COs-POs - FIRST YEAR

MECHANICAL

2021-2022

SHRIDEVI	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF MECHANICAL ENGINEERING

SUBJECT	ENGINEERING VISUALIZATION	SUBJECT CODE	21EVN15

COURSE OUTCOME

CO1	Understand and visualize the objects with definite shape and dimensions
CO2	Analyze the shape and size of objects through different views
CO3	Develop the lateral surfaces of the object
CO4	Create a 3D view using CAD software.
CO5	Identify the interdisciplinary engineering components or systems through its graphical representation

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.

H.O.D
Dept. of Mechanical
S.I.E.T., TUMKUR -6

PRINCIPAL
SIET., TUMAKURU.

COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY											
FACULTY NAME	RAVI KUMAR K R											
BRANCH	ME			ACADEMIC YEAR			2021-22					
COURSE	B.E	SEMESTER	I	SECTION								
SUBJECT	ENGINEERING VISUALIZATION					SUBJECT CODE		21EVN15				
CO & PO MAPPING												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
OVERALL MAPPING OF SUBJECT												1.86

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	62.89	1.88	1.25			1.88	0.62		0.62	0.62	1.88		1.25
CO2	65.97	1.97	1.31			1.97	0.65		0.65	0.65	1.97		1.31
CO3	53.52	1.60	1.07			1.60	0.53		0.53	0.53	1.60		1.07
CO4	62.01	1.86	1.24			1.86	0.62	0.62		0.62	1.86		0.62
CO5	55.34	1.66	1.10			1.66				0.55	1.66		1.10
AVERAGE	59.94	1.79	1.19			1.79	0.6	0.62	0.6	0.59	1.79		1.06
FINAL ATTAINMENT LEVEL													1.11

H.O.D
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PRINCIPAL
SIET., TUMAKURU.

Academic year	2021-22			SEM	I		Total strength			105			Subject	ENGINEERING VISUALISATION					Subject Code	21EVN15								
SEM:I	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			ASSIGNEMENT / QUIZ(20 M)					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1+C2	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV21CS001	14	11	25	14	12	26	16	13	27	4	4	4	4	4	7.2	7.2	7.2	7.2	7.2	36	25.2	35.2	23.2	25.2	24.2	0.74	0.82	0.68	0.74	0.71
1SV21CS002	16	14	30	16	14	30	16	14	30	4	4	4	4	4	9.8	9.8	9.8	9.8	9.8	49	29.8	43.8	27.8	29.8	27.8	0.88	1.00	0.82	0.88	0.82
1SV21CS003	2	1	3	2	2	4	2	3	5	4	4	4	4	4	4.6	4.6	4.6	4.6	4.6	23	30.6	11.8	10.6	30.6	11.6	0.91	0.26	0.31	0.91	0.34
1SV21CS004	15	8	23	15	7	22	15	9	24	4	4	4	4	4	7.4	7.4	7.4	7.4	7.4	37	26.4	16.4	18.4	26.4	20.4	0.78	0.38	0.54	0.78	0.60
1SV21CS005	3	9	12	3	8	11	3	10	13	4	4	4	4	4	4.8	4.8	4.8	4.8	4.8	24	11.8	20.8	16.8	11.8	18.8	0.35	0.47	0.49	0.35	0.55
1SV21CS006	12	12	24	13	11	24	12	13	25	4	4	4	4	4	8.8	8.8	8.8	8.8	8.8	44	24.8	36.8	23.8	24.8	25.8	0.73	0.84	0.70	0.73	0.76
1SV21CS008	16	11	27	16	10	26	16	12	28	4	4	4	4	4	8.2	8.2	8.2	8.2	8.2	41	28.2	39.2	22.2	28.2	24.2	0.83	0.89	0.65	0.83	0.71
1SV21CS009	13	13	26	13	12	25	13	14	27	4	4	4	4	4	8.6	8.6	8.6	8.6	8.6	43	25.6	38.6	24.6	25.6	26.6	0.75	0.88	0.72	0.75	0.78
1SV21CS010	16	7	23	16	6	22	16	8	24	4	4	4	4	4	7	7	7	7	7	35	27	34	17	27	18	0.79	0.77	0.50	0.79	0.58
1SV21CS011	12	3	15	12	2	14	12	4	16	4	4	4	4	4	7	7	7	7	7	35	23	26	13	23	15	0.68	0.59	0.38	0.68	0.44
1SV21CS012	17	9	26	17	8	25	17	10	27	4	4	4	4	4	8.8	8.8	8.8	8.8	8.8	44	29.8	38.8	20.8	29.8	23.8	0.88	0.88	0.61	0.88	0.67
1SV21CS013	16	7	23	16	6	22	16	8	24	4	4	4	4	4	9	9	9	9	9	45	29	36	19	29	21	0.85	0.82	0.56	0.85	0.62
1SV21CS014	19	5	24	19	4	23	19	6	25	4	4	4	4	4	7.6	7.6	7.6	7.6	7.6	38	30.6	35.6	13.6	30.6	17.6	0.90	0.81	0.40	0.90	0.52
1SV21CS015	12	16	28	12	15	27	12	17	29	4	4	4	4	4	9.6	9.6	9.6	9.6	9.6	48	25.6	43.6	28.6	25.6	30.6	0.75	0.99	0.84	0.75	0.90
1SV21CS016	16	13	29	16	13	29	16	13	29	4	4	4	4	4	9.2	9.2	9.2	9.2	9.2	46	29.2	42.2	26.2	29.2	26.2	0.86	0.96	0.77	0.86	0.77
1SV21CS017	11	11	22	11	12	23	11	10	21	4	4	4	4	4	9.2	9.2	9.2	9.2	9.2	46	24.2	35.2	25.2	24.2	23.2	0.71	0.80	0.74	0.71	0.68
1SV21CS018	15	15	30	15	15	30	15	15	30	4	4	4	4	4	9.4	9.4	9.4	9.4	9.4	47	28.4	43.4	28.4	28.4	28.4	0.84	0.99	0.84	0.84	0.84
1SV21CS019	12	10	22	12	10	22	12	10	22	4	4	4	4	4	8.8	8.8	8.8	8.8	8.8	44	22.8	32.8	20.8	22.8	20.8	0.67	0.75	0.61	0.67	0.61
1SV21CS020	17	9	26	17	8	25	17	10	27	4	4	4	4	4	9	9	9	9	9	45	30	39	21	30	23	0.88	0.89	0.62	0.88	0.68
1SV21CS021	19	0	19	19	0	19	19	0	19	4	4	4	4	4	5	5	5	5	5	25	29	28	9	28	9	0.82	0.64	0.26	0.82	0.26
1SV21CS022	13	15	28	13	15	28	13	15	28	4	4	4	4	4	9.4	9.4	9.4	9.4	9.4	47	26.4	41.4	28.4	26.4	28.4	0.78	0.94	0.84	0.78	0.84
1SV21CS023	11	8	19	11	8	19	11	8	19	4	4	4	4	4	8.2	8.2	8.2	8.2	8.2	41	23.2	31.2	20.2	23.2	20.2	0.68	0.71	0.59	0.68	0.59
1SV21CS024	16	8	24	16	8	24	16	8	24	4	4	4	4	4	9.2	9.2	9.2	9.2	9.2	46	28.2	37.2	21.2	29.2	21.2	0.86	0.85	0.62	0.86	0.62
1SV21CS025	13	10	23	13	10	23	13	10	23	4	4	4	4	4	9.2	9.2	9.2	9.2	9.2	46	26.2	36.2	23.2	26.2	23.2	0.77	0.82	0.68	0.77	0.68
1SV21CS026	11	13	24	11	13	24	11	13	24	4	4	4	4	4	8.8	8.8	8.8	8.8	8.8	44	23.8	36.8	25.8	23.8	25.8	0.70	0.84	0.76	0.70	0.76
1SV21CS027	14	12	26	14	12	26	14	12	26	4	4	4	4	4	7.8	7.8	7.8	7.8	7.8	39	25.8	37.8	23.8	25.8	23.8	0.76	0.86	0.70	0.76	0.70
1SV21CS028	17	2	19	17	2	19	17	2	19	4	4	4	4	4	4.8	4.8	4.8	4.8	4.8	24	25.8	27.8	10.8	25.8	30.8	0.76	0.63	0.32	0.76	0.32
1SV21CS029	11	6	17	11	6	17	11	6	17	4	4	4	4	4	7	7	7	7	7	35	22	28	17	22	17	0.65	0.64	0.50	0.65	0.50
1SV21CS030	15	12	27	15	12	27	15	12	27	4	4	4	4	4	6.4	6	6	6	6	32	25.6	37	22	25	22	0.75	0.84	0.65	0.74	0.65
1SV21CS031	2	1	3	2	3	5	2	2	4	4	4	4	4	4	6.8	6.8	6.8	6.8	6.8	34	12.8	13.8	13.8	12.8	12.8	0.38	0.31	0.41	0.38	0.38
1SV21CS032	11	2	13	11	2	13	11	2	13	4	4	4	4	4	5.2	5.2	5.2	5.2	5.2	26	20.2	22.2	11.2	20.2	11.2	0.59	0.50	0.33	0.59	0.33
1SV21CS033	12	14	26	12	13	25	12	15	27	4	4	4	4	4	7.6	7.6	7.6	7.6	7.6	38	23.6	37.6	24.6	23.6	26.6	0.69	0.85	0.72	0.69	0.78
1SV21CS034	15	3	18	15	3	17	15	4	19	4	4	4	4	4	5.8	5.8	5.8	5.8	5.8	29	24.8	27.8	11.8	24.8	13.8	0.73	0.63	0.35	0.73	0.41
1SV21CS035	13	16	29	13	16	29	13	16	29	4	4	4	4	4	9.6	9.6	9.6	9.6	9.6	48	26.6	42.6	29.6*	26.6	29.6	0.78	0.97	0.87	0.78	0.87
1SV21CS036	12	13	25	12	13	25	12	13	25	4	4	4	4	4	9.2	9.2	9.2	9.2	9.2	46	25.2	38.2	26.2	25.2	26.2	0.74	0.87	0.77	0.74	0.77
1SV21CS037	14	7	21	14	7	21	14	7	21	4	4	4	4	4	8.2	8.2	8.2	8.2	8.2	41	26.2	33.2	19.2	26.2	19.2	0.77	0.75	0.56	0.77	0.56
1SV21CS038	16	10	26	16	10	26	16	10	26	4	4	4	4	4	8.8	8.8	8.8	8.8	8.8	44	30.8	35.8	17.8	30.8	17.8	0.91	0.81	0.52	0.91	0.52
1SV21CS039	11	1	12	11	1	12	11	1	12	4	4	4	4	4	9.8	9.8	9.8	9.8	9.8	49	30.8	43.8	26.8	30.8	26.8	0.91	1.00	0.79	0.91	0.79
1SV21CS040	14	10	24	14	10	24	14	10	26	4	4	4	4	4	6.4	6.4	6.4	6.4	6.4	32	23.4	29.4	16.4	23.4	16.4	0.69	0.67	0.48	0.69	0.48
1SV21CS041	10	5	23	18	5	23	18	5	23	4	4	4	4	4	7.8	7.8	7.8	7.8	7.8	39	22.8	32.8	21.8	22.8	21.8	0.67	0.75	0.64	0.67	0.64
1SV21CS042	17	13	30	17	13	30	17	13	30	4	4	4	4	4	9.2	9.2	9.2	9.2	9.2	46	28.2	41.2	28.2	28.2	28.2	0.77	0.94	0.83	0.77	0.83
1SV21CS043	13	6	19	13	6	19	13	6	19	4	4	4	4	4	8.4	8.4	8.4	8.4	8.4	42	24.4	26.4	14.4	24.4	14.4	0.72	0.60	0.42	0.72	0.42
1SV21CS044	11	10	21	11	10	21	11	10	21	4	4	4	4	4	7.2	7.2	7.2	7.2	7.2	36	25.2	35.2	21.2	25.2	21.2	0.74	0.80	0.62	0.74	0.62
1SV21CS045	13	15	28	13	15	28	13	15	28	4	4	4	4	4	9.4	9.4	9.4	9.4	9.4	47	24.4	39.4	29.4	24.4	27.4	0.72	0.90	0.86	0.72	0.81
1SV21CS046	12	2	14	12	2	14	12	2	14	4	4	4	4	4	4.2	4.2	4.2	4.2	4.2	21	12.2	16.2	9.2	12.2	11.2	0.36	0.32	0.27	0.36	0.33
1SV21CS047	4	1	5	4	2	6	4	3	7	4	4	4	4	4	8.8	8.8	8.8	8.8	8.8	44	31.8	36.8	17.8	31.8	17.8	0.94	0.84	0.52	0.94	0.52
1SV21CS048	14	10	24	14	10	24	14	10	24	4	4	4	4	4	5.2	5.2	5.2	5.2	5.2	26	20.2	21.2	11.2	20.2	9.2	0.59	0.48	0.33	0.59	0.27
1SV21CS049	11	15	26	11	16	27	11	14	25	4	4	4	4	4	7.8	7.8	7.8	7.8	7.8	39	29.8	32.8	14.8	29.8	14.8	0.87	0.74	0.43	0.87	0.43
1SV21CS050	17	9	26	17	9	26	17	9	26	4	4	4	4	4	5.6	5.6	5.6	5.6	5.6	28	22.6	37.6	24.8	22.6	24.6	0.66	0.85	0.72	0.66	0.72
1SV21CS051	4	2	6	4	3	7	4	3	7	4	4	4	4	4	9.2	9.2	9.2	9.2	9.2	46	25.2	32.2	20.2	25.2	20.2	0.74	0.73	0.59	0.74	0.59
1SV21CS052	19	5	24	19	5	24	19	5	24	4	4	4	4	4	5.4	5.4	5.4	5.4	5.4	27	26.4	31.4	14.4	26.4	14.4	0.78	0.71	0.42	0.78	0.42
1SV21CS053	11	1	12	11	2	13	11	0	11	4	4	4	4	4	7.2	7.2	7.2	7.2	7.2	36	22.2	36.2	25.2	22.2	25.2	0.65	0.82	0.74	0.65	0.74
1SV21CS054	18	3	21	18	3	21	18	3	21	4	4	4	4	4	9.2	9.2	9.2	9.2	9.2	46	28.2	39.2	24.2	28.2	24.2	0.83	0.89	0.71	0.83	0.71
1SV21CS055	13	15	28	13	15	28	13	15	28	4	4	4	4	4	9.4	9.4	9.4	9.4	9.4	47	29.4	40.4	24.4	29.4	24.4	0.86	0.92	0.72	0.86	0.72
1SV21CS056	12	7	19	12	7	19	12	7	19	4	4	4	4	4	7.8	7.8	7.8	7.8	7.8	39	26.8	32.8	18.8	26.8	16.8	0.79	0.75	0.55	0.79	0.49
1SV21CS057	17	5	22	17	5	22	17	5	22	4	4	4	4	4	6.6	6.6	6.6	6.6	6.6	33	21.6	31.6	19.6	21.6	21.6	0.64	0.72	0.58	0.64	0.64
1SV21CS058	11	14	25	11	14	25	11	14	25	4	4	4	4	4	8.2	8.2	8.2	8.2	8.2	41	25.2	39.2	26.2	25.2	26.2	0.74	0.89	0.77	0.74	0.77
1SV21CS059	15	11	26	15	11	26	15	11	26	4	4	4	4	4	3.8	3.8	3.8	3.8	3.8	19	9.8	12.8	9.8	9.8	11.8	0.29	0.29	0.29	0.29	0.35
1SV21CS060	16	11	27	16	11	27	16	11	27	4	4	4	4	4	1.2	1.2	1.2	1.2	1.2	6	7.2	9.2	9.2	7.2	8.2	0.21	0.21	0.27	0.21	0.24
1SV21CS061	15	6	21	15	7	22	15	5	20	4	4	4	4	4	6.8	6.8	6.8	6.8	6.8	34	13.8	18.8	16.8	11.8	18.8	0.35	0.43	0.49	0.35	0.55
1SV21CS062	11	10	21	11	9	20	11	11	22	4	4	4	4	4	6.2	6.2	6.2	6.2	6.2	31	23.2	25.2	12.2	23.2	12.2	0.68	0.57	0.36	0.68	0.36
1SV21CS063	13	14	27	13	14	27	13	14	27	4	4	4	4	4	6	6	6	6	6	30	22	38	25	22	27	0.65	0.86	0.74	0.65	0.79
1SV21CS064	3	3	5	2	2	4	2	4	6	4	4	4	4	4	1.4	1.4	1.4	1.4	1.4	7	9.4	15.4	10.4	9.4	12.4	0.28	0.35	0.31	0.28	0.38
1SV21CS065	2	2	4	2	4	6	2	3	5	4	4	4	4	4	6.4	6.4	6.4	6.4	6.4	32	23.4	36.4	22.4	23.4	24.4	0.69	0.83	0.66	0.69	0.76
1SV21CS066	1	7	8	1	6	7	1	8	9	4	4	4	4	4	7.8	7.8	7.8	7.8	7.8	39	24.8	40.8	27.8	24.8	27.8	0.73	0.93	0.82	0.73	0.82
1SV21CS067	13	2	15	13	2	15	13	3	15	4	4	4	4	4	5.6	5.6	5.6	5.6	5.6	28	22.8	30.8	23.6	22.8	23.6	0.66	0.83	0.69	0.66	0.69
1SV21CS068	12	16	28	12	15	27	12	17	29	4	4	4	4	4	6.2	6.2	6.2	6.2	6.2	31	23.2	25.2	12.2	23.2	12.2	0.68	0.57	0.36	0.68	0.36
1SV21CS069	4	6	10	4	5	9	4	7	11	4	4	4	4	4	6	6	6	6	6	30	22	38	25	22	27	0.65	0.86	0.74	0.65	0.79
1SV21CS070	13	13	26	13	12	25	13	14	27	4	4	4	4	4	1.4	1.4	1.4	1.4	1.4	7	9.4	15.4	10.4	9.4	12.4	0.28	0.35	0.31	0.28	0.38
1SV21CS071	13	16	29	13	16	29	13	16	29	4	4	4	4	4	6.4	6.4	6.4	6.4	6.4	32	23.4	36.4	22.4	23.4	24.4	0.69	0.83	0.66	0.69	0.72
1SV21CS072	11	16	27	11	16	27	11	16	27	4	4	4	4	4	7.8	7.8	7.8	7.8	7.8	39	24.8	40.8	27.8	24.8	27.8	0.73	0.93	0.82	0.73	0.82
1SV21CS073	13	14	27	13	14	27	13	14	27	4	4	4	4	4	5.6	5.6	5.6	5.6	5.6	28	22.8	30.8	23.6	22.8	23.6	0.66	0.83	0.69	0.66	0.69

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15V21CI074	1	5	6	1	4	5	1	6	7	4	4	4	4	4	3.8	3.8	3.8	3.8	3.8	19	8.8	13.8	11.8	8.8	13.8	0.26	0.31	0.35	0.26	0.41
15V21CI075	9	2	11	9	2	11	9	2	11	4	4	4	4	4	4.6	4.6	4.6	4.6	4.6	23	17.6	19.6	10.6	17.6	10.6	0.52	0.45	0.31	0.52	0.31
15V21CI076	13	13	26	13	13	26	13	13	26	4	4	4	4	4	5.6	5.6	5.6	5.6	5.6	28	22.8	35.6	22.6	22.8	22.6	0.66	0.81	0.68	0.66	0.66
15V21CI077	12	11	23	12	11	23	12	11	23	4	4	4	4	4	4.6	4.6	4.6	4.6	4.6	23	20.8	31.6	19.6	20.6	19.6	0.61	0.72	0.58	0.61	0.58
15V21CI078	11	14	25	11	14	25	11	14	25	4	4	4	4	4	4.8	4.8	4.8	4.8	4.8	24	19.8	33.8	21.8	19.8	22.8	0.58	0.77	0.67	0.58	0.67
15V21CI079	10	17	27	10	17	27	10	17	27	4	4	4	4	4	5.6	5.6	5.6	5.6	5.6	28	19.6	36.6	26.6	19.6	26.6	0.58	0.83	0.78	0.58	0.78
15V21CI080	16	11	27	16	11	27	16	11	27	4	4	4	4	4	6	6	6	6	6	30	26	27	21	26	21	0.76	0.84	0.62	0.76	0.62
15V21CI081	5	1	6	5	0	5	5	2	7	4	4	4	4	4	3.6	3.6	3.6	3.6	3.6	18	12.6	13.6	7.6	12.6	9.6	0.37	0.31	0.22	0.37	0.28
15V21CI082	13	15	28	13	15	28	13	15	28	4	4	4	4	4	6.6	6.6	6.6	6.6	6.6	33	23.6	38.6	25.6	23.6	25.6	0.69	0.88	0.75	0.69	0.75
15V21CI083	13	5	18	13	5	18	13	5	18	4	4	4	4	4	4.4	4.4	4.4	4.4	4.4	22	21.4	26.4	13.4	21.4	13.4	0.63	0.60	0.39	0.63	0.39
15V21CI084	5	4	9	5	4	9	5	4	9	4	4	4	4	4	2	2	2	2	2	10	11	15	10	11	10	0.32	0.34	0.29	0.32	0.29
15V21CI085	3	2	5	3	2	5	3	2	5	4	4	4	4	4	1.8	1.8	1.8	1.8	1.8	9	8.8	10.8	7.8	8.8	7.8	0.26	0.25	0.23	0.26	0.23
15V21CI086	18	10	28	18	10	28	18	10	28	4	4	4	4	4	6.4	6.4	6.4	6.4	6.4	32	28.4	38.4	20.4	28.4	20.4	0.84	0.87	0.60	0.84	0.60
15V21CI087	7	3	10	7	3	10	7	3	10	4	4	4	4	4	2	2	2	2	2	10	13	16	9	13	9	0.38	0.36	0.26	0.38	0.26
15V21CV001	8	6	14	8	6	14	7	14	14	4	4	4	4	4	5.6	5.6	5.6	5.6	5.6	28	17.6	21.6	17.6	16.6	23.6	0.52	0.49	0.52	0.49	0.69
15V21CV002	3	3	6	2	3	5	3	4	7	4	4	4	4	4	1.8	1.8	1.8	1.8	1.8	9	8.8	10.8	8.8	8.8	9.8	0.26	0.25	0.26	0.26	0.29
15V21CV003	12	1	13	11	2	13	2	11	13	4	4	4	4	4	4.8	4.8	4.8	4.8	4.8	24	20.8	20.8	10.8	10.8	19.8	0.61	0.47	0.32	0.32	0.58
15V21CV004	7	6	13	4	9	13	5	8	13	4	4	4	4	4	4.8	4.8	4.8	4.8	4.8	24	15.8	18.8	17.8	13.8	16.8	0.46	0.43	0.52	0.41	0.49
15V21CV005	2	4	6	4	1	5	4	3	7	4	4	4	4	4	1.2	1.2	1.2	1.2	1.2	6	7.2	13.2	6.2	9.2	8.2	0.21	0.30	0.18	0.27	0.24
15V21CV006	2	5	7	2	4	6	4	4	8	4	4	4	4	4	1.4	1.4	1.4	1.4	1.4	7	7.4	12.4	9.4	9.4	9.4	0.21	0.28	0.28	0.28	0.28
15V21CV007	3	7	10	4	5	9	2	9	11	4	4	4	4	4	6	6	6	6	6	30	15	21	15	12	19	0.88	0.68	0.44	0.35	0.56
15V21CV008	4	5	9	5	4	9	4	5	9	4	4	4	4	4	1.2	1.2	1.2	1.2	1.2	6	9.2	13.2	11.2	9.2	10.2	0.27	0.30	0.33	0.27	0.30
15V21CV010	5	6	11	3	8	11	4	7	11	4	4	4	4	4	2.8	2.8	2.8	2.8	2.8	14	11.8	15.8	14.8	10.8	13.8	0.35	0.36	0.44	0.32	0.41
15V21CV011	3	2	5	3	1	4	3	3	6	4	4	4	4	4	1.4	1.4	1.4	1.4	1.4	7	8.4	10.4	6.4	7.4	7.4	0.25	0.24	0.18	0.22	0.22
15V21CV012	4	3	7	3	5	7	3	4	7	4	4	4	4	4	2.6	2.6	2.6	2.6	2.6	13	10.6	11.6	11.6	9.6	10.6	0.31	0.26	0.34	0.28	0.31
15V21CV013	0	0	0	0	0	0	0	0	0	4	4	4	4	4	0	0	0	0	0	0	4	4	4	4	4	0.12	0.09	0.12	0.12	0.12
15V21CV014	3	3	6	2	4	6	3	5	6	4	4	4	4	4	1.2	1.2	1.2	1.2	1.2	6	8.2	10.2	9.2	6.2	10.2	0.24	0.23	0.27	0.18	0.30
15V21CV015	17	6	23	11	11	22	13	11	24	4	4	4	4	4	5.2	5.2	5.2	5.2	5.2	26	26.2	26.2	20.2	22.2	20.2	0.77	0.60	0.58	0.65	0.59
15V21EE001	3	3	6	1	4	5	3	5	7	4	4	4	4	4	1.8	1.8	1.8	1.8	1.8	9	8.8	9.8	9.8	7.8	10.8	0.26	0.22	0.29	0.23	0.32
15V21EE002	11	3	14	12	2	14	13	1	14	4	4	4	4	4	4.8	4.8	4.8	4.8	4.8	24	19.8	23.8	10.8	21.8	9.8	0.58	0.54	0.32	0.64	0.29
15V21EE003	19	9	28	15	12	27	11	18	29	4	4	4	4	4	5.8	5.8	5.8	5.8	5.8	29	28.8	33.8	21.8	20.8	27.8	0.85	0.77	0.64	0.61	0.82
15V21EE005	9	3	12	1	11	12	8	4	12	4	4	4	4	4	5.6	5.6	5.6	5.6	5.6	28	18.6	13.6	20.6	17.6	13.6	0.55	0.31	0.61	0.52	0.80
15V21EE006	18	11	29	19	9	28	14	16	30	4	4	4	4	4	7.8	7.8	7.8	7.8	7.8	39	29.8	41.8	20.8	25.8	27.8	0.88	0.95	0.83	0.76	0.82
TOTAL	1172	821	2000	1144	818	1962	1141	903	2037	420	420	420	420	420	653	652.8	652.8	652.8	652.8	3265	2245	3047.6	1910.6	2213.8	1875.6	66.0	68.3	56.2	65.1	58.1
No of Students	105	0	105	105	0	105	105	0	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
Average	11.16	7.92	19.08	10.90	7.98	18.88	10.87	8.53	19.40	4	4	4	4	4	6.22	6.21	6.22	6.22	6.22	31.10	21.38	29.02	18.20	21.08	18.82	62.89	65.97	53.52	62.01	55.34

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SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY
SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF MECHANICAL ENGINEERING

SUBJECT	ENGINEERING VISUALIZATION	SUBJECT CODE	21EVN25

COURSE OUTCOME

CO1	Understand and visualize the objects with definite shape and dimensions
CO2	Analyze the shape and size of objects through different views
CO3	Develop the lateral surfaces of the object
CO4	Create a 3D view using CAD software.
CO5	Identify the interdisciplinary engineering components or systems through its graphical representation

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	RAVI KUMAR K R				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	II	SECTION	
SUBJECT	ENGINEERING VISUALIZATION	SUBJECT CODE	21EVN25		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2			3	1		1	1	3		2
CO2	3	2			3	1		1	1	3		2
CO3	3	2			3	1		1	1	3		2
CO4	3	2			3	1	1		1	3		1
CO5	3	2			3				1	3		2
AVERAGE	3	2			3	1	1	1	1	3		1.8
											OVERALL MAPPING OF SUBJECT	1.86

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	69.02	2.07	1.38		2.07	0.69		0.69	0.68	2.07			1.38
CO2	71.74	2.15	1.43		2.15	0.71		0.71	0.71	2.15			1.43
CO3	59.60	1.78	1.19		1.78	0.59		0.59	0.59	1.78			1.19
CO4	68.98	2.06	1.37		2.06	0.68	0.68		0.68	2.06			0.68
CO5	59.60	1.78	1.19		1.78	0.59			0.59	1.78			1.19
AVERAGE	65.66	1.96	1.31		1.96	0.66	0.68	0.66	0.47	1.96			1.17
												FINAL ATTAINMENT LEVEL	1.20

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Academic year	2021-22			SEM	II		Total strength					Subject	ENGINEERING GRAPHICS					Subject Code	21EVN25									
SEM:II	IA TEST 1(50M)			IA TEST 2(50M)			IA TEST 3(50M)			ASSIGNMENT / QUIZ(10 M)			SEE MARKS(100)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1+2	CO2	CO3	CO4	CO5	TOTAL	CO1=16	CO2=40	CO3=24	CO4=16	CO5=16	CO1	CO2	CO3	CO4	CO5
1SV21AD001	2	3	5	2	3	5	2	3	5	4	4	4	4	4	5.2	5.2	5.2	5.2	5.2	26	11.2	14.2	12.2	11.2	12.2	0.33	0.52	0.36	0.33	0.36
1SV21AD002	15	6	21	15	6	21	15	6	21	4	4	4	4	4	6.4	6.4	6.4	6.4	6.4	32	23.4	29.6	14.4	23.4	14.4	0.69	0.87	0.42	0.69	0.42
1SV21AD003	17	10	27	17	10	27	17	10	27	4	4	4	4	4	6	6	6	6	6	30	27	37	20	27	20	0.79	0.84	0.59	0.79	0.59
1SV21AD004	12	3	15	12	3	15	12	3	15	4	4	4	4	4	1.6	1.6	1.6	1.6	1.6	8	17.6	20.6	8.6	17.6	8.6	0.52	0.47	0.25	0.52	0.25
1SV21AD005	12	13	25	12	13	25	12	13	25	4	4	4	4	4	9.4	9.4	9.4	9.4	9.4	47	25.4	38.4	26.4	25.4	26.4	0.75	0.87	0.78	0.75	0.78
1SV21AD006	11	3	14	11	3	14	11	3	14	4	4	4	4	4	4.4	4.4	4.4	4.4	4.4	22	19.4	22.4	11.4	19.4	11.4	0.57	0.51	0.34	0.57	0.34
1SV21AD007	1	1	2	1	1	2	1	1	2	4	4	4	4	4	0	0	0	0	0	0	5	6	5	5	5	0.15	0.14	0.15	0.15	0.15
1SV21AD008	1	11	12	1	11	12	1	11	12	4	4	4	4	4	4.8	4.8	4.8	4.8	4.8	24	9.8	20.8	19.8	9.8	19.8	0.29	0.47	0.58	0.29	0.58
1SV21AD009	12	10	22	12	10	22	12	10	22	4	4	4	4	4	7.6	7.6	7.6	7.6	7.6	38	23.6	33.6	21.6	23.6	21.6	0.69	0.76	0.64	0.69	0.64
1SV21AD010	2	5	7	2	5	7	2	5	7	4	4	4	4	4	4.4	4.4	4.4	4.4	4.4	22	10.4	25.4	13.4	10.4	13.4	0.31	0.55	0.39	0.31	0.39
1SV21AD011	13	6	19	13	6	19	13	6	19	4	4	4	4	4	5.6	5.6	5.6	5.6	5.6	28	22.6	28.6	15.6	22.6	15.6	0.66	0.65	0.46	0.66	0.46
1SV21AD012	14	12	26	14	12	26	14	12	26	4	4	4	4	4	9	9	9	9	9	45	27	38	25	27	25	0.79	0.89	0.74	0.79	0.74
1SV21AD013	11	3	14	11	3	14	11	3	14	4	4	4	4	4	6	6	6	6	6	30	21	34	19	21	19	0.62	0.55	0.38	0.62	0.38
1SV21AD015	1	10	11	1	10	11	1	10	11	4	4	4	4	4	9.2	9.2	9.2	9.2	9.2	46	14.2	24.2	23.2	14.2	23.2	0.42	0.55	0.68	0.42	0.68
1SV21AD016	12	11	23	12	11	23	12	11	23	4	4	4	4	4	9.8	9.8	9.8	9.8	9.8	49	25.8	36.8	24.8	25.8	24.8	0.76	0.84	0.73	0.76	0.73
1SV21AD017	12	11	23	12	11	23	12	11	23	4	4	4	4	4	9.2	9.2	9.2	9.2	9.2	46	25.2	36.2	24.2	25.2	24.2	0.74	0.82	0.71	0.74	0.71
1SV21AD018	3	1	3	2	1	3	2	1	3	4	4	4	4	4	0	0	0	0	0	0	6	7	5	6	5	0.18	0.16	0.15	0.18	0.15
1SV21AD019	14	10	24	14	10	24	14	10	24	4	4	4	4	4	9.6	9.6	9.6	9.6	9.6	48	27.6	37.6	23.6	27.6	23.6	0.81	0.85	0.69	0.81	0.69
1SV21AD020	12	9	21	12	9	21	12	9	21	4	4	4	4	4	8.8	8.8	8.8	8.8	8.8	44	24.8	33.8	21.8	24.8	21.8	0.73	0.77	0.64	0.73	0.64
1SV21AD021	11	13	24	11	13	24	11	13	24	4	4	4	4	4	9.6	9.6	9.6	9.6	9.6	48	24.6	37.6	*26.6	24.6	26.6	0.72	0.85	0.78	0.72	0.78
1SV21AD022	12	12	24	12	12	24	12	12	24	4	4	4	4	4	9.4	9.4	9.4	9.4	9.4	47	25.4	37.4	25.4	25.4	25.4	0.75	0.85	0.75	0.75	0.75
1SV21AD023	2	3	5	2	3	5	2	3	5	4	4	4	4	4	4.2	4.2	4.2	4.2	4.2	21	10.2	13.2	11.2	10.2	11.2	0.30	0.30	0.33	0.30	0.33
1SV21AD024	4	3	7	4	3	7	4	3	7	4	4	4	4	4	0	0	0	0	0	0	8	11	7	8	7	0.24	0.25	0.21	0.24	0.21
1SV21AD025	12	7	19	12	7	19	12	7	19	4	4	4	4	4	6.8	6.8	6.8	6.8	6.8	34	22.8	29.8	17.8	22.8	17.8	0.67	0.68	0.52	0.67	0.52
1SV21AD026	15	15	30	15	15	30	15	15	30	4	4	4	4	4	9.6	9.6	9.6	9.6	9.6	48	28.6	43.6	28.6	28.6	28.6	0.84	0.99	0.84	0.84	0.84
1SV21AD027	22	0	22	22	0	22	22	0	22	4	4	4	4	4	5.4	5.4	5.4	5.4	5.4	27	31.4	31.4	9.4	31.4	9.4	0.92	0.71	0.28	0.92	0.28
1SV21AD028	12	8	20	12	8	20	12	8	20	4	4	4	4	4	5.8	5.8	5.8	5.8	5.8	29	21.8	29.8	17.8	21.8	17.8	0.64	0.68	0.52	0.64	0.52
1SV21AD029	11	9	20	11	9	20	11	9	20	4	4	4	4	4	6.8	6.8	6.8	6.8	6.8	34	21.8	30.8	19.8	21.8	19.8	0.64	0.70	0.58	0.64	0.58
1SV21AD030	10	12	22	10	12	22	10	12	22	4	4	4	4	4	5.8	5.8	5.8	5.8	5.8	29	19.8	31.8	21.8	19.8	21.8	0.58	0.72	0.64	0.58	0.64
1SV21AD031	11	4	15	11	4	15	11	4	15	4	4	4	4	4	6.4	6.4	6.4	6.4	6.4	32	21.4	25.4	14.4	21.4	14.4	0.63	0.58	0.42	0.63	0.42
1SV21AD032	13	6	19	13	6	19	13	6	19	4	4	4	4	4	7.8	7.8	7.8	7.8	7.8	39	24.8	30.8	17.8	24.8	17.8	0.73	0.70	0.52	0.73	0.52
1SV21AD033	12	8	20	12	8	20	12	8	20	4	4	4	4	4	6.2	6.2	6.2	6.2	6.2	31	22.2	30.2	18.2	22.2	18.2	0.65	0.69	0.54	0.65	0.54
1SV21AD034	11	15	26	11	15	26	11	15	26	4	4	4	4	4	9.4	9.4	9.4	9.4	9.4	47	24.4	35.4	28.4	24.4	28.4	0.72	0.90	0.84	0.72	0.84
1SV21AD035	13	15	28	13	15	28	13	15	28	4	4	4	4	4	9.6	9.6	9.6	9.6	9.6	48	26.6	41.6	28.6	26.6	28.6	0.78	0.95	0.84	0.78	0.84
1SV21AD036	12	3	15	12	3	15	12	3	15	4	4	4	4	4	4.4	4.4	4.4	4.4	4.4	22	20.4	25.4	11.4	20.4	11.4	0.60	0.53	0.34	0.60	0.34
1SV21AD037	11	13	24	11	13	24	11	13	24	4	4	4	4	4	9.8	9.8	9.8	9.8	9.8	49	24.8	37.8	26.8	24.8	26.8	0.73	0.88	0.79	0.73	0.79
1SV21AD038	13	17	30	13	17	30	13	17	30	4	4	4	4	4	6.8	6.8	6.8	6.8	6.8	34	23.8	40.8	27.8	23.8	27.8	0.70	0.93	0.82	0.70	0.82
1SV21AD039	11	4	15	11	4	15	11	4	15	4	4	4	4	4	8.6	8.6	8.6	8.6	8.6	43	23.6	27.6	16.6	23.6	16.6	0.69	0.63	0.49	0.69	0.49
1SV21AD040	3	2	5	3	2	5	3	2	5	4	4	4	4	4	4.2	4.2	4.2	4.2	4.2	21	11.2	13.2	10.2	11.2	10.2	0.33	0.30	0.30	0.33	0.30
1SV21IS001	12	10	22	12	10	22	12	10	22	4	4	4	4	4	9.2	9.2	9.2	9.2	9.2	46	25.2	35.2	23.2	25.2	23.2	0.74	0.80	0.68	0.74	0.68

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1SV21S002	11	15	26	11	15	26	11	15	26	4	4	4	4	4	8.8	8.8	8.8	8.8	8.8	44	23.8	33.8	27.8	23.8	27.8	0.70	0.88	0.82	0.70	0.82
1SV21S003	13	13	26	13	13	26	13	13	26	4	4	4	4	4	9	9	9	9	9	45	26	39	26	26	26	0.76	0.89	0.76	0.76	0.76
1SV21S004	17	13	30	17	13	30	17	13	30	4	4	4	4	4	9.8	9.8	9.8	9.8	9.8	49	30.8	43.8	26.8	30.8	26.8	0.91	1.00	0.79	0.81	0.79
1SV21S005	18	11	29	18	11	29	18	11	29	4	4	4	4	4	9.8	9.8	9.8	9.8	9.8	49	31.8	42.8	24.8	31.8	24.8	0.94	0.97	0.73	0.94	0.73
1SV21S006	12	12	24	12	12	24	12	12	24	4	4	4	4	4	9.6	9.6	9.6	9.6	9.6	48	25.6	37.6	25.6	25.6	25.6	0.75	0.85	0.75	0.75	0.75
1SV21S007	14	14	28	14	14	28	14	14	28	4	4	4	4	4	5.4	5.4	5.4	5.4	5.4	27	23.4	37.4	23.4	23.4	23.4	0.69	0.85	0.69	0.69	0.69
1SV21S008	12	9	21	12	9	21	12	9	21	4	4	4	4	4	8.2	8.2	8.2	8.2	8.2	41	24.2	33.2	21.2	24.2	21.2	0.71	0.75	0.62	0.71	0.62
1SV21S009	11	15	26	11	15	26	11	15	26	4	4	4	4	4	9.2	9.2	9.2	9.2	9.2	46	24.2	39.2	28.2	24.2	28.2	0.71	0.89	0.83	0.71	0.83
1SV21S010	14	9	23	14	9	23	14	9	23	4	4	4	4	4	9.6	9.6	9.6	9.6	9.6	48	27.6	35.6	22.6	27.6	22.6	0.81	0.83	0.66	0.81	0.66
1SV21S011	13	12	25	13	12	25	13	12	25	4	4	4	4	4	9.2	9.2	9.2	9.2	9.2	46	26.2	38.2	25.2	26.2	25.2	0.77	0.87	0.74	0.77	0.74
1SV21S012	12	12	24	12	12	24	12	12	24	4	4	4	4	4	8.8	8.8	8.8	8.8	8.8	44	24.8	36.8	24.8	24.8	24.8	0.73	0.84	0.73	0.73	0.73
1SV21S013	11	11	22	11	11	22	11	11	22	4	4	4	4	4	8	8	8	8	8	40	23	34	23	23	23	0.68	0.77	0.68	0.68	0.68
1SV21S014	13	15	28	13	15	28	13	15	28	4	4	4	4	4	9.6	9.6	9.6	9.6	9.6	48	26.6	41.6	28.6	26.6	28.6	0.78	0.95	0.84	0.78	0.84
1SV21S015	12	11	23	12	11	23	12	11	23	4	4	4	4	4	9.4	9.4	9.4	9.4	9.4	47	25.4	36.4	24.4	25.4	24.4	0.75	0.83	0.72	0.75	0.72
1SV21S016	13	0	13	13	0	13	13	0	13	4	4	4	4	4	6.6	6.6	6.6	6.6	6.6	33	23.6	23.6	10.6	23.6	10.6	0.69	0.54	0.21	0.69	0.21
1SV21S017	11	8	19	11	8	19	11	8	19	4	4	4	4	4	5.2	5.2	5.2	5.2	5.2	26	20.2	28.2	17.2	20.2	17.2	0.59	0.64	0.51	0.59	0.51
1SV21S018	12	10	22	12	10	22	12	10	22	4	4	4	4	4	6	6	6	6	6	30	22	32	20	22	20	0.65	0.73	0.59	0.65	0.59
1SV21S019	12	16	28	12	16	28	12	16	28	4	4	4	4	4	9.8	9.8	9.8	9.8	9.8	49	25.8	41.8	29.8	25.8	29.8	0.76	0.95	0.88	0.76	0.88
1SV21S020	0	0	0	0	0	0	0	0	0	4	4	4	4	4	0	0	0	0	0	0	4	4	4	4	4	0.12	0.09	0.12	0.12	0.12
1SV21S021	12	7	19	12	7	19	12	7	19	4	4	4	4	4	5.2	5.2	5.2	5.2	5.2	26	21.2	28.2	16.2	21.2	16.2	0.62	0.64	0.48	0.62	0.48
1SV21S022	0	0	0	0	0	0	0	0	0	4	4	4	4	4	0	0	0	0	0	0	4	4	4	4	4	0.12	0.09	0.12	0.12	0.12
1SV21S023	12	0	12	12	0	12	12	0	12	4	4	4	4	4	6.4	6.4	6.4	6.4	6.4	32	22.4	22.4	10.4	22.4	10.4	-0.66	0.51	0.31	0.66	0.31
1SV21S024	12	3	15	12	3	15	12	3	15	4	4	4	4	4	7.8	7.8	7.8	7.8	7.8	39	23.8	26.8	14.8	23.8	14.8	0.70	0.61	0.44	0.70	0.44
1SV21S025	13	7	20	13	7	20	13	7	20	4	4	4	4	4	7.2	7.2	7.2	7.2	7.2	36	24.2	31.2	18.2	24.2	18.2	0.71	0.71	0.54	0.71	0.54
1SV21S026	11	9	20	11	9	20	11	9	20	4	4	4	4	4	8	8	8	8	8	40	23	32	21	23	21	0.68	0.73	0.62	0.68	0.62
1SV21S027	9	11	20	9	11	20	9	11	20	4	4	4	4	4	8	8	8	8	8	40	21	32	23	21	23	0.62	0.73	0.68	0.62	0.68
1SV21S028	13	9	22	13	9	22	13	9	22	4	4	4	4	4	8	8	8	8	8	40	25	34	21	25	21	0.74	0.77	0.62	0.74	0.62
1SV21S029	11	12	23	11	12	23	11	12	23	4	4	4	4	4	6.6	6.6	6.6	6.6	6.6	33	21.6	33.6	22.6	21.6	22.6	0.64	0.76	0.66	0.64	0.66
1SV21S030	1	1	2	1	1	2	1	1	2	4	4	4	4	4	4.6	4.6	4.6	4.6	4.6	23	9.6	30.6	9.6	9.6	9.6	0.28	0.24	0.28	0.28	0.28
1SV21S031	11	0	11	11	0	11	11	0	11	4	4	4	4	4	4.2	4.2	4.2	4.2	4.2	21	19.2	19.2	8.2	19.2	8.2	0.56	0.44	0.24	0.56	0.24
1SV21S032	12	4	16	12	4	16	12	4	16	4	4	4	4	4	8.4	8.4	8.4	8.4	8.4	42	24.4	28.4	16.4	24.4	16.4	0.72	0.65	0.48	0.72	0.48
1SV21S033	12	0	12	12	0	12	12	0	12	4	4	4	4	4	9.6	9.6	9.6	9.6	9.6	48	25.6	25.6	13.6	25.6	13.6	0.75	0.58	0.40	0.75	0.40
1SV21S034	6	4	10	4	6	10	4	6	10	4	4	4	4	4	5	5	5	5	5	25	15	17	15	13	15	0.44	0.39	0.44	0.38	0.44
1SV21S035	14	7	21	14	7	21	14	7	21	4	4	4	4	4	6.4	6.4	6.4	6.4	6.4	32	24.4	31.4	17.4	24.4	17.4	0.73	0.71	0.51	0.72	0.51
1SV21S036	13	5	18	13	5	18	13	5	18	4	4	4	4	4	9.4	9.4	9.4	9.4	9.4	47	26.4	31.4	18.4	26.4	18.4	0.78	0.71	0.54	0.78	0.54
1SV21S037	11	9	20	11	9	20	11	9	20	4	4	4	4	4	9.6	9.6	9.6	9.6	9.6	48	24.6	33.6	22.6	24.6	22.6	0.72	0.76	0.66	0.72	0.66
1SV21EC001	3	19	21	2	19	21	2	19	21	4	4	4	4	4	9	9.8	9.8	9.8	9.8	45	15	34.8	32.8	15.8	32.8	0.44	0.79	0.86	0.46	0.86
1SV21EC002	12	17	29	12	17	29	12	17	29	4	4	4	4	4	9.8	9.8	9.8	9.8	9.8	49	25.8	42.8	30.8	25.8	30.8	0.76	0.97	0.91	0.76	0.91
1SV21EC003	11	18	29	11	18	29	11	18	29	4	4	4	4	4	9.8	9.8	9.8	9.8	9.8	49	24.8	42.8	31.8	24.8	31.8	0.73	0.97	0.94	0.73	0.94
1SV21EC004	2	0	2	2	0	2	2	0	2	4	4	4	4	4	5	5	5	5	5	25	11	11	9	11	9	0.32	0.25	0.20	0.32	0.20
1SV21EC005	12	5	17	12	5	17	12	5	17	4	4	4	4	4	9.4	9.4	9.4	9.4	9.4	47	25.4	30.4	18.4	25.4	18.4	0.75	0.69	0.56	0.75	0.56
1SV21EC006	11	6	17	11	6	17	11	6	17	4	4	4	4	4	9.2	9.2	9.2	9.2	9.2	46	24.2	30.2	19.2	24.2	19.2	0.71	0.69	0.56	0.71	0.56
1SV21EC007	11	4	15	11	4	15	11	4	15	4	4	4	4	4	8	8	8	8	8	40	23	27	16	23	16	0.68	0.61	0.47	0.68	0.47
1SV21EC008	13	11	24	13	11	24	13	11	24	4	4	4	4	4	9.4	9.4	9.4	9.4	9.4	47	26.4	37.4	24.4	26.4	24.4	0.78	0.85	0.72	0.78	0.72
1SV21EC009	12	13	25	12	13	25	12	13	25	4	4	4	4	4	9.4	9.4	9.4	9.4	9.4	47	25.4	38.4	26.4	25.4	26.4	0.75	0.87	0.78	0.75	0.78
1SV21EC010	11	10	21	11	10	21	11	10	21	4	4	4	4	4	9.4	9.4	9.4	9.4	9.4	47	24.4	34.4	23.4	24.4	23.4	0.72	0.78	0.69	0.72	0.69

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1SV21EC011	10	7	25	18	7	25	18	7	25	4	4	4	4	4	9.4	9.4	9.4	9.4	9.4	47	31.4	38.4	20.4	31.4	20.4	0.92	0.87	0.60	0.92	0.60
1SV21EC012	14	2	16	14	2	16	14	2	16	4	4	4	4	4	4.6	4.6	4.6	4.6	4.6	23	23.6	24.6	10.6	22.6	10.6	0.68	0.56	0.31	0.68	0.31
1SV21EC013	11	1	12	11	1	12	11	1	12	4	4	4	4	4	9	9	9	9	9	45	24	25	14	24	14	0.71	0.57	0.41	0.71	0.41
1SV21EC014	12	3	15	12	3	15	12	3	15	4	4	4	4	4	8.4	8.4	8.4	8.4	8.4	42	24.4	27.4	15.4	24.4	15.4	0.72	0.62	0.45	0.72	0.45
1SV21EC015	11	18	29	11	18	29	11	18	29	4	4	4	4	4	9	9	9	9	9	45	24	42	33	24	33	0.71	0.95	0.61	0.71	0.91
1SV21EC016	2	0	2	2	0	2	2	0	2	4	4	4	4	4	4.2	4.2	4.2	4.2	4.2	21	10.2	10.2	8.2	10.2	8.2	0.30	0.23	0.24	0.30	0.24
1SV21EC017	1	1	3	1	1	3	1	1	3	4	4	4	4	4	4.2	4.2	4.2	4.2	4.2	21	9.2	10.2	9.2	9.2	9.2	0.27	0.23	0.27	0.27	0.27
1SV21EC018	12	5	17	12	5	17	12	5	17	4	4	4	4	4	8.2	8.2	8.2	8.2	8.2	41	24.2	29.2	17.2	24.2	17.2	0.71	0.66	0.51	0.71	0.51
1SV21EC019	12	14	26	12	14	26	12	14	26	4	4	4	4	4	9.6	9.6	9.6	9.6	9.6	48	25.6	30.6	27.6	25.6	27.6	0.75	0.90	0.81	0.75	0.81
1SV21EC020	14	3	17	14	3	17	14	3	17	4	4	4	4	4	8.6	8.6	8.6	8.6	8.6	43	26.6	29.6	25.6	26.6	15.6	0.78	0.67	0.46	0.78	0.46
1SV21EC021	1	1	2	1	1	2	1	1	2	4	4	4	4	4	0	0	0	0	0	0	5	6	5	5	5	0.15	0.14	0.15	0.15	0.15
1SV21EC022	8	1	9	8	1	9	8	1	9	4	4	4	4	4	4	4	4	4	4	20	16	17	9	16	9	0.47	0.39	0.26	0.47	0.26
1SV21EC023	12	5	17	12	5	17	12	5	17	4	4	4	4	4	8.8	8.8	8.8	8.8	8.8	44	24.8	29.8	17.8	24.8	17.8	0.73	0.68	0.52	0.73	0.52
1SV21EC024	11	4	15	11	4	15	11	4	15	4	4	4	4	4	8.6	8.6	8.6	8.6	8.6	43	23.6	27.6	16.6	23.6	16.6	0.69	0.63	0.49	0.69	0.49
1SV21EC025	12	1	13	12	1	13	12	1	13	4	4	4	4	4	9.2	9.2	9.2	9.2	9.2	46	25.2	26.2	14.2	25.2	14.2	0.74	0.60	0.42	0.74	0.42
1SV21EC027	11	4	15	11	4	15	11	4	15	4	4	4	4	4	7.8	7.8	7.8	7.8	7.8	39	22.8	26.8	15.8	22.8	15.8	0.67	0.61	0.46	0.67	0.46
1SV21EC028	9	3	12	9	3	12	9	3	12	4	4	4	4	4	6.6	6.6	6.6	6.6	6.6	33	19.6	22.6	13.6	19.6	13.6	0.58	0.51	0.40	0.58	0.40
1SV21EC029	2	0	2	2	0	2	2	0	2	4	4	4	4	4	0	0	0	0	0	0	4	4	4	4	4	0.18	0.14	0.12	0.18	0.12
1SV21EC030	12	5	17	12	5	17	12	5	17	4	4	4	4	4	9.6	9.6	9.6	9.6	9.6	48	25.6	30.6	18.6	25.6	18.6	0.75	0.70	0.55	0.75	0.55
1SV21EC031	2	0	2	2	0	2	2	0	2	4	4	4	4	4	0	0	0	0	0	0	4	4	4	4	4	0.18	0.14	0.12	0.18	0.12
1SV21EC032	1	1	2	1	1	2	1	1	2	4	4	4	4	4	0	0	0	0	0	0	5	6	5	5	5	0.15	0.14	0.15	0.15	0.15
1SV21EC033	13	7	20	13	7	20	13	7	20	4	4	4	4	4	9.4	9.4	9.4	9.4*	9.4	47	26.4	33.4	20.4	26.4	20.4	0.78	0.76	* 0.60	0.78	0.60
1SV21EC034	12	5	17	12	5	17	12	5	17	4	4	4	4	4	9	9	9	9	9	45	25	30	18	25	18	0.74	0.66	0.53	0.74	0.53
1SV21EC035	11	6	17	11	6	17	11	6	17	4	4	4	4	4	8.8	8.8	8.8	8.8	8.8	44	23.8	29.8	18.8	23.8	18.8	0.70	0.68	0.55	0.70	0.55
TOTAL	1134	811	1945	1132	813	1945	1132	813	1945	440	440	440	440	440	772.8	773.4	773.4	773.4	773.4	3863	2340.8	2156.4	224	2345.4	2026.4	69.02	71.74	59.60	68.98	59.60
No of Students	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Average	11.34	8.11	19.45	11.32	8.13	19.45	11.32	8.13	19.45	4.4	4.4	4.4	4.4	4.4	7.726	7.734	7.734	7.734	7.734	38.63	23.408	31.564	2.24	23.454	20.264	69.02	71.74	59.60	68.98	59.60

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DEPARTMENT OF MECHANICAL ENGINEERING

ODD SEM

2021-22

SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ME

SUBJECT	MECHANICS OF MATERIAL	SUBJECT CODE	18ME32

COURSE OUTCOME

CO1	Apply an engineering knowledge to demonstrate the behavior of materials
CO2	Analyze the thin and thick cylinders and draw a stress distribution curve, also to create Mohr's circle diagram for plane stress conditions.
CO3	Determine the various forces and moments in beams
CO4	Evaluate the dimensions of mechanical elements for various applications.
CO5	Compare different strain energy methods and theories of failures in design of machineries

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.

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PRINCIPAL
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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	K P CHANDRAIAH				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	III	SECTION	
SUBJECT	MECHANICS OF MATERIAL	SUBJECT CODE	18ME32		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	1										
CO2	1	2										
CO3	1	3										
CO4	2	3										
CO5	3	2										
AVERAGE	2	2.2										
OVERALL MAPPING OF SUBJECT												2.1

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	42.8	1.28	0.42										
CO2	38.8	0.38	0.77										
CO3	50.1	0.50	1.50										
CO4	40.8	0.81	1.22										
CO5	40.8	1.22	0.81										
AVERAGE	42.66	0.83	0.94										
FINAL ATTAINMENT LEVEL													0.88

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2021-22

Academic year	2021-22			SEM	III		Total strength			12		Subject	Mechanics of Materials			Subject Code	18ME32										
SEM:III	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			ASSIGNEMENT / QUIZ(10 M)					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV20ME001	10	12	22	8	12	20	9	12	21	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	24	16.8	26.8	18.8	15.8	15.8	0.49	0.43	0.55	0.46	0.46
1SV20ME002	10	10	20	7	8	15	9	7	16	2	2	2	2	2	5.4	5.4	5.4	5.4	5.4	27	17.4	24.4	15.4	16.4	16.4	0.51	0.35	0.45	0.48	0.48
1SV20ME003	11	11	22	10	12	22	10	12	22	2	2	2	2	2	6	6	6	6	6	30	19	29	20	18	18	0.56	0.45	0.59	0.53	0.53
1SV20ME004	6	9	15	11	4	15	8	10	18	2	2	2	2	2	2	2	2	2	2	10	10	24	8	12	12	0.29	0.18	0.24	0.35	0.35
1SV20ME005	5	5	10	6	4	10	6	4	10	2	2	2	2	2	2.6	2.6	2.6	2.6	2.6	13	9.6	15.6	8.6	10.6	10.6	0.28	0.20	0.25	0.31	0.31
1SV20ME006	11	4	15	8	8	16	7	10	17	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	18.2	19.2	15.2	14.2	14.2	0.54	0.35	0.45	0.42	0.42
1SV20ME007	7	13	20	6	9	15	8	17	25	2	2	2	2	2	3.6	3.6	3.6	3.6	3.6	18	12.6	24.6	14.6	13.6	13.6	0.37	0.33	0.43	0.40	0.40
1SV20ME008	6	10	16	8	7	15	6	11	17	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	13.2	25.2	14.2	13.2	13.2	0.39	0.32	0.42	0.39	0.39
1SV20ME009	6	20	26	3	24	27	9	19	28	2	2	2	2	2	7.4	7.4	7.4	7.4	7.4	37	15.4	32.4	33.4	18.4	18.4	0.45	0.76	0.98	0.54	0.54
1SV21ME400	12	3	15	6	14	20	3	7	10	2	2	2	2	2	4	4	4	4	4	20	18	15	20	9	9	0.53	0.45	0.59	0.26	0.26
1SV21ME401	7	8	15	7	13	20	6	19	25	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	13.2	21.2	19.2	12.2	12.2	0.39	0.44	0.56	0.36	0.36
1SV21ME402	4	13	17	5	10	15	6	10	16	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	11.2	25.2	17.2	13.2	13.2	0.33	0.39	0.51	0.39	0.39
TOTAL	95	118	213	85	125	210	87	138	225	24	24	24	24	24	55.6	55.6	55.6	55.6	55.6	278	174.6	282.6	204.6	166.6	166.6	5.14	4.65	6.02	4.90	4.90
NO OF STUDENTS	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
AVERAGE	7.9	9.8	17.8	7.1	10.4	17.5	7.3	11.5	18.8	2.0	2.0	2.0	2.0	2.0	4.6	4.6	4.6	4.6	4.6	23.2	14.6	23.6	17.1	13.9	13.9	42.8	38.8	50.1	40.8	40.8

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SHRIDEVI	**SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY** **SIRA ROAD, TUMKUR- 572 106.**

DEPARTMENT OF ME

SUBJECT	BASIC THERMODYNAMICS	SUBJECT CODE	18ME33

COURSE OUTCOME

CO1	Estimate the forces and couples for four bars and slider crank mechanisms to keep the system in equilibrium
CO2	Analyze and estimate balancing of rotating & reciprocating masses in same and different planes
CO3	Applying principles of governors and gyroscope and its applications
CO4	Analyze different modes of vibration for damped vibration with single degree of freedom systems
CO5	Compare modes of vibration for forced and damped vibration with single degree of freedom systems

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	B H VASUDEVAMURTHY				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	III	SECTION	
SUBJECT	BASIC THERMODYNAMICS	SUBJECT CODE	18ME33		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	2										
CO2	2	2										
CO3	3	3										
CO4	2	2										
CO5	2	2	2									
AVERAGE	2.2	2.2	2									
											OVERALL MAPPING OF SUBJECT	2.1

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	40.8	0.81	0.81										
CO2	53.1	1.06	1.06										
CO3	48.9	1.46	1.46										
CO4	44.2	0.88	0.88										
CO5	48.4	0.96	0.96	0.96									
AVERAGE	47.08	1.03	1.03	0.96									
												FINAL ATTAINMENT LEVEL	1.0

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Academic year	2021-22			SEM	III		Total strength			12		Subject	Basic Thermodynamics			Subject Code		18ME33									
SEM:III	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			ASSIGNEMENT / QUIZ(10 M					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV20ME001	7	14	21	12	8	20	11	11	22	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	13.2	32.2	14.2	17.2	17.2	0.39	0.73	0.42	0.51	0.51
1SV20ME002	10	8	18	4	13	17	5	14	19	2	2	2	2	2	5	5	5	5	5	25	17	19	20	12	21	0.50	0.43	0.59	0.35	0.62
1SV20ME003	11	9	20	5	14	19	7	14	21	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	12	15.4	18.4	18.4	11.4	18.4	0.45	0.42	0.54	0.34	0.54
1SV20ME004	7	8	15	12	2	14	9	7	16	2	2	2	2	2	3.4	3.4	3.4	3.4	3.4	17	12.4	25.4	7.4	14.4	12.4	0.36	0.58	0.22	0.42	0.36
1SV20ME005	5	7	12	5	11	16	4	10	14	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	12	9.4	16.4	15.4	8.4	14.4	0.28	0.37	0.45	0.25	0.42
1SV20ME006	11	5	16	2	18	20	9	9	18	2	2	2	2	2	3.4	3.4	3.4	3.4	3.4	17	16.4	12.4	23.4	14.4	14.4	0.48	0.28	0.69	0.42	0.42
1SV20ME007	7	10	17	7	12	19	11	10	21	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	13.2	23.2	18.2	17.2	16.2	0.39	0.53	0.54	0.51	0.48
1SV20ME008	10	9	19	5	12	17	10	11	21	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	16.2	20.2	18.2	16.2	17.2	0.48	0.46	0.54	0.48	0.51
1SV20ME009	6	22	28	12	14	26	16	13	29	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	12.2	40.2	20.2	22.2	19.2	0.36	0.91	0.59	0.65	0.56
1SV21ME400	4	10	14	8	7	15	8	8	16	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	10.2	24.2	13.2	14.2	14.2	0.30	0.55	0.39	0.42	0.42
1SV21ME401	10	9	19	12	8	20	11	10	21	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	16.2	27.2	14.2	17.2	16.2	0.48	0.62	0.42	0.51	0.48
1SV21ME402	9	10	19	6	11	17	10	11	21	2	2	2	2	2	3.6	3.6	3.6	3.6	3.6	18	14.6	21.6	16.6	15.6	16.6	0.43	0.49	0.49	0.46	0.49
TOTAL	97	121	218	90	130	220	111	128	239	24	24	24	24	24	45.4	45.4	45.4	45.4	45.4	227	166.4	280.4	199.4	180.4	197.4	4.89	6.37	5.86	5.31	5.81
NO OF STUDENTS	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
AVERAGE	8.1	10.1	18.2	7.5	10.8	18.3	9.3	10.7	19.9	2.0	2.0	2.0	2.0	2.0	3.8	3.8	3.8	3.8	3.8	18.9	13.9	23.4	16.6	15.0	16.5	40.8	53.1	48.9	44.2	48.4

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SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ME

SUBJECT	MATERIAL SCIENCE	SUBJECT CODE	18ME34

COURSE OUTCOME

CO1	**Understand** the fundamentals of structure and behavior of engineering materials for various mechanical applications
CO2	**Analyse** the various modes of failure of engineering material
CO3	**Assess** the structural and physical properties of engineering materials through various heat treatment process
CO4	**Perceive** various properties of composites, its application and to provide an alternate to conventional structural materials
CO5	**Propose** alternate materials which are sustainable, economic and enable new product generation

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.

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

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY											
FACULTY NAME	RAVI KUMAR K R											
BRANCH	ME		ACADEMIC YEAR		2021-22							
COURSE	B.E	SEMESTER	III	SECTION								
SUBJECT	MATERIAL SCIENCE			SUBJECT CODE	18ME34							
CO & PO MAPPING												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
OVERALL MAPPING OF SUBJECT												2.5

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	48.7	1.46											
CO2	48.7		0.97										
CO3	50.2	1.50											
CO4	48.5		0.97										
CO5	53.4	1.60											
ERAGE	49.9	0.91	0.97										
FINAL ATTAINMENT LEVEL													0.94

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Academic year	2021-22			SEM	III		Total strength			12		Subject	Material Science				Subject Code	18ME34							
SEM:III	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			SSIGNEMENT / QUIZ(10 M					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO			
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=54	CO3=34	co4=34	CO5=34	CO1	CO2	CO3	CO4
1SV20ME001	11	6	17	15	11	26	14	15	29	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	17.2	27.2	17.2	20.2	21.2	0.51	0.50	0.51	0.59
1SV20ME002	9	5	14	9	9	18	13	9	22	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	17.4	22.4	17.4	21.4	17.4	0.51	0.41	0.51	0.63
1SV20ME003	10	11	21	12	11	23	11	15	26	2	2	2	2	2	2.8	2.8	2.8	2.8	2.8	14	14.8	27.8	15.8	15.8	19.8	0.44	0.51	0.46	0.46
1SV20ME004	10	5	15	10	11	21	11	14	25	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	16.2	21.2	17.2	17.2	20.2	0.48	0.39	0.51	0.51
1SV20ME005	13	7	20	14	15	29	0	0	0	2	2	2	2	2	0	0	0	0	0	0	15	23	17	2	2	0.44	0.43	0.50	0.06
1SV20ME006	8	9	17	10	6	16	6	9	15	2	2	2	2	2	5.6	5.6	5.6	5.6	5.6	28	15.6	26.6	13.6	13.6	16.6	0.46	0.49	0.40	0.40
1SV20ME007	13	3	16	15	12	27	8	15	23	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	19.2	24.2	18.2	14.2	21.2	0.56	0.45	0.54	0.42
1SV20ME008	9	6	15	11	11	22	10	8	18	2	2	2	2	2	4.4	4.4	4.4	4.4	4.4	22	15.4	23.4	17.4	16.4	14.4	0.45	0.43	0.51	0.48
1SV20ME009	8	15	23	14	15	29	15	15	30	2	2	2	2	2	6.8	6.8	6.8	6.8	6.8	34	16.8	37.8	23.8	23.8	23.8	0.49	0.70	0.70	0.70
1SV21ME400	13	9	22	12	11	23	11	12	23	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	20.8	28.8	18.8	18.8	19.8	0.61	0.53	0.55	0.55
1SV21ME401	8	8	16	13	8	21	12	15	27	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	14.2	27.2	14.2	18.2	21.2	0.42	0.50	0.42	0.54
1SV21ME402	10	9	19	11	8	19	10	14	24	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	16.2	26.2	14.2	16.2	20.2	0.48	0.49	0.42	0.48
TOTAL	122	93	215	146	128	274	121	141	262	24	24	24	24	24	52.8	52.8	52.8	52.8	52.8	264	198.8	315.8	204.8	197.8	217.8	5.85	5.85	6.02	5.82
NO OF STUDENTS	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
AVERAGE	10.2	7.8	17.9	12.2	10.7	22.8	10.1	11.8	21.8	2.0	2.0	2.0	2.0	2.0	4.4	4.4	4.4	4.4	4.4	22.0	16.6	26.3	17.1	16.5	18.2	48.7	48.7	50.2	48.5

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SHRIDEVI	**SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY** **SIRA ROAD, TUMKUR- 572 106.**

DEPARTMENT OF ME

SUBJECT	METAL CUTTING AND FORMING	SUBJECT CODE	18ME35A

COURSE OUTCOME

CO1	Apply the knowledge of metal cutting using basic machine tools fro the production of components
CO2	Choose the right cutting material and fluids and also evaluate cutting tool parameters for different machining operations
CO3	Evaluate tool life on the basis of wear and wear rate and also discuss the economics of machining process of various cutting tool
CO4	Apply the knowledge of sheet metal forming for production of components
CO5	Design different sheet metal dies for simple sheet metal components

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.

)4 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.

Dept. of Mechanical
S.I.E.T., TUMKUR

PRINCIPAL
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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	J C THIPPESWAMY				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	III	SECTION	
SUBJECT	METAL CUTTING AND FORMING	SUBJECT CODE	18ME35A		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	1									
CO2	3	2										
CO3	3	2	1									
CO4	3	2										
CO5	3	2										
AVERAGE	3	2	1									
OVERALL MAPPING OF SUBJECT												2.0

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	42.6	1.27	0.85	0.42									
CO2	65.87	1.97	1.31										
CO3	54.12	1.62	1.08	0.54									
CO4	47.50	1.42	0.95										
CO5	56.32	1.68	1.12										
AVERAGE	53.27	1.59	1.06	0.48									
FINAL ATTAINMENT LEVEL													1.04

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Academic year	2021-22			SEM	III		Total strength			12		Subject	Metal Cutting and Forming			Subject Code		18ME35A								
SEM:III	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			SSIGNEMENT / QUIZ(10 M					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV20ME001	12	10	22	15	10	25	12	13	25	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	18.2	31.2	16.2	18.2	19.2	0.54	0.71	0.48	0.54	0.56
1SV20ME002	11	6	17	5	14	19	3	18	21	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	17.6	17.6	20.6	9.6	24.6	0.52	0.40	0.61	0.28	0.72
1SV20ME003	7	18	25	12	13	25	12	13	25	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	24	13.8	36.8	19.8	18.8	19.8	0.41	0.84	0.58	0.55	0.58
1SV20ME004	5	14	19	12	12	24	3	23	26	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	11.6	32.6	18.6	9.6	29.6	0.34	0.74	0.55	0.28	0.87
1SV20ME005	8	16	24	5	9	14	8	8	16	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	14.6	27.6	15.6	14.6	14.6	0.43	0.63	0.46	0.43	0.43
1SV20ME006	5	6	11	7	13	20	12	8	20	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	24	11.8	19.8	19.8	18.8	14.8	0.35	0.45	0.58	0.55	0.44
1SV20ME007	8	14	22	12	10	22	12	10	22	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	15.2	33.2	17.2	19.2	17.2	0.45	0.75	0.51	0.56	0.51
1SV20ME008	5	16	21	11	12	23	11	11	22	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	12.2	34.2	19.2	18.2	18.2	0.36	0.78	0.56	0.54	0.54
1SV20ME009	7	21	28	8	20	28	12	16	28	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	14.8	36.8	27.8	19.8	23.8	0.44	0.84	0.82	0.58	0.70
1SV21ME400	7	8	15	8	8	16	6	8	14	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	13.2	22.2	14.2	12.2	14.2	0.39	0.50	0.42	0.36	0.42
1SV21ME401	12	10	22	13	11	24	12	11	23	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	18.6	29.6	17.6	18.6	17.6	0.55	0.67	0.52	0.55	0.52
1SV21ME402	6	8	14	12	8	20	10	10	20	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	12.2	26.2	14.2	16.2	16.2	0.36	0.60	0.42	0.48	0.48
TOTAL	93	147	240	120	140	260	113	149	262	24	24	24	24	24	56.8	56.8	56.8	56.8	56.8	284	173.8	347.8	220.8	193.8	229.8	5.11	7.90	6.49	5.7	6.76
NO OF STUDENTS	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
AVERAGE	7.75	12.3	20	10	11.67	21.67	9.42	12.4	21.83	2	2	2	2	2	4.73	4.73	4.73	4.73	4.73	23.67	14.48	28.98	18.4	16.15	19.15	42.60	65.87	54.12	47.50	56.32

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SHRIDEVI	**SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY** **SIRA ROAD, TUMKUR- 572 106.**

DEPARTMENT OF ME

SUBJECT	COMPUTER AIDED MACHINE DRAWING	SUBJECT CODE	18ME36A

COURSE OUTCOME

CO1	To read and understand the orthographic and sectional views of various machine components
CO2	To develop 3D models using modeling software's
CO3	To produce 2D drawings by manual drafting and by using drafting packages
CO4	To construct assembly drawings, part drawings and Bill of materials as per BIS Conventions
CO5	To apply limits fits and tolerance to all assemblies and part drawings

PROGRAM OUTCOMES

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	PRASHANTH S				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	III	SECTION	
SUBJECT	COMPUTER AIDED MACHINE DRAWING	SUBJECT CODE	18ME36A		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2											
CO2	2				2							
CO3	2				2							
CO4	2		2		2							
CO5	2											2
AVERAGE	2		2		2							2
											OVERALL MAPPING OF SUBJECT	2.0

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	62.16	1.24											
CO2	70.19	1.40				1.40							
CO3	65.59	1.31				1.31							
CO4	64.61	1.29		1.29		1.29							
CO5	62.16	1.24											1.24
AVERAGE	64.94	1.29		1.29		1.33							1.24
												FINAL ATTAINMENT LEVEL	1.28

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Academic year	2021-22			SEM	III		Total strength			12		Subject	Computer Aided Machine Drawing				Subject Code	18ME36A								
SEM:III	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			SSIGNEMENT / QUIZ(10 M					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV20ME001	10	16	26	10	10	20	12	8	20	2	2	2	2	2	9.8	9.8	9.8	9.8	9.8	49	21.8	37.8	21.8	23.8	19.8	0.64	0.86	0.64	0.70	0.58
1SV20ME002	11	8	19	11	10	21	12	8	20	2	2	2	2	2	8.4	8.4	8.4	8.4	8.4	42	21.4	29.4	20.4	22.4	18.4	0.63	0.67	0.60	0.66	0.54
1SV20ME003	11	11	22	11	14	25	14	11	25	2	2	2	2	2	11.2	11.2	11.2	11.2	11.2	56	24.2	35.2	27.2	27.2	24.2	0.71	0.80	0.80	0.80	0.71
1SV20ME004	6	11	17	6	14	20	13	7	20	2	2	2	2	2	11	11	11	11	11	55	19	30	27	26	20	0.56	0.68	0.79	0.76	0.59
1SV20ME005	4	11	15	4	10	14	8	8	16	2	2	2	2	2	6.6	6.6	6.6	6.6	6.6	33	12.6	23.6	18.6	16.6	16.6	0.37	0.54	0.55	0.49	0.49
1SV20ME006	8	6	14	8	12	20	12	8	20	2	2	2	2	2	7.2	7.2	7.2	7.2	7.2	36	17.2	23.2	21.2	21.2	17.2	0.51	0.53	0.62	0.62	0.51
1SV20ME007	9	11	20	9	17	26	9	11	20	2	2	2	2	2	9.8	9.8	9.8	9.8	9.8	49	20.8	31.8	28.8	20.8	22.8	0.61	0.72	0.85	0.61	0.67
1SV20ME008	12	11	23	12	8	20	13	7	20	2	2	2	2	2	9.6	9.6	9.6	9.6	9.6	48	23.6	34.6	19.6	24.6	18.6	0.69	0.79	0.58	0.72	0.55
1SV20ME009	16	12	28	16	12	28	6	22	28	2	2	2	2	2	11.4	11.4	11.4	11.4	11.4	57	29.4	41.4	25.4	19.4	35.4	0.86	0.94	0.75	0.57	1.04
1SV21ME400	4	10	14	4	11	15	6	10	16	2	2	2	2	2	8	8	8	8	8	40	14	24	21	16	20	0.41	0.55	0.62	0.47	0.59
1SV21ME401	14	5	19	14	11	25	12	13	25	2	2	2	2	2	8.6	8.6	8.6	8.6	8.6	43	24.6	29.6	21.6	22.6	23.6	0.72	0.67	0.64	0.66	0.69
1SV21ME402	15	5	20	15	5	20	13	7	20	2	2	2	2	2	8	8	8	8	8	40	25	30	15	23	17	0.74	0.68	0.44	0.68	0.50
TOTAL	120	117	237	120	134	254	130	120	250	24	24	24	24	24	109.6	109.6	109.6	109.6	109.6	548	253.6	370.6	267.6	263.6	253.6	7.46	8.42	7.87	7.75	7.46
NO OF STUDENTS	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
AVERAGE	10	9.75	19.75	10	11.17	21.17	10.83	10	20.8	2	2	2	2	2	9.13	9.13	9.13	9.13	9.13	45.67	21.13	30.88	22.3	21.97	21.13	62.16	70.19	65.59	64.61	62.16

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SHRIDEVI	**SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY** **SIRA ROAD, TUMKUR- 572 106.**

DEPARTMENT OF ME

SUBJECT	MANAGEMENT AND ECONOMICS	SUBJECT CODE	18ME51

COURSE OUTCOME

CO1	Explain the development of management and the role it plays at different levels in an organization
CO2	Comprehend the process and role of effective planning, organizing and staffing for the development of an organization
CO3	Understand the necessity of good leadership, communication and coordination for establishing effective control in an organization
CO4	Understand engineering economics demand supply and its importance in economic decision making and problem solving
CO5	Calculate present worth, annual worth and IRR for different alternatives in economic decision making

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	SANTHOSH T U				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	V	SECTION	
SUBJECT	MANAGEMENT AND ECONOMICS	SUBJECT CODE	18ME51		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2											
CO2	2											
CO3	3											1
CO4	3	2										
CO5	2	2									1	
AVERAGE	2.4	2									1	1
OVERALL MAPPING OF SUBJECT												1.6

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	59.00	1.18											
CO2	70.82	1.14											
CO3	73.29	2.19											0.73
CO4	54.88	1.64	1.09										
CO5	59.29	1.18	1.18									0.59	
AVERAGE	63.45	1.46	1.13									0.59	0.73
FINAL ATTAINMENT LEVEL													0.97

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Academic year	2021-22						Total strength			20		Subject	Management and economics			Subject Code		18ME51										
SEM:V	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			ASSIGNEMENT / QUIZ(10 M)					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV17ME005	3	16	19	10	10	20	3	0	3	2	2	2	2	2	0	0	0	0	0	0	5	28	19.6	5	2	0.15	0.64	0.58	0.15	0.06
1SV18ME003	19	13	32	14	19	33	19	18	37	2	2	2	2	2	7.6	7.6	7.6	7.6	7.6	38	28.6	36.6	27.4	28.6	27.6	0.84	0.83	0.81	0.84	0.81
1SV18ME008	12	14	26	14	20	34	18	18	36	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	20.4	36.4	28.2	26.4	26.4	0.60	0.83	0.83	0.78	0.78
1SV18ME010	18	9	27	14	12	26	18	13	31	2	2	2	2	2	6.2	6.2	6.2	6.2	6.2	31	26.2	31.2	18.6	26.2	21.2	0.77	0.71	0.55	0.77	0.62
1SV18ME011	13	9	22	11	17	28	10	18	28	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	19.6	26.6	24	16.6	24.6	0.58	0.60	0.71	0.49	0.72
1SV18ME012	8	11	19	13	11	24	10	18	28	2	2	2	2	2	5	5	5	5	5	25	15	31	20.2	17	25	0.44	0.70	0.59	0.50	0.74
1SV18ME013	20	12	32	18	18	36	10	18	28	2	2	2	2	2	7.2	7.2	7.2	7.2	7.2	36	29.2	39.2	26	19.2	27.2	0.86	0.89	0.76	0.56	0.80
1SV19ME001	17	18	35	15	18	33	10	18	28	2	2	2	2	2	6	6	6	6	6	30	25	41	25.2	18	26	0.74	0.93	0.74	0.53	0.76
1SV19ME002	13	6	19	15	11	26	15	14	29	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	20.2	28.2	15.4	22.2	21.2	0.59	0.64	0.45	0.65	0.62
1SV19ME004	5	9	14	9	8	17	10	10	20	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	12	9.4	22.4	15.2	14.4	14.4	0.28	0.51	0.45	0.42	0.42
1SV19ME005	10	6	16	14	13	27	10	18	28	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	17.2	27.2	20	17.2	25.2	0.51	0.62	0.59	0.51	0.74
1SV19ME006	18	16	34	19	14	33	20	12	32	2	2	2	2	2	5	5	5	5	5	25	25	42	20.6	27	19	0.74	0.95	0.61	0.79	0.56
1SV19ME010	9	16	25	14	18	32	20	18	38	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	15.6	36.6	24.2	26.6	24.6	0.46	0.83	0.71	0.78	0.72
1SV19ME011	14	6	20	6	11	17	8	8	16	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	20.2	18.2	16	14.2	14.2	0.59	0.41	0.47	0.42	0.42
1SV19ME013	8	12	20	11	10	21	8	4	12	2	2	2	2	2	3	3	3	3	3	15	13	28	15.4	13	9	0.38	0.64	0.45	0.38	0.26
1SV19ME014	20	8	28	7	13	20	10	5	13	2	2	2	2	2	3.4	3.4	3.4	3.4	3.4	17	25.4	20.4	19.2	15.4	10.4	0.75	0.46	0.56	0.45	0.31
1SV19ME015	11	19	30	6	5	11	10	10	20	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	17.2	31.2	15.4	16.2	16.2	0.51	0.71	0.45	0.48	0.48
1SV20ME400	15	10	25	19	13	32	8	15	23	2	2	2	2	2	8.4	8.4	8.4	8.4	8.4	42	25.4	39.4	20.8	18.4	25.4	0.75	0.90	0.61	0.54	0.75
1SV20ME402	13	11	24	10	12	22	8	14	22	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	20.8	28.8	19.8	15.8	21.8	0.61	0.65	0.58	0.46	0.64
1SV20ME403	15	9	24	14	5	19	8	14	22	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	22.8	30.8	107.2	15.8	21.8	0.67	0.70	3.15	0.46	0.64
TOTAL	261	230	491	253	258	511	233	263	494	40	40	40	40	40	100.2	100.2	100.2	100.2	100.2	501	401.2	629.2	498.4	373.2	403.2	11.8	14.16	14.66	10.98	11.86
NO OF STUDENTS	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
AVERAGE	13.05	11.5	24.55	12.7	12.9	25.55	11.65	13.2	24.7	2	2	2	2	2	5.01	5.01	5.01	5.01	5.01	25.05	20.06	31.16	24.92	18.66	20.16	55	70.82	73.29	54.88	59.29

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SHRIDEVI	**SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY** **SIRA ROAD, TUMKUR- 572 106.**

DEPARTMENT OF ME

SUBJECT	DESIGN OF MACHINE ELEMENTS I	SUBJECT CODE	18ME52

COURSE OUTCOME

CO1	Apply the concepts of selection of materials for given mechanical components
CO2	List the functions and uses of machine elements used in mechanical systems.
CO3	Apply codes and standards in the design of machine elements and select an element based on the Manufacturer's catalogue.
CO4	Analyze the performance and failure modes of mechanical components subjected to combined loading and fatigue loading using the concepts of theories of failure.
CO5	Demonstrate the application of engineering design tools to the design of machine components like shafts, couplings, power screws, fasteners, welded and riveted joints.
CO6	Understand the art of working in a team

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	DR NARENDRA VISWANATH				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	V	SECTION	
SUBJECT	DESIGN OF MACHINE ELEMENTS I	SUBJECT CODE	18ME52		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3										
CO2	3	3										
CO3	3	2	3									
CO4	3	3										
CO5	2	2	2									
AVERAGE	2.8	2.6	2.5									
OVERALL MAPPING OF SUBJECT												2.66

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	44.44	1.33	1.33										
CO2	45.48	1.36	1.36										
CO3	53.44	1.60	1.06	1.60									
CO4	39.44	1.18	1.18										
CO5	39.44	0.78	0.78	0.78									
AVERAGE	44.44	1.25	1.14	1.19									
FINAL ATTAINMENT LEVEL													1.19

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Academic year	2021-22						Total strength			20		Subject	Design of Machine Elements -						Subject Code	18ME52										
SEM:V	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			ASSIGNEMENT / QUIZ(10 M)					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV17ME005	5	1	6	6	1	7	1	4	5	2	2	2	2	2	0	0	0	0	0	0	7	9	10.6	3	6	0.21	0.20	0.31	0.09	0.18
1SV18ME003	12	6	18	12	5	17	7	9	16	2	2	2	2	2	7.6	7.6	7.6	7.6	7.6	38	21.6	27.6	13.4	16.6	18.6	0.64	0.63	0.39	0.49	0.55
1SV18ME008	13	7	20	12	9	21	11	11	22	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	21.4	27.4	17.2	19.4	19.4	0.63	0.62	0.51	0.57	0.57
1SV18ME010	10	8	18	14	2	16	7	7	14	2	2	2	2	2	6.2	6.2	6.2	6.2	6.2	31	18.2	30.2	8.6	15.2	15.2	0.54	0.69	0.25	0.45	0.45
1SV18ME011	7	9	16	7	7	14	10	8	18	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	13.6	22.6	14	16.6	14.6	0.40	0.51	0.41	0.49	0.43
1SV18ME012	9	7	16	8	7	15	6	8	14	2	2	2	2	2	5	5	5	5	5	25	16	22	16.2	13	15	0.47	0.50	0.48	0.38	0.44
1SV18ME013	12	8	20	12	10	22	11	7	18	2	2	2	2	2	7.2	7.2	7.2	7.2	7.2	36	21.2	29.2	18	20.2	16.2	0.62	0.66	0.53	0.59	0.48
1SV19ME001	15	10	25	13	11	24	13	10	23	2	2	2	2	2	6	6	6	6	6	30	23	31	18.2	21	18	0.68	0.70	0.54	0.62	0.53
1SV19ME002	12	6	18	11	11	22	8	12	20	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	19.2	24.2	15.4	15.2	19.2	0.56	0.55	0.45	0.45	0.56
1SV19ME004	5	1	6	4	1	5	4	3	7	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	12	9.4	9.4	8.2	8.4	7.4	0.28	0.21	0.24	0.25	0.22
1SV19ME005	12	5	17	13	6	19	12	3	15	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	19.2	25.2	13	19.2	10.2	0.56	0.57	0.38	0.56	0.30
1SV19ME006	6	4	10	6	6	12	3	8	11	2	2	2	2	2	5	5	5	5	5	25	13	17	12.6	10	15	0.38	0.39	0.37	0.29	0.44
1SV19ME010	4	4	8	7	3	10	3	3	6	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	10.6	17.6	9.2	9.6	9.6	0.31	0.40	0.27	0.28	0.28
1SV19ME011	3	5	8	2	5	7	2	4	6	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	9.2	13.2	10	8.2	10.2	0.27	0.30	0.29	0.24	0.30
1SV19ME013	6	1	7	3	6	9	1	4	5	2	2	2	2	2	3	3	3	3	3	15	11	9	11.4	6	9	0.32	0.20	0.34	0.18	0.26
1SV19ME014	2	8	10	2	4	6	3	5	8	2	2	2	2	2	3.4	3.4	3.4	3.4	3.4	17	7.4	15.4	10.2	8.4	10.4	0.22	0.35	0.30	0.25	0.31
1SV19ME015	4	2	6	1	3	4	4	4	8	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	10.2	9.2	13.4	10.2	10.2	0.30	0.21	0.39	0.30	0.30
1SV20ME400	12	10	22	9	9	18	13	7	20	2	2	2	2	2	8.4	8.4	8.4	8.4	8.4	42	22.4	29.4	16.8	23.4	17.4	0.66	0.67	0.49	0.69	0.51
1SV20ME402	6	2	8	4	3	7	2	4	6	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	13.8	13.8	10.8	9.8	11.8	0.41	0.31	0.32	0.29	0.35
1SV20ME403	7	8	15	2	14	16	7	7	14	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	14.8	17.8	116.2	14.8	14.8	0.44	0.40	3.42	0.44	0.44
TOTAL	162	112	274	148	123	271	128	128	256	40	40	40	40	40	100.2	100.2	100.2	100.2	100.2	501	302.2	400.2	363.4	268.2	268.2	8.89	9.10	10.69	7.89	7.89
NO OF STUDENTS	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
AVERAGE	8.1	5.6	13.7	7.4	6.15	13.55	6.4	6.4	12.8	2	2	2	2	2	5.01	5.01	5.01	5.01	5.01	25.05	15.11	20.01	18.17	13.41	13.41	44.44	45.48	53.44	39.44	39.44

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SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ME

SUBJECT	DYNAMICS OF MACHINES	SUBJECT CODE	18ME53

COURSE OUTCOME

CO1	Estimate the forces and couples for four bars and slider crank mechanisms to keep the system in equilibrium
CO2	Analyze and estimate balancing of rotating & reciprocating masses in same and different planes
CO3	Applying principles of governors and gyroscope and its applications
CO4	Analyze different modes of vibration for damped vibration with single degree of freedom systems
CO5	Compare modes of vibration for forced and damped vibration with single degree of freedom systems

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	B H VASUDEVAMURTHY				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	V	SECTION	
SUBJECT	DYNAMICS OF MACHINES	SUBJECT CODE	18ME53		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	2										
CO2	2	2										
CO3	3	3										
CO4	2	2										
CO5	2	2	2									
AVERAGE	2	2	2									
OVERALL MAPPING OF SUBJECT												2.0

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	39.29	0.78	0.78										
CO2	37.98	0.75	0.75										
CO3	47.41	1.42	1.42										
CO4	35.03	0.70	0.70										
CO5	36.50	0.73	0.73	0.73									
AVERAGE	39.24	0.87	0.87	0.73									
FINAL ATTAINMENT LEVEL													0.82

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Academic year	2021-22						Total strength			20		Subject	Dynamics of Machines					Subject Code	18ME53										
SEM/V	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			SSIGNEMENT / QUIZ(10 M					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV17ME005	4	2	6	4	1	5	6	1	7	2	2	2	2	2	0	0	0	0	0	0	6	8	10.6	8	3	0.18	0.18	0.31	0.24	0.09
1SV18ME003	6	9	15	6	10	16	4	10	14	2	2	2	2	2	7.6	7.6	7.6	7.6	7.6	38	15.6	24.6	18.4	13.6	19.6	0.46	0.56	0.54	0.40	0.58
1SV18ME008	13	4	17	8	10	18	7	9	16	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	21.4	20.4	18.2	15.4	17.4	0.63	0.46	0.54	0.45	0.51
1SV18ME010	5	5	10	6	6	12	5	3	8	2	2	2	2	2	6.2	6.2	6.2	6.2	6.2	31	13.2	19.2	12.6	13.2	11.2	0.39	0.44	0.37	0.39	0.33
1SV18ME011	7	5	12	4	4	8	7	3	10	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	13.6	15.6	11	13.6	9.6	0.40	0.35	0.32	0.40	0.28
1SV18ME012	5	3	8	4	8	12	4	6	10	2	2	2	2	2	5	5	5	5	5	25	12	14	17.2	11	13	0.35	0.32	0.51	0.32	0.38
1SV18ME013	7	5	12	6	4	10	3	5	8	2	2	2	2	2	7.2	7.2	7.2	7.2	7.2	36	16.2	20.2	12	12.2	14.2	0.48	0.46	0.35	0.36	0.42
1SV19ME001	8	6	14	9	6	15	6	7	13	2	2	2	2	2	6	6	6	6	6	30	16	23	13.2	14	15	0.47	0.52	0.39	0.41	0.44
1SV19ME002	9	3	12	7	3	10	4	10	14	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	16.2	17.2	7.4	11.2	17.2	0.48	0.39	0.22	0.33	0.51
1SV19ME004	4	2	6	4	1	5	6	1	7	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	12	8.4	10.4	8.2	10.4	5.4	0.25	0.24	0.24	0.31	0.16
1SV19ME005	8	4	12	6	2	8	3	7	10	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	15.2	17.2	9	10.2	14.2	0.45	0.39	0.26	0.30	0.42
1SV19ME006	6	2	8	7	3	10	6	6	12	2	2	2	2	2	5	5	5	5	5	25	13	16	9.6	13	13	0.38	0.36	0.28	0.38	0.38
1SV19ME010	4	6	10	4	4	8	7	5	12	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	10.6	16.6	10.2	13.6	11.6	0.31	0.38	0.30	0.40	0.34
1SV19ME011	4	2	6	6	1	7	4	1	5	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	10.2	14.2	6	10.2	7.2	0.30	0.32	0.18	0.30	0.21
1SV19ME013	9	3	12	4	4	8	3	7	10	2	2	2	2	2	3	3	3	3	3	15	14	12	9.4	8	12	0.41	0.27	0.28	0.24	0.35
1SV19ME014	4	2	6	3	1	4	4	4	8	2	2	2	2	2	3.4	3.4	3.4	3.4	3.4	17	9.4	10.4	7.2	9.4	9.4	0.28	0.24	0.21	0.28	0.28
1SV19ME015	3	1	4	5	1	6	7	1	8	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	9.2	12.2	11.4	13.2	7.2	0.27	0.28	0.34	0.39	0.21
1SV20ME400	9	9	18	7	9	16	5	9	14	2	2	2	2	2	8.4	8.4	8.4	8.4	8.4	42	19.4	26.4	16.8	15.4	19.4	0.57	0.60	0.49	0.45	0.57
1SV20ME402	6	4	10	5	3	8	4	5	9	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	13.8	16.8	10.8	11.8	12.8	0.41	0.38	0.32	0.35	0.38
1SV20ME403	6	4	10	8	1	9	3	8	11	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	13.8	19.8	103.2	10.8	15.8	0.41	0.45	3.04	0.32	0.46
TOTAL	127	81	208	113	82	195	98	108	206	40	40	40	40	40	100.2	100.2	100.2	100.2	100.2	501	267.2	334.2	322.4	238.2	248.2	7.86	7.60	9.48	7.01	7.30
NO OF STUDENTS	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
AVERAGE	6.35	4.05	10.4	5.65	4.1	9.75	4.9	5.4	10.3	2	2	2	2	2	5.01	5.01	5.01	5.01	5.01	25.05	13.36	16.71	16.12	11.91	12.41	39.29	37.98	47.41	35.03	36.50

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SHRIDEVI	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ME

SUBJECT	TURBO MACHINES	SUBJECT CODE	18ME54

COURSE OUTCOME

CO1	Model studies and thermodynamics analysis of turbo machines.
CO2	Analyze the energy transfer in Turbo machine with degree of reaction and utilization factor.
CO3	Classify, analyze and understand various type of steam turbine.
CO4	Classify, analyze and understand various type of hydraulic turbine.
CO5	Understand the concept of radial power absorbing machine and the problems involved during its operation.

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY											
FACULTY NAME	K P CHANDRAIAH											
BRANCH	ME		ACADEMIC YEAR	2021-22								
COURSE	B.E	SEMESTER	V	SECTION								
SUBJECT	TURBO MACHINES			SUBJECT CODE	18ME54							
CO & PO MAPPING												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3									
CO2	3	3	3									
CO3	3	3	3									
CO4	3	3	3									
CO5	3	3	3									
AVERAGE	3	3	3									
OVERALL MAPPING OF SUBJECT												3.0

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	41.94	1.25	1.25	1.25									
CO2	47.52	1.42	1.42	1.42									
CO3	52.56	1.57	1.57	1.57									
CO4	43.12	1.29	1.29	1.29									
CO5	39.15	1.17	1.17	1.17									
AVERAGE	44.85	1.34	1.34	1.34									
FINAL ATTAINMENT LEVEL													1.34

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Academic year	2021-22						Total strength			20		Subject	Turbo Machines					Subject Code	18ME54										
SEM/V	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			ASSIGNEMENT / QUIZ(10 M)					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV17ME005	4	2	6	5	2	7	3	2	5	2	2	2	2	2	0	0	0	0	0	0	6	9	11.6	5	4	0.18	0.20	0.34	0.15	0.12
1SV18ME003	15	10	25	15	11	26	16	11	27	2	2	2	2	2	7.6	7.6	7.6	7.6	7.6	38	24.6	34.6	19.4	25.6	20.6	0.72	0.79	0.57	0.75	0.61
1SV18ME008	12	14	26	13	12	25	17	10	27	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	20.4	35.4	20.2	25.4	18.4	0.60	0.80	0.59	0.75	0.54
1SV18ME010	6	4	10	6	3	9	7	4	11	2	2	2	2	2	6.2	6.2	6.2	6.2	6.2	31	14.2	18.2	9.6	15.2	12.2	0.42	0.41	0.28	0.45	0.36
1SV18ME011	5	4	9	5	6	11	8	2	10	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	11.6	15.6	13	14.6	8.6	0.34	0.35	0.38	0.43	0.25
1SV18ME012	6	7	13	7	5	12	6	8	14	2	2	2	2	2	5	5	5	5	5	25	13	21	14.2	13	15	0.38	0.48	0.42	0.38	0.44
1SV18ME013	12	14	26	15	10	25	15	12	27	2	2	2	2	2	7.2	7.2	7.2	7.2	7.2	36	21.2	38.2	18	24.2	21.2	0.62	0.87	0.53	0.71	0.62
1SV19ME001	8	7	15	8	6	14	8	8	16	2	2	2	2	2	6	6	6	6	6	30	16	23	13.2	16	16	0.47	0.52	0.39	0.47	0.47
1SV19ME002	9	8	17	7	8	15	11	8	19	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	16.2	22.2	12.4	18.2	15.2	0.48	0.50	0.36	0.54	0.45
1SV19ME004	4	3	7	4	2	6	2	3	5	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	12	8.4	11.4	9.2	6.4	7.4	0.25	0.26	0.27	0.19	0.22
1SV19ME005	8	4	12	7	4	11	7	6	13	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	15.2	18.2	11	14.2	13.2	0.45	0.41	0.32	0.42	0.39
1SV19ME006	6	5	11	6	6	12	4	6	10	2	2	2	2	2	5	5	5	5	5	25	13	18	12.6	11	13	0.38	0.41	0.37	0.32	0.38
1SV19ME010	8	4	12	8	2	10	7	4	11	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	14.6	18.6	8.2	13.6	10.6	0.43	0.42	0.24	0.40	0.31
1SV19ME011	6	8	14	4	12	16	4	11	15	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	12.2	18.2	17	10.2	17.2	0.36	0.41	0.50	0.30	0.51
1SV19ME013	5	2	7	4	1	5	5	1	6	2	2	2	2	2	3	3	3	3	3	15	10	11	6.4	10	6	0.29	0.25	0.19	0.29	0.18
1SV19ME014	6	6	12	7	4	11	4	6	10	2	2	2	2	2	3.4	3.4	3.4	3.4	3.4	17	11.4	18.4	10.2	9.4	11.4	0.34	0.42	0.30	0.28	0.34
1SV19ME015	8	6	14	6	7	13	10	5	15	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	14.2	18.2	17.4	16.2	11.2	0.42	0.41	0.51	0.48	0.33
1SV20ME400	5	9	14	9	7	16	6	6	12	2	2	2	2	2	8.4	8.4	8.4	8.4	8.4	42	15.4	28.4	14.8	16.4	16.4	0.45	0.65	0.44	0.48	0.48
1SV20ME402	5	4	9	6	5	11	4	6	10	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	12.8	17.8	12.8	11.8	13.8	0.38	0.40	0.38	0.35	0.41
1SV20ME403	7	7	14	8	4	12	9	7	16	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	14.8	22.8	106.2	16.8	14.8	0.44	0.52	3.12	0.49	0.44
TOTAL	145	128	273	150	117	267	153	126	279	40	40	40	40	40	100.2	100.2	100.2	100.2	100.2	501	285.2	418.2	357.4	293.2	266.2	8.39	9.50	10.51	8.62	7.83
NO OF STUDENTS	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
AVERAGE	7.25	6.4	13.65	7.5	5.85	13.35	7.65	6.3	13.95	2	2	2	2	2	5.01	5.01	5.01	5.01	5.01	25.05	14.26	20.91	17.87	14.66	13.31	41.94	47.52	52.56	43.12	39.15

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SHRIDEVI	**SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY** **SIRA ROAD, TUMKUR- 572 106.**

DEPARTMENT OF ME

SUBJECT	FLUID POWER ENGINEERING	SUBJECT CODE	18ME55

COURSE OUTCOME

CO1	Understand the basic concepts (principles) of working and maintenance of fluid power system with its potential applications.
CO2	Interpret the construction and working of input and output elements of fluid power systems viz. hydraulic and pneumatic pumps, motors and cylinders.
CO3	Demonstrate the functioning of control valves for obtaining desired output from fluid power systems.
CO4	Formulate (construct) the hydraulic and pneumatic circuits for various outputs
CO5	Integrate fluid power system with electrical and logic elements, controls to maintain the sequence of 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 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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	SANTHOSH T U				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	V	SECTION	
SUBJECT	FLUID POWER ENGINEERING	SUBJECT CODE	18ME54		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3											
CO2	2	2										
CO3	2											
CO4	1		2		2							
CO5	2		3		2							1
AVERAGE	2	2	2.5		2							1
OVERALL MAPPING OF SUBJECT												1.9

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	49.48	1.48											
CO2	59.57	1.19	1.19										
CO3	61.24	1.22											
CO4	50.76	0.50		1.01	1.01								
CO5	49.15	0.98		1.47	0.98								0.49
AVERAGE	54.14	1.07		1.24	0.99								0.49
FINAL ATTAINMENT LEVEL													0.94

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Academic year	2021-22						Total strength			20		Subject	Fluid Power Engineering					Subject Code	18ME55										
SEM:V	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			SSIGNEMENT / QUIZ(10 M					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV17ME005	5	4	9	6	3	9	4	5	9	2	2	2	2	2	0	0	0	0	0	0	7	12	12.6	6	7	0.21	0.27	0.37	0.18	0.21
1SV18ME003	12	12	24	13	13	26	13	15	28	2	2	2	2	2	7.6	7.6	7.6	7.6	7.6	38	21.6	34.6	21.4	22.6	24.6	0.64	0.79	0.63	0.66	0.72
1SV18ME008	13	13	26	15	13	28	12	12	24	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	21.4	36.4	21.2	20.4	20.4	0.63	0.83	0.62	0.60	0.60
1SV18ME010	10	6	16	6	9	15	12	5	17	2	2	2	2	2	6.2	6.2	6.2	6.2	6.2	31	18.2	20.2	15.6	20.2	13.2	0.54	0.46	0.46	0.59	0.39
1SV18ME011	11	6	17	6	10	16	11	7	18	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	17.6	18.6	17	17.6	13.6	0.52	0.42	0.50	0.52	0.40
1SV18ME012	12	12	24	12	11	23	13	12	25	2	2	2	2	2	5	5	5	5	5	25	19	31	20.2	20	19	0.56	0.70	0.59	0.59	0.56
1SV18ME013	11	12	23	15	7	22	14	10	24	2	2	2	2	2	7.2	7.2	7.2	7.2	7.2	36	20.2	36.2	15	23.2	19.2	0.59	0.82	0.44	0.68	0.56
1SV19ME001	15	10	25	13	11	24	12	14	26	2	2	2	2	2	6	6	6	6	6	30	23	31	18.2	20	22	0.68	0.70	0.54	0.59	0.65
1SV19ME002	11	8	19	11	7	18	13	7	20	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	18.2	26.2	11.4	20.2	14.2	0.54	0.60	0.34	0.59	0.42
1SV19ME004	6	6	12	7	4	11	7	6	13	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	12	10.4	17.4	11.2	11.4	10.4	0.31	0.40	0.33	0.34	0.31
1SV19ME005	9	11	20	11	9	20	5	15	20	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	16.2	29.2	16	12.2	22.2	0.48	0.66	0.47	0.36	0.65
1SV19ME006	13	12	25	14	10	24	13	13	26	2	2	2	2	2	5	5	5	5	5	25	20	33	16.6	20	20	0.59	0.75	0.49	0.59	0.59
1SV19ME010	10	13	23	11	11	22	12	12	24	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	16.6	30.6	17.2	18.6	18.6	0.49	0.70	0.51	0.55	0.55
1SV19ME011	11	8	19	6	14	20	13	5	18	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	17.2	20.2	19	19.2	11.2	0.51	0.46	0.56	0.56	0.33
1SV19ME013	4	6	10	4	4	8	6	6	12	2	2	2	2	2	3	3	3	3	3	15	9	15	9.4	11	11	0.26	0.34	0.28	0.32	0.32
1SV19ME014	8	10	18	12	7	19	8	12	20	2	2	2	2	2	3.4	3.4	3.4	3.4	3.4	17	13.4	27.4	13.2	13.4	17.4	0.39	0.62	0.39	0.39	0.51
1SV19ME015	6	8	14	6	7	13	7	8	15	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	12.2	20.2	17.4	13.2	14.2	0.36	0.46	0.51	0.39	0.42
1SV20ME400	11	9	20	8	11	19	11	10	21	2	2	2	2	2	8.4	8.4	8.4	8.4	8.4	42	21.4	27.4	18.8	21.4	20.4	0.63	0.62	0.55	0.63	0.60
1SV20ME402	9	10	19	15	6	21	8	12	20	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	16.8	32.8	13.8	15.8	19.8	0.49	0.75	0.41	0.46	0.58
1SV20ME403	12	6	18	11	9	20	11	8	19	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	19.8	24.8	111.2	18.8	15.8	0.58	0.56	3.27	0.55	0.46
TOTAL	199	182	381	202	176	378	205	194	399	40	40	40	40	40	100.2	100.2	100.2	100.2	100.2	501	339.2	524.2	416.4	345.2	334.2	9.98	11.91	12.25	10.15	9.83
NO OF STUDENTS	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
AVERAGE	9.95	9.1	19.05	10.1	8.8	18.9	10.25	9.7	19.95	2	2	2	2	2	5.01	5.01	5.01	5.01	5.01	25.05	16.96	26.21	20.82	17.26	16.71	49.88	59.57	61.24	50.76	49.15

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SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF MECHANICAL ENGINEERING

SUBJECT	OPERATION MANAGEMENT	SUBJECT CODE	18ME56

COURSE OUTCOME

CO1	Understand the fundamental basis and nature of operation management techniques for the manufacturing Industry and also to assess a range of strategies for improving the efficiency and effectiveness of organizational operations
CO2	Analyze the appropriateness and applicability of a range of operations management systems/models in decision making and forecasting techniques.
CO3	Evaluate various facility alternatives and their capacity decisions and sequencing techniques in operations management environment.
CO4	Summarize Aggregate Planning & Master Scheduling methods by graphical, charting techniques and mathematical techniques as applied to product and process industries.
CO5	Assess the operational issues between Industry, vendor and customer by using Material Requirement Planning (MRP), Purchasing and Supply Chain Management (SCM).

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.

O5 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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	PRASHANTH S				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	V	SECTION	-
SUBJECT	OPERATION MANAGEMENT	SUBJECT CODE	18ME56		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3										1
CO2	3	3	2									1
CO3	3	3										1
CO4	3	3										1
CO5	3	3										1
AVERAGE	3	3										1
OVERALL MAPPING OF SUBJECT												2.3

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	54.59	1.63	1.63										0.54
CO2	65.37	1.96	1.96	1.30									0.65
CO3	64.93	1.93	1.93										0.64
CO4	58.97	1.75	1.75										0.58
CO5	48.42	1.45	1.45										0.48
AVERAGE	58.37	1.74	1.74	1.30			—						0.57
FINAL ATTAINMENT LEVEL													1.33

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Academic year	2021-22						Total strength			20		Subject	Operations Management						Subject Code	18ME56									
SEM:V	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			ASSIGNEMENT / QUIZ(10 M					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV17ME005	16	11	27	18	11	29	23	5	28	2	2	2	2	2	0	0	0	0	0	0	18	31	20.6	25	7	0.53	0.70	0.61	0.74	0.21
1SV18ME003	14	10	24	12	12	24	11	13	24	2	2	2	2	2	7.6	7.6	7.6	7.6	7.6	38	23.6	31.6	20.4	20.6	22.6	0.69	0.72	0.60	0.61	0.66
1SV18ME008	11	9	20	12	7	19	13	8	21	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	19.4	29.4	15.2	21.4	16.4	0.57	0.67	0.45	0.63	0.48
1SV18ME010	12	8	20	8	11	19	16	5	21	2	2	2	2	2	6.2	6.2	6.2	6.2	6.2	31	20.2	24.2	17.6	24.2	13.2	0.59	0.55	0.52	0.71	0.39
1SV18ME011	5	16	21	13	10	23	12	10	22	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	11.6	35.6	17	18.6	16.6	0.34	0.81	0.50	0.55	0.49
1SV18ME012	12	12	24	12	13	25	14	12	26	2	2	2	2	2	5	5	5	5	5	25	19	31	22.2	21	19	0.56	0.70	0.65	0.62	0.56
1SV18ME013	14	12	26	12	16	28	17	10	27	2	2	2	2	2	7.2	7.2	7.2	7.2	7.2	36	23.2	33.2	24	26.2	19.2	0.68	0.75	0.71	0.77	0.56
1SV19ME001	19	7	26	14	13	27	13	15	28	2	2	2	2	2	6	6	6	6	6	30	27	29	20.2	21	23	0.79	0.66	0.59	0.62	0.68
1SV19ME002	13	10	23	12	13	25	14	10	24	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	20.2	29.2	17.45	21.2	17.2	0.59	0.66	0.51	0.62	0.51
1SV19ME004	7	8	15	9	6	15	12	3	15	2	2	2	2	2	2.4	2.45	2.45	2.45	2.45	12	11.4	21.45	13.2	16.45	7.45	0.34	0.49	0.39	0.48	0.22
1SV19ME005	9	9	18	13	7	20	14	5	19	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	16.2	29.2	14	21.2	12.2	0.48	0.66	0.41	0.62	0.36
1SV19ME006	12	12	24	13	15	28	5	21	26	2	2	2	2	2	5	5	5	5	5	25	19	32	21.6	12	28	0.56	0.73	0.64	0.35	0.82
1SV19ME010	12	9	21	16	4	20	14	8	22	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	18.6	31.6	10.2	20.6	14.6	0.55	0.72	0.30	0.61	0.43
1SV19ME011	15	3	18	9	8	17	8	11	19	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	21.2	18.2	13	14.2	17.2	0.62	0.41	0.38	0.42	0.51
1SV19ME013	5	5	10	9	3	12	10	1	11	2	2	2	2	2	3	3	3	3	3	15	10	19	8.4	15	6	0.29	0.43	0.25	0.44	0.18
1SV19ME014	8	11	19	12	9	21	14	6	20	2	2	2	2	2	3.4	3.4	3.4	3.4	3.4	17	13.4	28.4	15.2	19.4	11.4	0.39	0.65	0.45	0.57	0.34
1SV19ME015	12	6	18	9	8	17	7	12	19	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	18.2	21.2	18.4	13.2	18.2	0.54	0.48	0.54	0.39	0.54
1SV20ME400	14	12	26	12	13	25	13	14	27	2	2	2	2	2	8.4	8.4	8.4	8.4	8.4	42	24.4	34.4	20.8	23.4	24.4	0.72	0.78	0.61	0.69	0.72
1SV20ME402	9	12	21	13	10	23	15	7	22	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	16.8	32.8	17.8	22.8	14.8	0.49	0.75	0.52	0.67	0.44
1SV20ME403	12	13	25	12	12	24	13	13	26	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	19.8	32.8	114.25	20.8	20.8	0.58	0.75	3.36	0.61	0.61
TOTAL	231	195	426	240	201	441	258	189	447	40	40	40	40	40	100.2	100.25	100.3	100.3	100.3	501	371.2	575.25	441.5	398.25	329.25	10.92	13.07	12.99	11.71	9.68
NO OF STUDENTS	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
AVERAGE	11.55	9.75	21.3	12	10.05	22.05	12.9	9.45	22.35	2	2	2	2	2	5.01	5.01	5.01	5.01	5.01	25.05	18.56	28.76	22.08	19.91	16.46	54.59	65.37	64.93	58.57	48.42

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SHRIDEVI	**SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY** **SIRA ROAD, TUMKUR- 572 106.**

DEPARTMENT OF ME

SUBJECT	CONTROL ENGINEERING	SUBJECT CODE	18ME71

COURSE OUTCOME

CO1	Identify the control system and its types , control actions
CO2	Construct the system governing equations for physical models(Electrical, Thermal, Mechanical, Electro Mechanical
CO3	Analyze the gain of the system using block diagram and signal flow graph
CO4	Evaluate the stability of Control system in complex domain and frequency domain
CO5	Employ state equations to study the Bode's plot

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	B H VASUDEVAMURTHY				
BRANCH	ME		ACADEMIC YEAR	2021-22	
COURSE	B.E	SEMESTER	VII	SECTION	
SUBJECT	CONTROL ENGINEERING		SUBJECT CODE	18ME71	

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2											1
CO2	2	2	1									
CO3	2	2										
CO4	2	2	1									1
CO5	1	2	1									1
AVERAGE	1.8	1.6	0.6									1
OVERALL MAPPING OF SUBJECT												1.25

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	44.71	0.89											0.44
CO2	62.32	1.24	1.24	0.62									
CO3	48.95	0.97	0.97										
CO4	47.65	0.95	0.95	0.47									0.47
CO5	46.34	0.46	0.92	0.46									0.46
AVERAGE	49.99	0.90	1.02	0.51									0.45
FINAL ATTAINMENT LEVEL													0.72

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Academic year	2021-22			SEM	VII		Total strength			9		Subject	Control Engineering				Subject Code	18ME71										
SEM:VII	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			SSIGNEMENT / QUIZ(10 M					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV18ME002	13	16	29	14	13	27	20	11	31	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	21.4	38.4	21.4	28.4	19.4	0.63	0.87	0.63	0.84	0.57
1SV18ME004	14	13	27	13	15	28	12	14	26	2	2	2	2	2	5	5	5	5	5	25	21	33	22	19	21	0.62	0.75	0.65	0.56	0.62
1SV18ME005	11	11	22	13	11	24	11	15	26	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	17.2	30.2	17.2	17.2	21.2	0.51	0.69	0.51	0.51	0.62
1SV18ME009	6	4	10	6	6	12	6	8	14	2	2	2	2	2	2.2	2.2	2.2	2.2	2.2	11	10.2	14.2	10.2	10.2	12.2	0.3	0.32	0.3	0.3	0.36
1SV19ME400	5	7	12	5	9	14	8	2	10	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	24	11.8	18.8	15.8	14.8	8.8	0.35	0.43	0.46	0.44	0.26
1SV19ME401	12	12	24	15	11	26	12	10	22	2	2	2	2	2	6.2	6.2	6.2	6.2	6.2	31	20.2	35.2	19.2	20.2	18.2	0.59	0.8	0.56	0.59	0.54
1SV19ME402	6	6	12	6	8	14	5	5	10	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	12.2	18.2	14.2	11.2	11.2	0.36	0.41	0.42	0.33	0.33
1SV19ME403	6	15	21	13	10	23	9	10	19	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	12.6	34.6	16.6	15.6	16.6	0.37	0.79	0.49	0.46	0.49
1SV19ME404	7	13	20	8	10	18	6	10	16	2	2	2	2	2	1.2	1.2	1.2	1.2	1.2	6	10.2	24.2	13.2	9.2	13.2	0.3	0.55	0.39	0.27	0.39
TOTAL	80	97	177	93	93	186	89	85	174	18	18	18	18	18	38.8	38.8	38.8	38.8	38.8	194	136.8	246.8	149.8	145.8	141.8	4.02	5.61	4.41	4.29	4.17
NO OF STUDENTS	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
AVERAGE	8.889	10.8	19.667	10.3	10.33	20.67	9.889	9.44	19.333	2	2	2	2	2	4.3111	4.3111	4.311	4.311	4.311	21.56	15.2	27.42	16.64	16.2	15.76	44.71	62.32	48.95	47.65	46.34

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SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY
SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ME

SUBJECT	COMPUTER AIDED DESIGN AND MANUFACTURING	SUBJECT CODE	18ME72

COURSE OUTCOME

CO1	Define automation, CIM,CAD,CAM & explain differences between these concepts. Solve simple problems of transformations of entities on computer screen
CO2	Explain the basics of automated manufacturing industries through mathematical models and analyze different types of automated flow lines
CO3	Analyze the automated flowlines to reduce time and enhance productivity
CO4	Explain the use of different computer applications in manufacturing and able to prepare part program for simple jobs on CNC and Robot Programming
CO5	Visualize and appreciate the modern trends in manufacturing like additive manufacturing industry 4.0 and applications of IOT leading to smart manufacturing.

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY											
FACULTY NAME	RAVI KUMAR K R											
BRANCH	ME		ACADEMIC YEAR		2021-22							
COURSE	B.E	SEMESTER	VII	SECTION								
SUBJECT	COMPUTER AIDED DESIGN AND MANUFACTURING			SUBJECT CODE	18ME72							
CO & PO MAPPING												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2										
CO2	3	2										
CO3	3	2										
CO4	3	2										
CO5	3	2										
AVERAGE	3	2										
OVERALL MAPPING OF SUBJECT												2.5

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	33.33	0.99	0.66										
CO2	57.68	1.73	1.15										
CO3	43.59	1.30	0.87										
CO4	52.09	1.56	1.04										
CO5	47.19	1.41	0.94										
AVERAGE	46.77	1.39	0.93										
FINAL ATTAINMENT LEVEL													1.16

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Academic year	2021-22			SEM	VII		Total strength		9		Subject	Computer aided design and manufacturing				Subject Code	18ME72										
SEM:VII	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			ASSIGNEMENT / QUIZ(10 M)					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV18ME002	13	9	22	15	12	27	11	8	19	2	2	2	2	2	5.4	5.4	5.4	5.4	5.4	27	15	31.4	19.4	18.4	15.4	0.44	0.71	0.57	0.54	0.45
1SV18ME004	10	8	18	10	10	20	11	9	20	2	2	2	2	2	5.6	5.6	5.6	5.6	5.6	28	12	25.6	17.6	18.6	16.6	0.35	0.58	0.52	0.55	0.49
1SV18ME005	7	11	18	11	3	14	8	7	15	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	9	28.2	9.2	14.2	13.2	0.26	0.64	0.27	0.42	0.39
1SV18ME009	2	6	8	3	6	9	5	6	11	2	2	2	2	2	5.4	5.4	5.4	5.4	5.4	27	4	16.4	13.4	12.4	13.4	0.12	0.37	0.39	0.36	0.39
1SV19ME400	6	9	15	8	13	21	12	8	20	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	8	24.2	20.2	19.2	15.2	0.24	0.55	0.59	0.56	0.45
1SV19ME401	15	13	28	11	6	17	15	9	24	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	17	31.8	13.8	22.8	16.8	0.5	0.72	0.41	0.67	0.49
1SV19ME402	9	5	14	8	7	15	7	9	16	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	11	19.2	13.2	13.2	15.2	0.32	0.44	0.39	0.39	0.45
1SV19ME403	11	6	17	12	4	16	13	15	28	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	13	25.2	11.2	20.2	22.2	0.38	0.57	0.33	0.59	0.65
1SV19ME404	11	7	18	12	8	20	13	9	22	2	2	2	2	2	5.4	5.4	5.4	5.4	5.4	27	13	26.4	15.4	20.4	16.4	0.38	0.6	0.45	0.6	0.48
TOTAL	84	74	158	90	69	159	95	80	175	18	18	18	18	18	46.4	46.4	46.4	46.4	46.4	232	102	228.4	133.4	159.4	144.4	3	5.19	3.92	4.69	4.25
NO OF STUDENTS	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
AVERAGE	9.333	8.22	17.556	10	7.667	17.67	10.56	8.89	19.444	2	2	2	2	2	5.16	5.16	5.16	5.16	5.16	25.78	11.33	25.38	14.82	17.71	16.04	33.33	57.68	43.59	52.09	47.19

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SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ME

SUBJECT	TOTAL QUALITY MANAGEMENT	SUBJECT CODE	18ME731

COURSE OUTCOME

CO1	Explain the various approaches of TQM
CO2	Infer the customer perception of quality
CO3	Analyze customer needs and perception to design feed back systems
CO4	Apply statistical tools for continuous improvement of systems
CO5	Apply the tools and technology for effective improvement of TQM

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.

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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.

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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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	J C THIPPESWAMY				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	VII	SECTION	
SUBJECT	TOTAL QUALITY MANAGEMENT	SUBJECT CODE	18ME731		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2											1
CO2	2	2									1	1
CO3	2	2										1
CO4	2										1	1
CO5	2	2									1	1
AVERAGE	2	2									1	1
OVERALL MAPPING OF SUBJECT												1.5

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	56.08	1.12											0.56
CO2	63.03	1.26	1.26									0.63	0.63
CO3	53.14	1.06	1.06										0.53
CO4	53.46	1.06										0.53	0.53
CO5	51.50	1.03	1.03									0.51	0.51
AVERAGE	55.44	1.10	1.11									0.55	0.55
FINAL ATTAINMENT LEVEL													0.82

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Academic year	2021-22			SEM	VII		Total strength			9			Subject	Total Quality Management					Subject Code	18ME734										
SEM:VII	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			ASSIGNEMENT / QUIZ(10 M)					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV18ME002	11	11	22	9	12	21	12	11	23	2	2	2	2	2	8.2	8.2	8.2	8.2	8.2	41	21.2	30.2	22.2	22.2	21.2	0.62	0.69	0.65	0.65	0.62
1SV18ME004	13	11	24	12	10	22	11	12	23	2	2	2	2	2	9	9	9	9	9	45	24	34	21	22	23	0.71	0.77	0.62	0.65	0.68
1SV18ME005	5	3	8	8	4	12	6	4	10	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	11.2	17.2	10.2	12.2	10.2	0.33	0.39	0.30	0.36	0.3
1SV18ME009	7	5	12	6	4	10	3	5	8	2	2	2	2	2	5	5	5	5	5	25	14	18	11	10	12	0.41	0.41	0.32	0.29	0.35
1SV19ME400	12	11	23	13	12	25	12	9	21	2	2	2	2	2	7.6	7.6	7.6	7.6	7.6	38	21.6	33.6	21.6	21.6	18.6	0.64	0.76	0.64	0.64	0.55
1SV19ME401	14	4	18	9	13	22	11	9	20	2	2	2	2	2	9.4	9.4	9.4	9.4	9.4	47	25.4	24.4	24.4	22.4	20.4	0.75	0.55	0.72	0.66	0.6
1SV19ME402	13	12	25	11	12	23	13	8	21	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	21.4	31.4	20.4	21.4	16.4	0.63	0.71	0.6	0.63	0.48
1SV19ME403	9	11	20	14	10	24	13	9	22	2	2	2	2	2	0	0	0	0	0	0	11	27	12	15	11	0.32	0.61	0.35	0.44	0.32
1SV19ME404	11	10	21	13	9	22	6	14	20	2	2	2	2	2	8.8	8.8	8.8	8.8	8.8	44	21.8	33.8	19.8	16.8	24.8	0.64	0.77	0.58	0.49	0.73
TOTAL	95	78	173	95	86	181	87	81	168	18	18	18	18	18	58.6	58.6	58.6	58.6	58.6	293	171.6	249.6	162.6	163.6	157.6	5.05	5.67	4.78	4.81	4.64
NO OF STUDENTS	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
AVERAGE	10.56	8.67	19.2	10.6	9.6	20.11	9.667	9	18.667	2	2	2	2	2	6.51	6.51	6.51	6.51	6.51	32.56	19.07	27.73	18.07	18.18	17.51	56.08	63.03	53.14	53.46	51.50

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SHRIDEVI	**SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY** **SIRA ROAD, TUMKUR- 572 106.**

DEPARTMENT OF ME

SUBJECT	MECHATRONICS	SUBJECT CODE	18ME744

COURSE OUTCOME

CO1	Illustrate various components of Mechatronics systems.
CO2	Assess various control systems used in automation
CO3	Design and conduct experiments to evaluate the performance of a mechatronics system or component with respect to specifications, as well as to analyse and interpret data.
CO4	Apply the principles of Mechatronics design to product design.
CO5	Function effectively as members of multidisciplinary teams.

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	PRASHANTH S				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	VII	SECTION	
SUBJECT	MECHATRONICS	SUBJECT CODE	18ME744		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3											
CO2	3	3										
CO3	3	3										
CO4												
CO5		3										
AVERAGE	3	3										
OVERALL MAPPING OF SUBJECT												3.0

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	48.69	1.46											
CO2	68.64	2.05	2.05										
CO3	53.20	1.59	1.59										
CO4	55.49												
CO5	62.35		1.87										
AVERAGE	57.67	1.7	1.82										
FINAL ATTAINMENT LEVEL													1.76

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Academic year	2021-22			SEM	VII		Total strength			9		Subject	MECHATRONICS			Subject Code	18ME744									
SEM:VII	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			ASSIGNEMENT / QUIZ(10 M					SEE MARKS(60)						Total Cos ATTAINMENT					% of Individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV18ME002	14	11	25	12	11	23	11	16	27	2	2	2	2	2	8.2	8.2	8.2	8.2	8.2	41	18	33.2	21.2	21.2	26.2	0.53	0.75	0.62	0.62	0.77
1SV18ME004	13	11	24	13	9	22	13	13	26	2	2	2	2	2	7.6	7.6	7.6	7.6	7.6	38	17	33.6	18.6	22.6	22.6	0.5	0.76	0.55	0.66	0.66
1SV18ME005	9	7	16	13	5	18	8	12	20	2	2	2	2	2	5.4	5.4	5.4	5.4	5.4	27	13	27.4	12.4	15.4	19.4	0.38	0.62	0.36	0.45	0.57
1SV18ME009	13	6	19	7	10	17	12	9	21	2	2	2	2	2	5	5	5	5	5	25	17	20	17	19	16	0.5	0.45	0.5	0.56	0.47
1SV19ME400	12	10	22	14	10	24	14	12	26	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	16	32.4	18.4	22.4	20.4	0.47	0.74	0.54	0.66	0.60
1SV19ME401	13	15	28	13	14	27	7	19	26	2	2	2	2	2	8.8	8.8	8.8	8.8	8.8	44	17	38.8	24.8	17.8	29.8	0.5	0.88	0.73	0.52	0.88
1SV19ME402	13	9	22	15	6	21	13	11	24	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	17	30.2	12.2	19.2	17.2	0.5	0.69	0.36	0.56	0.51
1SV19ME403	13	11	24	14	8	22	8	13	21	2	2	2	2	2	7.4	7.4	7.4	7.4	7.4	37	17	34.4	17.4	17.4	22.4	0.5	0.78	0.51	0.51	0.66
1SV19ME404	13	7	20	8	14	22	8	10	18	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	24	17	21.8	20.8	14.8	16.8	0.5	0.50	0.61	0.44	0.49
TOTAL	113	87	200	109	87	196	94	115	209	18	18	18	18	18	57.8	57.8	57.8	57.8	57.8	289	149	271.8	162.8	170	190.8	4.38	6.18	4.79	4.99	5.61
NO OF STUDENTS	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
AVERAGE	12.56	9.67	22.222	12	9.667	21.78	10.44	12.8	23.22	2	2	2	2	2	6.42	6.42	6.42	6.42	6.42	32.11	16.56	30.2	18.09	18.87	21.20	48.69	68.64	53.20	55.49	62.35

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SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING

EVEN SEM

2021-22

SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY
SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF MECHANICAL ENGINEERING

SUBJECT	APPLIED THERMODYNAMICS	SUBJECT CODE	18ME42

COURSE OUTCOME

CO1	Apply thermodynamic concepts to analyze the performance of gas power cycles.
CO2	Apply thermodynamic concepts to analyze the performance of vapour power cycles.
CO3	Understand combustion of fuels and performance of I C engines.
CO4	Apply Thermodynamic concepts to determine performance parameters of refrigeration and air-conditioning systems.
CO5	Understand the working principle of Air compressors and Steam nozzles, applications, relevance of air and identify methods for performance improvement

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	B H VASUDEVAMURTHY				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	IV	SECTION	
SUBJECT	APPLIED THERMODYNAMICS	SUBJECT CODE	18ME42		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2											
CO2	2											
CO3	2	2										
CO4	2	2	1									
CO5	2	2	1									
AVERAGE	2	2	1									
											OVERALL MAPPING OF SUBJECT	1.67

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	48.7	0.97											
CO2	64.4	1.28											
CO3	43.6	0.87	0.87										
CO4	48.5	0.97	0.97	0.48									
CO5	46.5	0.93	0.93	0.46									
AVERAGE	50.34	1.00	0.92	0.47									
												FINAL ATTAINMENT LEVEL	0.79

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Academic year	2021-22			SEM	IV		Total strength			12		Subject	Applied Thermodynamics			Subject Code	18ME42									
SEM:IV	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			ASSIGNEMENT / QUIZ(10 M					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	co4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV20ME001	12	9	21	11	10	21	13	8	21	2	2	2	2	2	2.8	2.8	2.8	2.8	2.8	14	16.8	24.8	14.8	17.8	12.8	0.49	0.56	0.44	0.52	0.38
1SV20ME002	11	16	27	11	16	27	13	14	27	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	17.2	33.2	22.2	19.2	20.2	0.51	0.75	0.65	0.56	0.59
1SV20ME003	12	11	23	12	11	23	13	10	23	2	2	2	2	2	3.6	3.6	3.6	3.6	3.6	18	17.6	28.6	16.6	18.6	15.6	0.52	0.65	0.49	0.55	0.46
1SV20ME004	13	7	20	12	8	20	11	9	20	2	2	2	2	2	0.4	0.4	0.4	0.4	0.4	2	15.4	21.4	10.4	13.4	11.4	0.45	0.49	0.31	0.39	0.34
1SV20ME005	1	9	10	1	9	10	1	9	10	2	2	2	2	2	1.8	1.8	1.8	1.8	1.8	9	4.8	13.8	12.8	4.8	12.8	0.14	0.31	0.38	0.14	0.38
1SV20ME006	12	10	22	11	11	22	13	9	22	2	2	2	2	2	1.6	1.6	1.6	1.6	1.6	8	15.6	24.6	14.6	16.6	12.6	0.46	0.56	0.43	0.49	0.37
1SV20ME007	13	11	24	13	11	24	12	12	24	2	2	2	2	2	2.8	2.8	2.8	2.8	2.8	14	17.8	28.8	15.8	16.8	16.8	0.52	0.65	0.46	0.49	0.49
1SV20ME008	11	14	25	12	13	25	13	12	25	2	2	2	2	2	0.8	0.8	0.8	0.8	0.8	4	13.8	28.8	15.8	15.8	14.8	0.41	0.65	0.46	0.46	0.44
1SV20ME009	13	16	29	12	17	29	13	16	29	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	19.2	34.2	23.2	19.2	22.2	0.56	0.78	0.68	0.56	0.65
1SV21ME400	15	5	20	11	9	20	13	7	20	2	2	2	2	2	2.8	2.8	2.8	2.8	2.8	14	19.8	20.8	13.8	17.8	11.8	0.58	0.47	0.41	0.52	0.35
1SV21ME401	14	10	24	23	1	24	11	13	24	2	2	2	2	2	5	5	5	5	5	25	21	40	8	18	20	0.62	0.91	0.24	0.53	0.59
1SV21ME402	13	12	25	22	3	25	13	12	25	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	24	19.8	40.8	9.8	19.8	18.8	0.58	0.93	0.29	0.58	0.55
TOTAL	140	130	270	151	119	270	139	131	270	24	24	24	24	24	34.8	34.8	34.8	34.8	34.8	174	198.8	339.8	177.8	197.8	189.8	5.85	7.72	5.23	5.82	5.58
NO OF STUDENTS	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
AVERAGE	11.7	10.8	22.5	12.6	9.9	22.5	11.6	10.9	22.5	2.0	2.0	2.0	2.0	2.0	2.9	2.9	2.9	2.9	2.9	14.5	16.6	28.3	14.8	16.5	15.8	48.7	64.4	43.6	48.5	46.5

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SHRIDEVI	**SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY** **SIRA ROAD, TUMKUR- 572 106.**

DEPARTMENT OF ME

SUBJECT	FLUID MECHANICS	SUBJECT CODE	18ME43

COURSE OUTCOME

CO1	Identify and calculate the key fluid properties used in the analysis of fluid behavior. Explain the principles of pressure, buoyancy and floatation
CO2	Apply the knowledge of fluid statics, kinematics and dynamics while addressing problems mechanical and chemical engineering.
CO3	Describe the principles of fluid kinematics and dynamics.
CO4	Explain the concept of boundary layer in fluid flow and apply dimensional analysis to for dimensionless numbers in terms of input output variables.
CO5	Illustrate and explain the basic concept of compressible flow and CFD

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY											
FACULTY NAME	K P CHANDRAIAH											
BRANCH	ME		ACADEMIC YEAR	2021-22								
COURSE	B.E	SEMESTER	IV	SECTION								
SUBJECT	FLUID MECHANICS			SUBJECT CODE	18ME43							
CO & PO MAPPING												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3									
CO2	3	3	3									
CO3	3	3	3									
CO4	3	3	3									
CO5	3	3	3									
AVERAGE	3	3	3									
OVERALL MAPPING OF SUBJECT												3.0

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	53.5	1.60	1.60	1.60									
CO2	58.2	1.74	1.74	1.74									
CO3	61.5	1.84	1.84	1.84									
CO4	57.1	1.71	1.71	1.71									
CO5	63.7	1.91	1.91	1.91									
AVERAGE	58.8	1.76	1.76	1.76									
FINAL ATTAINMENT LEVEL													1.76

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SIET, TUMAKURU

Academic year	2021-22			SEM	IV		Total strength			12		Subject	Fluid Mechanics			Subject Code	18ME43									
SEM:IV	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			SSIGNEMENT / QUIZ(10 M					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=54	CO3=34	co4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV20ME001	19	10	29	12	14	26	12	17	29	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	25.2	28.2	20.2	18.2	23.2	0.74	0.52	0.59	0.54	0.68
1SV20ME002	12	15	27	14	11	25	11	18	29	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	18.6	35.6	17.6	17.6	24.6	0.55	0.66	0.52	0.52	0.72
1SV20ME003	16	10	26	11	15	26	13	16	29	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	22.2	27.2	21.2	19.2	22.2	0.65	0.50	0.62	0.56	0.65
1SV20ME004	13	16	29	10	19	29	16	10	26	2	2	2	2	2	3.4	3.4	3.4	3.4	3.4	17	18.4	31.4	24.4	21.4	15.4	0.54	0.58	0.72	0.63	0.45
1SV20ME005	3	6	9	6	5	11	5	5	10	2	2	2	2	2	1.6	1.6	1.6	1.6	1.6	8	6.6	15.6	8.6	8.6	8.6	0.19	0.29	0.25	0.25	0.25
1SV20ME006	12	13	25	12	15	27	13	16	29	2	2	2	2	2	1.4	1.4	1.4	1.4	1.4	7	15.4	28.4	18.4	16.4	19.4	0.45	0.53	0.54	0.48	0.57
1SV20ME007	15	11	26	17	10	27	11	18	29	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	21.2	34.2	16.2	17.2	24.2	0.62	0.63	0.48	0.51	0.71
1SV20ME008	11	15	26	11	18	29	15	14	29	2	2	2	2	2	1	1	1	1	1	5	14	29	21	18	17	0.41	0.54	0.62	0.53	0.50
1SV20ME009	16	13	29	15	14	29	13	16	29	2	2	2	2	2	5.2	25	25	25	25	26	23.2	55	41	40	43	0.68	1.02	1.21	1.18	1.26
1SV21ME400	11	7	18	8	8	16	11	9	20	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	17.2	21.2	14.2	17.2	15.2	0.51	0.39	0.42	0.51	0.45
1SV21ME401	12	14	26	13	16	29	13	16	29	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	24	18.8	33.8	22.8	19.8	22.8	0.55	0.63	0.67	0.58	0.67
1SV21ME402	10	19	29	11	18	29	12	17	29	2	2	2	2	2	5.4	5.4	5.4	5.4	5.4	27	17.4	37.4	25.4	19.4	24.4	0.51	0.69	0.75	0.57	0.72
TOTAL	150	149	299	140	163	303	145	172	317	24	24	24	24	24	44.2	64	64	64	64	221	218.2	377	251	233	260	6.4	7.0	7.4	6.9	7.6
NO OF STUDENTS	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
AVERAGE	12.5	12.4	24.9	11.7	13.6	25.3	12.1	14.3	26.4	2.0	2.0	2.0	2.0	2.0	3.7	5.3	5.3	5.3	5.3	18.4	18.2	31.4	20.9	19.4	21.7	53.5	58.2	61.5	57.1	63.7

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SHRIDEVI	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF MECHANICAL ENGINEERING

SUBJECT	KINEMATICS OF MACHINES	SUBJECT CODE	18ME44

COURSE OUTCOME

CO1	Identify the kinematic link, kinematic pairs, chains, mechanisms, mobility, and inversions.
CO2	Determine the velocities and accelerations of linkages and joints of mechanisms graphical method.
CO3	Apply the Freudenstein's equation to determine the velocities and accelerations by analytical method for slider crank mechanism and other applications.
CO4	Analyse different cams and sketch the cam profiles for various motions of the follower, motion characteristics.
CO5	Evaluate the velocity ratio and torque in various types of gear trains.

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	B H VASUDEVAMURTHY				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	IV	SECTION	
SUBJECT	KINEMATICS OF MACHINES	SUBJECT CODE	18ME44		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3											
CO2	2											
CO3	2	3										
CO4	2	2										
CO5	2	2										
AVERAGE	2.2	2.3										
OVERALL MAPPING OF SUBJECT												2.25

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	43.4	1.30											
CO2	68.8	1.37											
CO3	47.3	0.94	1.14										
CO4	54.7	1.09	1.09										
CO5	46.3	0.92	0.92										
AVERAGE	52.1	1.12	1.14										
FINAL ATTAINMENT LEVEL													1.13

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Academic year	2021-22			SEM	IV		Total strength			12		Subject	Kinematics of Machines			Subject Code	18ME44									
SEM:IV	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			SSIGNEMENT / QUIZ(10 M					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	co4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV20ME001	6	15	21	11	11	22	11	12	23	2	2	2	2	2	3	3	3	3	3	15	11	31	16	16	17	0.32	0.70	0.47	0.47	0.50
1SV20ME002	5	20	25	12	14	26	15	12	27	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	11.6	38.6	20.6	21.6	18.6	0.34	0.88	0.61	0.64	0.55
1SV20ME003	8	15	23	12	12	24	15	10	25	2	2	2	2	2	2.8	2.8	2.8	2.8	2.8	14	12.8	31.8	16.8	19.8	14.8	0.38	0.72	0.49	0.58	0.44
1SV20ME004	9	11	20	13	8	21	13	9	22	2	2	2	2	2	3.2	3.2	3.2	3.2	3.2	16	14.2	29.2	13.2	18.2	14.2	0.42	0.66	0.39	0.54	0.42
1SV20ME005	0	10	10	5	5	10	10	0	10	2	2	2	2	2	0	0	0	0	0	0	2	17	7	12	2	0.06	0.39	0.21	0.35	0.06
1SV20ME006	11	11	22	15	8	23	14	10	24	2	2	2	2	2	2	2	2	2	2	10	15	30	12	18	14	0.44	0.68	0.35	0.53	0.41
1SV20ME007	12	12	24	15	10	25	11	15	26	2	2	2	2	2	1.8	1.8	1.8	1.8	1.8	9	15.8	30.8	13.8	14.8	18.8	0.46	0.70	0.41	0.44	0.55
1SV20ME008	12	14	26	8	16	24	13	12	25	2	2	2	2	2	1.8	1.8	1.8	1.8	1.8	9	15.8	25.8	19.8	16.8	15.8	0.46	0.59	0.58	0.49	0.46
1SV20ME009	14	14	28	15	14	29	16	14	30	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	21.8	36.8	21.8	23.8	21.8	0.64	0.84	0.64	0.70	0.64
1SV21ME400	13	4	17	11	7	18	15	4	19	2	2	2	2	2	4.4	4.4	4.4	4.4	4.4	22	19.4	21.4	13.4	21.4	10.4	0.57	0.49	0.39	0.63	0.31
1SV21ME401	11	16	27	15	13	28	14	15	29	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	17.2	37.2	19.2	20.2	21.2	0.51	0.85	0.56	0.59	0.62
1SV21ME402	15	13	28	15	14	29	15	15	30	2	2	2	2	2	3.4	3.4	3.4	3.4	3.4	17	20.4	33.4	19.4	20.4	20.4	0.60	0.76	0.57	0.60	0.60
TOTAL	116	155	271	147	132	279	162	128	290	24	24	24	24	24	37	37	37	37	37	185	177	363	193	223	189	5.21	8.25	5.7	6.56	5.5588
NO OF STUDENTS	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
AVERAGE	9.7	12.9	22.6	12.3	11.0	23.3	13.5	10.7	24.2	2.0	2.0	2.0	2.0	2.0	3.1	3.1	3.1	3.1	3.1	15.4	14.8	30.3	16.1	18.6	15.8	43.4	68.8	47.3	54.7	46.3

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SHRIDEVI	**SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY** **SIRA ROAD, TUMKUR- 572 106.**

DEPARTMENT OF MECHANICAL ENGINEERING

SUBJECT	METAL CASTING AND WELDING	SUBJECT CODE	18ME45B

COURSE OUTCOME

CO1	Describe the casting process and prepare different types of cast products.
CO2	Compare the Gas fired pit, Resistance, Coreless, Electrical and Cupola Metal Furnaces.
CO3	Understand the Solidification process and Casting of Non-Ferrous Metals
CO4	Describe the Metal Arc, TIG, MIG, Submerged and Atomic Hydrogen Welding processes etc. used in manufacturing
CO5	Describe methods for the quality assurance of components made of casting and joining process

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	J C THIPPESWAMY				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	IV	SECTION	
SUBJECT	METAL CASTING AND WELDING	SUBJECT CODE	18ME45B		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3											
CO2	3											
CO3	3	2										
CO4	3											
CO5	3	2										
AVERAGE	3	2										
OVERALL MAPPING OF SUBJECT												2.5

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	57.4	1.27											
CO2	61.4	1.84											
CO3	44.4	1.33	0.88										
CO4	48.3	1.74											
CO5	42.9	1.28	0.85										
AVERAGE	52.88	1.58	0.86										
FINAL ATTAINMENT LEVEL													1.22

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Academic year	2021-22			SEM	IV		Total strength			12		Subject	Metal Casting and Welding			Subject Code	18ME45B								
SEM:IV	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			ASSIGNEMENT / QUIZ(10 M)					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	co4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV20ME001	11	11	22	14	8	22	13	9	22	2	2	2	2	2	6.6	6.6	6.6	6.6	6.6	33	19.6	33.6	16.6	21.6	17.6	0.58	0.76	0.49	0.64	0.52
1SV20ME002	12	9	21	13	8	21	11	10	21	2	2	2	2	2	5	5	5	5	5	25	19	29	15	18	17	0.56	0.66	0.44	0.53	0.50
1SV20ME003	11	7	18	13	5	18	13	5	18	2	2	2	2	2	3	3	3	3	3	15	16	25	10	18	10	0.47	0.57	0.29	0.53	0.29
1SV20ME004	12	6	18	11	7	18	11	7	18	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	18.2	23.2	13.2	17.2	13.2	0.54	0.53	0.39	0.51	0.39
1SV20ME005	11	1	12	11	1	12	11	1	12	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	17.2	18.2	7.2	17.2	7.2	0.51	0.41	0.21	0.51	0.21
1SV20ME006	13	7	20	13	7	20	13	7	20	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	20.2	27.2	14.2	20.2	14.2	0.59	0.62	0.42	0.59	0.42
1SV20ME007	13	8	21	11	10	21	14	7	21	2	2	2	2	2	4.4	4.4	4.4	4.4	4.4	22	19.4	25.4	16.4	20.4	13.4	0.57	0.58	0.48	0.60	0.39
1SV20ME008	14	11	25	12	13	25	13	12	25	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	22.4	31.4	21.4	21.4	20.4	0.66	0.71	0.63	0.63	0.60
1SV20ME009	14	9	23	13	10	23	18	5	23	2	2	2	2	2	8	8	8	8	8	40	24	32	20	28	15	0.71	0.73	0.59	0.82	0.44
1SV21ME400	11	1	12	11	1	12	8	4	12	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	17.2	18.2	7.2	14.2	10.2	0.51	0.41	0.21	0.42	0.30
1SV21ME401	14	7	21	12	9	21	12	9	21	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	24	20.8	25.8	15.8	18.8	15.8	0.61	0.59	0.46	0.55	0.46
1SV21ME402	11	15	26	11	15	26	14	12	26	2	2	2	2	2	7	7	7	7	7	35	20	35	24	23	21	0.59	0.80	0.71	0.68	0.62
TOTAL	147	92	239	145	94	239	151	88	239	24	24	24	24	24	63	63	63	63	63	315	234	324	181	238	175	6.88	7.36	5.32	7.00	5.15
NO OF STUDENTS	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
AVERAGE	12.3	7.7	19.9	12.1	7.8	19.9	12.6	7.3	19.9	2.0	2.0	2.0	2.0	2.0	5.3	5.3	5.3	5.3	5.3	26.3	19.5	27.0	15.1	19.8	14.6	57.4	61.4	44.4	58.3	42.9

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SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF MECHANICAL ENGINEERING

SUBJECT	MECHANICAL MEASUREMENTS AND METROLOGY	SUBJECT CODE	18ME46B

COURSE OUTCOME

CO1	Understand the objectives of metrology, methods of measurement, standards of measurement & various measurement parameters
CO2	Understand limits, fits and tolerance and the working of comparators
CO3	Describe measurement of major & minor diameter, pitch, angle and effective diameter of screw threads and gears
CO4	Explain measurement systems, transducers, intermediate modifying devices and terminating devices
CO5	Understand the measurement of force, Torque and Pressure

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	SANTHOSH T U				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	IV	SECTION	
SUBJECT	MECHANICAL MEASUREMENTS AND METROLOGY	SUBJECT CODE	18ME46B		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2										
CO2	3	2	1									
CO3	3	1										
CO4	3											
CO5	3											
AVERAGE	3	1.67	1									
OVERALL MAPPING OF SUBJECT												1.89

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	58.0	1.74	1.16										
CO2	60.9	1.82	1.21	0.60									
CO3	42.1	1.26	0.42										
CO4	59.0	1.77											
CO5	41.1	1.23											
AVERAGE	52.22	1.56	0.93	0.60									
FINAL ATTAINMENT LEVEL													1.03

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Academic year	2021-22			SEM	IV		Total strength			12		Subject	nical Measurements & Me			Subject Code	18ME46B									
SEM:IV	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			SSIGNEMENT / QUIZ(10 M					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	co4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV20ME001	11	5	16	11	5	16	14	2	16	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	24	17.8	22.8	11.8	20.8	8.8	0.52	0.52	0.35	0.61	0.26
1SV20ME002	15	9	24	14	10	24	14	10	24	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	23.4	31.4	18.4	22.4	18.4	0.69	0.71	0.54	0.66	0.54
1SV20ME003	13	6	19	11	8	19	13	6	19	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	19.2	23.2	14.2	19.2	12.2	0.56	0.53	0.42	0.56	0.36
1SV20ME004	15	5	20	14	6	20	12	8	20	2	2	2	2	2	7.8	7.8	7.8	7.8	7.8	39	24.8	28.8	15.8	21.8	17.8	0.73	0.65	0.46	0.64	0.52
1SV20ME005	13	0	13	11	2	13	11	2	13	2	2	2	2	2	1.6	1.6	1.6	1.6	1.6	8	16.6	14.6	5.6	14.6	5.6	0.49	0.33	0.16	0.43	0.16
1SV20ME006	11	10	21	14	7	21	14	7	21	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	18.2	31.2	14.2	21.2	14.2	0.54	0.71	0.42	0.62	0.42
1SV20ME007	13	5	18	11	7	18	15	3	18	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	19.2	22.2	13.2	21.2	9.2	0.56	0.50	0.39	0.62	0.27
1SV20ME008	12	10	22	14	8	22	11	11	22	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	18.2	30.2	14.2	17.2	17.2	0.54	0.69	0.42	0.51	0.51
1SV20ME009	11	10	21	14	7	21	15	6	21	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	19.4	32.4	15.4	23.4	14.4	0.57	0.74	0.45	0.69	0.42
1SV21ME400	14	4	18	12	6	18	11	7	18	2	2	2	2	2	7.2	7.2	7.2	7.2	7.2	36	23.2	25.2	15.2	20.2	16.2	0.68	0.57	0.45	0.59	0.48
1SV21ME401	11	10	21	13	8	21	13	8	21	2	2	2	2	2	6	6	6	6	6	30	19	31	16	21	16	0.56	0.70	0.47	0.62	0.47
1SV21ME402	11	11	22	11	11	22	11	11	22	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	17.6	28.6	17.6	17.6	17.6	0.52	0.65	0.52	0.52	0.52
TOTAL	150	85	235	150	85	235	154	81	235	24	24	24	24	24	62.6	62.6	62.6	62.6	62.6	313	236.6	321.6	171.6	240.6	167.6	6.96	7.31	5.05	7.08	4.93
NO OF STUDENTS	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	0.27	12	12	12
AVERAGE	12.5	7.1	19.6	12.5	7.1	19.6	12.8	6.8	19.6	2.0	2.0	2.0	2.0	2.0	5.2	5.2	5.2	5.2	5.2	26.1	19.7	26.8	14.3	20.1	14.0	58.0	60.9	42.1	59.0	41.1

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DEPARTMENT OF MECHANICAL ENGINEERING

SUBJECT	FINITE ELEMENT METHODS	SUBJECT CODE	18ME61

COURSE OUTCOME

CO1	Identify the application and characteristics of FEA elements such as bars, beams, plane and iso-parametric elements.
CO2	Develop element characteristic equation and generation of global equation.
CO3	Formulate and solve Axi-symmetric and heat transfer problems
CO4	Apply suitable boundary conditions to a global equation for bars, trusses, beams, circular shafts, heat transfer, fluid flow, axi-symmetric and dynamic problems
CO5	Solve for field variables in heat transfer , fluid flow problems, axi-symmetric and dynamic problems

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	B H VASUDEVAMURTHY				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	VI	SECTION	
SUBJECT	FINITE ELEMENT METHODS	SUBJECT CODE	18ME61		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3										
CO2	3	3										
CO3	3	2	3									
CO4	3	3										
CO5	2	2	2									
AVERAGE	2.8	2.6	2.5									
OVERALL MAPPING OF SUBJECT												2.63

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	44.4	1.33	1.33										
CO2	59.6	1.78	1.78										
CO3	46.2	1.38	0.92	1.38									
CO4	46.7	1.40	1.40										
CO5	44.78	0.89	0.89	0.89									
AVERAGE	48.32	1.35	1.26	1.13									
FINAL ATTAINMENT LEVEL													1.24

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Academic year	2021-22						Total strength			20		Subject			Finite Element Methodss					Subject Code		18ME61							
SEM:VI	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			ASSIGNEMENT / QUIZ(10 M)					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV17ME005	5	9	14	11	4	15	12	4	16	2	2	2	2	2	0	0	0	0	0	0	7	22	6	14	6	0.21	0.50	0.18	0.41	0.18
1SV18ME003	13	13	26	6	21	27	11	17	28	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	24	19.8	25.8	27.8	17.8	23.8	0.58	0.59	0.82	0.52	0.70
1SV18ME008	12	15	27	7	19	26	12	13	25	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	18.2	28.2	25.2	18.2	19.2	0.54	0.64	0.74	0.54	0.56
1SV18ME010	11	15	26	13	15	28	12	15	27	2	2	2	2	2	1.8	1.8	1.8	1.8	1.8	9	14.8	31.8	18.8	15.8	18.8	0.44	0.72	0.55	0.46	0.55
1SV18ME011	12	8	20	13	7	20	11	9	20	2	2	2	2	2	0	0	0	0	0	0	14	23	9	13	11	0.41	0.52	0.26	0.38	0.32
1SV18ME012	11	11	22	12	11	23	13	8	21	2	2	2	2	2	1	1	1	1	1	5	14	26	14	16	11	0.41	0.59	0.41	0.47	0.32
1SV18ME013	12	15	27	13	15	28	11	18	29	2	2	2	2	2	2	2	2	2	2	10	16	32	19	15	22	0.47	0.73	0.56	0.44	0.65
1SV19ME001	11	12	23	11	13	24	13	12	25	2	2	2	2	2	1.2	1.2	1.2	1.2	1.2	6	14.2	26.2	16.2	16.2	15.2	0.42	0.60	0.48	0.48	0.45
1SV19ME002	12	15	27	13	14	27	13	14	27	2	2	2	2	2	1.8	1.8	1.8	1.8	1.8	9	15.8	31.8	17.8	16.8	17.8	0.46	0.72	0.52	0.49	0.52
1SV19ME004	0	0	0	0	0	0	0	0	0	2	2	2	2	2	0	0	0	0	0	0	2	2	2	2	2	0.06	0.05	0.06	0.06	0.06
1SV19ME005	13	7	20	12	8	20	11	9	20	2	2	2	2	2	2	2	2	2	2	10	17	23	12	15	13	0.50	0.52	0.35	0.44	0.38
1SV19ME006	12	15	27	11	17	28	14	15	29	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	18.2	32.2	23.2	20.2	21.2	0.54	0.73	0.68	0.59	0.62
1SV19ME010	11	13	24	13	12	25	13	13	26	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	12	15.4	30.4	16.4	17.4	17.4	0.45	0.69	0.48	0.51	0.51
1SV19ME011	14	13	27	12	16	28	12	17	29	2	2	2	2	2	7.8	7.8	7.8	7.8	7.8	39	23.8	34.8	25.8	21.8	26.8	0.70	0.79	0.76	0.64	0.79
1SV19ME013	12	10	22	11	10	21	11	12	23	2	2	2	2	2	0.2	0.2	0.2	0.2	0.2	1	14.2	23.2	12.2	13.2	14.2	0.42	0.53	0.36	0.39	0.42
1SV19ME014	11	9	20	13	7	20	11	9	20	2	2	2	2	2	0	0	0	0	0	0	13	24	9	13	11	0.38	0.55	0.26	0.38	0.32
1SV19ME015	13	3	16	12	4	16	12	4	16	2	2	2	2	2	3.6	3.6	3.6	3.6	3.6	18	18.6	20.6	9.6	17.6	9.6	0.55	0.47	0.28	0.52	0.28
1SV20ME400	12	15	27	12	17	29	11	17	28	2	2	2	2	2	0	0	0	0	0	0	14	29	19	13	19	0.41	0.66	0.56	0.38	0.56
1SV20ME402	12	8	20	15	4	19	21	0	21	2	2	2	2	2	0	0	0	0	0	0	14	25	6	23	2	0.41	0.57	0.18	0.68	0.06
1SV20ME403	11	16	27	11	18	29	12	16	28	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	18.2	34.2	25.2	19.2	23.2	0.54	0.78	0.74	0.56	0.68
TOTAL	220	222	442	221	232	453	236	223	458	40	40	40	40	40	42.2	42.2	42.2	42.2	42.2	211	302.2	525.2	314.2	318.2	304.2	8.89	11.94	9.24	9.36	8.95
NO OF STUDENTS	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
AVERAGE	11	11.1	22.1	11.1	11.6	22.65	11.8	11.1	22.9	2	2	2	2	2	2.11	2.11	2.11	2.11	2.11	10.55	15.11	26.26	15.71	15.91	15.21	44.44	59.68	46.21	46.79	44.74

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SHRIDEVI	**SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY** **SIRA ROAD, TUMKUR- 572 106.**

DEPARTMENT OF ME

SUBJECT	HEAT TRANSFER	SUBJECT CODE	18ME63

COURSE OUTCOME

CO1	Understand the modes of heat transfer and apply the basic laws to formulate engineering systems.
CO2	Understand and apply the basic laws of heat transfer to extended surface, composite material and unsteady state heat transfer problems
CO3	Analyze heat conduction through numerical methods and apply the fundamental principle to solve radiation heat transfer problems.
CO4	Analyze heat transfer due to free and forced convective heat transfer.
CO5	Understand the design and performance analysis of heat exchangers and their practical applications, Condensation and Boiling phenomena

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	RAVI KUMAR K R				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	VI	SECTION	
SUBJECT	HEAT TRANSFER	SUBJECT CODE	18ME63		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3									
CO2	3	3	3									
CO3	3	3	3									
CO4	3	3	3									
CO5	3	3	3									
AVERAGE	3	3	3									
OVERALL MAPPING OF SUBJECT												3.0

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	50.68	1.52	1.52	1.52									
CO2	55.67	1.67	1.67	1.67									
CO3	42.32	1.26	1.26	1.26									
CO4	51.61	1.54	1.54	1.54									
CO5	43.56	1.30	1.30	1.30									
AVERAGE	48.76	1.45	1.45	1.45									
FINAL ATTAINMENT LEVEL													1.45

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Academic year	2021-22						Total strength			19		Subject	Heat Transfer						Subject Code	18ME63									
SEM:VI	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			ASSIGNEMENT / QUIZ(10 M)					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV17ME005	4	8	12	5	11	16	7	7	14	2	2	2	2	2	0	0	0	0	0	0	6	15	13	9	9	0.18	0.34	0.38	0.26	0.26
1SV18ME003	11	9	20	13	11	24	11	11	22	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	17.2	28.2	17.2	17.2	17.2	0.51	0.64	0.51	0.51	0.51
1SV18ME008	13	9	22	13	13	26	14	10	24	2	2	2	2	2	3.2	3.2	3.2	3.2	3.2	16	18.2	27.2	18.2	19.2	15.2	0.54	0.62	0.54	0.56	0.45
1SV18ME010	7	6	13	14	1	15	8	6	14	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	14.8	27.8	8.8	15.8	13.8	0.44	0.63	0.26	0.46	0.41
1SV18ME011	14	7	21	9	8	17	11	8	19	2	2	2	2	2	0	0	0	0	0	0	16	18	10	13	10	0.47	0.41	0.29	0.38	0.29
1SV18ME012	7	8	15	12	4	16	12	2	14	2	2	2	2	2	3.4	3.4	3.4	3.4	3.4	17	12.4	25.4	9.4	17.4	7.4	0.36	0.58	0.28	0.51	0.22
1SV18ME013	15	12	27	16	7	23	17	8	25	2	2	2	2	2	0.4	0.4	0.4	0.4	0.4	2	17.4	30.4	9.4	19.4	10.4	0.51	0.69	0.28	0.57	0.31
1SV19ME001	11	6	17	11	7	18	12	10	22	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	17.2	23.2	13.2	18.2	16.2	0.51	0.53	0.39	0.54	0.48
1SV19ME002	19	3	22	11	10	21	16	7	23	2	2	2	2	2	6.8	6.8	6.8	6.8	6.8	34	27.8	22.8	18.8	24.8	15.8	0.82	0.52	0.55	0.73	0.46
1SV19ME004	0	0	0	0	0	0	0	0	0	2	2	2	2	2	0	0	0	0	0	0	2	2	2	2	2	0.06	0.05	0.06	0.06	0.06
1SV19ME005	13	6	19	11	11	22	12	10	22	2	2	2	2	2	1.4	1.4	1.4	1.4	1.4	7	16.4	20.4	14.4	15.4	13.4	0.48	0.46	0.42	0.45	0.39
1SV19ME006	12	16	28	14	6	20	14	10	24	2	2	2	2	2	4.2	4.20	4.20	4.20	4.20	21.00	18.2	36.2	12.2	20.2	16.2	0.54	0.82	0.36	0.59	0.48
1SV19ME010	11	7	18	10	7	17	12	13	25	2	2	2	2	2	5.6	5.6	5.6	5.6	5.6	28	18.6	24.6	14.6	19.6	20.6	0.55	0.56	0.43	0.58	0.61
1SV19ME011	16	11	27	12	16	28	11	18	29	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	23.2	30.2	23.2	18.2	25.2	0.68	0.69	0.68	0.54	0.74
1SV19ME013	5	4	9	8	2	10	11	3	14	2	2	2	2	2	0	0	0	0	0	0	7	14	4	13	5	0.21	0.32	0.12	0.38	0.15
1SV19ME014	14	10	24	12	13	25	12	14	26	2	2	2	2	2	0	0	0	0	0	0	16	24	15	14	16	0.47	0.55	0.44	0.41	0.47
1SV19ME015	12	6	18	14	9	23	11	11	22	2	2	2	2	2	0	0	0	0	0	0	14	22	11	13	13	0.41	0.50	0.32	0.38	0.38
1SV20ME400	11	5	16	8	11	19	15	10	25	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	18.8	20.8	18.8	22.8	17.8	0.55	0.47	0.55	0.67	0.52
1SV20ME402	16	3	19	11	13	24	14	8	22	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	24	22.8	20.8	19.8	20.8	14.8	0.67	0.47	0.58	0.61	0.44
1SV20ME403	14	12	26	11	11	22	11	13	24	2	2	2	2	2	7.4	7.4	7.4	7.4	7.4	37	23.4	32.4	20.4	20.4	22.4	0.69	0.74	0.60	0.60	0.66
TOTAL	225	148	373	215	171	386	231	179	410	40	40	40	40	40	62.4	62.4	62.4	62.4	62.4	312	327.4	465.4	273.4	333.4	281.4	9.63	10.58	8.04	9.81	8.28
No of students	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Average	11.84	7.79	19.63	11.3	9.00	20.32	12.16	9.42	21.58	2.11	2.11	2.11	2.11	2.11	3.28	3.28	3.28	3.28	3.28	16.42	17.23	24.49	14.39	17.55	14.81	50.68	55.67	42.32	51.61	43.56

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SHRIDEVI	**SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY** **SIRA ROAD, TUMKUR- 572 106.**

DEPARTMENT OF ME

SUBJECT	DESIGN OF MACHINE ELEMENTS II	SUBJECT CODE	18ME62

COURSE OUTCOME

CO1	Apply design principles for the design of mechanical system involving springs, belts, pulleys and wireropes
CO2	Design different types of gears and simple gear boxes for relevant applications
CO3	Understand the design principles of brakes and clutches
CO4	Apply design concepts of hydrodynamics bearings for different applications and select anti friction bearings for different applications using the manufacturers, catalogue
CO5	Apply the engineering design tools to product design

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY											
FACULTY NAME	DR NARENDRA VISWANATH											
BRANCH	ME			ACADEMIC YEAR			2021-22					
COURSE	B.E	SEMESTER		VI	SECTION							
SUBJECT	DESIGN OF MACHINE ELEMENTS II					SUBJECT CODE		18ME62				
CO & PO MAPPING												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
OVERALL MAPPING OF SUBJECT												2.6

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	27.93	0.83	0.83	0.55									
CO2	32.34	0.64	0.97	0.64									
CO3	27.93	0.83	0.83	0.55									
CO4	27.62	0.82	0.82										
CO5	27.46	0.82	0.82										
AVERAGE	28.65	0.78	0.85	0.58									
FINAL ATTAINMENT LEVEL													0.73

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Academic year	2021-22						Total strength			19		Subject	Design of Machine Elements – II			Subject Code		18ME62									
SEM:VI	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			ASSIGNEMENT / QUIZ(10 M)						SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV17ME005	0	0	0	0	0	0	0	0	0	2	2	2	2	2	0	0	0	0	0	0	2	2	2	2	2	0.06	0.05	0.06	0.06	0.06
1SV18ME003	5	11	16	7	11	18	11	6	17	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	11.2	24.2	17.2	17.2	12.2	0.33	0.55	0.51	0.51	0.36
1SV18ME008	4	6	10	4	4	8	5	4	9	2	2	2	2	2	3.2	3.2	3.2	3.2	3.2	16	9.2	15.2	9.2	10.2	9.2	0.27	0.35	0.27	0.30	0.27
1SV18ME010	6	6	12	5	5	10	7	4	11	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	13.8	18.8	12.8	14.8	11.8	0.41	0.43	0.38	0.44	0.35
1SV18ME011	0	0	0	0	0	0	0	0	0	2	2	2	2	2	0	0	0	0	0	0	2	2	2	2	2	0.06	0.05	0.06	0.06	0.06
1SV18ME012	7	3	10	3	5	8	3	6	9	2	2	2	2	2	3.4	3.4	3.4	3.4	3.4	17	12.4	11.4	10.4	8.4	11.4	0.36	0.26	0.31	0.25	0.34
1SV18ME013	4	7	11	6	3	9	5	5	10	2	2	2	2	2	0.4	0.4	0.4	0.4	0.4	2	6.4	15.4	5.4	7.4	7.4	0.19	0.35	0.16	0.22	0.22
1SV19ME001	4	8	12	5	6	11	2	8	10	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	10.2	19.2	12.2	8.2	14.2	0.30	0.44	0.36	0.24	0.42
1SV19ME002	7	5	12	7	8	15	6	9	15	2	2	2	2	2	6.8	6.8	6.8	6.8	6.8	34	15.8	20.8	16.8	14.8	17.8	0.46	0.47	0.49	0.44	0.52
1SV19ME004	0	0	0	0	0	0	0	0	0	2	2	2	2	2	0	0	0	0	0	0	2	2	2	2	2	0.06	0.05	0.06	0.06	0.06
1SV19ME005	4	6	10	3	6	9	5	3	8	2	2	2	2	2	1.4	1.4	1.4	1.4	1.4	7	7.4	12.4	9.4	8.4	6.4	0.22	0.28	0.28	0.25	0.19
1SV19ME006	6	7	13	11	8	19	5	5	10	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	12.2	24.2	14.2	11.2	11.2	0.36	0.55	0.42	0.33	0.33
1SV19ME010	3	6	9	5	3	8	6	4	10	2	2	2	2	2	5.6	5.6	5.6	5.6	5.6	28	10.6	18.6	10.6	13.6	11.6	0.31	0.42	0.31	0.40	0.34
1SV19ME011	6	3	9	4	6	10	5	4	9	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	13.2	14.2	13.2	12.2	11.2	0.39	0.32	0.39	0.36	0.33
1SV19ME013	0	0	0	0	0	0	0	0	0	2	2	2	2	2	0	0	0	0	0	0	2	2	2	2	2	0.06	0.05	0.06	0.06	0.06
1SV19ME014	0	0	0	0	0	0	0	0	0	2	2	2	2	2	0	0	0	0	0	0	2	2	2	2	2	0.06	0.05	0.06	0.06	0.06
1SV19ME015	0	0	0	0	0	0	0	0	0	2	2	2	2	2	0	0	0	0	0	0	2	2	2	2	2	0.06	0.05	0.06	0.06	0.06
1SV20ME400	11	8	19	5	5	10	6	7	13	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	18.8	20.8	12.8	13.8	14.8	0.55	0.47	0.38	0.41	0.44
1SV20ME402	6	6	12	3	2	5	3	7	10	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	24	12.8	15.8	8.8	9.8	13.8	0.38	0.36	0.26	0.29	0.41
1SV20ME403	5	7	12	11	6	17	7	3	10	2	2	2	2	2	7.4	7.4	7.4	7.4	7.4	37	14.4	27.4	15.4	16.4	12.4	0.42	0.62	0.45	0.48	0.36
Total	78	89	167	79	78	157	76	75	151	40	40	40	40	40	62.4	62.4	62.4	62	62.4	312	180.4	270.4	180.4	178.4	177.4	5.31	6.15	5.31	5.25	5.22
No of students	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Average	4.11	4.68	8.79	4.16	4.11	8.26	4.00	3.95	7.95	2.11	2.11	2.11	2.11	2.11	3.28	3.28	3.28	3.28	3.28	16.42	9.49	14.23	9.49	9.39	9.34	27.93	32.34	27.93	27.62	27.46

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SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY
SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF MECHANICAL ENGINEERING

SUBJECT	NON-TRADITIONAL MACHINING	SUBJECT CODE	18ME641

COURSE OUTCOME

CO1	Understand the compare traditional and non-traditional machining process and recognize the need for Non- traditional machining process.
CO2	Understand the constructional features, performance parameters, process characteristics, applications, advantages and limitations of USM, AJM and WJM
CO3	Identify the need of Chemical and electro-chemical machining process along with the constructional features, process parameters, process characteristics, applications, advantages and limitations.
CO4	Understand the constructional feature of the equipment, process parameters, process characteristics, applications, advantages and limitations EDM & PAM.
CO5	Understand the LBM equipment, LBM parameters, and characteristics. EBM equipment and mechanism of metal removal, applications, advantages and limitations LBM & EBM

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY											
FACULTY NAME	J C THIPPESWAMY											
BRANCH	ME			ACADEMIC YEAR			2021-22					
COURSE	B.E	SEMESTER	VI	SECTION								
SUBJECT	NON-TRADITIONAL MACHINING					SUBJECT CODE	18ME641					

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	2										
CO2	2	2										
CO3	2	2										
CO4	2	2										
CO5	2	2										
AVERAGE	2	2										
OVERALL MAPPING OF SUBJECT												2.0

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	56.5	1.13	1.13										
CO2	36.8	1.27	1.27										
CO3	50.9	1.01	1.01										
CO4	55.6	1.11	1.11										
CO5	52.4	1.04	1.04										
AVERAGE	55.84	1.11	1.11										
FINAL ATTAINMENT LEVEL													1.11

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Academic year	2021-22						Total strength			20		Subject	Non-traditional Machining (PE-1)			Subject Code	18ME641										
SEM:VI	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			ASSIGNEMENT / QUIZ(10 M					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV17ME005	11	4	15	11	4	15	11	4	15	2	2	2	2	2	1.8	1.8	1.8	1.8	1.8	9	14.8	18.8	7.8	14.8	7.8	0.44	0.43	0.23	0.44	0.23
1SV18ME003	12	12	24	12	11	23	12	13	25	2	2	2	2	2	7.8	7.8	7.8	7.8	7.8	39	21.8	33.8	20.8	21.8	22.8	0.64	0.77	0.61	0.64	0.67
1SV18ME008	12	9	21	12	11	23	11	11	22	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	24	18.8	27.8	17.8	17.8	17.8	0.55	0.63	0.52	0.52	0.52
1SV18ME010	11	10	21	13	9	22	12	8	20	2	2	2	2	2	7.6	7.6	7.6	7.6	7.6	38	20.6	32.6	18.6	21.6	17.6	0.61	0.74	0.55	0.64	0.52
1SV18ME011	11	7	18	11	8	19	11	9	20	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	17.2	24.2	14.2	17.2	15.2	0.51	0.55	0.42	0.51	0.45
1SV18ME012	12	9	21	13	9	22	12	8	20	2	2	2	2	2	7.2	7.2	7.2	7.2	7.2	36	21.2	31.2	18.2	21.2	17.2	0.62	0.71	0.54	0.62	0.51
1SV18ME013	13	13	26	13	14	27	12	16	28	2	2	2	2	2	11.2	11.2	11.2	11.2	11.2	56	26.2	39.2	27.2	25.2	29.2	0.77	0.89	0.80	0.74	0.86
1SV19ME001	13	9	22	11	13	24	11	12	23	2	2	2	2	2	5.6	5.6	5.6	5.6	5.6	28	20.6	27.6	20.6	18.6	19.6	0.61	0.63	0.61	0.55	0.58
1SV19ME002	11	10	21	12	10	22	12	11	23	2	2	2	2	2	7.6	7.6	7.6	7.6	7.6	38	20.6	31.6	19.6	21.6	20.6	0.61	0.72	0.58	0.64	0.61
1SV19ME004	0	0	0	0	0	0	0	0	0	2	2	2	2	2	0	0	0	0	0	0	2	2	2	2	2	0.06	0.05	0.06	0.06	0.06
1SV19ME005	11	4	15	11	6	17	12	4	16	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	18.2	22.2	13.2	19.2	11.2	0.54	0.50	0.39	0.56	0.33
1SV19ME006	13	12	25	12	14	26	12	15	27	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	20.2	31.2	21.2	19.2	22.2	0.59	0.71	0.62	0.56	0.65
1SV19ME010	12	8	20	11	11	22	11	10	21	2	2	2	2	2	7.2	7.2	7.2	7.2	7.2	36	21.2	28.2	20.2	20.2	19.2	0.62	0.64	0.59	0.59	0.56
1SV19ME011	11	13	24	13	12	25	11	15	26	2	2	2	2	2	8.8	8.8	8.8	8.8	8.8	44	21.8	36.8	22.8	21.8	25.8	0.64	0.84	0.67	0.64	0.76
1SV19ME013	12	10	22	14	8	22	12	10	22	2	2	2	2	2	0	0	0	0	0	0	14	26	10	14	12	0.41	0.59	0.29	0.41	0.35
1SV19ME014	13	7	20	12	8	20	13	7	20	2	2	2	2	2	5.6	5.6	5.6	5.6	5.6	28	20.6	26.6	15.6	20.6	14.6	0.61	0.60	0.46	0.61	0.43
1SV19ME015	13	3	16	13	3	16	11	5	16	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	20.8	23.8	10.8	18.8	12.8	0.61	0.54	0.32	0.55	0.38
1SV20ME400	12	11	23	11	13	24	12	13	25	2	2	2	2	2	7.6	7.6	7.6	7.6	7.6	38	21.6	31.6	22.6	21.6	22.6	0.64	0.72	0.66	0.64	0.66
1SV20ME402	11	10	21	12	10	22	11	12	23	2	2	2	2	2	8.8	8.8	8.8	8.8	8.8	44	21.8	32.8	20.8	21.8	22.8	0.64	0.75	0.61	0.64	0.67
1SV20ME403	11	12	23	12	13	25	10	14	24	2	2	2	2	2	7.6	7.6	7.6	7.6	7.6	38	20.6	33.6	22.6	19.6	23.6	0.61	0.76	0.66	0.58	0.69
TOTAL	225	173	398	229	187	416	219	197	416	40	40	40	40	40	119.6	120	119.6	120	120	598	384.6	561.6	346.6	378.6	356.6	11.31	12.76	10.19	11.14	10.49
NO OF STUDENTS	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
AVERAGE	11.25	8.7	19.9	11.5	9.35	20.8	10.95	9.85	20.8	2	2	2	2	2	5.98	5.98	5.98	5.98	5.98	29.9	19.23	28.08	17.33	18.93	17.83	56.56	63.82	50.97	55.68	52.44

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SHRIDEVI	**SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY** **SIRA ROAD, TUMKUR- 572 106.**

DEPARTMENT OF ME

SUBJECT	ENERGY ENGINEERING	SUBJECT CODE	18ME81

COURSE OUTCOME

CO1	Summarize the basic concepts of thermal energy systems
CO2	Identify renewable energy sources and their utilization
CO3	Understand the basic concepts of solar radiation and analyze the working of solar PV and thermal systems.
CO4	Understand principles of energy conversion from alternate sources including wind, geothermal, ocean, biomass, and biogas.
CO5	Understand the concepts and applications of fuel cells, thermoelectric convertor and MHD generator. Identify methods of energy storage for specific applications.

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.

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SIET, TUMAKURU

COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY											
FACULTY NAME	K P CHANDRAIAH											
BRANCH	ME			ACADEMIC YEAR		2021-22						
COURSE	B.E	SEMESTER	VIII	SECTION								
SUBJECT	ENERGY ENGINEERING			SUBJECT CODE	18ME81							
CO & PO MAPPING												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3											
CO2	3											
CO3	3											
CO4	3											
CO5	3											
AVERAGE	3											
OVERALL MAPPING OF SUBJECT												3.0

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	60.98	1.82											
CO2	83.48	2.50											
CO3	64.25	1.92											
CO4	68.82	2.06											
CO5	59.67	1.79											
AVERAGE	67.44	2.01											
FINAL ATTAINMENT LEVEL													2.01

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Academic year	2021-22			SEM	VII		Total strength			9		Subject	Energy Engineering				Subject Code	18ME81										
SEM:VIII	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			SIGNEMENT / QUIZ(10					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV18ME002	12	16	28	18	12	30	18	11	29	2	2	2	2	2	7.6	7.6	7.6	7.6	7.6	38	21.6	43.6	21.6	27.6	20.6	0.64	0.99	0.64	0.81	0.61
1SV18ME004	13	15	28	19	11	30	19	10	29	2	2	2	2	2	5.4	5.4	5.4	5.4	5.4	27	20.4	41.4	18.4	26.4	17.4	0.60	0.94	0.54	0.78	0.51
1SV18ME005	11	14	25	15	11	26	13	14	27	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	18.2	36.2	18.2	20.2	21.2	0.54	0.82	0.54	0.59	0.62
1SV18ME009	14	14	28	11	15	26	15	9	24	2	2	2	2	2	5.4	5.4	5.4	5.4	5.4	27	21.4	32.4	22.4	22.4	16.4	0.63	0.74	0.66	0.66	0.48
1SV19ME400	13	17	30	12	16	28	11	15	26	2	2	2	2	2	7.8	7.8	7.8	7.8	7.8	39	22.8	38.8	25.8	20.8	24.8	0.67	0.88	0.76	0.61	0.73
1SV19ME401	15	12	27	15	15	30	19	11	30	2	2	2	2	2	7.6	7.6	7.6	7.6	7.6	38	24.6	36.6	24.6	28.6	20.6	0.72	0.83	0.72	0.84	0.61
1SV19ME402	13	15	28	14	16	30	12	17	29	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	24	19.8	35.8	22.8	18.8	23.8	0.58	0.81	0.67	0.55	0.70
1SV19ME403	11	14	25	11	16	27	18	8	26	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	18.2	32.2	23.2	25.2	15.2	0.54	0.73	0.68	0.74	0.45
1SV19ME404	12	14	26	12	12	24	13	15	28	2	2	2	2	2	5.6	5.6	5.6	5.6	5.6	28	19.6	33.6	19.6	20.6	22.6	0.58	0.76	0.58	0.61	0.66
TOTAL	114	131	245	127	124	251	138	110	248	18	18	18	18	18	54.6	54.6	54.6	54.6	54.6	273	186.6	330.6	196.6	210.6	182.6	5.49	7.51	5.78	6.19	5.37
NO OF STUDENTS	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
AVERAGE	12.67	14.6	27.222	14.1	13.78	27.89	15.33	12.2	27.56	2	2	2	2	2	6.07	6.07	6.07	6.07	6.07	30.33	20.73	36.73	21.84	23.4	20.29	60.98	83.48	64.25	68.82	59.67

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SHRIDEVI	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF MECHANICAL ENGINEERING

SUBJECT	AUTOMOBILE ENGINEERING	SUBJECT CODE	18ME824

COURSE OUTCOME

CO1	Understand the structure and working principles pertaining to Power plant, Transmission, Control& Accessory systems employed in Automobiles.
CO2	Apply the knowledge of Automobile systems to Contribute to enhancement of Efficiency.
CO3	Appreciate the recent developments in engine and Emission control systems.

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.

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COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY				
FACULTY NAME	SANTHOSH T U				
BRANCH	ME	ACADEMIC YEAR	2021-22		
COURSE	B.E	SEMESTER	VIII	SECTION	
SUBJECT	AUTOMOBILE ENGINEERING	SUBJECT CODE	18ME824		

CO & PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3											
CO2	3	2										
CO3	3	2				1	1					
CO4												
CO5												
AVERAGE	3	2										
OVERALL MAPPING OF SUBJECT												2.5

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	55.5	1.66											
CO2	68.4	2.05	1.36										
CO3	51.6	1.56	1.03			0.51	0.51						
CO4	56.8												
CO5	52.2												
AVERAGE	56.9	1.75	1.19			0.51	0.51						
FINAL ATTAINMENT LEVEL													0.99

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Academic year	2021-22			SEM	VII		Total strength		9		Subject	Automobile Engineering				Subject Code	18ME824													
SEM:VIII	IA TEST 1(30M)			IA TEST 2(30M)			IA TEST 3(30M)			ASSIGNEMENT / QUIZ(10 M)					SEE MARKS(60)						Total Cos ATTAINMENT					% of individual CO				
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV18ME002	12	13	25	11	13	24	13	13	26	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	18.2	30.2	19.2	19.2	19.2	0.54	0.69	0.56	0.56	0.56
1SV18ME004	11	12	23	13	10	23	12	11	23	2	2	2	2	2	3	3	3	3	3	15	16	30	15	17	16	0.47	0.68	0.44	0.50	0.47
1SV18ME005	11	9	20	13	7	20	11	9	20	2	2	2	2	2	5.4	5.4	5.4	5.4	5.4	27	18.4	29.4	14.4	18.4	16.4	0.54	0.67	0.42	0.54	0.48
1SV18ME009	12	4	16	11	5	16	12	4	16	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	18.6	21.6	11.6	18.6	10.6	0.55	0.49	0.34	0.55	0.31
1SV19ME400	12	10	22	12	10	22	13	9	22	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	20.4	30.4	18.4	21.4	17.4	0.60	0.69	0.54	0.63	0.51
1SV19ME401	11	18	29	14	15	29	12	17	29	2	2	2	2	2	11.6	11.6	11.6	11.6	11.6	58	24.6	45.6	28.6	25.6	30.6	0.72	1.04	0.84	0.75	0.90
1SV19ME402	12	11	23	11	12	23	12	11	23	2	2	2	2	2	6	6	6	6	6	30	20	30	20	20	19	0.59	0.68	0.59	0.59	0.56
1SV19ME403	11	10	21	12	9	21	12	9	21	2	2	2	2	2	2.2	2.2	2.2	2.2	2.2	11	15.2	26.2	13.2	16.2	13.2	0.45	0.60	0.39	0.48	0.39
1SV19ME404	12	10	22	11	11	22	11	11	22	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	18.6	27.6	17.6	17.6	17.6	0.55	0.63	0.52	0.52	0.52
TOTAL	104	97	201	108	92	200	108	94	202	18	18	18	18	18	48	48	48	48	48	240	170	271	158	174	160	5	6.16	4.65	5.12	4.71
NO OF STUDENTS	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
AVERAGE	11.56	10.8	22.3	12	10.22	22.22	12	10.4	22.4	2	2	2	2	2	5.3	5.3	5.3	5.3	5.3	26.7	18.9	30.11	17.56	19.33	17.78	55.56	68.43	51.63	56.86	52.29

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