5	28	19	19	19	21
69	1SV22CS410	SANJAY S	19	0	20	19	0	0	10	10	2.5	2.5	2.5	2.5	20	21	5	5.25	5.25	5.25	27	8	8	18	15
70	1SV22CS411	SREE VANIR	17	19	20	17	10	9	10	10	2.5	2.5	2.5	2.5	20	36	9	9	9	9	29	22	21	22	23
71	1SV22CS412	YASHASWINI K	17	20	20	17	10	10	10	10	2.5	2.5	2.5	2.5	20	30	8	7.5	7.5	7.5	27	20	20	20	22
72	1SV22CS413	MANOJ KUMAR M	15	18	19	15	9	9	10	9	2.5	2.5	2.5	2.5	20	19	5	4.75	4.75	4.75	22	16	16	17	18

25.26	17.92	17.38	18.39
70%	69%	70%	74%

*Pratibha TS*

Staff incharge

*Nandhu Kumar*  
PRINCIPAL  
SIET, TUMKUR.

*Bar*  
HOD,  
COMPUTER SCIENCE & ENGG.  
SIET, TUMAKURU-06.





**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**COURSE OUTCOME**

- CO1.** Learn the basic needs of communication system.
- CO2.** Interpret the communication challenges and its solution.
- CO3.** Identify and organize the communication system network components.
- CO4.** Design communication networks for user requirements.

**PROGRAM OUTCOMES**

- PO1** Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- PO2** Problem analysis: Identify, formulate, 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: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- PO4** Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and 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.
- PO6** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- PO7** 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.
- PO8** Ethics: Apply ethical principles and commit to professional ethics and 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 the society.
- PO11** Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.
- PO12** Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.




COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY														
FACULTY NAME	Mrs. LAVANYA K														
BRANCH	CSE			ACADEMIC YEAR				2023-24							
COURSE	B.E	SEMESTER			V	SECTION			B						
SUBJECT	COMPUTER NETWORKINGS					SUBJECT CODE			21CS52						
<b>CO &amp; PO MAPPING</b>															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	2	3	2	3	3	1	1	2	3	2	2	3	2	3
CO2	2	2	3	1	3	2	1	1	2	3	2	2	3	3	2
CO3	2	3	3	2	3	3	1	1	3	3	3	2	3	3	2
CO4	2	3	3	2	3	3	1	1	2	3	2	2	3	3	3
AVERAGE	2	2.5	3	1.75	3	2.75	1	1	2.25	3	2.25	2	3	2.75	2.5
OVERALL MAPPING OF SUBJECT												2.21			

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	68.3	1.36	1.36	2.04	1.36	2.04	2.04	0.68	0.68	1.36	2.04	1.36	1.36	2.04	1.36	2.04
CO2	74.3	1.48	1.48	2.22	0.74	2.22	1.48	0.74	0.74	1.48	2.22	1.48	1.48	2.22	2.22	1.48
CO3	74.4	1.48	2.23	2.23	1.48	2.23	2.23	0.74	0.74	2.23	2.23	2.23	1.48	2.23	2.23	1.48
CO4	70.3	1.40	2.10	2.10	1.40	2.10	2.10	0.70	0.70	1.40	2.10	1.40	1.40	2.10	2.10	2.10
AVERAGE		1.43	1.79	2.15	1.25	2.15	1.96	0.72	0.72	1.62	2.15	1.62	1.43	2.15	1.98	1.78
FINAL ATTAINMENT LEVEL													1.66			



  
 PRINCIPAL  
 SIET, TUMKUR.

  
 H.O.D.  
 COMPUTER SCIENCE & ENGG.,  
 SIET, TUMAKURU-06.



Roll No.	USN	Name	21C	Sem:	2023-	ODD	FACULTY:LAVANYA K																TO TA L								
			SS2	V	24		SUB:Computer				T2				T3				ENMENT 10 + Semi					EXTERNAL				Final			
			T1	T2	T3		CO 1-	CO 2-	CO 3-	CO 4-	CO 1-7	CO 2-8	CO 3-7	CO 4-8	LA B	AS S	SE E(5	CO 1-	CO 2-	CO 3-	CO 4-	CO1-39		CO2-41	CO3-29	CO4-31					
1	1SV21CS064	ROJA G	6	12	0	6	12	0	0	7	7	7	8	19	10	18	5	5	5	5	18	24	12	13	16						
2	1SV21CS065	SAHANA D	12	15	17	12	15	10	7	7	8	7	7	19	10	31	8	8	8	8	27	31	25	22	26						
3	1SV21CS066	SAHIL	16	15	0	16	15	0	0	7	7	7	7	18	10	22	6	6	6	6	29	28	13	13	20						
4	1SV21CS067	SANJAY	18	15	20	18	15	10	10	7	8	7	8	20	10	23	6	6	6	6	31	29	23	24	27						
5	1SV21CS068	SARANYA	19	18	19	19	18	10	9	7	7	7	8	19	10	24	6	6	6	6	32	31	23	23	27						
6	1SV21CS069	SHASHIRE	13	15	14	13	15	7	7	7	8	7	7	19	10	27	7	7	7	7	27	30	21	21	25						
7	1SV21CS070	SHREYA T	20	20	20	20	20	10	10	7	8	7	8	20	10	30	8	8	8	8	35	36	25	26	30						
8	1SV21CS071	SHREYAS	18	18	19	18	18	10	9	7	7	7	8	19	10	30	8	8	8	8	33	33	25	25	29						
9	1SV21CS072	SNEHA G	19	20	20	19	20	10	10	7	8	7	8	20	10	37	9	9	9	9	35	37	26	27	32						
10	1SV21CS073	SOUMYA	19	20	20	19	20	10	10	7	8	7	7	19	10	32	8	8	8	8	34	36	25	25	30						
11	1SV21CS074	SOWMYAS	15	17	18	15	17	10	8	7	7	7	8	19	10	18	5	5	5	5	27	29	22	21	24						
12	1SV21CS075	SOWN DAR	12	17	0	12	17	0	0	7	8	7	7	19	10	29	7	7	7	7	26	32	14	14	22						
13	1SV21CS076	SPANDAN	20	20	20	20	20	10	10	7	8	7	8	20	10	33	8	8	8	8	35	36	25	26	31						
14	1SV21CS077	SUJAN	18	14	19	18	14	10	9	7	8	7	8	20	10	39	10	10	10	10	35	32	27	27	30						
15	1SV21CS078	SUMA M T	18	20	20	18	20	10	10	7	8	7	8	20	10	28	7	7	7	7	32	35	24	25	29						
16	1SV21CS080	TASMIYA	14	18	19	14	18	10	9	7	8	7	7	19	10	18	5	5	5	5	26	31	22	21	25						
17	1SV21CS081	UMESH	0	9	12	0	9	6	6	7	7	7	8	19	10	22	6	6	6	6	13	22	19	20	18						
18	1SV21CS082	VEENA N	19	19	20	19	19	10	10	7	8	7	8	20	10	30	8	8	8	8	34	35	25	26	30						
19	1SV21CS083	VIDHYA S	0	10	19	0	10	10	9	7	8	7	8	20	10	22	6	6	6	6	13	24	23	23	20						
20	1SV21CS084	VINAY	0	18	12	0	18	6	6	7	8	7	8	20	10	20	5	5	5	5	12	31	18	19	20						
21	1SV21CS085	VISHNU	7	6	9	7	6	5	4	7	8	7	8	20	10	14	4	4	4	4	18	18	16	16	17						
22	1SV21CS086	YOJITH	0	18	20	0	18	10	10	7	8	7	8	20	10	29	7	7	7	7	14	33	24	25	24						
23	1SV21CS087	ZAINAB	18	19	19	18	19	10	9	7	7	7	8	19	10	28	7	7	7	7	32	33	24	24	28						
																				26.7	30.5	21.6	21.8								
																				68%	74%	74%	70%								

*Nandini Hanumanth*  
 PRINCIPAL  
 S.I.C. TUMKUR.

*Bal*  
 H.O.D.  
 COMPUTER SCIENCE & ENGG.,  
 SIET, TUMAKURU-08.





## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### COURSE OUTCOME

- CO1.** Identify, analyze and define database objects, enforce integrity constraints on a database using RDBMS
- CO2.** Use Structured Query Language (SQL) for database manipulation and also demonstrate the basic of query evaluation.
- CO3.** Design and build simple database systems and relate the concept of transaction, concurrency control and recovery in database.
- CO4.** Develop application to interact with databases, relational algebra expression.
- CO5.** Develop applications using tuple and domain relation expression from queries.

### PROGRAM OUTCOMES

- P01** Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- P02** Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- P03** Design / development of solutions: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- P04** Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and provide valid conclusions.
- P05** Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling to complex engineering activities.
- P06** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- P07** 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.
- P08** Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- P09** Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- P010** Communication: Communicate effectively on complex engineering activities with the engineering community and with the society.
- P011** Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.
- P012** Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.



COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY															
FACULTY NAME	Mr. UMESH B L															
BRANCH	CSE					ACADEMIC YEAR					2023-24					
COURSE	B.E	SEMESTER				V	SECTION					A				
SUBJECT	DATABASE MANAGEMENT SYSTEMS							SUBJECT CODE					21CS53			

**CO & PO MAPPING**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	1									2	2		
CO2	2	1	2	1	3							1	3		
CO3	2	1	2	1	2							1	2		
CO4	2	3			1							2	3		
CO5	1	1	2	1								1	2		
AVERAGE	2.0	1.6	1.8	1.0	2.0							1.4	2.4		
OVERALL MAPPING OF SUBJECT												1.74			

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	76.6	2.29	1.53	0.76									1.53	1.53		
CO2	76.6	1.53	0.76	1.53	0.76	2.29							0.76	2.29		
CO3	77.2	1.54	0.77	1.54	0.77	1.54							0.77	1.54		
CO4	77.2	1.54	2.31			0.77							1.54	2.31		
CO5	85.5	0.85	0.85	1.71	0.85								0.85	1.71		
AVERAGE		1.55	1.24	1.39	0.79	1.53							1.09	1.88		
FINAL ATTAINMENT LEVEL													1.35			

*Aradh*

*Umesh B L*  
PRINCIPAL  
SIET, TUMKUR.

*B*  
HOD,  
COMPUTER SCIENCE & ENGG.,  
SIET, TUMAKURU-06.



SUB: DATABASE MANAGEMENT SYSTEMS			SEM: V 'A' SEC					2023-24		ODD		FACULTY: MR. UMESH B L					DEPT: CSE												
Roll No.	USN	Name	TI			T2		T3	ASSIGNMENT 20 + QUIZ 20 = 40/5					EXTERNAL					FINAL					TOTAL AVG					
			T1	T2	T3	CO1-10	CO2-10	CO3-10	CO4-10	CO5-20	CO1-8	CO2-8	CO3-8	CO4-8	CO5-8	ASS	QUIZ	SEE (50)	CO1-10	CO2-10	CO3-10	CO4-10	CO5-10		CO1-28	CO2-28	CO3-28	CO4-28	CO5-38
1	1SV21CS001	AASTHA PANDEY	20	15	20	10	10	7.5	7.5	20	8	8	8	8	8	20	20	29	5.8	5.8	5.8	5.8	5.8	23.8	23.8	21.3	21.3	33.8	24.8
2	1SV21CS002	ABDUL MOHSIN J KHAN	18	19	20	9	9	9.5	9.5	20	8	8	8	8	8	20	20	33	6.6	6.6	6.6	6.6	6.6	23.6	23.6	24.1	24.1	34.6	26.0
3	1SV21CS003	ABHINAV DEVARAJ T R	17	19	20	8.5	8.5	9.5	9.5	20	8	7	8	8	7	20	18	18	3.6	3.6	3.6	3.6	3.6	20.1	19.1	21.1	21.1	30.6	22.4
4	1SV21CS004	ABHISHEK RANJAN	14	14	18	7	7	7	7	18	8	8	7	7	8	20	18	19	3.8	3.8	3.8	3.8	3.8	18.8	18.8	17.8	17.8	29.8	20.6
5	1SV21CS005	ABRAR AHAMED I	18	20	20	9	9	10	10	20	8	8	8	8	8	20	20	29	5.8	5.8	5.8	5.8	5.8	22.8	22.8	23.8	23.8	33.8	25.4
6	1SV21CS006	AISHWARYA S	20	18	19	10	10	9	9	19	8	8	8	8	8	20	20	26	5.2	5.2	5.2	5.2	5.2	23.2	23.2	22.2	22.2	32.2	24.6
7	1SV21CS008	ANANYA M J	20	17	20	10	10	8.5	8.5	20	8	8	8	8	8	20	20	13	2.6	2.6	2.6	2.6	2.6	20.6	20.6	19.1	19.1	30.6	22.0
8	1SV21CS009	ARSHIYA NAAZ	20	14	20	10	10	7	7	20	8	8	8	8	8	20	20	18	3.6	3.6	3.6	3.6	3.6	21.6	21.6	18.6	18.6	31.6	22.4
9	1SV21CS010	BHARATH M H	18	17	20	9	9	8.5	8.5	20	8	8	8	8	8	20	20	23	4.6	4.6	4.6	4.6	4.6	21.6	21.6	21.1	21.1	32.6	23.6
10	1SV21CS011	BHAVANA M R	20	18	20	10	10	9	9	20	8	8	8	8	8	20	20	24	4.8	4.8	4.8	4.8	4.8	22.8	22.8	21.8	21.8	32.8	24.4
11	1SV21CS012	BHAVYA A	20	19	20	10	10	9.5	9.5	20	8	8	8	8	8	20	20	19	3.8	3.8	3.8	3.8	3.8	21.8	21.8	21.3	21.3	31.8	23.6
12	1SV21CS013	BHAVYA S	19	17	18	9.5	9.5	8.5	8.5	18	8	8	8	8	8	20	20	37	7.4	7.4	7.4	7.4	7.4	24.9	24.9	23.9	23.9	33.4	26.2
13	1SV21CS014	BHOOMIKA Y	15	19	20	7.5	7.5	9.5	9.5	20	8	8	8	8	8	20	20	27	5.4	5.4	5.4	5.4	5.4	20.9	20.9	22.9	22.9	33.4	24.2
14	1SV21CS015	BHUVAN G RAMALADA	18	18	20	9	9	9	9	20	8	8	8	8	8	20	20	34	6.8	6.8	6.8	6.8	6.8	23.8	23.8	23.8	23.8	34.8	26.0
15	1SV21CS016	BIMMI KUMARI	20	20	20	10	10	10	10	20	8	8	8	8	8	20	20	36	7.2	7.2	7.2	7.2	7.2	25.2	25.2	25.2	25.2	35.2	27.2
16	1SV21CS017	BINDHUSHREE R	18	19	20	9	9	9.5	9.5	20	8	8	8	8	8	20	20	24	4.8	4.8	4.8	4.8	4.8	21.8	21.8	22.3	22.3	32.8	24.2
17	1SV21CS018	CHAITHRA P	19	19	20	9.5	9.5	9.5	9.5	20	8	8	8	8	8	20	20	30	6.0	6.0	6.0	6.0	6.0	23.5	23.5	23.5	23.5	34.0	25.6
18	1SV21CS019	CHAITHRA V	19	18	19	9.5	9.5	9	9	19	8	8	8	8	8	20	20	22	4.4	4.4	4.4	4.4	4.4	21.9	21.9	21.4	21.4	31.4	23.6
19	1SV21CS020	CHANDANA G	19	18	20	9.5	9.5	9	9	20	8	8	8	8	8	20	20	21	4.2	4.2	4.2	4.2	4.2	21.7	21.7	21.2	21.2	32.2	23.6
20	1SV21CS021	CHANDANA N H	11	13	15	5.5	5.5	6.5	6.5	15	8	8	8	8	8	20	20	6	1.2	1.2	1.2	1.2	1.2	14.7	14.7	15.7	15.7	24.2	17.0
21	1SV21CS022	CHANDU P	19	19	20	9.5	9.5	9.5	9.5	20	8	8	8	8	8	20	20	35	7.0	7.0	7.0	7.0	7.0	24.5	24.5	24.5	24.5	35.0	26.6
22	1SV21CS023	CHITHRA J P	19	19	20	9.5	9.5	9.5	9.5	20	8	8	8	8	8	20	20	32	6.4	6.4	6.4	6.4	6.4	23.9	23.9	23.9	23.9	34.4	26.0
23	1SV21CS024	D P HARSHITHA	17	15	20	8.5	8.5	7.5	7.5	20	8	8	8	8	8	20	20	19	3.8	3.8	3.8	3.8	3.8	20.3	20.3	19.3	19.3	31.8	22.2
24	1SV21CS025	DARSHAN K	19	14	20	9.5	9.5	7	7	20	8	8	8	8	8	20	20	18	3.6	3.6	3.6	3.6	3.6	21.1	21.1	18.6	18.6	31.6	22.2
25	1SV21CS026	DHANUSH K R	20	19	20	10	10	9.5	9.5	20	8	8	8	8	8	20	20	30	6.0	6.0	6.0	6.0	6.0	24.0	24.0	23.5	23.5	34.0	25.8
26	1SV21CS027	DHEERAJ S	17	15	17	8.5	8.5	7.5	7.5	17	8	8	8	8	8	20	20	18	3.6	3.6	3.6	3.6	3.6	20.1	20.1	19.1	19.1	28.6	21.4
27	1SV21CS028	DIPENDU KUMBHAKAR	17	16	19	8.5	8.5	8	8	19	8	8	8	8	8	20	20	27	5.4	5.4	5.4	5.4	5.4	21.9	21.9	21.4	21.4	32.4	23.8
28	1SV21CS029	DIVYA A C	18	18	20	9	9	9	9	20	8	8	8	8	8	20	20	31	6.2	6.2	6.2	6.2	6.2	23.2	23.2	23.2	23.2	34.2	25.4
29	1SV21CS030	DIVYA D R	19	19	20	9.5	9.5	9.5	9.5	20	8	8	8	8	8	20	20	40	8.0	8.0	8.0	8.0	8.0	25.5	25.5	25.5	25.5	36.0	27.6
30	1SV21CS032	HARSHITHA B	9	15	20	4.5	4.5	7.5	7.5	20	8	8	8	8	8	20	20	27	5.4	5.4	5.4	5.4	5.4	17.9	17.9	20.9	20.9	33.4	22.2
31	1SV21CS033	HEMANTH YALLAPPA	18	19	20	9	9	9.5	9.5	20	8	8	8	8	8	20	20	1	0.2	0.2	0.2	0.2	0.2	17.2	17.2	17.7	17.7	28.2	19.6
32	1SV21CS034	HEMASHREE M	19	18	20	9.5	9.5	9	9	20	8	8	8	8	8	20	20	36	7.2	7.2	7.2	7.2	7.2	24.7	24.7	24.2	24.2	35.2	26.6
33	1SV21CS035	HENJESH K O	19	17	20	9.5	9.5	8.5	8.5	20	8	8	8	8	8	20	20	32	6.4	6.4	6.4	6.4	6.4	23.9	23.9	22.9	22.9	34.4	25.6
34	1SV21CS036	KARUNAKARA L	19	16	19	9.5	9.5	8	8	19	8	8	8	8	8	20	20	33	6.6	6.6	6.6	6.6	6.6	24.1	24.1	22.6	22.6	33.6	25.4
35	1SV21CS037	KIRAN S	17	18	20	8.5	8.5	9	9	20	8	8	8	8	8	20	20	31	6.2	6.2	6.2	6.2	6.2	22.7	22.7	23.2	23.2	34.2	25.2
36	1SV21CS038	KISHOR N	20	18	20	10	10	9	9	20	8	8	8	8	8	20	20	33	6.6	6.6	6.6	6.6	6.6	24.6	24.6	23.6	23.6	34.6	26.2
37	1SV21CS039	KUSUMA R	8	12	19	4	4	6	6	19	8	8	8	8	8	20	20	10	2.0	2.0	2.0	2.0	2.0	14.0	14.0	16.0	16.0	29.0	17.8



21CS53

Roll No.	USN	Name	T1			T2		T3	ASSIGNMENT 20 + QUIZ 20 = 40/5								EXTERNAL					FINAL					TOTAL AVG		
			T1	T2	T3	CO1-10	CO2-10	CO3-10	CO4-10	CO5-20	CO1-8	CO2-8	CO3-8	CO4-8	CO5-8	ASS	QUIZ	SEE (50)	CO1-10	CO2-10	CO3-10	CO4-10	CO5-10	CO1-28	CO2-28	CO3-28		CO4-28	CO5-38
38	1SV21CS040	LAXMI SONNAD	18	18	20	9	9	9	9	20	8	8	8	8	8	20	20	25	5.0	5.0	5.0	5.0	5.0	22.0	22.0	22.0	22.0	33.0	24.2
39	1SV21CS041	LIKITHA T P	17	20	20	8.5	8.5	10	10	20	8	8	8	8	8	20	20	29	5.8	5.8	5.8	5.8	5.8	22.3	22.3	23.8	23.8	33.8	25.2
40	1SV21CS042	MAMATHA H R	19	18	19	9.5	9.5	9	9	19	8	8	8	8	8	20	20	34	6.8	6.8	6.8	6.8	6.8	24.3	24.3	23.8	23.8	33.8	26.0
41	1SV21CS043	MANDARA H	15	17	20	7.5	7.5	8.5	8.5	20	8	8	8	8	8	20	20	24	4.8	4.8	4.8	4.8	4.8	20.3	20.3	21.3	21.3	32.8	23.2
42	1SV21CS044	MANIKANTA M	19	17	19	9.5	9.5	8.5	8.5	19	8	8	8	8	8	20	20	22	4.4	4.4	4.4	4.4	4.4	21.9	21.9	20.9	20.9	31.4	23.4
43	1SV21CS045	MANU S	20	19	20	10	10	9.5	9.5	20	8	8	8	8	8	20	20	27	5.4	5.4	5.4	5.4	5.4	23.4	23.4	22.9	22.9	33.4	25.2
44	1SV21CS046	MAYUR KUSHAL PATIL	20	19	20	10	10	9.5	9.5	20	8	8	8	8	8	20	20	36	7.2	7.2	7.2	7.2	7.2	25.2	25.2	24.7	24.7	35.2	27.0
45	1SV21CS048	MOHAMMED JUNAID PASHA	12	5	18	6	6	2.5	2.5	18	8	8	8	8	8	20	20	23	4.6	4.6	4.6	4.6	4.6	18.6	18.6	15.1	15.1	30.6	19.6
46	1SV21CS049	NAGAPOOJA M	20	19	20	10	10	9.5	9.5	20	8	8	8	8	8	20	20	30	6.0	6.0	6.0	6.0	6.0	24.0	24.0	23.5	23.5	34.0	25.8
47	1SV21CS050	NAHIDA K	17	19	20	8.5	8.5	9.5	9.5	20	8	8	8	8	8	20	20	33	6.6	6.6	6.6	6.6	6.6	23.1	23.1	24.1	24.1	34.6	25.8
48	1SV21CS051	NANDAN L	9	13	19	4.5	4.5	6.5	6.5	19	8	8	8	8	8	20	20	20	4.0	4.0	4.0	4.0	4.0	16.5	16.5	18.5	18.5	31.0	20.2
49	1SV21CS052	P A NIVEDITHA	18	18	19	9	9	9	9	19	8	8	8	8	8	20	20	39	7.8	7.8	7.8	7.8	7.8	24.8	24.8	24.8	24.8	34.8	26.8
50	1SV21CS053	PANEENDRA E	13	14	19	6.5	6.5	7	7	19	8	8	8	8	8	20	20	20	4.0	4.0	4.0	4.0	4.0	18.5	18.5	19.0	19.0	31.0	21.2
51	1SV21CS054	POOJA G	18	19	20	9	9	9.5	9.5	20	8	8	8	8	8	20	20	18	3.6	3.6	3.6	3.6	3.6	20.6	20.6	21.1	21.1	31.6	23.0
52	1SV21CS055	PRADEEP KUMAR H G	18	17	20	9	9	8.5	8.5	20	8	8	8	8	8	20	20	24	4.8	4.8	4.8	4.8	4.8	21.8	21.8	21.3	21.3	32.8	23.8
53	1SV21CS056	PRIYANSHU PRASHAD	19	19	20	9.5	9.5	9.5	9.5	20	8	8	8	8	8	20	20	33	6.6	6.6	6.6	6.6	6.6	24.1	24.1	24.1	24.1	34.6	26.2
54	1SV21CS057	PUNEETH KUMAR R	18	15	19	9	9	7.5	7.5	19	8	8	8	8	8	20	20	18	3.6	3.6	3.6	3.6	3.6	20.6	20.6	19.1	19.1	30.6	22.0
55	1SV21CS058	PUNEETH N	17	16	19	8.5	8.5	8	8	19	8	8	8	8	8	20	20	23	4.6	4.6	4.6	4.6	4.6	21.1	21.1	20.6	20.6	31.6	23.0
56	1SV21CS059	PUNITH KUMAR H S	17	18	18	8.5	8.5	9	9	18	8	8	8	8	8	20	20	21	4.2	4.2	4.2	4.2	4.2	20.7	20.7	21.2	21.2	30.2	22.8
57	1SV21CS060	RAJAN KUMAR SAH	16	17	19	8	8	8.5	8.5	19	8	8	8	8	8	20	20	20	4.0	4.0	4.0	4.0	4.0	20.0	20.0	20.5	20.5	31.0	22.4
58	1SV21CS062	RAKSHITHA P B	9	13	19	4.5	4.5	6.5	6.5	19	8	8	8	8	8	20	20	18	3.6	3.6	3.6	3.6	3.6	16.1	16.1	18.1	18.1	30.6	19.8
59	1SV21CS063	RAMYASHREE N	20	19	20	10	10	9.5	9.5	20	8	8	8	8	8	20	20	36	7.2	7.2	7.2	7.2	7.2	25.2	25.2	24.7	24.7	35.2	27.0
60	1SV22CS401	CHANDANA T	14	16	20	7	7	8	8	20	8	8	8	8	8	20	20	29	5.8	5.8	5.8	5.8	5.8	20.8	20.8	21.8	21.8	33.8	23.8
61	1SV22CS402	DEEPA S M	18	18	19	9	9	9	9	19	8	8	8	8	8	20	20	24	4.8	4.8	4.8	4.8	4.8	21.8	21.8	21.8	21.8	31.8	23.8
62	1SV22CS403	HANUMANTHARAYA J	13	20	20	6.5	6.5	10	10	20	8	8	8	8	8	20	20	31	6.2	6.2	6.2	6.2	6.2	20.7	20.7	24.2	24.2	34.2	24.8
63	1SV22CS404	HITESH KUMAR H	8	16	16	4	4	8	8	16	8	8	8	8	8	20	20	24	4.8	4.8	4.8	4.8	4.8	16.8	16.8	20.8	20.8	28.8	20.8
64	1SV22CS405	JYOTHSNA M V	10	16	20	5	5	8	8	20	8	8	8	8	8	20	20	21	4.2	4.2	4.2	4.2	4.2	17.2	17.2	20.2	20.2	32.2	21.4
65	1SV22CS406	LAXMI S	11	18	19	5.5	5.5	9	9	19	8	8	8	8	8	20	20	30	6.0	6.0	6.0	6.0	6.0	19.5	19.5	23.0	23.0	33.0	23.6
66	1SV22CS407	PUNITH G R	17	17	19	8.5	8.5	8.5	8.5	19	8	8	8	8	8	20	20	28	5.6	5.6	5.6	5.6	5.6	22.1	22.1	22.1	22.1	32.6	24.2
67	1SV22CS408	ROHITH I M	8	13	17	4	4	6.5	6.5	17	8	8	8	8	8	20	20	20	4.0	4.0	4.0	4.0	4.0	16.0	16.0	18.5	18.5	29.0	19.6
68	1SV22CS409	SAHANA S	14	17	19	7	7	8.5	8.5	19	8	8	8	8	8	20	20	22	4.4	4.4	4.4	4.4	4.4	19.4	19.4	20.9	20.9	31.4	22.4
69	1SV22CS410	SANJAY S	18	19	19	9	9	9.5	9.5	19	8	8	8	8	8	20	20	26	5.2	5.2	5.2	5.2	5.2	22.2	22.2	22.7	22.7	32.2	24.4
70	1SV22CS411	SREE VANI R	17	16	20	8.5	8.5	8	8	20	8	8	8	8	8	20	20	32	6.4	6.4	6.4	6.4	6.4	22.9	22.9	22.4	22.4	34.4	25.0
71	1SV22CS412	YASHASWINI K	18	17	19	9	9	8.5	8.5	19	8	8	8	8	8	20	20	27	5.4	5.4	5.4	5.4	5.4	22.4	22.4	21.9	21.9	32.4	24.2
72	1SV22CS413	MANOJ KUMAR M	5	11	17	2.5	2.5	5.5	5.5	17	8	8	8	8	8	20	20	25	5.0	5	5	5	5	15.5	15.5	18.5	18.5	30.0	19.6

PRINCIPAL  
SIET, TUMKUR.

H.O.D.  
COMPUTER SCIENCE & ENGINEERING  
SIET, TUMAKURU-06.

21.5 21.4 21.6 21.6 32.5  
76.6% 76.6% 77.2% 77.2% 85.5%





## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### COURSE OUTCOME

- CO1:** Identify, analyze and define database objects, enforce integrity constraints on a database using RDBMS
- CO2:** Use Structured Query Language (SQL) for database manipulation and also demonstrate the basic of query evaluation.
- CO3:** Design and build simple database systems and relate the concept of transaction, concurrency control and recovery in database.
- CO4:** Develop application to interact with databases, relational algebra expression.
- CO5:** Develop applications using tuple and domain relation expression from queries.
- PSO1:** To Create, select, and apply appropriate techniques, resources, modern engineering and IT tools including prediction and modelling 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.
- PSO3:** Acquaint module knowledge on emerging trends of the modern era in computer science and engineering.

### PROGRAM OUTCOMES

- PO1** Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- PO2** Problem analysis: Identify, formulate, 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: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- PO4** Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and 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.
- PO6** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- PO7** 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.
- PO8** Ethics: Apply ethical principles and commit to professional ethics and 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 the society.

**PO11** Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.

**PO12** Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.

COLLEGE		SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY													
FACULTY NAME		Dr. Charan K V													
BRANCH		ISE			ACADEMIC YEAR				2023-24						
COURSE	B.E	SEMESTER			V	SECTION			B						
SUBJECT	DBMS					SUBJECT CODE			21CS53						
<b>CO &amp; PO MAPPING</b>															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	2								2	3	1	
CO2	2	2	3	1								2	2	2	
CO3	2	2	2	2								1	2	2	
CO4	1	3	1	2								2	2	2	
CO5	2	3	2	1								3	2	2	
AVERAGE	2	2.6	2.2	2								2	2.2	1.8	
<b>OVERALL MAPPING OF SUBJECT</b>												2.11			



*Manjunath Kumar*  
 PRINCIPAL  
 SIET, TUMKUR.

*Bas*  
 HOD,  
 COMPUTER SCIENCE & ENGG.,  
 SIET, TUMAKURU-06.



	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	67.4	2.02	2.02	2.02	1.34								1.34	2.02	0.67	
CO2	60.1	1.20	1.20	1.80	1.2								1.20	1.20	1.20	
CO3	60	1.2	1.2	1.2	1.2								0.60	1.2	1.2	
CO4	57.6	0.57	1.72	0.57	1.2								1.15	1.15	1.15	
CO5	57.5	1.15	1.72	1.15									1.72	1.15	1.15	
AVERAGE		1.23	1.57	1.35	1.67								1.20	1.34	1.07	
FINAL ATTAINMENT LEVEL													1.29			

*Narendra Kumar*  
 PRINCIPAL  
 SIET, TUMKUR.

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**V SEM "B" SECTION (CSE)**

Sub: DBMS		21CS53					2023-2024					ODD		NAME OF THE STAFF					Dr. Charan K V									
Roll No.	USN	Name	IA MARKS			T1	T2			T3			Assign 10 + Quiz 20 = 30					External Marks					FINAL					TOTAL AVG
			T1 (20)	T2 (20)	T3 (20)		CO1-20	CO2-15	CO3-15	CO4-15	CO5-15	CO1-6	CO2-6	CO3-6	CO4-6	CO5-6	SEE (50)	CO1-10	CO2-10	CO3-10	CO4-10	CO5-10	CO1-36	CO2-31	CO3-31	CO4-31	CO5-31	
1	ISV21CS064	ROJA G	13	15	19	13	7.5	7.5	9.5	5.5	5	6	6	6	6	29	6	2	2	2	2	24	15	15	17	13	17.0	
2	ISV21CS065	SAHANA D N	14	12	20	14	6	6	10	7.5	6	6	6	6	6	22	4	5	5	5	5	24	17	17	21	18	19.3	
3	ISV21CS066	SAHIL MUBARAK	13	8	0	13	4	4	0	0	6	6	6	6	6	35	7	6	6	6	6	26	16	16	12	12	16.4	
4	ISV21CS067	SANJAY RAMESH NAIK	15	16	20	15	8	8	10	6.5	6	6	6	6	6	26	5	5	5	5	5	26	19	19	21	18	20.9	
5	ISV21CS068	SARANYA B	18	16	20	18	8	8	10	10	6	6	6	6	6	26	5	6	6	6	6	29	20	20	22	22	22.5	
6	ISV21CS069	SHASHIREKHA K N	12	15	15	12	7.5	7.5	7.5	7.5	6	6	6	6	6	21	4	5	5	5	5	22	19	19	19	19	19.2	
7	ISV21CS070	SHREYA T S	20	19	20	20	9.5	9.5	10	10	6	6	6	6	6	31	6	7	7	7	7	32	22	22	23	23	24.5	
8	ISV21CS071	SHREYAS SURESH SALUNKI	18	19	20	18	9.5	9.5	10	10	6	6	6	6	6	35	7	8	8	8	8	31	24	24	24	24	25.2	
9	ISV21CS072	SNEHA G	20	17	20	20	8.5	8.5	10	10	6	6	6	6	6	31	6	5	5	5	5	32	20	20	21	21	22.8	
10	ISV21CS073	SOUMYA	20	15	20	20	7.5	7.5	10	9.5	6	6	6	6	6	36	7	6	6	6	6	33	19	19	22	21	23.0	
11	ISV21CS074	SOWMYASHRI S	20	12	10	20	6	6	5	5	6	6	6	6	6	29	6	6	6	6	6	32	18	18	17	17	20.0	
12	ISV21CS075	SOWNDARYA K A	16	13	20	16	6.5	6.5	0	0	6	6	6	6	6	27	5	4	4	4	4	27	16	16	10	10	15.8	
13	ISV21CS076	SPANDANA B GOWDA	20	18	20	20	9	9	10	10	6	6	6	6	6	30	6	8	8	8	8	32	23	23	24	24	25.0	
14	ISV21CS077	SUJAN TIMMAPP NAIK	20	18	18	20	9	9	9	8.5	6	6	6	6	6	43	9	7	7	7	7	35	22	22	22	21	24.1	
15	ISV21CS078	SUMA M T	20	19	20	20	9.5	9.5	10	10	6	6	6	6	6	30	6	6	6	6	6	32	22	22	22	22	24.0	
16	ISV21CS080	TASMIYA BANU	16	16	16	16	8	8	8	8.5	6	6	6	6	6	13	3	2	2	2	2	25	16	16	16	17	18.0	
17	ISV21CS081	UMESH	0	14	20	0	7	7	10	8	6	6	6	6	6	18	4	5	5	5	5	10	18	18	21	19	17.1	
18	ISV21CS082	VEENA N	20	18	20	20	9	9	10	10	6	6	6	6	6	12	2	6	6	6	6	28	21	21	22	22	22.7	
19	ISV21CS083	VIDHYA S	18	17	20	0	8.5	8.5	0	0	6	6	6	6	6	21	4	4	4	4	4	10	18	18	10	10	13.1	
20	ISV21CS084	VINAY KUMAR R	0	16	20	0	8	8	10	7.5	6	6	6	6	6	36	7	1	1	1	1	13	15	15	17	15	15.3	
21	ISV21CS085	VISHNU THIRTHA TADPATR	0	8	17	0	4	4	8.5	7	6	6	6	6	6	13	3	1	1	1	1	9	11	11	16	14	12.0	
22	ISV21CS086	YOJITH SIDDESHWAR G	17	17	20	0	8.5	8.5	0	0	6	6	6	6	6	40	8	5	5	5	5	14	20	20	11	11	15.2	
23	ISV21CS087	ZAINAB FAKRUDDIN	19	18	19	19	9	9	9.5	10	6	6	6	6	6	32	6	4	4	4	4	31	19	19	19	20	21.5	
																					21.0	18.6	18.6	18.6	17.9	18.93		

*Dr. Charan K V*

*Principal*  
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 SIET. TUMKUR.

*Dr. Charan K V*  
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**SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY**

**SIRA ROAD, TUMKUR- 572 106.**

## **Department of Computer Science and Engineering**

### **COURSE OUTCOME**

- C01. Apply the knowledge of searching and reasoning techniques for different applications.
- C02. Have a good understanding of machine learning in relation to other fields and fundamental issues and challenges of machine learning.
- C03. Apply the knowledge of classification algorithms on various dataset and compare results
- C04. Model the neuron and Neural Network, and to analyze ANN learning and its applications.
- C05. Identifying the suitable clustering algorithm for different pattern

### **PROGRAM OUTCOMES**

- P01** Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- P02** Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- P03** Design / development of solutions: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- P04** Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and provide valid conclusions.
- P05** Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling to complex engineering activities.
- P06** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- P07** 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.
- P08** Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- P09** Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- P010** Communication: Communicate effectively on complex engineering activities with the engineering community and with the society.
- P011** Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.
- P012** Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.



COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY					
FACULTY NAME	Dr.R.RAJESWARI					
BRANCH	CSE	ACADEMIC YEAR			2023-2024	
COURSE	B.E	SEMESTER	V	SECTION	A	
SUBJECT	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING			SUBJECT CODE	21CS54	

CO-PO-PSO Mapping																	
COs	Pos												PSOs				
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3		
CO1	3	3	3									3	2	3	3	3	
CO2	3	3	3	2	2									3	3	3	
CO3	3	3	3	2	2									3	3	3	
CO4	3	3	3	3										3	2	3	
CO5	3	3	3											3	3	3	
Average	3.0	3.0	3.0	2.3	2.0								3.0	2.0	3.0	2.8	3.0

### CO AND PO ATTAINMENT

ATTAINMENT TABLE																
COs	AVG	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	27.55	0.82	0.82	0.82								0.82	0.55	0.82	0.82	0.82
CO2	22.1%	0.66	0.66	0.66	0.44	0.44								0.66	0.66	0.66
CO3	25.0%	0.75	0.75	0.75	0.5	0.5								0.75	0.75	0.75
CO4	22.3%	0.67	0.67	0.67	0.67									0.67	0.47	0.67
CO3	22%	0.66	0.66	0.66										0.66	0.66	0.66
AVERAGE		0.71	0.71	0.71	0.53	0.47						0.82	0.55	0.71	0.67	0.71

*[Signature]*

*[Signature]*  
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**Sri Shridevi Charitable Trust (R.)**  
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(Approved by AICTE, New Delhi) (Recognized by Govt. of Karnataka and Affiliated to Visvesvaraya Technological University, Belagavi)

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

21CS54

Sl. No.	Roll No.	Name	SEM I			T1		T2		T3		ASSIGNMENT (20)					SEM I (8)					QUIZ (6)					EXTERNAL					Final						
			T1(20)	T2(20)	T3(20)	CO1-15	CO2-5	CO2-05	CO3-15	CO4-10	CO5-10	CO1-2	CO2-2	CO3-2	CO4-2	CO5-2	CO1-2	CO2-2	CO3-2	CO4-2	CO5-2	CO1-2	CO2-2	CO3-2	CO4-2	CO5-2	SEE(50)	CO1-10	CO2-10	CO3-10	CO4-10	CO5-10	CO1-20	CO2-20	CO3-20	CO4-20	CO5-20	
1	15V21C8001	AASHTA PANDEY	20	20	20	15	5.0	3.0	15.0	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	34	6.8	6.8	6.8	6.8	6.8	29.8	24.8	29.8	24.8	23.8	
2	15V21C8002	ABHIR MISHRA	20	15	20	15	5.0	3.8	11.25	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	36	7.2	7.2	7.2	7.2	7.2	30.2	24.0	26.5	24.2	19.3	
3	15V21C8003	ABHIRAV DEVARAJ T R	18	11	17	13.5	4.5	2.8	8.25	8.5	9	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	19	3.8	3.8	3.8	3.8	3.8	25.5	19.1	20.1	19.3	19.3	
4	15V21C8004	ADITHYAN RANJAN	12	5	15	9	3.0	1.3	3.75	6.5	7	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	19	3.8	3.8	3.8	3.8	3.8	25.5	19.1	20.1	19.3	19.3
5	15V21C8005	ABIR AHMED I	16	12	18	12	4.0	3.0	9	9	9	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	26	5.2	5.2	5.2	5.2	5.2	22.2	17.5	17.0	18.7	18.7
6	15V21C8006	ASHWARYA S	18	16	19	13.5	4.5	4.0	12	9.5	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	23	4.6	4.6	4.6	4.6	4.6	24.6	19.6	21.6	20.6	20.6
7	15V21C8008	ANANYA M J	16	17	20	12	4.0	4.3	12.75	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	30	6.0	6.0	6.0	6.0	6.0	27.5	22.5	26.0	23.5	22.9	
8	15V21C8009	ARSHIYA NAAZ	20	11	19	15	5.0	2.8	8.25	9.5	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	18	3.6	3.6	3.6	3.6	3.6	23.6	19.9	24.4	21.6	20.6	
9	15V21C8010	ARABATHI M H	16	12	20	12	4.0	3.0	9	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	18	3.6	3.6	3.6	3.6	3.6	23.6	19.9	24.4	21.6	20.6	
10	15V21C8011	ARAVANA M R	20	16	20	15	5.0	4.0	12	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	32	6.4	6.4	6.4	6.4	6.4	26.4	21.4	23.4	24.4	23.4	
11	15V21C8012	ARAVYA A	20	16	20	15	5.0	4.0	12	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	32	6.4	6.4	6.4	6.4	6.4	26.4	21.4	23.4	24.4	23.4	
12	15V21C8013	ARAVYA S	19	13	16	14.25	4.8	3.3	9.75	8	8	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	28	5.6	5.6	5.6	5.6	5.6	28.6	22.6	24.6	22.6	22.6
13	15V21C8014	AROMIKA Y	20	13	20	15	5.0	3.3	9.75	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	26	5.2	5.2	5.2	5.2	5.2	27.5	21.2	23.0	20.2	20.2
14	15V21C8015	ARUNAV G RAMALADA	20	18	20	15	5.0	4.3	13.5	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	33	6.6	6.6	6.6	6.6	6.6	29.6	24.1	28.1	23.6	23.6
15	15V21C8016	ARMMI KUMARI	20	17	20	15	5.0	4.3	13.75	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	33	6.6	6.6	6.6	6.6	6.6	29.6	24.1	28.1	23.6	23.6
16	15V21C8017	ARUNDESHREE R	20	16	19	15	5.0	4.0	12	9.5	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	30	6.0	6.0	6.0	6.0	6.0	28.0	23.3	26.8	24.0	23.0	
17	15V21C8018	ARJITHA P	20	18	20	15	5.0	4.5	13.5	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	33	6.6	6.6	6.6	6.6	6.6	29.6	23.6	26.6	24.1	23.1	
18	15V21C8019	ARJITHA V	19	16	16	14.25	4.8	4.0	12	8	8	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	37	7.4	7.4	7.4	7.4	7.4	30.4	24.9	28.9	24.4	24.4	
19	15V21C8020	ARJITHA G	17	17	20	12.75	4.3	4.3	12.75	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	40	8.0	8.0	8.0	8.0	8.0	30.3	24.8	28.0	24.0	23.0	
20	15V21C8021	ARJITHA N H	11	6	12	8.25	2.8	1.5	4.5	6	6	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	26	5.2	5.2	5.2	5.2	5.2	26.0	21.7	26.0	22.2	22.2	
21	15V21C8022	ARJITHA P	20	19	20	15	5.0	4.8	14.25	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	19	3.8	3.8	3.8	3.8	3.8	20.1	16.1	16.3	17.8	16.8	
22	15V21C8023	ARJITHA J P	14	19	19	10.5	3.5	4.8	14.25	9.5	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	35	7.0	7.0	7.0	7.0	7.0	30.0	24.8	28.2	24.0	24.0
23	15V21C8024	D P HARSHITHA	19	14	20	14.25	4.8	3.5	10.5	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	42	8.4	8.4	8.4	8.4	8.4	26.9	24.7	30.7	25.9	24.9	
24	15V21C8025	DARSHAN K	20	11	11	15	5.0	2.8	8.25	5.5	6	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	12	2.4	2.4	2.4	2.4	2.4	24.7	18.7	20.9	19.4	19.4
25	15V21C8026	DRIANSHI K R	20	20	20	15	5.0	5.0	15	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	24	4.8	4.8	4.8	4.8	4.8	27.8	20.6	21.1	17.3	17.3
26	15V21C8027	DRIEHA S	15	11	16	11.25	3.8	2.8	8.25	8	8	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	36	7.2	7.2	7.2	7.2	7.2	30.2	25.2	30.2	25.2	24.2
27	15V21C8028	DIPENDU KUMHAKAR	18	12	17	13.5	4.5	3.0	9	8.5	9	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	18	3.6	3.6	3.6	3.6	3.6	22.9	18.1	19.9	18.6	18.6
28	15V21C8029	DEVYA A C	20	18	20	15	5.0	4.3	13.5	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	30	6.0	6.0	6.0	6.0	6.0	27.5	21.5	23.0	21.5	21.5
29	15V21C8030	DEVYA D H	19	18	20	14.25	4.8	4.5	13.5	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	40	8.0	8.0	8.0	8.0	8.0	31.0	25.5	29.5	23.0	23.0
30	15V21C8032	HARSHITHA B	13	14	15	9.75	3.3	3.5	10.5	7.5	8	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	34	6.8	6.8	6.8	6.8	6.8	29.1	24.1	28.3	23.8	23.8
31	15V21C8033	HEMAPATHI YALLAPPA	20	9	20	15	5.0	2.3	6.75	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	21	4.2	4.2	4.2	4.2	4.2	22.0	19.0	22.7	18.7	18.7
32	15V21C8034	HEMASHREE M	15	17	14	11.25	3.8	4.3	12.75	7	7	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	25	5.0	5.0	5.0	5.0	5.0	28.0	20.3	19.8	23.0	22.0
33	15V21C8035	HENESH K O	20	14	20	15	5.0	3.5	10.5	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	20	4.0	4.0	4.0	4.0	4.0	23.3	20.0	24.8	18.0	18.0
34	15V21C8036	KARINAKARA L	20	13	20	15	5.0	3.3	9.75	10	10	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	36	7.2	7.2	7.							



45	15V21C8048	MUHAMMED USABD PARIA	17	13	15	12.75	4.3	3.3	9.75	7.5	8	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	1	21	4.2	4.2	4.2	4.2	4.2	25.0	19.7	21.0	18.7	18.7	
46	15V21C8049	HANAGAPODDA M	20	20	20	15	5.0	5.0	15	10	10	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	1	40	8.0	8.0	8.0	8.0	8.0	31.0	26.0	31.0	26.0	25.0		
47	15V21C8050	NAHIDA K	20	20	20	15	5.0	5.0	15	10	10	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	1	25	5.0	5.0	5.0	5.0	5.0	28.0	23.0	28.0	22.0	22.0		
48	15V21C8051	HANJAN L	17	14	19	12.75	4.3	3.5	10.5	9.5	10	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	1	25	5.0	5.0	5.0	5.0	5.0	25.8	20.8	22.5	21.3	21.5	
49	15V21C8052	P.A SEVEREDIA	19	19	19	14.25	4.8	4.8	14.25	9.5	10	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	1	27	5.4	5.4	5.4	5.4	5.4	27.7	22.9	27.7	22.9	21.0		
50	15V21C8053	PANEEDHRA E	17	16	20	12.75	4.3	4.0	12	10	10	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	1	25	5.0	5.0	5.0	5.0	5.0	23.8	21.3	24.0	22.0	22.0	
51	15V21C8054	PORVA G	20	18	17	15	5.0	4.5	13.5	8.5	9	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	1	1	1	29	5.8	5.8	5.8	5.8	5.8	30.8	25.3	29.3	23.3	23.1
52	15V21C8055	PRADIP KUMAR H G	20	12	20	15	5.0	5.0	9	10	10	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	1	1	1	29	5.8	5.8	5.8	5.8	5.8	28.8	23.8	23.8	22.8	22.8
53	15V21C8056	PRİYAMBU PRABHAD	20	18	20	15	5.0	4.5	13.5	10	10	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	1	1	1	18	3.6	3.6	3.6	3.6	3.6	26.6	21.1	24.1	20.0	20.0
54	15V21C8057	PUSHEETH KUMAR E	20	18	19	15	5.0	4.5	13.5	9.5	10	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	1	28	5.6	5.6	5.6	5.6	5.6	28.6	23.1	27.1	23.1	22.1		
55	15V21C8058	PUSHEETH K	20	15	19	15	5.0	3.8	11.25	9.5	10	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	1	1	1	33	6.6	6.6	6.6	6.6	6.6	29.6	23.4	24.9	23.1	23.1
56	15V21C8059	PURUSH KUMAR H S	20	18	20	15	5.0	4.5	13.5	10	10	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	1	1	1	19	3.8	3.8	3.8	3.8	3.8	26.8	21.3	24.3	20.8	20.8
57	15V21C8060	RADAN KUMAR SAH	18	14	16	13.3	4.5	3.5	10.5	8	8	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	1	30	6.0	6.0	6.0	6.0	6.0	27.3	22.0	23.5	21.0	21.0	
58	15V21C8062	RAKSHITHA P B	18	8	16	13.5	4.5	2.0	6	8	8	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	1	22	4.4	4.4	4.4	4.4	4.4	23.9	18.9	17.4	19.4	19.4	
59	15V21C8063	RAMYAMBHEEN	19	20	20	14.25	4.8	5.0	15	10	10	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	1	39	7.8	7.8	7.8	7.8	7.8	30.1	25.6	30.8	25.8	24.8		

1621.60 1306.6 1474.6 1317.6 1296.6  
27.5 22.1 25.0 22.3 22.0

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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### COURSE OUTCOME

- CO1.** Apply the knowledge of searching and reasoning techniques for different applications.
- CO2.** Have a good understanding of machine learning in relation to other fields and fundamental issues and challenges of machine learning
- CO3.** Apply the knowledge of classification algorithms on various dataset and compare results
- CO4.** Model the neuron and Neural Network, and to analyze ANN learning and its applications.
- CO5.** Identifying the suitable clustering algorithm for different pattern.

### PROGRAM OUTCOMES

- PO1** Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- PO2** Problem analysis: Identify, formulate, 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: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- PO4** Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and 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.
- PO6** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- PO7** 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.
- PO8** Ethics: Apply ethical principles and commit to professional ethics and 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 the society.
- PO11** Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.
- PO12** Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.



COLLEGE		SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY													
FACULTY NAME		Mrs. MERLIN B													
BRANCH		CSE			ACADEMIC YEAR				2023-24						
COURSE	B.E	SEMESTER			V	SECTION			B						
SUBJECT	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING					SUBJECT CODE			21CS54						
<b>CO &amp; PO MAPPING</b>															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	2	2	2		1	1	1		2	3	2	1
CO2	3	3	2	3	2	2		1	2	3		2	3	3	2
CO3	2	2	3	2	2	3		1	2	2		2	2	3	1
CO4	3	3	3	2	2	2		1	1	2		2	3	3	2
CO5	2	2	3	1	1	2			1	2		2	3	3	2
AVERAGE	2.6	2.4	2.6	2	1.8	2.2		1	1.4	2		2	2.8	2.8	1.6
<b>OVERALL MAPPING OF SUBJECT</b>												2.09			

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	68.4	2.05	1.36	1.36	1.36	1.36	1.36		0.68	0.68	0.68		1.36	2.05	1.36	0.68
CO2	67.1	2.01	2.01	1.34	2.01	1.34	1.34		0.67	1.34	2.01		1.34	2.01	2.01	1.34
CO3	63.6	1.27	1.27	1.90	1.27	1.27	1.90		0.63	1.27	1.27		1.27	1.27	1.90	0.63
CO4	59.0	1.77	1.77	1.77	1.18	1.18	1.18		0.59	0.59	1.18		1.18	1.77	1.77	1.18
CO5	58.6	1.17	1.17	1.75	0.58	0.58	1.17			0.58	1.17		1.17	1.75	1.75	1.17
AVERAGE		1.65	1.51	1.62	1.28	1.14	1.39		0.64	0.89	1.26		1.26	1.77	1.75	1
<b>FINAL ATTAINMENT LEVEL</b>													1.32			

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**V SEM "B" SECTION (CSE)**

Sub: AIML		21CS54					2023-2024					EVEN					NAME OF THE STAFF					Mrs. Merlin B								
Rol I	USN	Name	IA MARKS			T1	T2			T3			Assign 20 + Quiz 20 = 40(Compress to 30)					SEE					FINAL					TOTAL AVG		
			T1 (20)	T2 (20)	T3 (20)	CO1- 20	CO2- 15	CO3- 15	CO4- 15	CO5- 15	CO 1-6	CO2- 6	CO3-6	CO4-6	CO5-6	SEE (50)	CO1- 10	CO2- 10	CO3- 10	CO4- 10	CO5- 10	CO1- 36	CO2-31	CO3- 31	CO4-31	CO5-31				
1	1SV21CS064	ROJA G	16	10	16	16	5	5	8	8	6	6	6	6	6	9	2	2	2	2	2	24	13	13	16	16	16.2			
2	1SV21CS065	SAHANA D N	15	19	20	15	9	10	10	10	6	6	6	6	6	23	5	5	5	5	5	26	20	21	21	21	21.4			
3	1SV21CS066	SAHIL MUBARAK	18	19	AB	18	12	7	0	0	6	6	6	6	6	30	6	6	6	6	6	30	24	19	12	12	19.4			
4	1SV21CS067	SANJAY RAMESH	13	18	17	13	9	9	8	9	6	6	6	6	6	27	5	5	5	5	5	24	20	20	19	20	21.0			
5	1SV21CS068	SARANYA B	17	20	18	17	10	10	9	9	6	6	6	6	6	29	6	6	6	6	6	29	22	22	21	21	22.8			
6	1SV21CS069	SHASHIREKHA K N	10	20	12	10	10	10	6	6	6	6	6	6	6	25	5	5	5	5	5	21	21	21	17	17	19.4			
7	1SV21CS070	SHREYA T S	20	20	19	20	10	10	13	6	6	6	6	6	6	34	7	7	7	7	7	33	23	23	26	19	24.6			
8	1SV21CS071	SHREYAS SURESH S	20	20	19	20	10	10	9.5	9.5	6	6	6	6	6	40	8	8	8	8	8	34	24	24	24	24	25.8			
9	1SV21CS072	SNEHA G	20	20	20	20	10	10	10	10	6	6	6	6	6	26	5	5	5	5	5	31	21	21	21	21	23.2			
10	1SV21CS073	SOUMYA	18	20	19	18	10	10	9	10	6	6	6	6	6	29	6	6	6	6	6	30	22	22	21	22	23.2			
11	1SV21CS074	SOWMYASHRI S	18	19	10	18	11	8	5	5	6	6	6	6	6	28	6	6	6	6	6	30	23	20	17	17	21.0			
12	1SV21CS075	SOWNDARYA K A	18	19	15	18	10	9	7	8	6	6	6	6	6	18	4	3	3	3	3	28	19	18	16	17	19.4			
13	1SV21CS076	SPANDANA B	20	20	20	20	10	10	10	10	6	6	6	6	6	39	8	8	8	8	8	34	24	24	24	24	25.8			
14	1SV21CS077	SUJAN TIMMAPPA N	20	20	16	20	10	10	8	8	6	6	6	6	6	33	7	7	7	7	7	33	23	23	21	21	23.8			
15	1SV21CS078	SUMA M T	18	20	13	18	10	10	7	6	6	6	6	6	6	31	6	6	6	6	6	30	22	22	19	18	22.4			
16	1SV21CS080	TASMIYA BANU	19	20	13	19	10	10	6	7	6	6	6	6	6	11	2	2	2	2	2	27	18	18	14	15	18.6			
17	1SV21CS081	UMESH	AB	19	10	0	13	6	5	5	6	6	6	6	6	25	5	5	5	5	5	11	24	17	16	16	16.8			
18	1SV21CS082	VEENA N	19	19	15	19	14	5	8	7	6	6	6	6	6	29	6	6	6	6	6	31	26	17	20	19	22.4			
19	1SV21CS083	VIDHYA S	AB	20	15	0	10	10	7	8	6	6	6	6	6	18	4	4	4	4	4	10	20	20	17	18	16.6			
20	1SV21CS084	VINAY KUMAR R	AB	19	13	0	9	10	6	7	6	6	6	6	6	7	1.4	1.4	1.4	1.4	1	7	16	17	13	14	13.8			
21	1SV21CS085	VISHNU THIRTHA T	AB	13	7	0	7	6	3	4	6	6	6	6	6	5	1	1	1	1	1	7	14	13	10	11	11.0			
22	1SV21CS086	YOJITH	AB	19	15	0	10	9	8	7	6	6	6	6	6	26	5	5	5	5	5	11	21	20	19	18	18.0			
23	1SV21CS087	ZAINAB	17	20	18	17	10	10	9	9	6	6	6	6	6	18	4	4	4	4	4	27	20	20	19	19	20.6			
																					24.6	20.8	19.7	18.3	18.2					
																					68.4%	67.1%	63.6%	59.0%	58.6%					

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**Course Outcomes & CO-PO-PSO Mapping and Justification**

<b>Subject</b>	<b>RESEARCH METHODOLOGY &amp; INTELLECTUAL PROPERTY RIGHTS</b>	21RMI56
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**COURSE OUTCOMES:**

CO No.	On completion of this course, students will be able to:	Cognitive Level
21RMI56.1	To know the meaning of engineering research.	L2
21RMI56.2	To know the procedure of Literature Review and Technical Reading.	L2
21RMI56.3	To know the fundamentals of patent laws and drafting procedure.	L2
21RMI56.4	Understanding the copyright laws and subject matters of copyrights and designs	L3
21RMI56.5	Understanding the basic principles of design rights.	L2

**Dept of CSE, SIET – Program Specific Outcome PSO**

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.
PSO3	Acquaint module knowledge on emerging trends of the modern era in Computer Science and Engineering

**CO-PO-PSO MAPPING**

CO No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
21RMI56.1	2	2	2	2	2	2	-	-	2	1	-	1	1	-	1
21RMI56.2	2	2	2	2	2	-	-	2	2	1	-	1	1	-	1
21RMI56.3	2	2	2	2	2	-	-	2	2	1	-	1	1	-	1
21RMI56.4	2	2	2	2	2	2	-	2	2	1	-	1	1	-	1
21RMI56.5	2	2	2	2	2	2	-	2	2	1	-	1	1	-	1
<b>Avg. Mapping</b>	2.0	2.0	2.0	2.0	2.0	2.0	-	2.0	2.0	-	-	1.0	1.0	-	1

*M. Srinivas Kumar*  
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*Bas*

*Dinesha H A*  
Course Coordinator  
Dr Dinesha H A

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SIRMI 56

SEM: V,SEC:A	IA TEST 1			IA TEST 2			IA TEST 3			Assignment=10/5																	
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO3	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	SEE	CO1	CO2	CO3	CO4	CO5	CO1-T	CO2-T	CO3-T	CO4-T	CO5-T	
1SV21CS001	15	3	18	10	4	14	12	2	2	16	2	2	2	2	2	28	12	12	2	2	0	29	27	20	4	4	44.4
1SV21CS002	15	2	17	12	5	17	12	2	2	16	2	2	2	2	2	22	6	4	4	4	4	23	20	23	18	8	46.7
1SV21CS003	15	5	20	12	5	17	10	3	2	15	2	2	2	2	2	26	6	6	6	2	6	23	25	23	18	10	49.4
1SV21CS004	5	0	5	10	3	13	14	2	2	8	2	2	2	2	2	11	4	2	2	2	1	11	14	21	17	5	35.0
1SV21CS005	12	5	17	10	2	12	15	1	1	17	2	2	2	2	2	18	4	4	3	3	4	18	21	22	21	7	45.6
1SV21CS006	15	5	20	14	4	18	15	2	0	17	2	2	2	2	2	33	9	7	7	6	4	26	28	28	21	6	57.2
1SV21CS008	12	5	17	14	4	18	15	3	0	18	2	2	2	2	2	19	5	5	5	0	4	19	26	26	21	6	51.1
1SV21CS009	10	10	20	10	5	15	14	2	0	16	2	2	2	2	2	21	5	5	5	3	3	17	27	26	19	5	49.4
1SV21CS010	7	4	11	14	4	18	15	2	2	19	2	2	2	2	2	24	5	5	5	5	4	14	25	26	21	8	47.8
1SV21CS011	12	7	19	15	5	20	14	2	2	18	2	2	2	2	2	22	5	5	4	4	4	19	29	25	20	8	51.7
1SV21CS012	15	5	20	15	5	20	13	2	2	17	2	2	2	2	2	33	7	7	7	7	5	24	29	27	20	9	55.6
1SV21CS013	15	4	19	8	3	11	13	2	2	17	2	2	2	2	2	31	7	6	6	6	6	24	20	24	21	10	49.4
1SV21CS014	15	4	19	14	4	18	14	2	2	18	2	2	2	2	2	33	10	5	5	5	8	27	25	25	24	12	56.1
1SV21CS015	12	5	17	12	5	17	12	2	1	15	2	2	2	2	2	38	12	6	6	6	8	26	25	25	22	11	54.4
1SV21CS016	15	5	20	0	0	0	12	2	2	16	2	2	2	2	2	44	16	8	8	8	4	33	15	22	18	8	48.9
1SV21CS017	15	4	19	15	4	19	15	1	1	17	2	2	2	2	2	39	12	8	8	8	3	29	29	29	20	6	59.4
1SV21CS018	15	4	19	15	4	19	15	1	1	17	2	2	2	2	2	30	10	5	5	5	5	27	26	26	22	8	56.1
1SV21CS019	15	4	19	14	4	18	15	1	1	17	2	2	2	2	2	26	10	7	7	3	0	27	27	28	17	3	55.0
1SV21CS020	15	4	19	14	4	18	14	2	3	19	2	2	2	2	2	30	6	6	6	6	6	23	26	26	22	11	53.9
1SV21CS021	15	4	19	10	5	11	12	2	2	16	2	2	2	2	2	21	7	5	5	3	1	24	21	24	15	5	46.7
1SV21CS022	12	5	17	14	5	19	13	2	2	17	2	2	2	2	2	35	8	8	8	8	3	22	29	28	18	7	53.9
1SV21CS023	15	4	19	14	4	18	14	2	2	18	2	2	2	2	2	27	8	8	8	2	1	25	28	28	17	5	54.4
1SV21CS024	15	3	18	15	4	19	14	2	2	18	2	2	2	2	2	18	6	4	3	3	2	23	24	23	18	6	48.9
1SV21CS025	15	4	19	10	4	14	10	2	3	15	2	2	2	2	2	27	8	4	4	7	4	25	20	20	16	9	45.0
1SV21CS026	14	3	17	15	5	20	13	3	2	18	2	2	2	2	2	28	8	8	8	2	2	24	28	28	17	6	53.9
1SV21CS027	15	4	19	10	3	13	14	2	1	17	2	2	2	2	2	28	8	8	8	4	0	25	24	27	16	3	51.1
1SV21CS028	8	5	13	12	3	15	14	2	2	14	2	2	2	2	2	31	7	7	7	7	3	17	26	26	19	7	48.9
1SV21CS029	15	4	19	14	4	18	14	2	2	18	2	2	2	2	2	28	7	7	7	7	7	24	27	27	23	11	56.1
1SV21CS030	15	5	20	15	4	19	13	2	2	17	2	2	2	2	2	42	12	10	9	5	4	29	32	28	8	8	53.9
1SV21CS032	10	5	15	15	4	19	10	3	2	15	2	2	2	2	2	36	12	8	5	5	6	24	30	21	18	10	51.7
1SV21CS033	15	2	17	10	2	12	12	3	2	17	2	2	2	2	2	33	10	7	7	4	5	27	21	23	19	9	50.0
1SV21CS034	15	2	17	13	3	16	13	3	2	18	2	2	2	2	2	33	8	8	8	6	3	25	25	26	18	7	52.2
1SV21CS035	13	2	15	13	4	17	14	2	2	18	2	2	2	2	2	28	6	6	6	6	4	21	23	26	20	8	50.0
1SV21CS036	12	5	17	10	5	15	14	2	1	17	2	2	2	2	2	29	6	6	6	6	5	20	23	27	21	8	50.6
1SV21CS037	13	4	17	12	6	18	13	2	2	17	2	2	2	2	2	31	8	6	6	6	5	23	24	27	20	9	52.2
1SV21CS038	13	4	17	12	5	17	12	3	2	18	2	2	2	2	2	35	10	7	7	7	4	25	25	26	18	8	52.2
1SV21CS039	14	4	18	12	4	16	12	3	2	17	2	2	2	2	2	37	10	5	5	8	9	26	23	23	23	13	52.8
1SV21CS040	14	3	17	14	5	19	13	2	2	17	2	2	2	2	2	35	12	8	8	8	3	28	27	28	18	7	56.1
1SV21CS041	14	5	19	13	4	17	13	3	2	18	2	2	2	2	2	33	13	7	5	5	3	29	27	24	18	7	54.4
1SV21CS042	15	5	20	12	5	17	14	3	2	19	2	2	2	2	2	34	13	7	5	5	4	30	26	26	20	8	56.7
1SV21CS043	15	5	20	10	4	14	14	2	1	17	2	2	2	2	2	37	13	7	5	5	7	30	24	25	23	10	56.7
1SV21CS044	14	3	17	10	5	15	12	2	1	15	2	2	2	2	2	35	13	7	5	5	5	29	22	24	19	8	52.2
1SV21CS045	14	3	17	14	3	17	12	3	2	17	2	2	2	2	2	40	13	8	9	5	5	29	27	26	19	9	56.1
1SV21CS046	14	4	18	14	4	18	13	2	1	16	2	2	2	2	2	37	13	7	5	5	7	29	27	24	22	10	56.7
1SV21CS048	10	5	15	12	4	16	12	2	2	16	2	2	2	2	2	25	5	5	5	5	5	17	24	23	19	9	46.1



1SV21CS049	15	5	20	14	5	19	14	2	2	18	2	2	2	2	2	36	10	8	6	4	6	27	29	27	22	10	58.3	
1SV21CS050	15	5	20	12	4	16	13	2	2	17	2	2	2	2	2	33	12	8	5	5	3	29	27	24	18	7	54.4	
1SV21CS051	14	3	17	12	3	15	13	2	1	16	2	2	2	2	2	18	8	3	3	2	2	24	20	21	17	5	45.6	
1SV21CS052	15	5	20	14	5	19	12	2	3	17	2	2	2	2	2	35	12	8	8	4	3	29	29	27	17	8	56.7	
1SV21CS053	12	4	16	12	5	17	12	3	2	17	2	2	2	2	2	29	10	5	5	5	4	24	23	24	18	8	49.4	
1SV21CS054	14	3	17	15	5	20	14	3	2	19	2	2	2	2	2	33	12	8	5	5	3	28	28	26	19	7	56.1	
1SV21CS055	14	3	17	12	5	17	13	3	0	16	2	2	2	2	2	29	10	5	5	5	4	26	22	25	19	6	51.1	
1SV21CS056	13	3	16	0	0	0	10	2	1	13	2	2	2	2	2	18	4	4	4	4	2	19	9	16	14	5	32.2	
1SV21CS057	14	3	17	0	0	0	12	3	2	17	2	2	2	2	2	31	8	8	8	4	3	24	13	22	17	7	42.2	
1SV21CS058	14	3	17	14	4	18	13	2	1	16	2	2	2	2	2	30	10	5	5	5	5	26	24	24	20	8	52.2	
1SV21CS059	14	4	18	10	5	15	12	2	2	16	2	2	2	2	2	25	8	5	5	5	2	24	21	24	16	6	47.2	
1SV21CS060	12	2	14	0	0	0	12	2	2	16	2	2	2	2	2	21	7	7	4	2	1	21	11	18	5	5	30.6	
1SV21CS062	10	4	14	10	3	13	12	2	2	16	2	2	2	2	2	18	4	4	4	4	2	16	20	21	16	6	40.6	
1SV21CS063	15	5	20	15	5	20	14	3	2	19	2	2	2	2	2	39	10	8	7	7	7	27	30	28	23	11	60.0	
TOTAL	795	239	920	693	231	920	769	130	100	986												1433	1427	1457	1089	451	3003.3	
Total students	28		28	28	28	28	28	28		28												28	28	28	28			
Average																							24.29	24.186	24.695	18.46		
																							71.44	54.969	50.398	54.29		57.772

*Narasimha Lakshminarayana*  
PRINCIPAL  
SIL. I. TUMKUR.

*B*  
HOD,  
COMPUTER SCIENCE & ENGG.,  
SIET, TUMAKURU-06.

*Dinesha*  
Dr. DINESHA H.A.,  
course coordinator





## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### COURSE OUTCOME

- CO1.** To know the meaning of engineering research.
- CO2.** To know the procedure of Literature Review and Technical Reading.
- CO3.** To know the fundamentals of patent laws and drafting procedure.
- CO4.** Understanding the copyright laws and subject matters of copyrights and design.
- CO5.** Understanding the basic principles of design rights.

### PROGRAM OUTCOMES

- PO1** Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- PO2** Problem analysis: Identify, formulate, 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: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- PO4** Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and 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.
- PO6** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- PO7** 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.
- PO8** Ethics: Apply ethical principles and commit to professional ethics and 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 the society.
- PO11** Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.
- PO12** Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.



COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY														
FACULTY NAME	Mrs. MERLIN B														
BRANCH	CSE			ACADEMIC YEAR				2023-24							
COURSE	B.E	SEMESTER		V	SECTION			B							
SUBJECT	RESEARCH METHODOLOGY				SUBJECT CODE			21RMI56							
<b>CO &amp; PO MAPPING</b>															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	1	2			2		1	2	2	2	3	2	2	2
CO2	2	2	3	2	3	1	1	2	2	3	1	2	2	3	2
CO3	2	2	3	2	3	1	1	2	2	3	1	2	2	3	2
CO4	2	2	3	2	2	2		3	2	2	1	3	2	3	3
CO5	3	1	3	3	3	1	1	3	2	2	2	3	2	2	3
AVERAGE	2.4	1.6	2.8	2.25	2.75	1.4	1	2.2	2	2.4	1.4	2.6	2	2.6	2.4
<b>OVERALL MAPPING OF SUBJECT</b>												2.12			

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	67.6	2.02	0.67	1.35			1.35		0.67	1.35	1.35	1.35	2.02	1.35	1.35	1.35
CO2	67.1	1.34	1.34	2.01	1.34	2.01	0.67	0.67	1.34	1.34	2.01	0.67	1.34	1.34	2.01	1.34
CO3	67.7	1.35	1.35	2.03	1.35	2.03	0.67	0.67	1.35	1.35	2.03	0.67	1.35	1.35	2.03	1.35
CO4	67.5	1.35	1.35	2.02	1.35	1.35	1.35		2.02	1.35	1.35	0.67	2.02	1.35	2.02	2.02
CO5	66	1.98	0.66	1.98	1.98	1.98	0.66	0.66	1.98	1.32	1.32	1.32	1.98	1.32	1.32	1.98
AVERAGE		1.61	1.07	1.88	1.51	1.84	0.94		1.47	1.34	1.61		1.74	1.34	1.75	1.61
<b>FINAL ATTAINMENT LEVEL</b>													1.52			

*Mrs. Merlin B*

*Principal*  
PRINCIPAL  
S.I.E.T. TUMKUR.

*Bar*  
HOD,  
COMPUTER SCIENCE & ENGG.,  
SIET, TUMAKURU-06.



### V SEM "B" SECTION (CSE)

Sub: RM		21RMI56									2023-2024					EVEN		NAME OF THE STAFF					Mrs. Merlin B							
Rol I	USN	Name	IA MARKS			T1	T2			T3			Assign 20 + Quiz 20 = 40(Compress to					SEE					FINAL					TOTAL AVG		
			T1 (20)	T2 (20)	T3 (20)	CO1- 20	CO2- 15	CO3- 15	CO4- 15	CO5- 15	CO1- 6	CO2- 6	CO3- 6	CO4- 6	CO5- 6	SEE (50)	CO1- 10	CO2- 10	CO3- 10	CO4- 10	CO5- 10	CO1-36	CO2-31	CO3-31	CO4-31	CO5- 31				
1	1SV21CS064	ROJA G	14	19	17	14	9	10	9	8	6	6	6	6	6	18	4	4	4	4	4	24	19	20	19	18	19.6			
2	1SV21CS065	SAHANA D N	16	19	20	16	10	9	10	10	6	6	6	6	6	29	6	6	6	6	6	28	22	21	22	22	23.1			
3	1SV21CS066	SAHIL MUBARAK	12	13	AB	12	6	7	0	0	6	6	6	6	6	32	6	6	6	6	6	24	18	19	12	12	18.7			
4	1SV21CS067	SANJAY RAMESH	12	16	18	12	8	8	9	9	6	6	6	6	6	26	5	5	5	5	5	23	19	19	20	20	20.5			
5	1SV21CS068	SARANYA B	19	18	20	19	8	10	10	10	6	6	6	6	6	24	5	5	5	5	5	30	19	21	21	21	22.6			
6	1SV21CS069	SHASHIREKHA K N	14	17	20	14	8	9	10	10	6	6	6	6	6	20	4	4	4	4	4	24	18	19	20	20	20.3			
7	1SV21CS070	SHREYA T S	16	20	20	16	10	10	10	10	6	6	6	6	6	46	9	9	9	9	9	31	25	25	25	25	26.7			
8	1SV21CS071	SHREYAS SURESH S	13	19	20	13	10	9	10	10	6	6	6	6	6	35	7	7	7	7	7	26	23	22	23	23	23.5			
9	1SV21CS072	SNEHA G	19	20	20	19	10	10	10	10	6	6	6	6	6	34	7	7	7	7	7	32	23	23	23	23	25.1			
10	1SV21CS073	SOUMYA	19	20	20	19	10	10	10	10	6	6	6	6	6	42	8	8	8	8	8	33	24	24	24	24	26.7			
11	1SV21CS074	SOWMYASHRI S	15	20	15	15	10	10	10	5	6	6	6	6	6	35	7	7	7	7	7	28	23	23	23	18	24.3			
12	1SV21CS075	SOWNDARYA K A	17	20	20	17	10	10	10	10	6	6	6	6	6	23	5	5	5	5	5	28	21	21	21	21	22.4			
13	1SV21CS076	SPANDANA B	19	20	20	19	10	10	10	10	6	6	6	6	6	36	7	7	7	7	7	32	23	23	23	23	25.5			
14	1SV21CS077	SUJAN TIMMAPPA N	17	20	20	17	10	10	10	10	6	6	6	6	6	22	4	4	4	4	4	27	20	20	20	20	22.2			
15	1SV21CS078	SUMA M T	18	20	20	18	10	10	10	10	6	6	6	6	6	31	6	6	6	6	6	30	22	22	22	22	24.2			
16	1SV21CS080	TASMIYA BANU	14	20	20	14	10	10	10	10	6	6	6	6	6	27	5	5	5	5	5	25	21	21	21	21	22.4			
17	1SV21CS081	UMESH	AB	17	18	0	8	9	9	9	6	6	6	6	6	19	4	4	4	4	4	10	18	19	19	19	16.3			
18	1SV21CS082	VEENA N	19	20	20	19	10	10	10	10	6	6	6	6	6	25	5	5	5	5	5	30	21	21	21	21	23.3			
19	1SV21CS083	VIDHYA S	AB	20	20	0	10	10	10	10	6	6	6	6	6	32	6	6	6	6	6	12	22	22	22	22	19.9			
20	1SV21CS084	VINAY KUMAR R	AB	15	14	0	7	8	10	4	6	6	6	6	6	24	5	5	5	5	5	11	18	19	21	15	17.1			
21	1SV21CS085	VISHNU THIRTHA T	AB	11	12	0	6	5	6	6	6	6	6	6	6	23	5	5	5	5	5	11	17	16	17	17	14.9			
22	1SV21CS086	YOJITH	AB	18	19	0	9	9	9	10	6	6	6	6	6	33	7	7	7	7	7	13	22	22	22	23	19.4			
23	1SV21CS087	ZAINAB	17	20	20	17	10	10	10	10	6	6	6	6	6	22	4	4	4	4	4	27	20	20	20	20	22.2			
																					24.3	20.8	21.0	20.9	20.5					
																					67.6%	67.1%	67.7%	67.5%	66.0%					

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*Principal*  
PRINCIPAL  
S. J. TUMKUR.

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**SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY**

**SIRA ROAD, TUMKUR- 572 106.**

## **Department of Computer Science and Engineering**

### **COURSE OUTCOME**

**CO1.** Appraise the theory of Artificial intelligence and Machine Learning

**CO2.** Illustrate the working of AI and ML Algorithms.

**CO3.** Demonstrate the applications of AI and ML.

### **PROGRAM OUTCOMES**

**PO1** Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.

**PO2** Problem analysis: Identify, formulate, 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: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.

**PO4** Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and provide valid conclusions.

**PO5** Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling to complex engineering activities.

**PO6** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.

**PO7** 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.

**PO8** Ethics: Apply ethical principles and commit to professional ethics and 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 the society.

**PO11** Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.

**PO12** Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.



COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY					
FACULTY NAME	Dr.R.RAJESWARI					
BRANCH	CSE	ACADEMIC YEAR			2023-2024	
COURSE	B.E	SEMESTER	VII	SECTION	A	
SUBJECT	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING			SUBJECT CODE	18CS71	

CO-PO-PSO Mapping															
COs	Pos												PSOs		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
CO1	3	3	3								2		3	3	3
CO2	3	3	3	2	2	2					2	2	3	3	3
CO3	3	3	3	2	2	2					2	2	3	3	3
Average	3.0	3.0	3.0	2.0	2.0	2.0					2.0	2.0	3.0	3.0	3.0

### CO AND PO ATTAINMENT

ATTAINMENT TABLE																
COs	AVG	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	38%	1.14	1.14	1.14								0.76		1.14	1.14	1.14
CO2	41%	1.23	1.23	1.23	0.82	0.82	0.82					0.82	0.82	1.23	1.23	1.23
CO3	41%	1.23	1.23	1.23	0.82	0.82	0.82					0.82	0.82	1.23	1.23	1.23
AVERAGE		1.2	1.2	1.2	0.82	0.82	0.82					0.8	0.82	1.2	1.2	1.2
Final attainment level 0.96																

*G. J. J. J.*  
Staff Incharge.

*M. S. S. S.*  
PRINCIPAL  
SIET, TUMKUR.

*B. S. S.*  
HOD,  
COMPUTER SCIENCE & ENGG.,  
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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

Roll No.	USN	Name	Sem: V / SEC 18CS71			2022-23			SUB: AIML			FACULTY: Dr Rajeswari.R						
			18CS71			T1	T2	T3	ASSIGNMENT (10)			EXTERNAL			Final			
			T1 (20)	T2 (20)	T3 (20)	COI-20	CO2-20	CO3-20	COI-2	CO2-2	CO3-2	SEE(60)	COI-20	CO2-20	CO3-20	COI-20	CO2-20	CO3-20
1	1SV20CS001	ANUSHA B S	30	30	30	30	30	30	3	3	4	37	12.3	12.3	12.3	45.3	45.3	46.3
2	1SV20CS002	ANUSHA R	29	30	30	29	30	30	3	3	4	45	15.0	15.0	15.0	47.0	48.0	49.0
3	1SV20CS003	ASFA KHANUM	30	30	30	30	30	30	3	3	4	42	14.0	14.0	14.0	47.0	47.0	48.0
4	1SV20CS004	ASHA	23	30	30	23	30	30	3	3	4	44	14.7	14.7	14.7	40.7	47.7	48.7
5	1SV20CS005	ASHWINI S	30	30	30	30	30	30	3	3	4	33	11.0	11.0	11.0	44.0	44.0	45.0
6	1SV20CS006	BORISH KONGBRILATPAM	22	30	30	22	30	30	3	3	4	40	13.3	13.3	13.3	38.3	46.3	47.3
7	1SV20CS007	DHEERAJ KUMAR P	8	17	22	8	17	22	3	3	4	24	8.0	8.0	8.0	19.0	28.0	34.0
8	1SV20CS008	DIBESH SRESTHA	19	25	24	19	25	24	3	3	4	41	13.7	13.7	13.7	35.7	41.7	41.7
9	1SV20CS009	EMILY LAURA	29	30	30	29	30	30	3	3	4	35	11.7	11.7	11.7	43.7	44.7	45.7
10	1SV20CS010	G MALINGARAYA	28	26	29	28	26	29	3	3	4	36	12.0	12.0	12.0	43.0	41.0	45.0
11	1SV20CS011	GIRISHA V	27	20	15	27	20	15	3	3	4	26	8.7	8.7	8.7	38.7	31.7	27.7
12	1SV20CS012	H R ABHINANDAN	20	25	20	20	25	20	3	3	4	39	13.0	13.0	13.0	36.0	41.0	37.0
13	1SV20CS013	HABIBULLA SADIK MULLA	21	22	20	21	22	20	3	3	4	40	13.3	13.3	13.3	37.3	38.3	37.3
14	1SV20CS014	HARSHITHA T A	30	30	30	30	30	30	3	3	4	44	14.7	14.7	14.7	47.7	47.7	48.7
15	1SV20CS015	JAHIDUL ISLAM	28	30	29	28	30	29	3	3	4	38	12.7	12.7	12.7	43.7	45.7	45.7
16	1SV20CS016	JAYANTH D S	19	30	30	19	30	30	3	3	4	27	9.0	9.0	9.0	31.0	42.0	43.0
17	1SV20CS017	KAVYA M	30	30	30	30	30	30	3	3	4	38	12.7	12.7	12.7	45.7	45.7	46.7
18	1SV20CS018	KEERTHANA KUMBAR	29	30	30	29	30	30	3	3	4	39	13.0	13.0	13.0	45.0	46.0	47.0
19	1SV20CS019	M P SHISHIER	2	11	20	2	11	20	3	3	4	23	7.7	7.7	7.7	12.7	21.7	31.7
20	1SV20CS020	MADHURA SHREE M	30	30	30	30	30	30	3	3	4	30	10.0	10.0	10.0	43.0	43.0	44.0
21	1SV20CS021	MAJMAANJUM	29	30	30	29	30	30	3	3	4	35	11.7	11.7	11.7	43.7	44.7	45.7
22	1SV20CS022	MAMATHA K	23	29	30	23	29	30	3	3	4	42	14.0	14.0	14.0	40.0	46.0	48.0
23	1SV20CS023	MANOJ KUMAR PATIL	24	21	8	24	21	8	3	3	4	32	10.7	10.7	10.7	37.7	34.7	22.7
24	1SV20CS024	MANTESH H RANGARADDI	20	29	26	20	29	26	3	3	4	29	9.7	9.7	9.7	32.7	41.7	39.7
25	1SV20CS025	MOHAMMED NABIL	15	19	17	15	19	17	3	3	4	21	7.0	7.0	7.0	25.0	29.0	28.0
26	1SV20CS026	MOHAMMED OWAIS KHAN	20	15	7	20	15	7	3	3	4	25	8.3	8.3	8.3	31.3	26.3	19.3
27	1SV20CS028	MONIKA A	29	30	30	29	30	30	3	3	4	36	12.0	12.0	12.0	44.0	45.0	46.0
28	1SV20CS029	MYTHRI B N	26	29	30	26	29	30	3	3	4	38	12.7	12.7	12.7	41.7	44.7	46.7
29	1SV20CS031	NAYANA D G	21	29	29	21	29	29	3	3	4	37	12.3	12.3	12.3	36.3	44.3	45.3



30	ISV20CS032	NETHRA PRASAD D R	20	23	20	20	23	20	3	3	4	31	10.3	10.3	10.3	33.3	36.3	34.3
31	ISV20CS033	PARTHA H R	21	26	27	21	26	27	3	3	4	39	13.0	13.0	13.0	37.0	42.0	44.0
32	ISV20CS034	PUSHPRAJ	28	26	30	28	26	30	3	3	4	41	13.7	13.7	13.7	44.7	42.7	47.7
33	ISV20CS035	RAHUL AJITH KUMBAR	28	23	23	28	23	23	3	3	4	39	13.0	13.0	13.0	44.0	39.0	40.0
34	ISV20CS036	ROUSHANI BEGUM	24	29	30	24	29	30	3	3	4	33	11.0	11.0	11.0	38.0	43.0	45.0
35	ISV20CS037	SADASHISH KUMAR BHOKTA	28	29	30	28	29	30	3	3	4	41	13.7	13.7	13.7	44.7	45.7	47.7
36	ISV20CS038	SAGAR S K	14	26	8	14	26	8	3	3	4	9	3.0	3.0	3.0	20.0	32.0	15.0
37	ISV20CS039	SANIYA SARDAR	29	30	30	29	30	30	3	3	4	39	13.0	13.0	13.0	45.0	46.0	47.0
38	ISV20CS040	SEKH FARDEEN	23	29	29	23	29	29	3	3	4	42	14.0	14.0	14.0	40.0	46.0	47.0
39	ISV20CS041	SHAIK RABBANI	8	25	14	8	25	14	3	3	4	37	12.3	12.3	12.3	23.3	40.3	30.3
40	ISV20CS042	SHARIBA FIRDOSE	29	30	28	29	30	28	3	3	4	41	13.7	13.7	13.7	45.7	46.7	45.7
41	ISV20CS045	SHRAVANAKUMARA T	22	23	23	22	23	23	3	3	4	24	8.0	8.0	8.0	33.0	34.0	35.0
42	ISV20CS046	SIDHANT PANDIT	12	20	18	12	20	18	3	3	4	24	8.0	8.0	8.0	23.0	31.0	30.0
43	ISV20CS047	SMRITI DEWANGAN	30	30	22	30	30	22	3	3	4	38	12.7	12.7	12.7	45.7	45.7	38.7
44	ISV20CS048	SOUVIK KARAK	15	26	23	15	26	23	3	3	4	28	9.3	9.3	9.3	27.3	38.3	36.3
45	ISV20CS049	SRIKIRAN B	20	29	23	20	29	23	3	3	4	32	10.7	10.7	10.7	33.7	42.7	37.7
46	ISV20CS050	SUSHMITHA K	29	29	30	29	29	30	3	3	4	30	10.0	10.0	10.0	42.0	42.0	44.0
47	ISV20CS051	TEJASHWINI R	24	30	30	24	30	30	3	3	4	39	13.0	13.0	13.0	40.0	46.0	47.0
48	ISV20CS052	TEJESHWAR T R	8	20	24	8	20	24	3	3	4	28	9.3	9.3	9.3	20.3	32.3	37.3
49	ISV20CS053	USHA B N	23	30	30	23	30	30	3	3	4	45	15.0	15.0	15.0	41.0	48.0	49.0
50	ISV20CS054	VAISHNAVI BHUSHAN	30	30	30	30	30	30	3	3	4	39	13.0	13.0	13.0	46.0	46.0	47.0
51	ISV20CS055	VARSHITHA T N	30	29	30	30	29	30	3	3	4	35	11.7	11.7	11.7	44.7	43.7	45.7
52	ISV20CS056	VENKATESH DALAWAI	26	30	30	26	30	30	3	3	4	38	12.7	12.7	12.7	41.7	45.7	46.7
																1970.7	2147.7	2138.7
																38%	41%	41%

*S. Srin*  
Staff Incharge

*M. Srinivasan*  
PRINCIPAL  
SIET. TUMKUR.

*B. Srinivasan*  
Head/CS6

**HOD.**  
COMPUTER SCIENCE & ENGG.,  
SIET, TUMAKURU-06.





DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

**COURSE OUTCOME**

- CO1. Understand fundamentals of Big Data analytics.
- CO2. Investigate Hadoop framework and Hadoop Distributed File system.
- CO3. Illustrate the concepts of NoSQL using MongoDB and Cassandra for Big Data.
- CO4. Demonstrate the MapReduce programming model to process the big data along with Hadoop tools.
- CO5. Use Machine Learning algorithms for real world big data.
- CO6. Analyze web contents and Social Networks to provide analytics with relevant visualization tools.

**PROGRAM OUTCOMES**

- PO1 Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- PO2 Problem analysis: Identify, formulate, 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: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- PO4 Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and 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.
- PO6 The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- PO7 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.
- PO8 Ethics: Apply ethical principles and commit to professional ethics and 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 the society.
- PO11 Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.
- PO12 Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.



COLLEGE		SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY													
FACULTY NAME		Mr. UMESH B L													
BRANCH		CSE			ACADEMIC YEAR				2023-24						
COURSE	B.E	SEMESTER			VII		SECTION								
SUBJECT	BIG DATA AND ANALYTICS					SUBJECT CODE			18CS72						
<b>CO &amp; PO MAPPING</b>															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3						1					1		
CO2	3	3	2		2								1		
CO3	3	3	2		2								1		
CO4	3	3	2										1		
CO5	3	3	2					2					1		
CO6	3		2										1		
AVERAGE	3	3	2		2			1.5					1		
<b>OVERALL MAPPING OF SUBJECT</b>												2.08			

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	75.8	2.27	2.27						0.75					0.75		
CO2	77.1	2.31	2.31	1.54		1.54								0.77		
CO3	80.1	2.40	2.40	1.60		1.60								0.80		
CO4	80.9	2.42	2.42	1.61										0.80		
CO5	82.5	2.47	2.47	1.65					1.65					0.82		
CO6	83.0	2.49		1.66										0.83		
AVERAGE	2.39	2.37	1.61		1.57				1.20					0.80		
<b>FINAL ATTAINMENT LEVEL</b>													1.66			

*Umesh B L*

*Umesh B L*  
PRINCIPAL  
SIET, TUMKUR.

*30/11/23*  
HOD,  
COMPUTER SCIENCE & ENGG.,  
SIET, TUMAKURU-06.



SUB: BIG DATA AND ANALYTICS			SEM: VII <i>180572</i> 2023-24														ODD		DEPT: CSE												
Roll No.	USN	Name	<del>BCS303</del>			T1		T2		T3		ASSIGNMENT 10/6						EXTERNAL						FINAL						TOTAL AVG	
			T1	T2	T3	CO1-15	CO2-15	CO3-15	CO4-15	CO5-15	CO6-15	CO1-2	CO2-2	CO3-2	CO4-2	CO5-1	CO6-1	SEE (60)	CO1-10	CO2-10	CO3-10	CO4-10	CO5-10	CO6-10	CO1-27	CO2-27	CO3-27	CO4-27	CO5-26		CO6-26
1	1SV20CS001	ANUSHA B S	29	30	30	14	15	15	15	15	15	2	2	2	2	1	1	33	5.5	5.5	5.5	5.5	5.5	5.5	21.5	22.5	22.5	22.5	21.5	21.5	22.1
2	1SV20CS002	ANUSHA R	30	30	30	15	15	15	15	15	15	2	2	2	2	1	1	38	6.3	6.3	6.3	6.3	6.3	6.3	23.3	23.3	23.3	23.3	22.3	22.3	23.1
3	1SV20CS003	ASFA KHANUM	27	30	29	13	14	15	15	14	15	2	2	2	2	1	1	40	6.7	6.7	6.7	6.7	6.7	6.7	21.7	22.7	23.7	23.7	21.7	22.7	22.7
4	1SV20CS004	ASHA	29	29	30	14	15	14	15	15	15	2	2	2	2	1	1	41	6.8	6.8	6.8	6.8	6.8	6.8	22.8	23.8	22.8	23.8	22.8	22.8	23.6
5	1SV20CS005	ASHWINI S	30	30	30	15	15	15	15	15	15	2	2	2	2	1	1	41	6.8	6.8	6.8	6.8	6.8	6.8	23.8	23.8	23.8	23.8	22.8	22.8	23.6
6	1SV20CS006	BORISH KONGBRAILATPAM	20	25	29	10	10	13	12	14	15	2	2	2	2	1	1	42	7.0	7.0	7.0	7.0	7.0	7.0	19.0	19.0	22.0	21.0	22.0	23.0	20.6
7	1SV20CS007	DHEERAJ KUMAR P	30	21	30	15	15	10	11	15	15	2	2	2	2	1	1	24	4.0	4.0	4.0	4.0	4.0	4.0	21.0	21.0	16.0	17.0	20.0	20.0	19.0
8	1SV20CS008	DIBESH SRESTHA	19	28	29	9	10	14	14	15	14	2	2	2	2	1	1	47	7.8	7.8	7.8	7.8	7.8	7.8	18.8	19.8	23.8	23.8	23.8	22.8	22.0
9	1SV20CS009	EMILY LAURA	29	27	30	14	15	13	14	15	15	2	2	2	2	1	1	48	8.0	8.0	8.0	8.0	8.0	8.0	24.0	25.0	23.0	24.0	24.0	24.0	24.0
10	1SV20CS010	G MALINGARAYA	30	24	30	15	15	12	12	15	15	2	2	2	2	1	1	44	7.3	7.3	7.3	7.3	7.3	7.3	24.3	24.3	21.3	21.3	23.3	23.3	22.9
11	1SV20CS011	GIRISHA V	27	23	30	14	13	12	11	15	15	2	2	2	2	1	1	30	5.0	5.0	5.0	5.0	5.0	5.0	21.0	20.0	19.0	18.0	21.0	21.0	19.8
12	1SV20CS012	H R ABHINANDAN	27	30	29	13	14	15	15	14	15	2	2	2	2	1	1	26	4.3	4.3	4.3	4.3	4.3	4.3	19.3	20.3	21.3	21.3	19.3	20.3	20.3
13	1SV20CS013	HABIBULLA SADIK MULLA	21	26	29	10	11	13	13	15	14	2	2	2	2	1	1	47	7.8	7.8	7.8	7.8	7.8	7.8	19.8	20.8	22.8	22.8	23.8	22.8	22.0
14	1SV20CS014	HARSHITHA T A	30	30	30	15	15	15	15	15	15	2	2	2	2	1	1	27	4.5	4.5	4.5	4.5	4.5	4.5	21.5	21.5	21.5	21.5	20.5	20.5	21.3
15	1SV20CS015	JAHIDUL ISLAM	27	24	29	13	14	12	12	14	15	2	2	2	2	1	1	44	7.3	7.3	7.3	7.3	7.3	7.3	22.3	23.3	21.3	21.3	22.3	23.3	22.1
16	1SV20CS016	JAYANTH D S	24	26	28	12	12	13	13	14	14	2	2	2	2	1	1	38	6.3	6.3	6.3	6.3	6.3	6.3	20.3	20.3	21.3	21.3	21.3	21.3	20.9
17	1SV20CS017	KAVYA M	30	30	30	15	15	15	15	15	15	2	2	2	2	1	1	32	5.3	5.3	5.3	5.3	5.3	5.3	22.3	22.3	22.3	22.3	21.3	21.3	22.1
18	1SV20CS018	KEERTHANA KUMBAR	28	30	30	14	14	15	15	15	15	2	2	2	2	1	1	52	8.7	8.7	8.7	8.7	8.7	8.7	24.7	24.7	25.7	25.7	24.7	24.7	25.1
19	1SV20CS019	M P SHISHIER	11	21	14	6	5	11	10	7	7	2	2	2	2	1	1	29	4.8	4.8	4.8	4.8	4.8	4.8	12.8	11.8	17.8	16.8	12.8	12.8	14.4
20	1SV20CS020	MADHURA SHREE M	30	30	30	15	15	15	15	15	15	2	2	2	2	1	1	41	6.8	6.8	6.8	6.8	6.8	6.8	23.8	23.8	23.8	23.8	22.8	22.8	23.6
21	1SV20CS021	MAJMAANJUM	27	28	30	13	14	14	14	15	15	2	2	2	2	1	1	42	7.0	7.0	7.0	7.0	7.0	7.0	22.0	23.0	23.0	23.0	23.0	23.0	22.8
22	1SV20CS022	MAMATHA K	25	24	26	12	13	12	12	13	13	2	2	2	2	1	1	42	7.0	7.0	7.0	7.0	7.0	7.0	21.0	22.0	21.0	21.0	21.0	21.0	21.2
23	1SV20CS023	MANOJ KUMAR PATIL	26	25	26	13	13	12	13	13	13	2	2	2	2	1	1	27	4.5	4.5	4.5	4.5	4.5	4.5	19.5	19.5	18.5	19.5	18.5	18.5	19.1
24	1SV20CS024	MANTESH H RANGARADDI	20	26	30	10	10	13	13	15	15	2	2	2	2	1	1	38	6.3	6.3	6.3	6.3	6.3	6.3	18.3	18.3	21.3	21.3	22.3	22.3	20.3
25	1SV20CS025	MOHAMMED NABIL	12	18	26	6	6	9	9	13	13	2	2	2	2	1	1	30	5.0	5.0	5.0	5.0	5.0	5.0	13.0	13.0	16.0	16.0	19.0	19.0	15.4
26	1SV20CS026	MOHAMMED OWAIS KHAN	22	11	26	11	11	5	6	13	13	2	2	2	2	1	1	33	5.5	5.5	5.5	5.5	5.5	5.5	18.5	18.5	12.5	13.5	19.5	19.5	16.5
27	1SV20CS028	MONIKA A	29	30	30	14	15	15	15	15	15	2	2	2	2	1	1	22	3.7	3.7	3.7	3.7	3.7	3.7	19.7	20.7	20.7	20.7	19.7	19.7	20.3
28	1SV20CS029	MYTHRI B N	21	30	30	10	11	15	15	15	15	2	2	2	2	1	1	54	9.0	9.0	9.0	9.0	9.0	9.0	21.0	22.0	26.0	26.0	25.0	25.0	24.0
29	1SV20CS031	NAYANA D G	23	29	30	11	12	14	15	15	15	2	2	2	2	1	1	39	6.5	6.5	6.5	6.5	6.5	6.5	19.5	20.5	22.5	23.5	22.5	22.5	21.7
30	1SV20CS032	NETHRA PRASAD D R	12	24	29	6	6	12	12	15	14	2	2	2	2	1	1	21	3.5	3.5	3.5	3.5	3.5	3.5	11.5	11.5	17.5	17.5	19.5	18.5	15.5
31	1SV20CS033	PARTHA H R	29	27	30	15	14	13	14	15	15	2	2	2	2	1	1	45	7.5	7.5	7.5	7.5	7.5	7.5	24.5	23.5	22.5	23.5	23.5	23.5	23.5
32	1SV20CS034	PUSHPRAJ	26	30	30	13	13	15	15	15	15	2	2	2	2	1	1	45	7.5	7.5	7.5	7.5	7.5	7.5	22.5	22.5	24.5	24.5	23.5	23.5	23.5
33	1SV20CS035	RAHUL AJITH KUMBAR	23	24	30	12	11	12	12	15	15	2	2	2	2	1	1	37	6.2	6.2	6.2	6.2	6.2	6.2	20.2	19.2	20.2	20.2	22.2	22.2	20.4
34	1SV20CS036	ROUSHANI BEGUM	23	30	30	11	12	15	15	15	15	2	2	2	2	1	1	32	5.3	5.3	5.3	5.3	5.3	5.3	18.3	19.3	22.3	22.3	21.3	21.3	20.7
35	1SV20CS037	SADASHISH KUMAR BHOKTA	30	30	30	15	15	15	15	15	15	2	2	2	2	1	1	39	6.5	6.5	6.5	6.5	6.5	6.5	23.5	23.5	23.5	23.5	22.5	22.5	23.3
36	1SV20CS038	SAGAR S K	21	14	21	10	11	7	7	10	11	2	2	2	2	1	1	31	5.2	5.2	5.2	5.2	5.2	5.2	17.2	18.2	14.2	14.2	16.2	17.2	16.0
37	1SV20CS039	SANIYA SARDAR	30	30	30	15	15	15	15	15	15	2	2	2	2	1	1	41	6.8	6.8	6.8	6.8	6.8	6.8	23.8	23.8	23.8	23.8	22.8	22.8	23.6



Roll No.	USN	Name	BESS303 10.03.20			T1		T2		T3		ASSIGNMENT 10/6						EXTERNAL						FINAL					TOTAL L AVG		
			T1	T2	T3	CO1-15	CO2-15	CO3-15	CO4-15	CO5-15	CO6-15	CO1-2	CO2-2	CO3-2	CO4-2	CO5-1	CO6-1	SEE (60)	CO1-10	CO2-10	CO3-10	CO4-10	CO5-10	CO6-10	CO1-27	CO2-27	CO3-27	CO4-27		CO5-26	CO6-26
38	1SV20CS040	SEKH FARDEEN	27	29	29	13	14	14	15	14	15	2	2	2	2	1	1	33	5.5	5.5	5.5	5.5	5.5	5.5	20.5	21.5	21.5	22.5	20.5	21.5	21.3
39	1SV20CS041	SHAIK RABBANI	22	25	23	11	11	12	13	11	12	2	2	2	2	1	1	44	7.3	7.3	7.3	7.3	7.3	7.3	20.3	20.3	21.3	22.3	19.3	20.3	20.7
40	1SV20CS042	SHARIBA FIRDOSE	30	30	30	15	15	15	15	15	15	2	2	2	2	1	1	45	7.5	7.5	7.5	7.5	7.5	7.5	24.5	24.5	24.5	24.5	23.5	23.5	24.3
41	1SV20CS045	SHRAVANAKUMARA T	28	30	30	14	14	15	15	15	15	2	2	2	2	1	1	36	6.0	6.0	6.0	6.0	6.0	6.0	22.0	22.0	23.0	23.0	22.0	22.0	22.4
42	1SV20CS046	SIDHANT PANDIT	19	20	11	9	10	10	10	5	6	2	2	2	2	1	1	22	3.7	3.7	3.7	3.7	3.7	3.7	14.7	15.7	15.7	15.7	9.7	10.7	14.3
43	1SV20CS047	SMRITI DEWANGAN	29	30	30	14	15	15	15	15	15	2	2	2	2	1	1	35	5.8	5.8	5.8	5.8	5.8	5.8	21.8	22.8	22.8	22.8	21.8	21.8	22.4
44	1SV20CS048	SOUVIK KARAK	16	30	26	8	8	15	15	13	13	2	2	2	2	1	1	43	7.2	7.2	7.2	7.2	7.2	7.2	17.2	17.2	24.2	24.2	21.2	21.2	20.8
45	1SV20CS049	SRIKIRAN B	23	29	29	11	12	14	15	14	15	2	2	2	2	1	1	42	7.0	7.0	7.0	7.0	7.0	7.0	20.0	21.0	23.0	24.0	22.0	23.0	22.0
46	1SV20CS050	SUSHMITHA K	21	27	30	10	11	13	14	15	15	2	2	2	2	1	1	42	7.0	7.0	7.0	7.0	7.0	7.0	19.0	20.0	22.0	23.0	23.0	23.0	21.4
47	1SV20CS051	TEJASHWINI R	22	28	30	11	11	14	14	15	15	2	2	2	2	1	1	48	8.0	8.0	8.0	8.0	8.0	8.0	21.0	21.0	24.0	24.0	24.0	24.0	22.8
48	1SV20CS052	TEJESHWAR T R	15	27	25	7	8	13	14	12	13	2	2	2	2	1	1	36	6.0	6.0	6.0	6.0	6.0	6.0	15.0	16.0	21.0	22.0	19.0	20.0	18.6
49	1SV20CS053	USHA B N	22	29	30	11	11	14	15	15	15	2	2	2	2	1	1	45	7.5	7.5	7.5	7.5	7.5	7.5	20.5	20.5	23.5	24.5	23.5	23.5	22.5
50	1SV20CS054	VAISHNAVI BHUSHAN	30	30	30	15	15	15	15	15	15	2	2	2	2	1	1	50	8.3	8.3	8.3	8.3	8.3	8.3	25.3	25.3	25.3	25.3	24.3	24.3	25.1
51	1SV20CS055	VARSHITHA T N	18	25	30	9	9	12	13	15	15	2	2	2	2	1	1	41	6.8	6.8	6.8	6.8	6.8	6.8	17.8	17.8	20.8	21.8	22.8	22.8	20.2
52	1SV20CS056	VENKATESH DALAWAI	29	28	30	14	15	14	14	15	15	2	2	2	2	1	1	39	6.5	6.5	6.5	6.5	6.5	6.5	22.5	23.5	22.5	22.5	22.5	22.5	22.7

20.5	20.8	21.6	21.8	21.5	21.6
75.8%	77.1%	80.1%	80.9%	82.5%	83.0%

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*Principal*  
PRINCIPAL  
S.I.T. TUMKUR.

*Handwritten signature*  
HOD.  
COMPUTER SCIENCE & ENGG.,  
SIET, TUMAKURU-06.





SHRIDEVI  
EDUCATION

Sri Shridevi Charitable Trust (R.)

**SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY**

Sira Road, Tumkur - 572 106, Karnataka, India.

Phone: 0816 - 2212629 | Principal: 0816 - 2212627, 9686114899 | Telefax: 0816 - 2212628

Email: info@shrideviengineering.org, principal@shrideviengineering.org | Website: www.shrideviengineering.org

(Approved by AICTE, New Delhi, Recognised by Govt. of Karnataka and Affiliated to Visvesvaraya Technological University, Belagavi)

ESTD: 2002



## Department of Computer Science and Engineering

### COURSE OUTCOME

**CO1.** Design the User Interface, design, menu creation, windows creation and connection between menus and windows.

### PROGRAM OUTCOMES

**PO1** Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.

**PO2** Problem analysis: Identify, formulate, 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: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.

**PO4** Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and 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.

**PO6** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.

**PO7** 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.

**PO8** Ethics: Apply ethical principles and commit to professional ethics and 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 the society.

**PO11** Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.

**PO12** Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.



COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY															
FACULTY NAME	MR. SUTHAN R															
BRANCH	CSE					ACADEMIC YEAR	2023-24									
COURSE	B.E	SEMESTER					VII	SECTION								
SUBJECT	USER INTERFACE DESIGN							SUBJECT CODE			18CS734					
<b>CO &amp; PO MAPPING</b>																
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	
CO1	3	3	3	1	3			2	1	1	1	2	2	2	2	
AVERAGE	3	3	3	1	3			2	1	1	1	2	2	3	3	
OVERALL MAPPING OF SUBJECT												1.66				

**CO - PO ATTAINMENT**

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	79.6	2.38	2.38	2.38	0.79	2.38			1.59	0.79	0.79	0.79	1.59	1.59	1.59	1.59
AVERAGE		2.38	2.38	2.38	0.79	2.38			1.59	0.79	0.79	0.79	1.59	1.59	1.59	1.59
FINAL ATTAINMENT LEVEL													1.58			



*M. Suthan R*  
PRINCIPAL  
S.I.E.T. TUMKUR.

*B.S.*  
**HOD,**  
COMPUTER SCIENCE & ENGG.,  
SIET, TUMAKURU-06.



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

Roll No.	USN	Name	18CS734	Sem:VII	2023-24	ODD				TOTAL AVG	
			SUB:User Interface Design			T1+T2+T3	ASSIGN	EXTERNAL			Final
			T1	T2	T3	COI-90	COI-10	SEE(60)	COI-60		COI-160
1	1SV20CS001	ANUSHA B S	30	29	30	89	10	50	50	149	149
2	1SV20CS002	ANUSHA R	29	29	29	87	10	46	46	143	143
3	1SV20CS003	ASFA KHANUM	29	29	29	87	10	42	42	139	139
4	1SV20CS004	ASHA	29	29	29	87	10	47	47	144	144
5	1SV20CS005	ASHWINI S	29	29	29	87	10	38	38	135	135
6	1SV20CS006	BORISH KONGBRAILATPAM	29	28	29	86	10	35	35	131	131
7	1SV20CS007	DHEERAJ KUMAR P	8	21	0	29	10	36	36	75	75
8	1SV20CS008	DIBESH SRESTHA	29	29	29	87	10	45	45	142	142
9	1SV20CS009	EMILY LAURA	29	29	29	87	10	36	36	133	133
10	1SV20CS010	G MALINGARAYA	29	28	29	86	10	44	44	140	140
11	1SV20CS011	GIRISHA V	16	28	29	73	10	32	32	115	115
12	1SV20CS012	H R ABHINANDAN	25	27	29	81	10	49	49	140	140
13	1SV20CS013	HABIBULLA SADIK MULLA	23	26	29	78	10	42	42	130	130
14	1SV20CS014	HARSHITHA T A	29	29	29	87	10	40	40	137	137
15	1SV20CS015	JAHIDUL ISLAM	29	28	29	86	10	43	43	139	139
16	1SV20CS016	JAYANTH D S	20	26	27	73	10	48	48	131	131
17	1SV20CS017	KAVYA M	29	29	29	87	10	47	47	144	144
18	1SV20CS018	KEERTHANA KUMBAR	29	29	29	87	10	54	54	151	151
19	1SV20CS019	M P SHISHIER	6	14	9	29	10	25	25	64	64
20	1SV20CS020	MADHURA SHREE M	29	29	29	87	10	40	40	137	137
21	1SV20CS021	MAJMAANJUM	29	29	29	87	10	48	48	145	145
22	1SV20CS022	MAMATHA K	26	29	24	79	10	40	40	129	129
23	1SV20CS023	MANOJ KUMAR PATIL	26	29	24	79	10	32	32	121	121
24	1SV20CS024	MANTESH H RANGARADDI	22	29	29	80	10	51	51	141	141



Roll No.	USN	Name	18CS734	Sem:VII	2023-24	ODD					TOTAL AVG
			SUB:User Interface Design			T1+T2+T3	ASSIGN	EXTERNAL		Final	
			T1	T2	T3	CO1-90	CO1-10	SEE(60)	CO1-60	CO1-160	
25	1SV20CS025	MOHAMMED NABIL	14	18	24	56	10	27	27	93	93
26	1SV20CS026	MOHAMMED OWAIS KHAN	8	23	15	46	10	21	21	77	77
27	1SV20CS028	MONIKA A	27	28	29	84	10	32	32	126	126
28	1SV20CS029	MYTHRI B N	26	28	29	83	10	32	32	125	125
29	1SV20CS031	NAYANA D G	29	29	29	87	10	37	37	134	134
30	1SV20CS032	NETHRA PRASAD D R	16	22	20	58	10	27	27	95	95
31	1SV20CS033	PARTHA H R	15	21	29	65	10	32	32	107	107
32	1SV20CS034	PUSHRAJ	29	29	29	87	10	37	37	134	134
33	1SV20CS035	RAHUL AJITH KUMBAR	28	29	29	86	10	48	48	144	144
34	1SV20CS036	ROUSHANI BEGUM	29	29	29	87	10	45	45	142	142
35	1SV20CS037	SADASHISH KUMAR BHOKTA	30	30	30	90	10	36	36	136	136
36	1SV20CS038	SAGAR S K	14	18	26	58	10	21	21	89	89
37	1SV20CS039	SANIYA SARDAR	28	29	29	86	10	48	48	144	144
38	1SV20CS040	SEKH FARDEEN	25	27	29	81	10	34	34	125	125
39	1SV20CS041	SHAIK RABBANI	14	23	21	58	10	41	41	109	109
40	1SV20CS042	SHARIBA FIRDOSE	29	29	29	87	10	28	28	125	125
41	1SV20CS045	SHRAVANAKUMARA T	29	29	28	86	10	36	36	132	132
42	1SV20CS046	SIDHANT PANDIT	20	5	20	45	10	24	24	79	79
43	1SV20CS047	SMRITI DEWANGAN	29	29	29	87	10	50	50	147	147
44	1SV20CS048	SOUVIK KARAK	16	27	24	67	10	45	45	122	122
45	1SV20CS049	SRIKIRAN B	25	26	27	78	10	43	43	131	131
46	1SV20CS050	SUSHMITHA K	29	29	29	87	10	46	46	143	143
47	1SV20CS051	TEJASHWINI R	29	27	28	84	10	50	50	144	144
48	1SV20CS052	TEJESHWAR T R	20	26	27	73	10	28	28	111	111
49	1SV20CS053	USHA B N	29	29	29	87	10	47	47	144	144
50	1SV20CS054	VAISHNAVI BHUSHAN	30	30	30	90	10	43	43	143	143
51	1SV20CS055	VARSHITHA T N	29	28	28	86	10	43	43	139	139
52	1SV20CS056	VENKATESH DALAWAI	29	29	29	86	10	34	34	130	130
										41.40625	41.40625
										79.6%	79.6%

*[Signature]*

*[Signature]*  
 PRINCIPAL  
 SIET, TUMKUR.

*[Signature]*  
 HOD,  
 COMPUTER SCIENCE & ENGG.,  
 SIET, TUMAKURU-06.





SHRIDEVI  
EDUCATION

Sri Shridevi Charitable Trust (R.)

## SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

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ESTD: 2002



### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

#### COURSE OUTCOME

- CO1. Define cryptography and its principles
- CO2. Explain Cryptography algorithms
- CO3. Illustrate Public and Private Key cryptography
- CO4. Explain Key management, distribution and certification
- CO5. Explain authentication protocols
- CO6. Tell about IPsec

#### PROGRAM OUTCOMES

- PO1 Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- PO2 Problem analysis: Identify, formulate, 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: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- PO4 Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and 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.
- PO6 The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- PO7 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.
- PO8 Ethics: Apply ethical principles and commit to professional ethics and 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 the society.
- PO11 Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.
- PO12 Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning



COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY														
FACULTY NAME	Dr. Kiran G M														
BRANCH	CSE			ACADEMIC YEAR				2023-24							
COURSE	B.E	SEMESTER			VII	SECTION									
SUBJECT	CRYPTOGRAPHY					SUBJECT CODE			18CS744						
<b>CO &amp; PO MAPPING</b>															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2							2			2		2		
CO2		3	1										2		
CO3					2								2		3
CO4		2		1											3
CO5													2	2	
CO6	1		1										2	2	
AVERAGE	1.5	2.5	1	1	2			2			2		2	2	3
<b>OVERALL MAPPING OF SUBJECT</b>												1.9			

### CO - PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	81.1	1.62							1.62			1.62		1.62		
CO2	79.3		2.37	0.79										1.58		
CO3	81.2					1.62								1.62		2.43
CO4	83.8		1.67		0.83											2.51
CO5	76.7													1.53	1.53	
CO6	81.1	0.81		0.81										1.62	1.62	
AVERAGE		1.21	2.02	0.8	0.83	1.62			1.62			1.62		1.59	1.57	2.47
<b>FINAL ATTAINMENT LEVEL</b>													1.53			

Kiran  
[Staff Incharge]

Principal  
SIET, TUMKUR.

HOD,  
COMPUTER SCIENCE & ENGG.,  
SIET, TUMAKURU-06.



2023-24

Sem:VII

FACULTY: Dr. KIRAN G M

SUB: Cryptography			18CS744			T1		T2		T3		ASSIGNMENT 10						EXTERNAL						Final						TOTAL AVG	
Roll No.	USN	Name	T1	T2	T3	CO1- 15	CO2- 15	CO3- 15	CO4- 15	CO5- 15	CO6- 15	CO1- 2	CO2- 1	CO3- 2	CO4- 1	CO5- 2	CO6- 2	SEE (60)	CO1- 10	CO2- 10	CO3- 10	CO4- 10	CO5- 10	CO6- 10	CO1-27	CO2-26	CO3-27	CO4-26	CO5-27		CO6-27
1	1SV20CS001	ANUSHA B S	30	29	30	15	15	15	14	15	15	2	1	2	2	1	2	45	8	8	8	8	8	8	25	24	25	24	24	25	24
2	1SV20CS002	ANUSHA R	30	30	30	15	15	15	15	15	15	2	1	2	2	1	2	37	6	6	6	6	6	6	23	22	23	23	22	23	23
3	1SV20CS003	ASFA KHANUM	30	30	30	15	15	15	15	15	15	2	1	2	2	1	2	48	8	8	8	8	8	8	25	24	25	25	24	25	25
4	1SV20CS004	ASHA	29	29	30	15	14	14	15	15	15	2	1	2	2	1	2	32	5	5	5	5	5	5	22	20	21	22	21	22	22
5	1SV20CS005	ASHWINI S	30	30	30	15	15	15	15	15	15	2	1	2	2	1	2	41	7	7	7	7	7	7	24	23	24	24	23	24	24
6	1SV20CS006	BORISH KONGBRAILATPAM	30	30	30	15	15	15	15	15	15	2	1	2	2	1	2	38	6	6	6	6	6	6	23	22	23	23	22	23	23
7	1SV20CS007	DHEERAJ KUMAR P	25	27	27	12	13	14	13	14	13	2	1	2	2	1	2	13	2	2	2	2	2	2	16	16	18	17	17	17	17
8	1SV20CS008	DIBESH SRESTHA	19	27	25	10	9	14	13	12	13	2	1	2	2	1	2	40	7	7	7	7	7	7	19	17	23	22	20	22	20
9	1SV20CS009	EMILY LAURA	29	30	29	15	14	15	15	14	15	2	1	2	2	1	2	35	6	6	6	6	6	6	23	21	23	23	21	23	22
10	1SV20CS010	G MALINGARAYA	30	30	29	15	15	15	15	14	15	2	1	2	2	1	2	38	6	6	6	6	6	6	23	22	23	23	21	23	23
11	1SV20CS011	GIRISHA V	28	29	29	14	14	14	15	14	15	2	1	2	2	1	2	26	4	4	4	4	4	4	20	19	20	21	19	21	20
12	1SV20CS012	H R ABHINANDAN	24	27	27	12	12	14	13	14	13	2	1	2	2	1	2	32	5	5	5	5	5	5	19	18	21	20	20	20	20
13	1SV20CS013	HABIBULLA SADIK MULLA	24	27	27	12	12	14	13	14	13	2	1	2	2	1	2	28	5	5	5	5	5	5	19	18	21	20	20	20	19
14	1SV20CS014	HARSHITHA T A	30	30	30	15	15	15	15	15	15	2	1	2	2	1	2	57	10	10	10	10	10	10	27	26	27	27	26	27	26
15	1SV20CS015	JAHIDUL ISLAM	28	29	30	14	14	15	14	15	15	2	1	2	2	1	2	50	8	8	8	8	8	8	24	23	25	24	24	25	25
16	1SV20CS016	JAYANTH D S	27	27	27	14	13	14	13	14	13	2	1	2	2	1	2	34	6	6	6	6	6	6	22	20	22	21	21	21	21
17	1SV20CS017	KAVYA M	29	30	29	15	14	15	15	14	15	2	1	2	2	1	2	41	7	7	7	7	7	7	24	22	24	24	22	24	23
18	1SV20CS018	KEERTHANA KUMBAR	30	30	30	15	15	15	15	15	15	2	1	2	2	1	2	39	7	7	7	7	7	7	24	23	24	24	23	24	23
19	1SV20CS019	M P SHISHIER	6	14	9	3	3	7	7	5	4	2	1	2	2	1	2	2	0	0	0	0	0	0	5	4	9	9	6	6	7
20	1SV20CS020	MADHURA SHREE M	28	29	28	14	14	14	15	14	14	2	1	2	2	1	2	21	4	4	4	4	4	4	20	19	20	21	19	20	19
21	1SV20CS021	MAJMAANJUM	28	30	30	14	14	15	15	15	15	2	1	2	2	1	2	39	7	7	7	7	7	7	23	22	24	24	23	24	23
22	1SV20CS022	MAMATHA K	27	27	26	14	13	14	13	13	13	2	1	2	2	1	2	38	6	6	6	6	6	6	22	20	22	21	20	21	21
23	1SV20CS023	MANOJ KUMAR PATIL	28	28	30	14	14	14	14	15	15	2	1	2	2	1	2	38	6	6	6	6	6	6	22	21	22	22	22	23	22
24	1SV20CS024	MANTESH H RANGARADDI	28	30	29	14	14	15	15	14	15	2	1	2	2	1	2	50	8	8	8	8	8	8	24	23	25	25	23	25	25
25	1SV20CS025	MOHAMMED NABIL	26	25	24	13	13	12	13	12	12	2	1	2	2	1	2	35	6	6	6	6	6	6	21	20	20	21	19	20	20
26	1SV20CS026	MOHAMMED OWAIS KHAN	26	27	19	13	13	14	13	10	9	2	1	2	2	1	2	12	2	2	2	2	2	2	17	16	18	17	13	13	16
27	1SV20CS028	MONIKA A	30	29	30	15	15	14	15	15	15	2	1	2	2	1	2	39	7	7	7	7	7	7	24	23	23	24	23	24	23
28	1SV20CS029	MYTHRI B N	28	29	29	14	14	14	15	14	15	2	1	2	2	1	2	45	8	8	8	8	8	8	24	23	24	25	23	25	24
29	1SV20CS031	NAYANA D G	29	29	29	15	14	14	15	14	15	2	1	2	2	1	2	33	6	6	6	6	6	6	23	21	22	23	21	23	22
30	1SV20CS032	NETHRA PRASAD D R	22	26	29	11	11	13	13	14	15	2	1	2	2	1	2	28	5	5	5	5	5	5	18	17	20	20	20	22	19
31	1SV20CS033	PARTHA H R	26	29	29	13	13	14	15	14	15	2	1	2	2	1	2	22	4	4	4	4	4	4	19	18	20	21	19	21	19



SUB: Cryptography			18CS744			T1		T2		T3		ASSIGNMENT 10						EXTERNAL						Final						TOTAL AVG	
Roll No.	USN	Name	T1	T2	T3	CO1-15	CO2-15	CO3-15	CO4-15	CO5-15	CO6-15	CO1-2	CO2-1	CO3-2	CO4-1	CO5-2	CO6-2	SEE (60)	CO1-10	CO2-10	CO3-10	CO4-10	CO5-10	CO6-10	CO1-27	CO2-26	CO3-27	CO4-26	CO5-27	CO6-27	TOTAL AVG
32	ISV20CS034	PUSHPRAJ	30	30	30	15	15	15	15	15	15	2	1	2	2	1	2	53	9	9	9	9	9	9	26	25	26	26	25	26	26
33	ISV20CS035	RAHUL AJITH KUMBAR	29	30	30	15	14	15	15	15	15	2	1	2	2	1	2	40	7	7	7	7	7	7	24	22	24	24	23	24	23
34	ISV20CS036	ROUSHANI BEGUM	28	30	30	14	14	15	15	15	15	2	1	2	2	1	2	38	6	6	6	6	6	6	22	21	23	23	22	23	23
35	ISV20CS037	SADASHISH KUMAR BHOKTA	30	30	30	15	15	15	15	15	15	2	1	2	2	1	2	45	8	8	8	8	8	8	25	24	25	25	24	25	24
36	ISV20CS038	SAGAR S K	26	24	24	13	13	12	12	12	12	2	1	2	2	1	2	16	3	3	3	3	3	3	18	17	17	17	16	17	17
37	ISV20CS039	SANIYA SARDAR	29	29	29	15	14	15	14	14	15	2	1	2	2	1	2	39	7	7	7	7	7	7	24	22	24	23	22	24	23
38	ISV20CS040	SEKH FARDEEN	29	29	29	15	14	15	14	14	15	2	1	2	2	1	2	32	5	5	5	5	5	5	22	20	22	21	20	22	22
39	ISV20CS041	SHAIK RABBANI	29	19	25	15	14	10	9	12	13	2	1	2	2	1	2	31	5	5	5	5	5	5	22	20	17	16	18	20	19
40	ISV20CS042	SHARIJA FIRDOSE	29	30	28	15	14	15	15	14	14	2	1	2	2	1	2	48	8	8	8	8	8	8	25	23	25	25	23	24	24
41	ISV20CS045	SHRAVANAKUMARA T	27	27	30	14	13	14	13	15	15	2	1	2	2	1	2	33	6	6	6	6	6	6	22	20	22	21	22	23	21
42	ISV20CS046	SIDHANT PANDIT	27	17	21	14	13	10	7	10	11	2	1	2	2	1	2	26	4	4	4	4	4	4	20	18	16	13	15	17	17
43	ISV20CS047	SMRITI DEWANGAN	30	30	30	15	15	15	15	15	15	2	1	2	2	1	2	34	6	6	6	6	6	6	23	22	23	23	22	23	22
44	ISV20CS048	SOUVIK KARAK	27	29	15	14	13	15	14	7	8	2	1	2	2	1	2	26	4	4	4	4	4	4	20	18	21	20	12	14	18
45	ISV20CS049	SRIKIRAN B	27	20	25	14	13	10	10	12	13	2	1	2	2	1	2	38	6	6	6	6	6	6	22	20	18	18	19	21	20
46	ISV20CS050	SUSHMITHA K	30	30	30	15	15	15	15	15	15	2	1	2	2	1	2	40	7	7	7	7	7	7	24	23	24	24	23	24	23
47	ISV20CS051	TEJASHWINI R	30	29	30	15	15	14	15	15	15	2	1	2	2	1	2	44	7	7	7	7	7	7	24	23	23	24	23	24	24
48	ISV20CS052	TEJESHWAR T R	26	26	27	13	13	13	13	14	13	2	1	2	2	1	2	32	5	5	5	5	5	5	20	19	20	20	20	20	20
49	ISV20CS053	USHA B N	30	30	30	15	15	15	15	15	15	2	1	2	2	1	2	33	6	6	6	6	6	6	23	22	23	23	22	23	22
50	ISV20CS054	VAISHNAVI BHUSHAN	30	30	30	15	15	15	15	15	15	2	1	2	2	1	2	48	8	8	8	8	8	8	25	24	25	25	24	25	25
51	ISV20CS055	VARSHITHA T N	30	27	30	15	15	14	13	15	15	2	1	2	2	1	2	41	7	7	7	7	7	7	24	23	23	22	23	24	23
52	ISV20CS056	VENKATESH DALAWAI	30	29	30	15	15	14	15	15	15	2	1	2	2	1	2	38	6	6	6	6	6	6	23	22	22	23	22	23	23

21.89	20.61	21.93	21.78	20.72	21.89
81.1%	79.3%	81.2%	83.8%	76.7%	81.1%

*Kp*  
[Staff Incharge]

*Manish Kumar*  
PRINCIPAL  
SIET, TUMKUR

*Bas*  
HOD,  
COMPUTER SCIENCE & ENGG.,  
SIET, TUMAKURU-08.





**SHRIDEVI**  
F O R E C A T I O N

Sri Shridevi Charitable Trust (R.)  
**SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY**

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(Approved by AICTE, New Delhi, Recognised by Govt. of Karnataka and Affiliated to Visvesvaraya Technological University, Belagavi)

ESTD: 2002



## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### COURSE OUTCOME

- CO1. Understand the selection, prioritization and initiation of individual projects and strategic role of project management.
- CO2. Understand the work breakdown structure by integrating it with organization.
- CO3. Understand the scheduling and uncertainty in projects.
- CO4. Understand risk management planning using project quality tools.
- CO5. Understand the activities like purchasing, acquisitions, contracting, partnering and collaborations related to performing projects.
- CO6. Determine project progress and results through balanced scorecard approach

### PROGRAM OUTCOMES

- PO1 Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- PO2 Problem analysis: Identify, formulate, 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: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- PO4 Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and provide valid conclusions.
- PO5 Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling to complex engineering activities.
- PO6 The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- PO7 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.
- PO8 Ethics: Apply ethical principles and commit to professional ethics and 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 the society.
- PO11 Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.
- PO12 Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning



COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY														
FACULTY NAME	AJAY HIREMATH														
BRANCH	CSE			ACADEMIC YEAR				2023-24							
COURSE	B.E	SEMESTER			VII		SECTION			-					
SUBJECT	PROJECT MANAGEMENT					SUBJECT CODE			18MN752						
<b>CO &amp; PO MAPPING</b>															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2							2			2		2		
CO2		3	1										2		
CO3					2								2		3
CO4		2		1											3
CO5													2	2	
CO6	1		1										2	2	
AVERAGE	1.5	2.5	1	1	2			2			2		2	2	3
<b>OVERALL MAPPING OF SUBJECT</b>												1.9			

### CO - PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	81.4	1.2							1.62			1.62		1.62		
CO2	79.8		2.37	0.79										1.58		
CO3	81.2					1.62								1.62		2.43
CO4	84.8		1.67		0.83											2.51
CO5	79.1													1.53	1.53	
CO6	83.2	0.81		0.81										1.62	1.62	
AVERAGE		1.21	2.02	0.8	0.83	1.62			1.62			1.62		1.59	1.57	2.47
<b>FINAL ATTAINMENT LEVEL</b>													1.53			

  
FACULTY

  
HOD,  
COMPUTER SCIENCE & ENGG.,  
SIET, TUMAKURU-06.

  
PRINCIPAL  
SIET, TUMKUR.




Roll No.	USN	Name	18CS244			T1		T2		T3		ASSIGNMENT 10						EXTERNAL						Final						TOTAL AVG	
			T1	T2	T3	CO1-15	CO2-15	CO3-15	CO4-15	CO5-15	CO6-15	CO1-2	CO2-1	CO3-2	CO4-1	CO5-2	CO6-2	SEE (60)	CO1-10	CO2-10	CO3-10	CO4-10	CO5-10	CO6-10	CO1-27	CO2-26	CO3-27	CO4-26	CO5-27		CO6-27
1	1SV20CS001	ANUSHA B S	29	30	30	14	15	15	15	15	15	2	1	2	2	1	2	36	6	8	8	8	8	8	22	24	25	25	24	25	24
2	1SV20CS002	ANUSHA R	26	30	30	13	13	15	15	15	15	2	1	2	2	1	2	48	8	6	6	6	6	6	23	20	23	23	22	23	22
3	1SV20CS003	ASFA KHANUM	30	30	30	15	15	15	15	15	15	2	1	2	2	1	2	36	6	8	8	8	8	8	23	24	25	25	24	25	24
4	1SV20CS004	ASHA	28	28	30	14	14	14	14	15	15	2	1	2	2	1	2	41	7	5	5	5	5	5	23	20	21	21	21	22	22
5	1SV20CS005	ASHWINI S	29	30	26	15	14	15	15	13	13	2	1	2	2	1	2	49	8	7	7	7	7	7	25	22	24	24	21	22	23
6	1SV20CS006	BORISH KONGBRILATPAM	29	30	30	14	15	15	15	15	15	2	1	2	2	1	2	51	9	6	6	6	6	6	25	22	23	23	22	23	23
7	1SV20CS007	DHEERAJ KUMAR P	29	22	29	14	15	12	12	14	15	2	1	2	2	1	2	21	4	2	2	2	2	2	20	18	16	16	17	19	18
8	1SV20CS008	DIBESH SRESTHA	28	29	29	14	14	14	15	14	15	2	1	2	2	1	2	35	6	7	7	7	7	7	22	22	23	24	22	24	23
9	1SV20CS009	EMILY LAURA	29	29	30	15	14	15	14	15	15	2	1	2	2	1	2	41	7	6	6	6	6	6	24	21	23	22	22	23	22
10	1SV20CS010	G MALINGARAYA	30	29	30	15	15	14	15	15	15	2	1	2	2	1	2	35	6	6	6	6	6	6	23	22	22	23	22	23	23
11	1SV20CS011	GIRISHA V	24	26	29	12	12	13	13	14	15	2	1	2	2	1	2	35	6	4	4	4	4	4	20	17	19	19	19	21	19
12	1SV20CS012	H R ABHINANDAN	26	28	29	13	13	14	14	14	15	2	1	2	2	1	2	39	7	5	5	5	5	5	22	19	21	21	20	22	21
13	1SV20CS013	HABIBULLA SADIK MULLA	29	29	29	14	15	14	15	14	15	2	1	2	2	1	2	41	7	5	5	5	5	5	23	21	21	22	20	22	21
14	1SV20CS014	HARSHITHA T A	29	30	30	14	15	15	15	15	15	2	1	2	2	1	2	44	7	10	10	10	10	10	23	26	27	27	26	27	26
15	1SV20CS015	JAHIDUL ISLAM	29	29	30	14	15	15	14	15	15	2	1	2	2	1	2	45	8	8	8	8	8	8	24	24	25	24	24	25	25
16	1SV20CS016	JAYANTH D S	30	29	26	15	15	14	15	13	13	2	1	2	2	1	2	44	7	6	6	6	6	6	24	22	22	23	20	21	22
17	1SV20CS017	KAVYA M	29	30	30	15	14	15	15	15	15	2	1	2	2	1	2	43	7	7	7	7	7	7	24	22	24	24	23	24	23
18	1SV20CS018	KEERTHANA KUMBAR	29	30	30	15	14	15	15	15	15	2	1	2	2	1	2	44	7	7	7	7	7	7	24	22	24	24	23	24	23
19	1SV20CS019	M P SHISHIER	17	8	24	8	9	4	4	12	12	2	1	2	2	1	2	29	5	0	0	0	0	0	15	10	6	6	13	14	11
20	1SV20CS020	MADHURA SHREE M	30	30	30	15	15	15	15	15	15	2	1	2	2	1	2	34	6	4	4	4	4	4	23	20	21	21	20	21	21
21	1SV20CS021	MAJMAANJUM	26	29	30	13	13	14	15	14	15	2	1	2	2	1	2	45	8	7	7	7	7	7	23	21	23	24	22	24	22
22	1SV20CS022	MAMATHA K	28	24	29	14	14	12	12	15	14	2	1	2	2	1	2	43	7	6	6	6	6	6	23	21	20	20	22	22	22
23	1SV20CS023	MANOJ KUMAR PATIL	29	28	29	14	15	14	14	14	15	2	1	2	2	1	2	35	6	6	6	6	6	6	22	22	22	22	21	23	22
24	1SV20CS024	MANTESH H RANGARADDI	29	27	28	14	15	14	13	14	14	2	1	2	2	1	2	44	7	8	8	8	8	8	23	24	24	23	23	24	24
25	1SV20CS025	MOHAMMED NABIL	7	28	25	4	3	14	14	13	12	2	1	2	2	1	2	39	7	6	6	6	6	6	13	10	22	22	20	20	18
26	1SV20CS026	MOHAMMED OWAIS KHAN	27	15	24	13	14	15	15	12	12	2	1	2	2	1	2	23	4	2	2	2	2	2	19	17	19	19	15	16	17
27	1SV20CS028	MONIKA A	29	30	30	14	15	15	15	15	15	2	1	2	2	1	2	47	8	7	7	7	7	7	24	23	24	24	23	24	23
28	1SV20CS029	MYTHRI B N	30	30	30	15	15	15	15	15	15	2	1	2	2	1	2	39	7	8	8	8	8	8	24	24	25	25	24	25	24
29	1SV20CS031	NAYANA D G	29	30	30	15	14	15	15	15	15	2	1	2	2	1	2	34	6	6	6	6	6	6	23	21	23	23	22	23	22
30	1SV20CS032	NETHRA PRASAD D R	25	29	30	12	13	14	13	15	15	2	1	2	2	1	2	23	4	5	5	5	5	5	18	19	21	20	21	22	20
31	1SV20CS033	PARTHA H R	29	30	29	14	15	15	15	14	15	2	1	2	2	1	2	38	6	4	4	4	4	4	22	20	21	21	19	21	20
32	1SV20CS034	PUSHRAJ	29	30	30	14	15	15	15	15	15	2	1	2	2	1	2	42	7	9	9	9	9	9	23	25	26	26	25	26	25
33	1SV20CS035	RAHUL AJITH KUMBAR	29	29	30	15	14	14	15	15	15	2	1	2	2	1	2	41	7	7	7	7	7	7	24	22	23	24	23	24	23



18MN752

Roll No.	USN	Name	180874			T1		T2		T3		ASSIGNMENT 10						EXTERNAL						Final						TOTAL AVG								
			T1	T2	T3	CO1-15	CO2-15	CO3-15	CO4-15	CO5-15	CO6-15	CO1-2	CO2-1	CO3-2	CO4-1	CO5-2	CO6-2	SEE (60)	CO1-10	CO2-10	CO3-10	CO4-10	CO5-10	CO6-10	CO1-27	CO2-26	CO3-27	CO4-26	CO5-27		CO6-27							
34	1SV20CS036	ROUSHANI BEGUM	26	29	30	13	13	14	15	15	15	2	1	2	2	1	2	32	5	6	6	6	6	6	20	20	22	23	22	23	22							
35	1SV20CS037	SADASHISH KUMAR BHOKTA	30	30	30	15	15	15	15	15	15	2	1	2	2	1	2	44	7	8	8	8	8	8	24	24	25	25	24	25	24							
36	1SV20CS038	SAGAR S K	26	22	30	13	13	11	11	15	15	2	1	2	2	1	2	27	5	3	3	3	3	3	20	17	16	16	19	20	18							
37	1SV20CS039	SANIYA SARDAR	28	28	30	14	14	14	14	14	14	2	1	2	2	1	2	41	7	7	7	7	7	7	23	22	23	23	22	23	22							
38	1SV20CS040	SEKH FARDEEN	28	26	29	14	14	13	13	14	15	2	1	2	2	1	2	42	7	5	5	5	5	5	23	20	20	20	20	22	21							
39	1SV20CS041	SHAIK RABBANI	21	21	28	10	11	10	11	14	14	2	1	2	2	1	2	33	6	5	5	5	5	5	18	17	17	18	20	21	19							
40	1SV20CS042	SHARIBA FIRDOSE	28	30	29	14	14	15	15	15	15	2	1	2	2	1	2	38	6	8	8	8	8	8	22	23	25	25	24	25	24							
41	1SV20CS045	SHRAVANAKUMARA T	29	29	29	14	15	14	15	15	14	2	1	2	2	1	2	24	4	6	6	6	6	6	20	22	22	23	22	22	21							
42	1SV20CS046	SIDHANT PANDIT	23	23	24	12	11	11	12	12	12	2	1	2	2	1	2	34	6	4	4	4	4	4	20	16	17	18	17	18	18							
43	1SV20CS047	SMRITI DEWANGAN	24	28	29	12	12	14	14	15	14	2	1	2	2	1	2	47	8	6	6	6	6	6	22	19	22	22	22	22	21							
44	1SV20CS048	SOUVIK KARAK	26	29	30	13	13	15	14	15	15	2	1	2	2	1	2	28	5	4	4	4	4	4	20	18	21	20	20	21	20							
45	1SV20CS049	SRIKIRAN B	29	28	29	14	15	14	14	14	15	2	1	2	2	1	2	29	5	6	6	6	6	6	21	22	22	22	21	23	22							
46	1SV20CS050	SUSHMITHA K	30	30	30	15	15	15	15	15	15	2	1	2	2	1	2	50	8	7	7	7	7	7	25	23	24	24	23	24	24							
47	1SV20CS051	TEJASHWINI R	30	30	29	15	15	15	15	14	15	2	1	2	2	1	2	36	6	7	7	7	7	7	23	23	24	24	22	24	24							
48	1SV20CS052	TEJESHWAR T R	26	29	27	13	13	14	15	14	13	2	1	2	2	1	2	21	4	5	5	5	5	5	19	19	21	22	20	20	20							
49	1SV20CS053	USHA B N	30	29	30	15	15	14	15	15	15	2	1	2	2	1	2	54	9	6	6	6	6	6	26	22	22	23	22	23	23							
50	1SV20CS054	VAISHNAVI BHUSHAN	29	30	30	15	14	15	15	15	15	2	1	2	2	1	2	47	8	8	8	8	8	8	25	23	25	25	24	25	24							
51	1SV20CS055	VARSHITHA T N	29	30	30	14	15	15	15	15	15	2	1	2	2	1	2	41	7	7	7	7	7	7	23	23	24	24	23	24	23							
52	1SV20CS056	VENKATESH DALAWAI	29	30	30	14	15	15	15	15	15	2	1	2	2	1	2	33	6	6	6	6	6	6	22	22	23	23	22	23	23							
																							21.98	20.74	21.91	22.05	21.36	22.47										
																							81.4%	79.8%	81.2%	84.8%	79.1%	83.2%										

  
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