AY-2022-23 Odd Sem



SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ME

SUBJECT	CONTOL ENGINEERING	SUBJECT CODE	18ME71	
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COURSE OUTCOME

CO1	Identify the type of control and control actions.
CO2	Develop the mathematical model of the physical systems.
CO3	Estimate the response and error in response of first and second-order systems subjected to standard input signals.
CO4	Represent the complex physical system using block diagram and signal flow graph and obtain transfer function.
CO5	Analyse a linear feedback control system for stability using Hurwitz criterion, Routh's criterion and root Locus technique in complex domain.
CO6	Analyse the stability of linear feedback control systems in frequency domain using polar plots, Nyquist and Bode plots.

- **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.

COLLI	EGE				TE	CHNC	DLO	GY, TUN	MAKU	JRU		
FACULTY	NAM	E				Prof.	K.P.	Chandr	aiah			
BRAN	СН		MECH	ANIC	AL	A	CAD	EMIC Y	EAR		2022	-23
COURSE	B.I	E	SEM	ESTE	R	VII	1	SECTIO	N		-	
SUBJECT		CON	NTOL I	ENGIN	EERI	NG		SUBJE	CT C	ODE	18M	E 7 1
CO & PO M	APPIN	\G						•				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	1	1	1	-	2	3	1	1	1	1	2
CO2	3	2	1	2	-	1	1	1	1	1	-	2
C03	3	2	1	1	1	2	2	1	1	1	1	2
CO4	3	1	1	1	-	2	3	1	1	1	1	2
CO5	3	1	1	1	1	2	2	. 1	1	1	1	2
AVERAGE	3	1.4	1	1.2	1	1.8	2.2	1	1	1	1	2
				·		OVE	CRAL	L MAP	PING	OF SUI	BJECT	1.52

SHRIDEVI INSTITUTE OF ENGINEERING &

CO AND PO ATTAINMENT

NAME OF THE

# 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CO	PO	PO	PO	PO	PO	PO						
	%	1	2	3	4	5	6	7	8	9	10	11	12
			0.7	0.7	0.7		1.4		0.7	0.7			
CO1	59	2.2	3	3	3	-	7	2.2	3	3	0.73	0.73	1.47
		1.9	1.3	0.6	1.3		0.6	0.6	0.6	0.6			
CO ₂	73	6	1	5	1	-	5	• 5	5	5	0.65	-	1.31
		1.4	0.9	0.4	0.4	0.4	0.9	0.9	0.4	0.4			
CO3	58	3	5	8	8	8	5	5	8	8	0.48	0.48	0.95
		1.5	0.5	0.5	0.5		1.0	1.5	0.5	0.5			
CO4	64	8	3	3	3	-	5	8	3	3	0.53	0.53	1.05
		1.4	0.4	0.4	0.4	0.4	0.9	0.9	0.4	0.4			
CO5	55	2	7	7	7	7	5	5	7	7	0.47	0.47	0.95
AVERA	61.	1.7	0.7	0.5	0.7	0.4	1.0	1.2	0.5	0.5			1.14
GE	8	18	98	72	04	8	1	66	72	72	0.57	0.55	6
							FIN	AL A	TTAI	NME	NT LE	VEL	0.83

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Academic year	202	1-13		SEA	II		To	tal str	ength	19		Sul	ject	C	ontrol E	ngineer	ing		8	ubject	Code	183	E71							
SEM:VII	IAT	EST 1	(3011)	IAT	EST 2	(3011)	IAT	EST.	3(30M)	ASS	IGNEA	ENT/	QUIZ(10 M)		SEE	MARK	5(60)				Total C	os ATTAL	NENT			%0	ìndividu	al CO	
USN	C01	CO2	TOTAL	CO:	CO3	OTAL	CO4	CO5	TOTAL	COl	CO2	CO3	C04	CO5	CO1=1	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO
ISV17ME005	12	4	16	14	4	18	12	8	20	2	2	2	2	2	0.8	0.8	0.8	0.8	0.8	4	14.8	20.8	6.8	14.8	10.8	44%	47%	20%	44%	325
1SV18ME003	16	13	29	18	12	30	16	12	28	2	2	2	1	2	6.4	6.4	6.4	6.4	6.4	32	24.4	39.4	20.4	24.4	20.4	72%	90%	60%	72%	609
1SV18AŒ008	11	17	28	19	11	30	18	11	29	2	2	2	2	2	4.8	4.8	4.0	4.8	4.8	24	17.8	42.8	17.8	24.8	17.8	52%	97%	52%	73%	529
ISVI8ME010	14	13	27	17	11	28	11	18	29	2	2	2	2	2	7.2	7.2	7.2	7.2	7.2	36	23.2	39.2	20.2	20.2	27.2	68%	89%	59%	59%	809
ISVI8ME011	12	14	26	12	15	27	18	7	25	2	2	2	2	2	1.8	1.8	1.8	1.8	1.8	9	15.8	29.8	18.8	21.8	10.8	46%	68%	55%	64%	329
1SV18ME012	11	14	25	15	9	24	13	16	29	2	2	2	1	2	4.8	4.8	4.8	4.8	4.8	24	17.8	35.8	15.8	19.8	22.8	52%	81%	46%	58%	679
1SV18ME013	17	12	29	14	13	27	15	13	28	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	24.8	33.8	20.8	22.8	20.8	73%	77%	61%	67%	615
ISV19ME001	15	15	30	9	19	28	17	12	29	2	2	2	2	2	4.8	4.8	4.8	4.8	4.0	24	21.8	30.8	25.8	23.8	18.8	64%	70%	76%	70%	555
SV19NE002	14	15	29	10	17	27	12	16	28	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	22.4	33.4	25.4	20.4	24.4	66%	76%	75%	60%	72
ISV19ME005	11	18	29	11	12	23	11	15	26	2	2	2	2	2	1.6	1.6	1.6	1.6	1.6	8	14.6	32.6	15.6	14.6	18.6	43%	74%	46%	43%	55
1SV19NE006	17	6	23	13	16	29	18	00	26	2	2	2	2	2	2.2	2.2	2.2	2.2	2.2	11	21.2	23.2	20.2	22.2	12.2	62%	53%	59%	65%	36
ISV19ME010	13	5	18	16	6	22	15	5	20	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	19.2	27.2	12.2	21.2	11.2	56%	62%	36%	62%	33
ISV19ME011	16	10	26	11	18	29	13	16	29	2	2	2	2	2	8.2	8.2	8.2	8.2	8.2	41	26.2	31.2	28.2	23.2	26.2	77%	71%	83%	68%	77
ISVI9ME013	13	6	19	12	9	21	19	1	20	2	2	2	2	2	1.6	1.6	1.6	1.6	1.6	8	16.6	21.6	12.6	22.6	4.6	49%	49%	37%	66%	14
ISV19ME014	11	14	25	19	11	30	15	14	29	2	2	2	2	2	6.6	6.6	6.6	6.6	6.6	33	19.6	41.6	19.6	23.6	22.6	58%	95%	58%	69%	66
ISV19ME015	18	00	26	10	20	30	17	11	28	2	2	2	2	2	6	6	6	6	6	30	26	26	28	25	19	76%	59%	82%	74%	569
SV20NE400	9	18	27	11	16	27	13	17	30	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	15.2	35.2	22.2	19.2	23.2	45%	80%	65%	56%	68
SV20AE402	10	10	20	14	8	22	13	11	24	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	16.2	30.2	14.2	19.2	17.2	48%	69%	42%	56%	51
SV20ME403	12	14	26	12	16	28	17	13	30	2	2	2	2	2	9.2	9.2	9.2	9.2	9.2	46	23.2	37.2	27.2	28.2	24.2	68%	85%	80%	83%	71
TOTAL	252	226	478	257	243	500	283	224	507	38	38	38	38	38	90.8	90.8	90.8	90.8	90.8	454	380.8	611.8	371.8	411.8	352.8	11.2	13.90	10.94	12.11	10.3
o 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	13.3	11.9	25.16	13.5	12.8	26.3	14.9	12	26.7	2	2	2	2	2	4.78	4.78	4.78	4.78	4.78	23.89	20.0	32.2	19.6	21.7	18.6	58.9	73.2	57.6	63.7	54.
TOTAL																										59%	73%	58%	64%	559



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

DEPARTMENT OF ME

SUBJECT COMPUTER AIDED DESIGN AND MANUFACTURING	SUBJECT CODE	18ME72
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COURSE OUTCOME

CO1	Define Automation, CIM, CAD, CAM and explain the 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 flow linestoreduce time and enhance productivity.
CO4	Explain the use of different computer applications in manufacturing, and able to prepare part programs for simple jobs on CNC machine tools and robot programming.
CO5	Visualize and appreciate the modern trends in Manufacturing like additive manufacturing, Industry 4.0 and applications of Internet of Things leading to Smart Manufacturing.

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FACULTY	NAM	E				Prof.	Ravi	ikumar l	KR			
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COURSE	B.1	E	SEM	ESTE	R	VII		SECTIO	N		-	
SUBJECT	CC		TER A				D	SUBJE	CT C	ODE	18M	E72
CO & PO M	APPIN	NG										
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	1	1	-	2	3	1	1	1	1	2
CO2	3	2	1	2	-	1	1	1	1	1	-	2
CO3	3	2	1	1	1	2	2	1	1	1	1	2
CO4	3	2	1	1	-	2	3	. 1	1	1	1	2
CO5	3	2	1	1	1	2	2	1	1	1	1	2
AVERAGE	3	1.6	1	1.2	1	1.8	2.2	1	1	1	1	2
		,	,	,	il.	OVE	CRAI	L MAP	PING	OF SUI	BJECT	1.52

SHRIDEVI INSTITUTE OF ENGINEERING &

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	CO	PO	PO	PO1	PO1	PO1							
	%	1	2	3	4	5	6	7	8	9	0	1	2
CO1		1.8	1.2	0.6			1.2	1.8	0.6	0.6			
	62	6	4	2	0.6	-	4	6	2	2	0.62	0.62	1.24
CO ₂		1.9	1.3	0.6			0.6	0.6	0.6	0.6			
	66	8	2	6	1.3	-	6	6	6	6	0.66	-	1.32
CO3		1.4	0.9	0.4		0.4	0.9	0.9	0.4	0.4			
	49	7	8	9	0.5	9	8	8	9	9	0.49	0.49	0.98
CO4		1.8	1.2	0.6			1.2	1.8	0.6	0.6			
	63	9	6	3	0.6	-	6	9	3	3	0.63	0.63	1.26
CO5		1.4	0.9	0.4		0.4	0.9	0.9	0.4	0.4			
	48	4	6	8	0.5	8	6	6	8	8	0.48	0.48	0.96
AVERA								•					
GE		1.7	1.1	0.5		0.4	1.0	1.2	0.5	0.5			
	57.6	3	5	8	0.7	9	2	7	8	8	0.58	0.56	1.15
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Academic year	-			SEA		10000	_		ength	19	10171				Aided		and Manufactu		_ 5	Subject	Code		IE72							
SEM:VII	_	_	(30M)	_	_	-	_	_		_	_	ENT/	,				EE MARKS(6	1					os ATTAL					individu		
USN						-			TOTAL		-	CO3			CO1=1		C03	C04			CO1=34		CO3=34			C01	CO2	CO3	CO4	COS
1SV17ME005	6	10	16	12	5	17	13	5	18	2	2	2	2	2	5.6	5.6	5.6	5.6	5.6	28	13.6	29.6	12.6	20.6	12.6	40%	67%	37%	61%	37%
1SV18ME003	11	14	25	13	11	24	12	17	29	2	2	2	2	2	9.4	9.4	9,4	9.4	9.4	47	22.4	38.4	22.4	23.4	28.4	66%	87%	66%	69%	84%
1SV18ME008	15	6	21	14	11	25	11	12	23	2	2	2	2	2	6	6	6	6	6	30	23	28	19	19	20	58%	54%	56%	56%	59%
1SV18ME010	13	10	23	19	2	21	11	14	25	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	24	19.8	35.8	8.8	17.8	20.8	58%	81%	26%	52%	61%
1SV18ME011	14	11	25	11	9	20	18	6	24	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	20.2	28.2	15.2	24.2	12.2	59%	64%	45%	71%	36%
1SV18AŒ012	13	8	21	13	10	23	15	7	22	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	20.8	28.8	17.8	22.8	14.8	61%	65%	52%	67%	44%
1SV18ME013	11	15	26	18	9	27	14	11	25	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	24	17.8	39.8	15.8	20.8	17.8	52%	90%	45%	61%	52%
1SV19ME001	19	10	29	16	7	23	13	13	26	2	2	2	2	2	5.6	5.5	5.6	5.6	5.6	28	26.6	33.6	14.6	20.6	20.6	78%	76%	43%	61%	61%
1SV19ME002	13	1	20	12	9	21	11	11	22	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	20.8	25.8	15.8	18.8	18.8	61%	61%	49%	55%	55%
1SV19ME005	12	3	15	9	9	18	15	3	18	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	*24	18.8	18.8	15.8	21.8	9.8	55%	43%	45%	64%	29%
1SV19ME006	16	4	20	11	11	22	17	4	21	2	2	2	2	2	8	8	8	8	8	40	26	25	21	27	14	76%	57%	52%	79%	41%
1SV19ME010	14	9	23	12	9	21	12	10	22	2	2	2	2	2	6.6	6.6	6.6	6.6	6.6	33	22.6	29.6	17.6	20.6	18.6	66%	67%	52%	61%	55%
1SV19ME011	13	10	23	17	10	27	15	10	25	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	21.4	35.4	18.4	23.4	18.4	63%	80%	54%	69%	54%
1SV19ME013	17	1	18	12	4	16	14	0	14	2	2	2	2	2	2.4	2.4	- 2.4	2.4	2.4	12	21.4	17.4	8.4	18.4	4.4	63%	40%	25%	54%	13%
1SV19ME014	14	5	19	11	12	23	13	8	21	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	22.4	24.4	20.4	21.4	16.4	66%	55%	60%	63%	48%
1SV19ME015	15	3	18	16	4	20	14	8	22	2	2	2	2	2	5	5	5	5	5	25	22	26	11	21	15	65%	59%	32%	62%	44%
1SV20ME400	13	10	23	13	16	29	16	10	26	2	2	2	2	2	6	6	6	6	6	30	21	31	24	24	18	62%	70%	71%	71%	53%
1SV20ME402	14	2	16	12	6	18	14	6	20	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	25	21.2	21.2	13.2	21.2	13.2	52%	48%	39%	52%	39%
1SV20ME403	13	12	25	12	17	29	15	12	27	2	2	2	2	2	5.4	5.4	5.4	5.4	5.4	27	20.4	31.4	24.4	22.4	19.4	60%	71%	72%	66%	
TOTAL	256	150	406	253	171	424	263	167	430	38	38	38	38	38	108.2	108.2	108.2	108.2	108.2	541	402.2	549.2	317.2	409.2	313.2	11.83	12.48	9.33		57%
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	12.48	19	12.04	9.21
Average	13.5	7.89	21.37	13.3	9	22.3	13.8	8.8	22.63	2	2	2	2	2	5.69	5.69	5.69	5.69	5.69	28.47	21.17	28.91	16.69	21.54	16.48	62.26	65.69	49.10	63.34	48.48
Total																									20.70	52%	55%	49%	63%	48%



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

DEPARTMENT OF ME

SUBJECT	TOTAL QUALITY MANAGEMENT	SUBJECT CODE	18ME734
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COURSE OUTCOME

CO1	Explain the various approaches of TQM
CO2	Infer the customer perception of quality
CO3	Analyse customer needs and perceptions to design feedback systems.
CO4	Apply statistical tools for continuous improvement of systems
CO5	Apply the tools and technique for effective implementation of TQM.

- **PO1** Engineering knowledge: An ability to apply knowledge of mathematics (including probability, Statistics and discrete mathematics), science, and engineering for solving Engineering problems And Knowledge.
- **PO2** Problem analysis: Identify, formulate, research literature, and analyze complex engineering Problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
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- 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.
- **P011** Project management and finance: An ability to use the modern engineering tools, techniques, Skills and management principles to do work as a member and leader in a team, to manage Projects in multidisciplinary environments.
- **PO12** Life-long learning: recognition of the need for, and an ability to engage in, to resolve Contemporary issues and acquire lifelong learning.

NAME O				SHR				TE OF E GY, TUN			NG &			
FACULTY	NAM	E				Prof.	Sant	tosh						
BRAN	СН		MECH	ANIC	AL	A	CAD	EMIC Y	EAR		2022	-23		
COURSE	В.1	E	SEM	ESTEI	R	VII		SECTIO	N		-			
SUBJECT	ТО	TAL (QUALI	ΓΥ MA	NAG	EMEN	Т	SUBJE	CT C	ODE	18MF	E734		
CO & PO MAPPING														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	7 PO8	PO9	PO10	PO11	PO12		
CO1	3	2	1	1	-	2	3	1	1	1	1	2		
CO2	3	2	1	2	-	1	1	1	1	1	-	2		
CO3	3	2	1	1	1	2	2	1	1	1	1	2		
CO4	3	2	1	1	-	2	3	1	1	1	1	2		
CO5	3	2	1	1	1	2	2	1	1	1	1	2		
AVERAGE	3	1.6	1	1.2	1	1.8	2.2	1	1	1	1	2		
			,			OVE	CRAL	L MAP	PING	OF SU	BJECT	1.52		

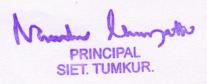
	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	64	1.92	1.28	0.64	0.6	-	1.28	1.92	0.64	0.64	0.64	0.62	1.28
CO2	76	2.28	1.52	0.76	1.5	-	0.76	0.76	0.76	0.76	0.76	-	1.52
CO3	53	1.59	1.06	0.53	0.5	0.49	1.06	1.06	0.53	0.53	0.53	0.49	1.06
CO4	65	1.95	1.3	0.65	0.7	_	1.3	1.95	0.65	0.65	0.65	0.63	1.3
CO5	57	1.71	1.14	0.57	0.6	0.48	1.14	1.14	0.57	0.57	0.57	0.48	1.14
AVERAGE	63	1.89	1.26	0.63	0.8	0.49	1.11	1.37	0.63	0.63	0.63	0.56	1.26
								1			attainme		0.94

PRINCIPAL SIET. TUMKUR.

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FACULTY

cademic yea	202	2-23		SEM	VII		_		ength	19		Sul	ject	tal Qu	ality Ma	nagem	ent (PI		8	Subject	Code	1811	E734							
SEM:VII		_	1(30M)	-	_	, ,		_	(30M)		IGNEA	ENT/	QUIZ(10 M)		SEE	IARK	S(60)				Total C	os ATTAI	NMENT			% 0	f individu	al CO	
USN	COI	-	TOTAL	CO:	CO3	TOTAL	CO4	CO5	TOTAL	C01	CO2	CO3	CO4	CO5	CO1=1	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
SV17ME005	13	4	17	8	8	16	4	11	15	2	2	2	2	2	5	5	5	5	5	25	20	19	15	11	18	59%	43%	44%	32%	53%
SV18ME003	16	9	25	15	11	26	16	11	27	2	2	2	2	2	9.4	9.4	9.4	9.4	9.4	47	27.4	35.4	22.4	27.4	22.4	81%	80%	66%	81%	66%
SV18ME008	12	12	24	13	12	25	13	13	26	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	20.4	33.4	20.4	21.4	21.4	60%	76%	60%	63%	63%
SV18ME010	17	7	24	16	10	26	12	16	28	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	24	23.8	29.8	16.8	18.8	22.8	70%	68%	49%	55%	67%
SV18ME011	13	10	23	17	9	26	11	15	26	2	2	2	2	2	2	2	2	2	2	10	17	31	13	15	19	50%	70%	38%	44%	56%
SV18ME012	16	8	24	14	13	27	18	6	24	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	22.2	28.2	19.2	24.2	12.2	65%	64%	56%	71%	36%
SV18ME013	13	11	24	17	10	27	15	15	30	2	2	2	2	2	7	7	7	1	7	35	22	37	19	24	24	65%	84%	56%	71%	71%
SV19ME001	13	12	25	16	9	25	17	11	28	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	19.2	34.2	15.2	23.2	17.2	56%	78%	45%	68%	51%
SV19ME002	12	11	23	18	9	27	12	16	28	2	2	2	2	2	5	5	5	5	5	25	19	36	16	19	23	56%	82%	47%	56%	68%
SV19ME005	12	11	23	15	13	28	16	8	24	2	2	2	2	2	6.6	6.6	6.6	6.6	6.6	33	20.6	34.6	21.6	24.6	16.6	61%	79%	64%	72%	49%
SV19NE006	14	16	30	16	8	24	18	9	27	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	20.2	38.2	14.2	24.2	15.2	59%	87%	42%	71%	45%
SV19NE010	12	11	23	14	10	24	15	10	25	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	19.8	32.8	17.8	22.8	17.8	58%	75%	52%	67%	52%
SV19ME011	14	13	27	17	13	30	13	11	24	2	2	2	2	2	9	9	9	9	9	45	25	41	24	24	22	74%	93%	71%	71%	65%
SV19ME013	16	5	21	14	11	25	11	12	23	2	2	2	2	2	6	6	6	6	6	30	24	27	19	19	20	71%	61%	56%	56%	59%
SV19ME014	17	6	23	15	9	24	10	15	25	2	2	2	2	2	7.2	7.2	7.2	7.2	7.2	36	26.2	30.2	18.2	19.2	24.2	77%	69%	54%	56%	71%
SV19ME015	13	15	28	17	7	24	16	7	23	2	2	2	2	2	9	9	9	9	9	45	24	43	18	27	18	71%	98%	53%	79%	53%
SV20NE400	13	16	29	15	80	23	14	9	23	2	2	2	2	2	9	9	9	9	9	45	24	42	19	25	20	71%	95%	56%	74%	59%
SV20A/E402	12	10	22	13	12	25	17.	8	25	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	18.2	29.2	18.2	23.2	14.2	54%	66%	54%	68%	42%
SV20ME403	14	12	26	18	9	27	17	11	28	2	2	2	2	2	5.4	5.4	5.4	5.4	5.4	27	21.4	37.4	16.4	24.4	18.4	63%	85%	48%	72%	54%
TOTAL	262	199	461	288	191	479	265	214	479	38	38	38	38	38	114.4	114.4	114	114.4	114.4	572	414,4	639.4	343.4	417.4	366.4	12.19	14.53	10.10	12.28	10.78
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
Average	13.8	10.5	24.26	15.2	10.1	25.2	13.9	11	25.21	2	2	2	2	2	6.02	6.02	6.02	6.02	6.02	30.11	21.81	33.65	18.07	21.97	19.28	64.15	76.48	53.16	64.61	56.72
Total																										64%	76%	53%	65%	57%





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

DEPARTMENT OF ME

SUBJECT	PROJECT MANAGMENT	SUBJECT CODE	18ME745

COURSE OUTCOME

CO1	Understand the selection, prioritization and initiation of individual projects and strategic role of project management.
CO2	Understand the work breakdown structure by integrating it with organization.
CO3	Understand the activities like purchasing, acquisitions, contracting, partnering and collaborations related to performing projects.
CO4	Determine project progress and results through balanced scorecard approach
CO5	Draw the network diagram to calculate the duration of the project and reduce it using crashing.

- **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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FACULTY	' NAM	Œ		,		Prof.	Sant	osh				
BRAN	СН		MECH	ANIC	AL	A	CAD	EMIC Y	YEAR		2022	2-23
COURSE	В.	E	SEM	ESTE	R	VII	5	SECTIO	N		•	
SUBJECT		PRO	JECT	MANA	GME	ENT		SUBJE	CT C	ODE	18MI	E745
CO & PO M	APPI	NG		1				•				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	1	1	1	-	2	3	1	1	1	1	2
CO2	3	2	1	2	-	1	1	1	1	1	-	2
CO3	3	2	1	1	1	2	2	1	1	1	1	2
CO4	3	1	1	1	-	2	3	1	1	1	1	2
CO5	3	1	1	1	1	2	2 .	1	1	1	1	2
AVERAGE	3	1.4	1	1.2	1	1.8	2.2	1	1	1	1	2
in the second			II.	·		OVE	RAL	L MAP	PING	OF SUE	BJECT	1.52

	CO					PO	PO				PO1	PO1	PO1
Total Agent Art Art	%	PO1	PO2	PO3	PO4	5	6	PO7	PO8	PO9	0	1	2
COL	70		0		_		1.4						
CO1	59	2.2	0.73	0.73	0.73	-	7	2.2	0.73	0.73	0.73	0.73	1.47
602		4.04					0.6						
CO ₂	73	1.96	1.31	0.65	1.31	-	5	0.65	0.65	0.65	0.65	-	1.31
						0.4	0.9						
CO3	58	1.43	0.95	0.48	0.48	8	5	0.95	0.48	0.48	0.48	0.48	0.95
COA							1.0	·					
CO4	64	1.58	0.53	0.53	0.53	-	5	1.58	0.53	0.53	0.53	0.53	1.05
00-						0.4	0.9						
CO5	55	1.42	0.47	0.47	0.47	7	5	0.95	0.47	0.47	0.47	0.47	0.95
AVERAG		1.71	0.79	0.57	0.70	0.4	1.0	1.26	0.57	0.57			1.14
E	61.8	8	8	2	4	8	1	6	2	2	0.57	0.55	6
							F	INAL	ATTA	INMF	NT LI		0.83

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PRINCIPAL SIET. TUMKUR.

Academic year				SEA		-			ength	19		Sub	ject	Pr	vject M:	nagem	ent		S	ubject	Code	1834	E745			***************************************				
SEM:VII		_		_	_	- /	-	_	3(3011)		IGNEA	ENT !	QUIZ(10 M)		SEE	MARK!	S(60)				Total C	os ATTAL	MENT			% 0	individu	al CO	
USN	CO1	CO2	TOTAL	CO:	CO3	TOTAL	CO4	COS	TOTAL	C01	CO2	CO3	C04	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	C03	C04	CO
1SV17ME005	12	12	24	16	18	34	8	8	16	2	2	2	2	2	5.4	5.4	5.4	5.4	5.4	27	19.4	35.4	25.4	15.4	15.4	57%	80%	75%	45%	45%
1SV18ME003	15	10	25	14	14	28	15	15	30	2	2	2	2	2	5.8	2	2	2	2	29	22.8	28	18	19	19	67%	64%	53%	56%	56%
1SV18ME008	15	9	24	15	15	30	13	15	28	2	2	2	2	2	8	8	8	8	8	40	25	34	25	23	25	74%	77%	74%	68%	74%
1SV18ME010	15	9	24	15	8	23	14	15	29	2	2	2	2	2	7	7	7	7	7	35	24	33	17	23	24	71%	75%	50%	58%	71%
1SV18ME011	15	8	23	15	14	29	13	15	28	2	2	2	2	2	5.6	5.6	5.6	5.6	5.6	28	22.6	30.6	21.6	20.6	22.6	66%	70%	64%	61%	66%
1SV18ME012	15	8	23	14	15	29	13	15	28	2	2	2	2	2	4.4	4.4	4.4	4.4	4.4	22	21.4	28.4	21.4	19.4	21.4	63%	65%	63%	57%	63%
1SV18ME013	15	10	25	15	15	30	14	15	29	2	2	2	2	2	5.4	5.4	5.4	5.4	5.4	27	22.4	32.4	22.4	21.4	22.4	66%	74%	66%	63%	66%
ISV19ME001	14	15	29	15	15	30	14	15	29	2	2	2	2	2	7.2	7.2	7.2	7.2	7.2	36	23.2	39.2	24.2	23.2	24.2	68%	89%	71%	58%	71%
1SV19ME002	15	13	28	15	14	29	12	14	25	2	2	2	2	2	4,4	4.4	4.4	4.4	4.4	22	21.4	34.4	20.4	18.4	20.4	63%	78%	60%	54%	60%
1SV19ME005	15	8	23	14	9	23	13	12	25	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	21.6	28.6	15.6	19.6	18.6	54%	65%	46%	58%	55%
1SV19ME006	15	12	27	14	14	28	12	13	25	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	22.2	33.2	21.2	19.2	20.2	65%	75%	62%	56%	59%
1SV19ME010	15	8	23	15	15	30	14	15	29	2	2	2	2	2	6	6	6	6	6	30	23	31	23	22	23	68%	70%	68%	65%	68%
1SV19\Æ011	15	15	30	14	14	28	14	15	29	2	2	2	2	2	5.4	5.4	6.4	6.4	6.4	32	23.4	37.4	22.4	22.4	23.4	69%	85%	66%	66%	69%
1SV19ME013	14	2	16	14	8	22	14	7	21	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	21.8	23.8	15.8	21.8	14.8	64%	54%	46%	64%	44%
1SV19ME014	15	15	30	14	14	28	14	15	29	2	2	2	2	2	6	6	6	6	6	30	23	37	22	22	23	58%	84%	65%	65%	68%
ISV19ME015	15	14	29	15	14	29	14	15	29	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	22.8	35.8	21.8	21.8	22.8	67%	84%	64%		
ISV20ME400	15	14	29	14	12	26	13	15	28	2	2	2	2	2	8.8	8.8	8.8	8.8	8.8	44	25.8	38.8	22.8	23.8	25.8	76%	88%	67%	54%	67%
1SV20ME402	14	8	22	15	15	30	14	15	29	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	32	22.4	31.4	23.4	22.4	23.4	66%	-		70%	76%
1SV20ME403	15	8	23	15	14	29	14	15	29	2	2	2	2	2	7,4	7.4	7.4	7.4	7.4	37	24.4	32.4	23.4	23.4			71%	59%	66%	69%
TOTAL	279	198	477	278	257	535	252	264	516	38	38	38	38	38	115.6	111.8	111.8	111.8	111.8	578	432.6	625.8	406.8	401.8	24.4 413.8	72% 12.72	74%	69%	69%	72%
O OF STUDENT	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	12.72	14.22	11.96 19	11.82 19	12.17
AVERAGE	14.7	10.4	25.1	14.6		28.2	13.3		27.2	2.0	2.0	2.0	2.0	2.0	6.1	5.9	5.9	5.9	5.9	30.4	22.8	32.9	21.4	21.1	21.8	67.0	74.9	63.0	62.2	64.1
Total																						VE.3	22.3	21.1	21.0	67%	75%	63%	52%	64%



SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ME

SUBJECT ENVIRONMENTAL PROTECTION OF MANAGEMENT	& SUBJECT CODE	18CV753
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COURSE OUTCOME

CO1	Appreciate the elements of Corporate Environmental Management systems complying to international environmental management system standards.
CO2	Lead pollution prevention assessment team
CO3	implement waste minimization options.
CO4	Develop, Implement, maintain
CO5	Audit Environmental Management systems for Organizations.

- **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.
- **P06** 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.

NAME O COLLI		E		SHR				TE OF E GY, TUN			IG &	
FACULTY	' NAM	E				Prof 1	Niran	ijani				
BRAN	СН		MECH	IANIC	AL	A	CAD	EMIC	YEAR		2022	-23
COURSE	B.1	E	SEM	ESTE	R	VII		SECTIO	N			
SUBJECT	ENV	IRON	MENT MANA			CTION	1&	SUBJE	CT C	ODE	18CV	753
CO & PO M	APPIN	NG										
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	1	1	-	2	3	1	1	1	1	2
CO2	3	2	1	2	-	1	1	1	1	1	-	2
CO3	3	2	1	1	1	2	2	1	1	1	1	2
CO4	3	2	1	1	-	2	3	. 1	1	1	1	2
CO5	3	2	1	1	1	2	2	1	1	1	1	2
AVERAGE	3	1.6	1	1.2	1	1.8	2.2	1	1	1	1	2
						OVE	RAL	L MAP	PING	OF SUI	BJECT	1.52

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C01											1010	1011	1012
	62	1.86	1.24	0.62	0.6	-	1.24	1.86	0.62	0.62	0.62	0.62	1.24
CO2													
	66	1.98	1.32	0.66	1.3	_	0.66	0.66	0.66	0.66	0.66	_	1.32
CO3													1,02
Section supplied to	49	1.47	0.98	0.49	0.5	0.49	0.98	0.98	0.49	0.49	0.49	0.49	0.98
CO4												0112	0.70
ASSESSED AND ADDRESS OF THE PARTY OF THE PAR	63	1.89	1.26	0.63	0.6	-	1.26	1.89	0.63	0.63	0.63	0.63	1.26
CO5												0.00	1.20
The second second second	48	1.44	0.96	0.48	0.5	0.48	0.96	0.96	0.48	0.48	0.48	0.48	0.96
AVERAGE												0.10	0.70
BOOK BOOK OF THE	57.6	1.73	1.15	0.58	0.7	0.49	1.02	1.27	0.58	0.58	0.58	0.56	1.15
								•		Final	attainme		0.86

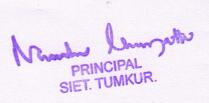
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PRINCIPAL SIET. TUMKUR.

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cademic year				SEM			To	tal str	ength	19		Subj	ect im	ental Pro	otection	a & Mana			Subject C	ode	18C	1753							
SEM:VII		_	(3011)		_	_		_	3(3011)			_	1Z(10)		SEE	MARKS	(60)				Total C	os ATTAI	NMENT			% o	indívídu	al CO	
USN	CO1	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	COl	CO2	CO3	coco	CO1=1	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
.SV17ME005	6	12	18	12	3	15	13	17	30	2	2	2	2 2	4.4	5.6	5.6	5.6	5.5	22	12.4	31.6	10.5	20.6	24.6	36%	72%	31%	61%	72%
SV18ME003	11	10	21	13	2	15	12	18	30	2	2	2	2 2	10.8	9.4	9.4	9.4	9.4	54	23.8	34.4	13.4	23.4	29.4	70%	78%	39%	69%	86%
SV18ME008	15	7	22	14	6	20	11	16	27	2	2	2	2 2	4.8	6	6	6	6	24	21.8	29	14	19	24	64%	66%	41%	56%	71%
SV18ME010	13	-4	9	19	-10	9	11	18	29	2	2	2	2 2	7.8	4.8	4.8	4.8	4.8	39	22.8	21.8	-3.2	17.8	24.8	67%	50%	-9%	52%	73%
SV18ME011	14	-4	10	11	6	17	18	12	30	2	2	2	2 2	6.4	4.2	4.2	4.2	4.2	32	22.4	13.2	12.2	24.2	18.2	66%	30%	35%	71%	54%
.SV18ME012	13	7	20	13	4	17	15	15	30	2	2	2	2 2	3	5.8	5.8	5.8	5.8	15	18	27.8	11.8	22.8	22.8	53%	63%	35%	67%	67%
SV18ME013	11	4	15	18	2	20	14	16	30	2	2	2	2 2	5.8	4.8	4.8	4.8	4.8	29	18.8	28.8	8.8	20.8	22.8	55%	65%	26%	61%	67%
SV19ME001	19	1	20	16	5	21	13	16	29	2	2	2	2 2	4.6	5.6	5.6	5.6	5.6	23	25.6	24.5	12.6	20.6	23.5	75%	56%	37%	61%	69%
.SV19ME002	13	5	18	12	-6	6	11	19	30	2	2	2	2 2	6.4	5.8	5.8	5.8	5.8	32	21.4	24.8	1.8	18.8	26.8	63%	56%	5%	55%	79%
.SV19ME005	12	4	8	9	11	20	15	15	30	2	2	2	2 2	5.8	4.8	4.8	4.8	4.8	29	19.8	11.8	17.8	21.8	21.8	58%	27%	52%	64%	64%
SV19ME006	16	2	18	11	15	26	17	9	26	2	2	2	2 2	6.2	8	8	8	8	31	24.2	23	25	27	19	71%	52%	74%	79%	56%
SV19ME010	14	12	26	12	-12	0	12	18	30	2	2	2	2 2	5.8	6.6	6.6	6.6	6.6	29	21.8	32.6	-3.4	20.6	26.6	64%	74%	-10%	61%	78%
SV19ME011	13	0	13	17	3	20	15	15	30	2	2	2	2 2	10.2	5.4	6.4	6.4	6.4	51	25.2	25.4	11.4	23.4	23.4	74%	58%	34%	69%	69%
SV19ME013	17	3	20	12	-12	0	14	9	23	2	2	2	2 2	6.4	2.4	2.4	2.4	2.4	32	25.4	19.4	-7.6	18.4	13.4	75%	44%	-22%	54%	39%
SV19ME014	14	6	20	11	11	22	13	17	30	2	2	2	2 2	8.2	6.4	6.4	. 6.4	6.4	41	24.2	25.4	19.4	21.4	25.4	71%	58%	57%	63%	75%
SV19ME015	15	.9	6	16	-9	7	14	16	30	2	2	2	2 2	4.2	5	5	5	5	21	21.2	14	-2	21	23	62%	32%	-6%	62%	68%
SV20ME400	. 13	6	19	13	7	20	16	4	20	2	2	2	2 2	9.6	6	6	6	6	48	24.6	27	15	24	12	72%	61%	44%	71%	35%
SV20ME402	14	-3	11	12	3	15	14	1	15	2	2	2	2 2	4.8	5.2	5.2	5.2	5.2	24	20.8	15.2	10.2	21.2	8.2	61%	37%	30%	62%	24%
SV20ME403	13	13	26	12	9	21	15	14	29	2	2	2	2 2	7	5.4	5.4	5.4	5.4	35	22	32.4	16.4	22.4	21.4	65%	74%	48%	66%	63%
TOTAL	256	64	320	253	38	291	263	265	528	38	38	38	38 38	122.2	108	108.2		108.2	611	416.2	463.2	184.2	409.2	411.2	12.24	10.53	5.42	12.04	12.09
o 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	13.5	3.37	16.84	13.3	2	15.3	13.8	14	27.79	2	2	2	2 2	6.43	5.69	5.69	5.69	5.69	32.16	21.91	24.38	9.69	21.54	21.54	64.43	55.41	28.51	63.34	63.65
Total																									64%	55%	29%	63%	64%





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

DEPARTMENT OF ME

SUBJECT MANAGEMENT AND ECONOMICS	SUBJECT CODE	18ME51
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COURSE OUTCOME

CO1	Understand needs, functions, roles, scope and evolution of Management
CO2	Understand importance, purpose of Planning and hierarchy of planning and also56nalyse its types.
CO3	Discuss Decision making, Organizing, Staffing, Directing and Controlling.
CO4	Select the best economic model from various available alternatives.
CO5	Understand various interest rate methods and implement the suitable one.

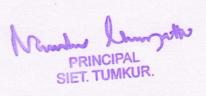
- **PO1** Engineering knowledge: An ability to apply knowledge of mathematics (including probability, Statistics and discrete mathematics), science, and engineering for solving Engineering problems And Knowledge.
- **PO2** Problem analysis: Identify, formulate, research literature, and analyze complex 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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COURSE	B.	E	SEM	ESTE	R	V	5	SECTIO	N		-	
SUBJECT	MAN	IAGE	MENT.	AND E	CON	OMIC	S	SUBJE	CT C	ODE	18M	E51
CO & PO M	APPI	NG					· _ /					
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	1	1	1	-	2	3	1	1	1	1	2
CO2	3	2	1	2	-	1	1	1	1	1	-	2
CO3	3	2	1	1	1	2	2	1	1	1	1	2
CO4	3	1	1	1	-	2	3	1	1	1	1	2
CO5	3	1	1	1	1	2	2	1	1	1	1	2
AVERAGE	3	1.4	1	1.2	1	1.8	2.2	1	1	1	1	2
						OVE	RAL	L MAPI	PING	OF SUE	BJECT	1.52

	CO	PO	PO	PO	PO	PO	PO						
	%	1	2	3	4	5	6	7	8	9	10	11	12
			0.7	0.7	0.7		1.4		0.7	0.7			12
CO1	57	2.2	3	3	3	-	7	2.2	3	3	0.73	0.73	1.47
		1.9	1.3	0.6	1.3		0.6	0.6	0.6	0.6			
CO ₂	69	6	1	5	1	-	5	5	5	5	0.65	-	1.31
		1.4	0.9	0.4	0.4	0.4	0.9	0.9	0.4	0.4			-
CO ₃	60	3	5	8	8	8	5	5	8	8	0.48	0.48	0.95
2		1.5	0.5	0.5	0.5		1.0	1.5	0.5	0.5			
CO4	65	8	3	3	3	-	5	8	3	3	0.53	0.53	1.05
605		1.4	0.4	0.4	0.4	0.4	0.9	0.9	0.4	0.4			
CO5	64	2	7	7	7	7	5	5	7	7	0.47	0.47	0.95
AVERA	(0)	1.7	0.7	0.5	0.7	0.4	1.0	1.2	0.5	0.5			1.14
GE	63	18	98	72	04	8	1	66	72	72	0.57	0.55	6
						449	FIN	AL A	TTAI	NME	NT LE	VEL	0.83

PRINCIPAL SIET. TUMKUR.

Academic ye	202	1.13		SEM	V		To	ital stre	ngth	83.00		Sul	ject	Mana	gement	and Eco	nomics		S	ubject (ode	183	Eš1							
SEM:V	LAT	EST I(3011)	IA'	IEST?	(3011)	IAT	ESI 3	3011)	ASS	GNE)	ENT/	QUIZ(1011)		SEE	MARKS	5(60)				Total	Cos ATT	AINEN			%0	individu	100	
USN	COl	CO1	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	COl	CO2	CO3	C04	CO5	CO1=1	CO2	CO3	CO4	CO5	Total	001=1	CO2=44	CO3=29	CO4=19	CO5=29	C01	CO2	C03	C04	CO5
1SV20AŒ00	8.00	12.00	20.00	12.00	12.00	24.00	15.00	14.00	29.00	2.00	2.00	2.00	2.00	2.00	5.60	5.60	5.60	5.60	5.60	28.00	15.60	31.60	19.60	22.60	21.60	46%	72%	58%	66%	64%
1SV20AE00	14.00	15.00	29.00	8.00	15.00	23.00	15.00	14.00	29.00	2.00	2.00	2.00	2.00	2.00	6.40	6.40	6.40	6.40	6.40	32.00	22.40	31.40	23.40	23.40	22.40	66%	71%	69%	69%	66%
ISV20ME00	8.00	12.00	20.00	8.00	10.00	18.00	15.00	14.00	29.00	2.00	2.00	2.00	2.00	2.00	4.60	4.60	4.60	4.60	4.60	23.00	14.60	26.60	16.60	21.60	20.60	43%	60%	49%	64%	61%
1SV20ME00	13.00	15.00	28.00	12.00	8.00	20.00	15.00	15.00	30.00	2.00	2.00	2.00	2.00	2.00	5.20	5.20	5.20	5.20	5.20	26.00	20.20	34.20	15.20	22.20	22.20	59%	78%	45%	65%	65%
1SV201/E00	12.00	5.00	17.00	6.00	14.00	20.00	15.00	15.00	30.00	2.00	2.00	2.00	2.00	2.00	2.80	2.80	2.80	2.80	2.80	14.00	16.80	15.80	18.80	19.80	19.80	49%	36%	55%	58%	58%
1SV20ME00	14.00	14.00	28.00	8.00	15.00	23.00	15.00	12.00	27.00	2.00	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	5.00	25.00	21.00	29.00	22.00	22.00	19.00	62%	66%	65%	65%	56%
ISV20NE00	10.00	11.00	21.00	8.00	10.00	18.00	15.00	15.00	30.00	2.00	2.00	2.00	2.00	2.00	5.00	5.00	5.00	5.00	5.00	25.00	17.00	26.00	17.00	22.00	22.00	50%	59%	50%	65%	65%
ISV20NE00	13.00	15.00	28.00	12.00	15.00	27.00	14.00	14.00	28.00	2.00	2.00	2.00	2.00	2.00	8.80	8.80	8.80	8.80	8.80	44.00	23.80	37.80	25.80	24.80	24.80	70%	86%	76%	73%	73%
1SV201/E00	15.00	15.00	30.00	15.00	15.00	30.00	15.00	15.W	30.00	2.00	2.00	2.00	2.00	2.00	5.80	5.80	5.80	5.80	5.80	29.00	22.80	37.80	22.80	22.80	22.80	67%	86%	67%	67%	67%
ISV2IME40	12.00	13.00	25.00	12.00	13.00	25.00	15.00	15.00	30.00	2.00	2.00	2.00	2.00	2.00	5.60	5.60	5.60	5.60	5.60	28.00	19.60	32.60	20.60	22.60	22.60	58%	74%	61%	66%	66%
1SV21ME40	15.00	15.00	30.00	12.00	15.00	27.00	15.00	14.00	29.00	2.00	2.00	2.00	2.00	2.00	5.20	5.20	5.20	5.20	5.20	26.00	22.20	34.20	22.20	22.20	21.20	65%	78%	65%	65%	62%
ISV2IME40	12.00	14.00	26.00	7.00	15.00	22.00	15.00	15.00	30.00	2.00	2.00	2.00		2.00	4.20	4.20	4.20	4.20	4.20	21.00	18.20	27.20	21.20	21.20	21.20	54%	62%	62%	62%	
Total	145.00					277.00																364.20	245.20	267.20	260.20	6.89	8.28	7.21	7.86	62%
	12.00			12.00	12.00	12.00				12.00									12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	7.65 12.00
Average	12.17	13.00	25.17	10.00	13.08	23.08	14.92	14.33	29.25			2.00		2.00	5.35	5.35		5.35	5.35	26.75	19.52	30.35	20.43	22.27	21.68	0.57	0.69	0.60	0.65	0.64
Total																							-51.14	20.01	20.40	57%	69%	60%	65%	64%





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

DEPARTMENT OF ME

SUBJECT	DESIGN OF MACHINE ELEMENTS-1	SUBJECT CODE	18ME52
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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.

- **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: recognition of the need for, and an ability to engage in, to resolve Contemporary issues and acquire lifelong learning.

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BRAN	СН		MECH	IANIC	AL	A	CAD	EMIC Y	YEAR		2022	2-23
COURSE	B.)	E	SEM	ESTE	R	V	S	SECTIO	N		-	
SUBJECT	DES	IGN O	F MAC	CHINE	ELEN	MENT	S-1	SUBJE	CT C	ODE	18M	E52
CO & PO M	APPIN	NG										
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	1	1	1	1	1	2	3	1	1	1	1	2
CO2	3	2	1	1	1	1	1	1	1	1	-	2
CO3	3	2	1	1	1	2	2	1	1	1	1	2
CO4	3	1	1	1	-	2	3 ·	1	1	1	1	2
CO5	3	1	1	1	1	2	2	1	1	1	1	2
AVERAGE	2.6	1.4	1	1.2	1	1.8	2.2	1	1	1	1	2
						OVE	RALI	L MAPI	PING (OF SUB	JECT	1.4

	CO	PO	DO1	PO1	DO1								
	%	1	2	3	4	5	6	7	8	9	0	1	PO1 2
CO1	51	0.51	0.51	0.51	0.51	0.51	1.02	1.53	0.51	0.51	0.51	0.51	1.02
CO2	60	1.8	1.20	0.6	1.2	0.6	0.6	0.6	0.6	0.6	0.6	-	1.2
CO3	48	1.44	0.96	0.48	0.48	0.48	0.96	0.96	0.48	0.48	0.48	0.48	0.96
CO4	56	1.68	0.56	0.56	0.56	0.56	1.12	1.68	0.56	0.56	0.56	0.56	1.12
CO5	43	1.29	0.43	0.43	0.43	0.43	0.86	0.86	0.43	0.43	0.43	0.43	0.86
AVERA		1.34	0.73	0.51	0.63	0.51	0.91	1.12	0.51	0.51	0.51	0.49	
GE	51.6	4	2	6	6	6	2	6	6	6	6	5	1.03
									Fina	al attai	inment	level	0.74

PRINCIPAL SIET. TUMKUR.

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PRINCIPAL SIET. TUMKUR.

Academic year	202	1.13		SEA	ľ		Tot	al str	ength	11	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Sul	ject	Design	of Mac	nine El	ments -	1	S	ubject	Code	183	E 52		ç	·	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,		
SEM:V	IAT	EST 1	(3031)	IAT	EST?	(3011)	IAT	EST 3	(3011)	ASS	GNEA	ENT/	QUIZ(1010)		SEE	MARKS	(60)				Total C	os ATTAL	NON			%0	individu	al CO	
USN	COI	CO2	TOTAL	CO2	CO3	OTAL	CO4	CO5	TOTAL	COl	CO2	CO3	CO4	COS	CO1=1	CO2	CO3	C04	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
ISV20AE001	12	11	23	12	13	25	13	14	27	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	12.	16.4	27.4	17.4	17.4	18.4	48%	62%	51%	51%	54%
1SV201\ E 002	11	17	28	14	15	29	15	15	30	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	17.2	37.2	21.2	21.2	21.2	51%	85%	62%	62%	62%
ISV20AE003	13	1	20	16	10	26	14	9	23	2	2	2	2	2	8.8	8.8	8.8	0.0	0.0	44	23.8	33.8	20.8	24.8	19.8	70%	71%	61%	73%	58%
1SV201\E004	13	5	18	12	1	22	12	000	20	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	12	17.4	21.4		16.4	12.4	51%	49%	42%	48%	36%
1SV20NE005	12	6	18	11	12	23	11	11	22	2	2	2	2	2	0	CII	~	0	٥	0	14	19	14	13	13	41%	43%	41%	38%	38%
1SV201\E006	12	12	24	14	10	24	16	11	27	2	1	2	2	2	2.8	2.8	2.8	2.8	2.8	14	16.8	30.8	14.8	20.8	15.8	49%	70%	44%	61%	46%
1SV20NE007	9	2	11	1	6	13	12	C>	12	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	12	13.4	13.4	10.4	16.4		39%	30%	31%	48%	13%
1SV201\E008	13	11	24	13	10	23	15	1	22	2	2	2	2	2	4,4		4.4		4.	22	19.4	30.4	16.4	21.4	13.4	57%	69%	48%	63%	39%
ISV20NE009	15	15	30	16	14	30	12	100	30	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21.	21.2	37.2	20.2	18.2	24.2	62%	85%	59%	54%	71%
ISV2INE400	11	6	17	12	12	24	17	5	22	2	2	2	2	2	5	5	5	5	5	25	18	25	19	24	12	53%	57%	56%	71%	35%
ISV2INE401	1	-003-	11	5	5	10	11	1	12	2	2	2	2	2	2.4	24	2.4	2.4	2.4	12.	11.4	13.4	9.4	15.4	5.4	34%	30%	28%	45%	16%
1SV21ME402	12	00	20	13	4	24	14	00	22	2	1	2	2	2	5.2	5.2	5.2	5.2	5.2	26	19.2	28.2	18.2	21.2	15.2	56%	64%	54%	62%	45%
TOTAL	140	104	244	145	128	273	162	407	269	24	24	24	24	24	44.2	44.2	44.2	41.2	41.2	221	208.2	317.2	196.2	230.2	175.2	6.12	7.21	5.77	6.77	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	11.7	0.57	20.33	12.1	10.7	22.8	13.5	8.9	22.42	2	2	2	2	2	3.68	3.68	3.68	3.68	3.68	18.42	17.35	26.43	16.35	19.18	14.6	51.03	60.08	48.09	56.42	42.94
Total																										51%	60%	48%	56%	43%



SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ME

SUBJECT	DYNAMICS OF MACHINES	SUBJECT CODE	18ME53
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COURSE OUTCOME

CO1	Understand needs, functions, roles, scope and evolution of Management
CO2	Understand importance, purpose of Planning and hierarchy of planning and also56nalyse its types.
CO3	Discuss Decision making, Organizing, Staffing, Directing and Controlling.
CO4	Select the best economic model from various available alternatives.
CO5	Understand various interest rate methods and implement the suitable one.

- **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.
- **P06** 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.

NAME O				SHR				FE OF E GY, TUN			IG &			
FACULTY	NAM	E		1		Prof.	BHV	7						
BRAN	СН		MECH	IANIC	AL	A	CAD	EMIC Y	YEAR		2022	-23		
COURSE	В.]	E	SEM	ESTE	R	V	S	SECTIO	N		•			
SUBJECT	I	YNA	MICS (OF MA	CHIN	NES		SUBJE	CT C	ODE	18M	IE53		
CO & PO M	APPIN	NG												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12		
CO1	3 1		1	1 -		2	, 3	1	1	1	1	2		
CO2	3	2	1	2	-	1	1	1	1	1	-	2		
CO3	3	2	1	1	1	2	. 2	1	1	1	1	2		
CO4	3	1	1	1	-	2	3	1	1	1	1	2		
CO5	3	1	1	1	1	2	2	1	1	1	1	2		
AVERAGE	3	1.4	1	1.2	1	1.8	2.2	1	1	1	1	2		
				JL.		OVE	RAL	L MAP	PING	OF SUE	BJECT	1.52		

	CO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO
	%	1	2	3	4	5	6	7	8	9	10	11	12
			0.7	0.7	0.7		1.4		0.7	0.7			
CO1	35	2.2	3	3	3	-	7	2.2	3	3	0.73	0.73	1.47
		1.9	1.3	0.6	1.3		0.6	0.6	0.6	0.6			
CO2	49	6	1	5	1	-	5	5	5	5	0.65	-	1.31
		1.4	0.9	0.4	0.4	0.4	0.9	0.9	0.4	0.4			
CO ₃	44	3	5	8	8	8	5	5	8	8	0.48	0.48	0.95
在		1.5	0.5	0.5	0.5		1.0	1.5	0.5	0.5			
CO4	46	8	3	3	3	-	5	8	3	3	0.53	0.53	1.05
		1.4	0.4	0.4	0.4	0.4	0.9	0.9	0.4	0.4			
CO5	47	2	7	7	7	7	5	5	7	7	0.47	0.47	0.95
AVERA	44.	1.7	0.7	0.5	0.7	0.4	1.0	1.2	0.5	0.5			1.14
GE	2	18	98	72	04	8	1	66	72	72	0.57	0.55	6
75A - 074 (8.5 °-)					14.27		FIN	AL A	TTAI	NME	NT LE	EVEL	0.83



PRINCIPAL SIET. TUMKUR.

Academic year	2022	1.13		SEM	V		Tot	alstr	ength	83		Sub	ject	Dy	namics o	fMach	ines		S	ubject	Code	183	ES)							
SEM:V	IAT	STI	(3031)	IAT	EST 1	(3011)	IAT	ST.	(3034)	ASS	GNE).	ENT/	QUIZ(I	011)		SEE!	LARKS	(60)				Total C	os ATTAI	NEXT			% 01	individua	n CO	
USN	C01	CO2	TOTAL	CO:	CO3	OTAL	CO4	CO5	TOTAL	COl	CO2	CO3	C04	CO5	CO1=12	CO2	CO3	CO4	CO5	Total	CO1=29	CO3=44	CO3=29	CO4=29	CO5=19	CO1	CO2	CO3	CO4	CO
1SV201\E001	7-	1	14	10	13	23	10	13	23	2	2	2	2	1	5.4	5.4	5.4	5.4	5.4	27	14	24	20.4	17.4	20.4	42%	55%	60%	51%	603
1SV20ME002	7	7	14	7	00	15	00	9	17	2	2	2	2	2	5.6	5.6	5.6	5.6	5.6	28	15	22	15.6	15.6	16.6	43%	49%	46%	46%	49%
1SV20ME003	5	5	10	11	11	22	10	13	23	2	2	2	2	2	2.8	2.8	2.8	2.8	2.8	14	100	21	15.8	14.8	17.8	29%	47%	46%	44%	52%
1SV201\E004	7	1	14	400	97	19	00	1	15	2	2	2	2	2	4.4		-	4.4	4.4	. 22	13	23	15.4	14.4	13.4	39%	53%	45%	42%	39%
1SV201AE005	****	3	1	1	8	15	CO	7	15	2	2	2	2	2	0.6	0.6	0.6	0.6	0.6	3	7	13	10.6	10.6	9.6	19%	29%	31%	31%	28%
1SV201\E006	1	7	14	00	9	17	00	9	17	2	2	2	2	2	0.4	0.4	0.4	0.4	0.4	.2	9	17	11.4	10.4	11.4	28%	40%	34%	31%	349
1SV20ME007	~	0	0	13	14	27	13	13	26	2	2	2	2	1	0	0	0	~	0	0	2	15	16	15	15	6%	34%	47%	4%	443
1SV201\E008	7	6	13	1	00	15	-	9	19	2	2	2	2	2	0.2	0.2	0.2	0.2	0.2	1	9	15	10.2	12.2	11.2	27%	35%	30%	36%	33%
1SV20ME009	14	14	28	- Carrier	44	28	14		28	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	21	35	21.2	21.2	21.2	62%	80%	62%	62%	629
ISV2IME400	1	7	14	0	0	0	10	11	21	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	13	13	6.2	16.2	17.2	39%	30%	18%	48%	519
1SV21ME401	100	111	21		3	27	15	14	29	2	2	2	2	2	1.8	1.8	1.8	1.8	1.8	9	14	29	16.8	18.8	17.8	41%	65%	49%	55%	52%
1SV21ME402	00	9	17	15	15	30	15	15	30	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	15	31	21.6	21.6	21.6	43%	70%	64%	64%	64%
TOTAL	83.	83	166	115	122	238	129	134	263	24	24	24	24	24	35.2	35.2	35.2	35.2	35.2	176	142	258	181.2	188.2	193.2	4.18	5.87	5.33	5.54	5.68
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	6.92	6.92	13.83	9.67	10.2	19.8	10.8	11	21.92	2	2	2	2	2	2.93	2.93	2.93	2.93	2.93	14.67	11.85	21.52	15.1	15.68	16.1	34.85	48.90	44.41	46.13	47.3
Total																										35%	49%	44%	46%	47%



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

DEPARTMENT OF ME

SUBJECT	TURBO MACHINES	SUBJECT CODE	18ME54	
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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.

- **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.
- **P07** Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **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: recognition of the need for, and an ability to engage in, to resolve Contemporary issues and acquire lifelong learning.

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FACULTY	NAM	E		PRO	F K.P.	.CHAN	DRA	IAH				
BRAN	СН		MECH	IANIC	AL	A	CAD	EMIC Y	EAR		2022	-23
COURSE	В.1	E	SEM	ESTE	R	V	S	SECTIO	N		-	
SUBJECT		TUR	BO MA	ACHIN	ES			SUBJE	CT C	ODE	18M	E54
CO & PO M	APPIN	NG					,					
	PO1	PO2	PO3 PO4 PO5 PO6 PO7 PO8 PO9 PO10 PO									PO12
CO1	1	1	1	1	1	2	3	1	1	1	1	2
CO2	3	2	1	1	1	1	1	1	1	1	-	2
CO3	3	2	1	1	1	2	2	1	1	1	1	2
CO4	3	1	1	1	-	2	3	1	1	1	1	2
CO5	3	1	1	1	1	2	2	1	1	1	1	2
AVERAGE	2.6	1.4	1	1.2	1	1.8	2.2	1	1	1	1	2
		J	R		ı	OVE	CRAL	L MAP	PING	OF SUI	BJECT	1.4

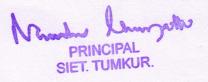
	CO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO
	%	1	2	3	4	5	6	7	8	9	10	11	12
CO1	53	0.51	0.51	0.51	0.51	0.51	1.02	1.53	0.51	0.51	0.51	0.51	1.02
CO2	31	1.8	1.20	0.6	1.2	0.6	0.6	0.6	0.6	0.6	0.6	-	1.2
CO3	34	1.44	0.96	0.48	0.48	0.48	0.96	0.96	0.48	0.48	0.48	0.48	0.96
CO4	51	1.68	0.56	0.56	0.56	0.56	1.12	1.68	0.56	0.56	0.56	0.56	1.12
CO5	32	1.29	0.43	0.43	0.43	0.43	0.86	0.86	0.43	0.43	0.43	0.43	0.86
AVERA	(2)	1.34	0.73	0.51	0.63	0.51	0.91	1.12	0.51	0.51	0.51	0.49	
GE	40.2	4	2	6	6	6	2	6	6	6	6	5	1.03
		34 1.44 0.96 0.48 0.48 0.48 0.96 0.96 0.48 0.48 0.48 0.96 51 1.68 0.56 0.56 0.56 0.56 1.12 1.68 0.56 0.56 0.56 1.12 32 1.29 0.43 0.43 0.43 0.86 0.86 0.43 0.43 0.43 0.86 1.34 0.73 0.51 0.63 0.51 0.91 1.12 0.51 0.51 0.49 0.49 40.2 4 2 6 6 6 2 6 6 6 5 1.03									0.74		

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PRINCIPAL SIET. TUMKUR.

Academic year	202	223		SEA	ľ		To	tal str	ength	12		Sul	ject		Turbo \	fachine	1		5	abject	Code	183	E \$4							
SEM:V	IAT	EST	(1011)	HI	EST:	!(30M)	IAT	EST.	3(3011)	ASS	[GNE]	ENT/	QVIZ(1030)		SEE	LARK!	5(60)				Total (os ATTA	NEVI			% 0	individu	al CO	
USN	COL	CO2	TOTAL	CO2	CO3	FOTA	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	CO1=1	CO:	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	C03	CO4	COS
1SV20ME001	13	1	20	12	100	22	11	10	21	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	12	17.4	23.4	14.4	15.4	14.4	51%	53%	42%	45%	42%
1SV20NE002	10	5	15	17	~	17	12	****	16	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	17.2	29.2	7.2	19.2	11.2	51%	66%	21%	56%	33%
18V20NE003	1	9	16	13	7	20	15	543	18	2	2	2	2	2	1.6	1.6	1.6	1.6	1.6	8	10.6	25.6	10.6	18.6	6.6	31%	58%	31%	55%	19%
1SV20ME004	14	1	21	11	8	19	14	3	17	2	2	2	2	2	1.6	1.6	1.6	1.6	1.6	8	17.6	21.6	11.6	17.6	6.6	52%	49%	34%	52%	19%
18V20ME005	1	3	10	12	C	12	1	1	14	2	2	2	2	2	0	٥	~	0	0	0	9	17	2	9	9	26%	39%	6%	26%	26%
1SV201\E006	13	7	20	8	8	16	13	5	18	2	2	2	2	2	1	1	1	- Among	1	5	16	18	11	16	8	47%	41%	32%	47%	24%
18V20A/E007	13	9	22	414	4	18	12	5	17	2	2	2	2	2	0.8	0.0	CO.	0.8	0.0	4	15.8	25.8	6.8	14.8	7.8	46%	59%	20%	44%	23%
1SV20NE008	15	1	22	6	00	14	12	6	18	2	2	2	2	2	14	1.4	1.4	1.4	1.4	1	18.4	16.4	11.4	15.4	9.4	54%	37%	34%	45%	28%
1SV20ME009	24	2	26	15	15	30	17	11	28	2	2	2	2	2	400	4.8	4.8	4.0	4.0	24	30.8	23.8	21.8	23.8	17.8	91%	54%	64%	70%	52%
1SV21ME400	22	5	27	17	11	28	19	10	29	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	12	26.4	26.4	15.4	23.4	14	78%	60%	45%	69%	42%
1SV21ME401	9	2	11	00	3	11	1	1	14	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	12	13.4	14.4	7.4	11.4	11.4	39%	33%	22%	34%	34%
1SV21ME402	19	10	29	15	13	28	19	00	27	2	2	2	2	2	2.6	2.6	2.6	2.6	2.6	13	23.6	29.6	17.6	23.6	12.6	69%	67%	52%	69%	37%
TOTAL	166	73	239	148	87	235	158	79	237	24	24	24	24	24	26.2	26.2	26.2	26.2	26.2	131	215.2	271.2	137.2	208.2	129.2	6.36	6.16	404	6.12	3.80
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	13.8	6.08	19.92	12.3	7.25	19.6	13.2	6.6	19.75	2	2	2	2	2	2.18	2.18	2.18	2.18	2.18	10.92	10.0	22.6	11.43	17.35	10.77	52.99	51.36	33.63	51.03	31.67
TOTAL																										53%	51%	34%	51%	32%





SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ME

SUBJECT	FLUID POWER ENGINEERING	SUBJECT CODE	18ME55	
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COURSE OUTCOME

CO1	Identify and analyse the functional requirements of a fluid power transmission system for a given application.
CO ₂	Visualize how a hydraulic/pneumatic circuit will work to accomplish the function.
CO3	Design an appropriate hydraulic or pneumatic circuit or combination circuit like electro-hydraulics, electro- pneumatics for a given application.
CO4	Select and size the different components of the circuit.
CO5	Develop a comprehensive circuit diagram by integrating the components selected for the given application.

- **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.
- **P08** 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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FACULTY	' NAM	E				Prof.	K.P.	CHAND	RAIA	Н			
BRAN	СН		MECH	IANIC	AL	A	CAD	EMIC Y	YEAR		2022	-23	
COURSE	B.1	E	SEM	SEMESTER V SECTION -									
SUBJECT	FLU	D PO	WER E	ENGIN	EERI	NG		SUBJE	CT C	ODE	18M	E55	
CO & PO M	APPIN	\G						,		1			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	
CO1	3 1		1 1 -		-	2	3	. 1	1	1	1	2	
CO2	3	2	1	2 -		1	1	1	1	1	-	2	
C03	3	2	1	1	1	2	2	1	1	1	1	2	
CO4	3	1	1	1	-	2	3	1	1	1	1	2	
CO5	3	1	1	1	1	2	2	1	1	1	1	2	
AVERAGE	3	1.4	1	1.2	1	1.8	2.2	1	1	1	1	2	
						OVE	RAL	L MAP	PING (OF SUE	BJECT	1.52	

	CO	PO	PO	PO	PO	PO	PO						
基度 是100	%	1	2	3	4	5	6	7	8	9	10	11	12
			0.7	0.7	0.7		1.4		0.7	0.7			
CO1	53	2.2	3	3	3	-	7	2.2	3	3	0.73	0.73	1.47
		1.9	1.3	0.6	1.3		0.6	0.6	0.6	0.6			
CO2	72	6	1	5	1	-	5	5	5	5	0.65	-	1.31
		1.4	0.9	0.4	0.4	0.4	0.9	0.9	0.4	0.4			
CO3	61	3	_ 5	8	8	8	5	5	8	8	0.48	0.48	0.95
66.4		1.5	0.5	0.5	0.5		1.0	1.5	0.5	0.5			
CO4	63	8	3	3	3	-	5	8	3	3	0.53	0.53	1.05
00-		1.4	0.4	0.4	0.4	0.4	0.9	0.9	0.4	0.4			
CO5	63	2	7	7	7	7	5	5	7	7	0.47	0.47	0.95
AVERA	62.	1.7	0.7	0.5	0.7	0.4	1.0	1.2	0.5	0.5			1.14
GE	4	18	98	72	04	8	1	66	72	72	0.57	0.55	6
							FIN	AL A	TTAI	NME	T LE	VEL	0.83

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Academic year		2-23		SEA	_		_	tal sti	rength	12		Sul	ject	Flui	d Power	Engin	ering		1	Subject	Code	183	E 55							1
SEM:V			(3031)	-	_	2(30M)		_	3(3011)	ASS	GNEA	ENT/	QUIZ(10 M)		SEE	MARK	S(60)				Total C	os ATTAL	MENT			%0	findividu	al CO	
USN	C01	CO2	TOTAL	CO:	CO3	TOTA	CO-	CO	TOTAL	COl	CO2	CO3	CO4	CO5	CO1=1	CO2	CO3	C04	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	C04	COS
1SV201\Œ001	9	11	20	14	14	28	15	15	30	2	2	2	2	2	5.6	5.6	5.6	5.6	5.6	28	. 16.6	32.6	21.6	22.6	22.6	49%	74%	64%	66%	66%
1SV201AE002	13	6	19	15	15	30	15	15	30	2	2	2	2	2	5	5	5	5	5	25	20	28	22	22	22	59%	64%	65%	65%	65%
ISV20ME003	9	00	17	15	15	30	15	15	30	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	15.2	29.2	21.2	21.2	21.2	45%	66%	62%	62%	62%
1SV20ME004	11	15	26	15	12	27	15	15	30	2	2	2	2	2	4.5	4.6	4.6	4.5	4.6	23	:17.6	36.6	18.6	21.6	21.6	52%	83%	55%	64%	64%
1SV20NŒ005	7	00	15	13	14	27	15	15	30	2	2	2	2	2	5.4	5.4	5.4	5.4	5.4	27	14.4	28.4	21.4	22.4	22.4	42%	65%	63%	66%	66%
1SV201\Œ006	12	co	20	15	14	29	15	15	30	2	2	2	2	2	3.2	3.2	3.2	3.2	3.2	16	17.2	28.2	19.2	20.2	20.2	51%	64%	56%	59%	59%
ISV201AE007	7	5	12	15	12	27	12	8	20	2	2	2	2	2	2.2	2.2	2.2	2.2	2.2	11	11.2	24.2	16.2	16.2	12.2	33%	55%	48%	48%	36%
ISV20NE008	14	15	29	15	15	30	15	15	30	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	21.8	37.8	22.8	22.8	22.8	64%	86%	67%	67%	67%
ISV201AIE009	14	00	22	15	15	30	15	15	30	2	2	2	2	2	1	1	7	7	7	35	23	32	24	24	24	68%	73%	71%	71%	71%
ISV21ME400	12	00	20	15	12	27	12	15	27	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	18.2	29.2	18.2	18.2	21.2	54%	66%	54%	54%	62%
SV21ME401	14	13	27	15	13	28	15	15	30	2	2	2	2	2	7	7	7	7	7	35	23	37	22	24	24	68%	84%	65%	71%	71%
SV21ME402	12	14	26	15	13	28	15	15	30	2	2	2	2	2	5	5	5	5	5	25	19	36	20	22	22	56%	82%	59%	55%	65%
TOTAL	134	119	253	177	164	341	174	173	347	24	24	24	24	24	59.2	59.2	59.2	59.2	59.2	296	217.2	379.2	247.2	257.2	256.2	6.39	8.52	7.27	7.56	7.54
OF STUDENT	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 :	11.2	9.92	21.08	14.8	13.7	28.4	14.5	French of The	28.92	2	2	2	2	2	4.93	4.93	4.93	4.93	4.93	24.67	18.10	31.60	20.60	21.43	21.35	53.24	71.82	60.59	63.04	62.79
Total																										53%	72%	61%	63%	63%



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

DEPARTMENT OF ME

SUBJECT OPERATION MANAGMENT SUBJECT CODE	18ME56	SUBJECT CODE	OPERATION MANAGMENT	SUBJECT
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COURSE OUTCOME

CO1	Understand the selection, prioritization and initiation of individual projects and strategic role of project management.
CO2	Understand the work breakdown structure by integrating it with organization.
CO3	Understand the activities like purchasing, acquisitions, contracting, partnering and collaborations related to performing projects.
CO4	Determine project progress and results through balanced scorecard approach
CO5	Draw the network diagram to calculate the duration of the project and reduce it using crashing.

- **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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FACULTY	NAM	TE				Prof	Sant	osh						
BRAN	CH		MECH	IANIC	AL	A	CAD	EMIC Y	YEAR		2022	22-23		
COURSE	В.	E	SEM	ESTE	R	V		SECTIO	N		-			
SUBJECT		OPE	RATION MANAGMENT SUBJECT CODE 18											
CO & PO M	APPII	NG												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12		
CO1	3	1	1	1	-	2	3	1	1	1	1	2		
CO2	3	2	1	2	-	1	1	. 1	1	1	-	2		
CO3	3	2	1	1	1	2	2	1	1	1	1	2		
CO4	3	1	1	1	-	2	3	1	1	1	1	2		
CO5	3	1	1	1	1	2	2	1	1	1	1	2		
AVERAGE	3	1.4	1	1.2	1	1.8	2.2	1	1	1	1	2		
						OVE	RAL	L MAPI	PING (OF SUB	JECT	1.52		

	СО					PO	PO				DO1	DO4	l no.
Control of the state of the sta	%	PO1	PO2	PO3	PO4	5	6	PO7	PO8	PO9	PO1 0	PO1	PO1
Control of the contro							1.4	- 0,	100	107	U	1	2
CO1	58	2.2	0.73	0.73	0.73	_	7	2.2	0.73	0.73	0.73	0.73	1.47
COA							0.6						
CO ₂	69	1.96	1.31	0.65	1.31	_	5	0.65	0.65	0.65	0.65	-	1.31
CO3		1 10	0.05			0.4	0.9						
CO3	65	1.43	0.95	0.48	0.48	8	5	0.95	0.48	0.48	0.48	0.48	0.95
CO4	58	1 50	0.53	0.50			1.0						
C04	30	1.58	0.53	0.53	0.53	-	5	1.58	0.53	0.53	0.53	0.53	1.05
CO5	62	1.42	0.47	0.45	~ .=	0.4	0.9						
AVERAG	02		0.47	0.47	0.47	7	5	0.95	0.47	0.47	0.47	0.47	0.95
E	63	1.71	0.79 8	0.57	0.70	0.4	1.0	1.26	0.57	0.57			1.14
	03	G	0	2	4	8	1	6	2	2	0.57	0.55	6
							F	INAL.	ATTA	INME	NT LE	EVEL	0.83

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ademic year	2022	23		SEM	v T		Tot	al stre	ngth	12		Subj	ect	Oper	ations M	anagei	nent		S	abject (ode	1834	E56							
SEM:V		ST 1(3				3010	IA TI		8	ASS	GNEM	ENT/)UIZ(1	011)		SEEN	IARKS	(60)				Total C	os ATTAL	MENT			% of	individua	100	
USN	COl	-	,		_	-	CO4	COS	OTAL	COl	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO\$=34	001	CO2	CO3	CO4	CO5
3V20ME001	11	13	24	12	16	28	12	14	26	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	18.8	32.8	23.8	19.8	21.8	55%	75%	70%	58%	64%
3V20ME002	10	15	25	11	16	27	11	15	26	2	2	2	2	2	6.6	6.6	6.6	6.6	6.6	33	18.6	34.6	24.6	19.6	23.6	55%	79%	72%	58%	69%
3V20ME003	13	8	21	9	16	25	9	14	23	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	20.2	24.2	23.2	16.2	21.2	59%	55%	68%	48%	62%
3V20ME004	12	14	26	10	17	27	12	13	25	2	2	2	1	2	7.8	7.8	7.8	7.8	7.8	39	21.8	33.8	26.8	21.8	22.8	64%	77%	79%	64%	67%
3V20ME005	11	9	20	11	7	18	11	8	19	2	2	1	2	2	0	0	0	~	0	0	13	22	9	13	10	38%	50%	26%	38%	29%
3V201AE006	80	12	20	12	12	24	4000	18	28	2	2	2	2	2	7.4	7.4	7.4	7.4	7.4	37	. 17.4	33.4	21.4	19.4	27.4	51%	76%	63%	57%	81%
3V20ME007	13	9	22	11	13	24	15	8	23	2	2	2	2	2	4.4	4.4	4.4	4.4	4.4	22	19.4	26.4	19.4	21.4	14.4	57%	60%	57%	63%	42%
3V20ME008	11	8	19	10	15	25	12	16	28	2	2	2	2	2	7.8	7.8	7.8	7.8	7.8	39	20.8	27.8	24.8	21.8	25.8	61%	63%	73%	64%	76%
3V20ME009	9	21	30	11	17	28	12	17	29	2	2	2	2	2	7.8	7.8	7.8	7.8	7.8	39	18.8	41.8	26.8	21.8	26.8	55%	95%	79%	64%	79%
3V21ME400	12	11	23	12	15	27	11	14	25	2	2	2	2	2	7.6	7.6	7.6	7.6	7.6	38	21.6	32.6	24.6	20.6	23.6	64%	74%	72%	61%	69%
5V21ME401	11	11	22	11	7	18	- Emp	6	20	2	2	2	1	2	5.2	5.2	5.2	5.2	5.2	26	18.2	29.2	14.2	21.2	13.2	54%	65%	42%	62%	39%
3V21ME402	16	00	24	10	16	26	11	14	25	2	2	2	1	2	8.2	8.2	8.2	8.2	8.2	41	26.2	28.2	26.2	21.2	24.2	77%	64%	77%	62%	71%
TOTAL	137	139	276	130	167	297	140	157	297	24	24	24	24	24	73.8	73.8	73.8	73.8	73.8	369	234.8	366.8	264.8	237.8	254.8	6.91	8.34	7.79	6.99	7.49
of Student	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	11,4	11.6	23	10.8	13.9	24.8	11.7	13	24.75	2	2	2	2	2	6.15	6.15	6.15	6.15	6.15	30.75	19.57	30.57	22.07	19.82	21.23	57.55	69.47	64.90	58.28	62.4
Total																										58%	69%	65%	58%	62%

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SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ME

SUBJECT	ENERGY ENGINEERING	SUBJECT CODE	18ME81	
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COURSE OUTCOME

CO1	Understand the construction and working of steam generators and their accessories.
CO2	Identify renewable energy sources and their utilization.
CO3	Understand principles of energy conversion
CO4	Understand principles of energy conversion from alternate sources including wind, geothermal,
CO5	Understand principles of energy conversion from alternate sources ocean, biomass, nuclear, hydel and tidal.

- **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.
- **P09** 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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FACULTY	NAM	E				Prof.	K.P.	Chandr	aiah			
BRAN	СН		MECH	IANIC	AL	A	CAD	EMIC Y	YEAR		2022	2-23
COURSE	B.)	E	SEM	ESTE	R	VIII	1	SECTIO	N		-	
SUBJECT		ENE	ERGY E	ENGIN	EERI	NG		SUBJE	CT C	ODE	18M	E81
CO & PO M	APPIN	\G				1	<u>'</u>	,				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	1	1	1	1	-	2	3	1	1	1	1	2
CO2	2	2	1	2	-	1	1	1	1	1	-	2
CO3	1	2	1	1	1	2	2	1	1	1	1	2
CO4	2	1	1	1	-	2	3	1	1	1	1	2
CO5	2	1	1	1	1	2	2	1	1	1	1	2
AVERAGE	1.6	1.4	1	1.2	1	1.8	2.2	1	1	1	1	2
			,			OVE	RAL	L MAPI	PING	OF SUE	BJECT	1.35

SHRIDEVI INSTITUTE OF ENGINEERING &

CO AND PO ATTAINMENT

NAME OF THE

	СО	PO	PO	PO	PO	PO	DO	D()	DO	DO	DO1	DO1	DO
	%	1 0					PO	PO	PO	PO	PO1	PO1	PO1
	70	1	2	3	4	5	6	7	8	9	0	1	2
CO1	60	1.8	0.6	0.6	0.6	-	1.2	1.8	0.6	0.6	0.6	0.6	1.2
		1.9		0.6	1.3		0.6	0.6	0.6	0.6			
CO2	65	5	1.3	5	1	-	5	5	5	5	0.65	-	1.3
		1.4	0.9	0.4	0.4	0.4	0.9	0.9	0.4	0.4			
CO3	47	1	4	7	8	7	4	4	7	7	0.47	0.47	0.94
		1.9	0.6	0.6	0.5		1.2	1.9	0.6	0.6			
CO4	64	2	4	4	3	-	8	·2	4	4	0.64	0.64	1.28
		1.2	0.4	0.4	0.4	0.4	0.8	0.8	0.4	0.4			
CO5	43	9	3	3	7	7	6	6	3	3	0.43	0.43	0.86
AVERAG		1.6	0.7	0.5	0.6	0.4	0.9	1.2	0.5	0.5			
E	55.8	7	8	6	8	7	9	3	6	6	0.56	0.54	1.12
									Fin	al atta	ninmen	t level	0.81

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Academic year	2022			SEM					ength	19			ject		nergy E	ngineer	ing		1 5	Subject	Code	18	ME81							
SEM:VIII			(30M)														MARK!	5(60)				Total C	os ATTAIN	MENT			% (of individu	ual CO	
USN	COl	CO2	TOTAL	CO2	CO3	OTA	CO4	CO	TOTAL	CO1	CO2	CO3	CO4	COS	CO1=1:	CO2	CO3	CO4	COS	TOTAL	CO1=34	CO2=4	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	COS
1SV17ME005	12	3	15	14	0	14	12	3	15	2	2	2	2	2	4.8	0.8	0.8	0.8	0.8	24	18.8	19.8	2.8	14.8	5.8	55%	45%	8%	44%	17%
1SV18ME003	16	10	26	18	7	25	15	10	26	2	2	2	2	2	8.4	6.4	6.4	5.4	6.4	42	25.4	36.4	15.4	24.4	18.4	78%	83%	45%	72%	54%
1SV18ME008	11	14	25	19	5	24	18	7	25	2	2	2	2	2	7.8	4.8	4.8	4.8	4.8	39	20.8	39.8	11.8	24.8	13.8	61%	90%	35%	73%	41%
1SV18ME010	14	15	29	17	12	29	11	17	28	2	2	2	2	2	7	7.2	7.2	7.2	7.2	35	23	41.2	21.2	20.2	26.2	68%	94%	62%	59%	77%
1SV18ME011	12	8	20	12	7	19	18	2	20	2	2	2	2	2	1.2	1.8	1.8	1.8	1.8	6	15.2	23.8	10.8	21.8	5.8	45%	54%	32%	64%	17%
1SV18ME012	11	10	21	15	4	19	13	8	21	2	2	2	2	2	6.4	4.8	4.8	4.8	4.8	32	19.4	31.8	10.8	19.8	14.8	57%	72%	32%	58%	44%
1SV18ME013	17	12	29	14	14	28	15	14	29	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	29	24.8	33.8	21.8	22.8	21.8	73%	77%	64%	67%	54%
1SV19ME001	15	12	27	9	18	27	17	9	26	2	2	2	2	2	7	4.8	4.8	4.8	4.8	35	24	27.8	24.8	23.8	15.8	71%	63%	73%	70%	45%
1SV19ME002	14	15	29	10	19	29	12	16	28	2	2	2	2	2	6	6.4	6.4	6.4	6.4	30	22	33.4	27.4	20.4	24.4	65%	76%	81%	60%	72%
1SV19ME005	11	9	20	11	9	20	11	8	19	2	2	2	2	2	5.2	1.6	1.6	1.6	1.6	26	18.2	23.6	12.6	14.6	11.6	54%	54%	37%	43%	34%
1SV19ME006	17	2	19	13	7	20	18	2	20	2	2	2	2	2	4.2	22	22	22	22	21	23.2	39	31	42	26	58%	89%	91%	124%	76%
1SV19ME010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0%	0%	0%	
1SV19ME011	16	5	21	11	11	22	13	9	22	2	2	2	2	2	7	8.2	8.2	8.2	8.2	35	25	26.2	21.2							0%
1SV19ME013	13	4	17	12	6	18	19	-1	18	2	2	2	2	2	8.8	1.6	1.6	1.6	1.6	44	23.8	19.6	9.6	23.2	19.2	74%	50%	62%	68%	56%
1SV19ME014	11	6	17	19	-1	18	15	3	18	2	2	2	2	2	5.5	6.6	6.6	6.6	6.6	33	19.6	33.6	7.6	22.6	2.6	70%	45%	28%	56%	8%
1SV19ME015	18	-3	15	10	6	16	17	-1	16	2	2	2	2	2	7.6	6	6.6	6						23.6	11.6	58%	76%	22%	69%	34%
1SV20ME400	9	16	25	11	15	26	13	13	26	2	2	2					-	-	6	38	27.6	15	14	25	7	81%	34%	41%	74%	21%
1SV20ME402	10	9	19	14	6	20	13	7	20	2	2	2	2	2	7.6	4.2	4.2	4.2	4.2	38	18.6	33.2	21.2	19.2	19.2	55%	75%	62%	56%	56%
1SV20ME403	12	14	26	12	15	27	17	10					2	2	6.6	4.2	4.2	4.2	4.2	33	18.6	29.2	12.2	19.2	13.2	55%	65%	36%	56%	39%
		161	400	241	150	401	268	136	404	36	2	2	2	2	7.8	9.2	9.2	9.2	9.2	39	21.8	37.2	26.2	28.2	21.2	54%	85%	77%	83%	52%
No of Students		19	19	19	19	19	19	19	19	19	36 19	36 19	36 19	36 19	115.8	106.4	105.4	106.4	106.4	579	390.8	544.4	302.4	410.4	278.4	11.49	12.37	8.89	12.07	8.19
	12.6			-	8.42			7.16	21.3	1.89	1.895		1.89	1.89	6.09	5.60	19 5.60	19 5.60	19 5.60	19 30.47	39	19	19	19	19	19	19	19	19	19
Total			-2.03	22.7	3.72		47.42	1.20	21.3	1.03	1.033	1.03	1.03	1.03	0.03	3.00	3.00	3.00	0.00	30.4/	20.6	28.7	15.9	21.6	14.7	60.5	65.1 65%	45.8 47%	63.5 64%	43.1



SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ME

SUBJECT	AUTOMOBILE ENGINEERING	SUBJECT CODE	18ME824	
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COURSE OUTCOME

To identify the different parts of an automobile and it's working
To understand the working of transmission and braking systems.
To comprehend the working of steering and suspension systems
To learn various types of fuels and injection systems
To know the cause of automobile emissions, its effects on environment and methods to reduce the emissions.

- **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.

NAME O				SHR				ΓΕ OF E GY, TUN			IG &			
FACULTY	NAM	E				Prof.	Ravi	kumar I	KR					
BRAN	СН		MECH	ANIC	AL	A	CAD	EMIC Y	EAR		2022	-23		
COURSE	B.I	3	SEM	ESTEI	R	VIII	5	SECTIO	N		-			
SUBJECT	AUT	OMO	BILE E	NGIN	EERI	NG		SUBJE	CT C	ODE	18MF	E824		
CO & PO M	CO & PO MAPPING													
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12		
CO1	1	1	1	1	-	2	3	1	1	1	1	2		
CO2	2	2	1	2	-	1	1	1	1	1	-	2		
CO3	1	2	1	1	1	2	2	1	1	1	1	2		
CO4	2	1	1	1	-	2	3 .	1	1	1	1	2		
CO5	2	1	1	1	1	2	2	1	1	1	1	2		
AVERAGE	1.6	1.4	1	1.2	1	1.8	2.2	1	1	1	1	2		
						OVE	CRAL	L MAP	PING	OF SUI	BJECT	1.35		

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	60	0.6	0.6	0.6	0.6	-	1.2	1.8	0.6	0.6	0.6	0.6	1.2
CO2	74	1.48	1.48	0.74	1.31	-	0.74	0.74	0.74	0.74	0.74	-	1.48
CO3	50	0.5	1	0.5	0.48	0.5	1	1	0.5	0.5	0.5	0.5	1
CO4	63	1.26	0.63	0.63	0.53	-	1.26	1.89	0.63	0.63	0.63	0.63	1.26
CO5	50	1	0.5	0.5	0.47	0.47	1	1	0.5	0.5	0.5	0.5	1
AVERAGE	59.4	0.97	0.84	0.59	0.68	0.49	1.04	1.29	0.59	0.59	0.59	0.56	1.19
								,	I	inal at	tainmei	nt level	0.79

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More

Academic year	2022	-23		SEM	VIII		Tota	l stre	ngth	19		Sub	ect	Auto	mobile :	Engine	ering		S	ubject (ode	1810	E824							
SEM:VIII	IA TI	EST 1	30M)	IATE	ST 2	30M)	IA TE	ST 3(30M)	ASSI	GNEM	ENT/	QUIZ(I	010		SEE	LARKS	60)				Total C	os ATTAL	MENT			% of	individua	100	
USN	COl	CO2	OTAL	CO2	CO3	OTAL	CO4	COS	OTAL	COl	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	6	18	24	12	10	22	13	-13	0	2	2	2	2	2	4.2	5.6	5.6	5.6	5.6	21	12.2	37.6	17.6	20.6	-5.4	36%	85%	52%	51%	16%
1SV18ME003	11	15	27	13	10	23	12	11	23	2	2	2	2	2.	7.6	9.4	9.4	9.4	9.4	38	20.6	40.4	21.4	23.4	22.4	61%	92%	63%	59%	66%
1SV18ME008	15	11	26	14	10	24	11	11	22	2	2	2	2	2	6.4	9	6	6	6	32	23.4	33	18	19	19	69%	75%	53%	56%	56%
1SV18ME010	13	15	29	19	9	28	11	17	28	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	24	19.8	41.8	15.8	17.8	23.8	58%	95%	45%	52%	70%
1SV18ME011	14	11	25	11	12	23	18	4	22	2	2	2	2	2	2.4	4.2	4.2	4.2	4.2	12	18.4	28.2	18.2	24.2	10.2	54%	64%	54%	71%	30%
1SV18ME012	13	12	25	13	11	24	15	7	22	2	2	2	2	2	1.6	5.8	5.8	5.8	5.8	8	16.6	32.8	18.8	22.8	14.8	49%	75%	55%	67%	44%
1SV18ME013	11	18	29	18	11	29	14	14	28	2	2	2	2	2	4.2	4.8	4.8	4.8	4.8	21	17.2	42.8	17.8	20.8	20.8	51%	97%	52%	61%	61%
1SV19ME001	19	10	29	16	10	26	13	14	27	2	2	2	2	2	4.2	5.6	5.6	5.6	5.6	21	25.2	33.6	17.6	20.6	21.5	74%	76%	52%	61%	64%
1SV19ME002	13	16	29	12	16	28	11	17	28	2	2	2	2	2	5.2	5.8	5.8	5.8	5.8	26	20.2	35.8	23.8	18.8	24.8	59%	81%	70%	55%	73%
1SV19ME005	12	11	23	9	13	22	15	6	21	2	2	2	2	2	4.6	4.8	4.8	4.8	4.8	23	18.6	26.8	19.8	21.8	12.8	55%	51%	58%	64%	38%
ISV19ME006	16	12	28	11	-6	5	17	9	26	2	2	2	2	2	6.6	8	80	00	8	33	24.6	33	4	27	19	72%	75%	12%	79%	56%
1SV19ME010	14	9	23	12	9	21	12	10	22	2	2	2	2	2	5.6	6.6	6.6	6.6	6.6	33	22.6	29.6	17.6	20.6	18.6	66%	67%	52%	61%	55%
1SV19ME011	13	13	26	17	5	22	15	10	25	2	2	2	2	2	7	6.4	6.4	6.4	6.4	35	22	38.4	13.4	23.4	18.4	65%	87%	39%	69%	54%
1SV19ME013	17	4	21	12	10	22	14	7	21	2	2	2	2	2	4.2	2.4	2.4	2.4	2.4	21	23.2	20.4	14.4	18.4	11.4	68%	45%	42%	54%	34%
1SV19ME014	14	7	21	11	8	19	13	7	20	2	2	2	2	2	3	6.4	6.4	6.4	6.4	15	19	26.4	16.4	21.4	15.4	56%	60%	48%	53%	45%
1SV19ME015	15	6	21	16	4	20	14	6	20	2	2	2	2	2	4.2	5	5	5	5	21	21.2	29	11	21	13	62%	66%	32%	52%	38%
1SV20ME400	13	14	27	13	13	26	16	9	25	2	2	2	2	2	9.6	6	6	6	6	48	24.6	35	21	24	17	72%	80%	62%	71%	50%
1SV20ME402	14	2	16	12	6	18	14	6	20	2	2	2	2	2	4.2	5.2	5.2	5.2	5.2	21	. 20.2	21.2	13.2	21.2	13.2	59%	48%	39%	52%	39%
1SV20ME403	13	13	26	12	17	29	15	13	28	2	2	2	2	2	5.8	5.4	5.4	5.4	5.4	29	20.8	32.4	24.4	22.4	20.4	61%	74%	72%	66%	60%
TOTAL	256	219	475	253	178	431	263	165	428	38	38	38	38	38	96.4	108.2	108.2	108.2	108.2	482	390.4	618.2	324.2	409.2	311.2	11.48	14.05	9.54	12.04	9.47
No of Students	s 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	13.5	11.5	25.00	13.3	9.37	22.7	13.8	8.7	22.53	2	2	2	2	2	5.07	5.69	5.69	5.69	5.69	25.37	20.55	32.54	17.06	21.54	16.38	60.43	73.95	50.19	63.34	49.85
Total																								100		60%	74%	50%	63%	50%



SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ME

SUBJECT	FINITE ELEMENT METHOD	SUBJECT CODE	18ME61	
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COURSE OUTCOME

CO1	Identify the application and characteristics of FEA elements such as bars, beams, plane and isoparametric 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
CO5	Apply suitable boundary conditions to a global equation circular shafts, heat transfer, fluid flow, axisymmetric and dynamic problems

- **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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FACULTY	NAM	E				Prof.	Thai	ra						
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COURSE	B.I	E	SEM	ESTE	R	VI	5	SECTIO	N		-			
SUBJECT		FINIT	E ELE	MENT	MET	HOD		SUBJE	CT C	ODE	18M	E61		
CO & PO M	CO & PO MAPPING													
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12		
CO1	3	2	1	1	-	2	3 .	1	1	1	1	2		
CO2	3	2	1	2	-	1	1	1	1	1	-	2		
CO3	3	2	1	1	1	2	2	1	1	1	1	2		
CO4	3	2	1	1	-	2	3	1	1	1	1	2		
CO5	3	2	1	1	1	2	2	1	1	1	1	2		
AVERAGE	3	1.6	1	1.2	1	1.8	2.2	1	1	1	1	2		
		n.	J	ı		OVE	CRAL	L MAP	PING	OF SUI	BJECT	1.52		

CO AND PO ATTAINMENT

	CO	PO	PO	PO	PO	PO	PO	· PO	PO	PO	PO1	PO1	PO1
the Hillson	%	1	2	3	4	5	6	7	8	9	0	1	2
CO1	37	1.11	0.74	0.37	0.37	-	0.74	1.11	0.37	0.37	0.37	0.37	0.74
CO2	49	1.47	0.98	0.49	1.31	-	0.49	0.49	0.49	0.49	0.49	-	0.98
CO3	44	1.32	0.88	0.44	0.48	0.44	0.88	0.88	0.44	0.44	0.44	0.44	0.88
CO4	46	1.38	0.92	0.46	0.53	-	0.92	1.38	0.46	0.46	0.46	0.46	0.92
CO5	47	1.41	0.94	0.47	0.47	0.47	0.94	0.94	0.47	0.47	0.47	0.47	0.94
AVERAG													
E	44.6	1.34	0.89	0.45	0.63	0.46	0.79	0.96	0.45	0.45	0.45	0.44	0.89
									Fir	ıal att	ainmen	t level	0.68

FACULTY

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PRINCIPAL SIET, TUMKUR.

Academic year	2022	-13		SEM	Ÿ		Tot	al str	ength	83		Sub	ect	fini	te Elem	ent Met	hod		S	ubject	Code	183.	E61	***************************************	***************************************	***************************************				***************************************
SEM:V	ATI	STI	(3034)	IA T	EST 2	(3031)	IAT	EST 3	(30M)	ASS	GNEN	ENT/	QUIZ	10 M)		SEE	LARKS	(60)				Total C	os ATTAL	MIM			% of	individua	100	
USN	COl	CO2	TOTAL	CO2	CO3	TOTAL	CO4	COS	TOTAL	COl	CO2	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	CO5	Total	CO1=29	CO2=44	CO3=29	CO4=29	CO5=29	CO1	CO2	CO3	CO4	CO5
1SV20ME001	1	7	29	10	13	22	12	33	28	2	2	2	2	2	5.2	5.4	5.4	5.4	5.4	26	14	24	20.4	17.4	20.4	42%	55%	60%	51%	60%
1SV20ME002	7	7	29	7	00	22	80	9	30	2	2	2	2	2	88	5.6	5.6	5.6	5.6	44	18	22	15.6	15.6	16.6	52%	49%	46%	46%	49%
1SV20ME003	5	5	28	11	11	22	10	13	28	2	2	2	2	2	2.6	2.8	2.8	2.8	2.8	13	10	21	15.8	14.8	17.8	28%	47%	46%	44%	52%
1SV20A/E004	7	7	19	10	9	22	00	7	22	2	2	2	2	2	4.2	4.4	4.4	4.4	4.4	21	13	23	15.4	14.4	13.4	39%	53%	45%	42%	39%
1SV20ME005	-Elle-	3	22	1	8	22	8	7	30	2	2	2	2	2	0	0.6	0.6	0.5	0.6	0	6	13	10.6	10.6	9.6	18%	29%	31%	31%	28%
1SV20\/E006	7	7	22	8	9	22	8	9	29	2	2	2	2	2	1.8	0.4	0.4	0.4	0.4	9	11	17	11.4	10.4	11.4	32%	40%	34%	31%	34%
1SV20ME007	~	0	27	13	14	22	13	13	29	2	2	2	2	2	1.2	0	0	0	0	6	3	15	16	15	15	9%	34%	47%	44%	44%
1SV20ME008	7	6	29	7	8	22	10	9	29	2	2	2	2	2	0	0.2	0.2	0.2	0.2	0	9	15	10.2	12.2	11.2	26%	35%	30%	36%	33%
1SV20ME009	14	14	22	14	14	22	14	14	30	2	2	2	2	2	6.6	5.2	5.2	5.2	5.2	33	23	35	21.2	21.2	21.2	66%	80%	62%	62%	62%
1SV21ME400	7	7	27	0	0	22	10	11	0	2	2	2	2	2	4.6	4.2	4.2	4.2	4.2	23	14	13	6.2	16.2	17.2	40%	30%	18%	48%	51%
1SV21ME401	10	11	21	14	13	22	15	14	28	2	2	2	2	2	4.2	1.8	1.8	1.8	1.8	21	15	29	15.8	18.8	17.8	48%	65%	49%	55%	52%
1SV21ME402	8	9	24	15	15	22	15	15	28	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	23	15	31	21.6	21.6	21.6	43%	70%	64%	64%	64%
TOTAL	83	83	299	116	122	264	129	134	311	24	24	24	24	24	43.8	35.2	35.2	35.2	35.2	219	151	258	181.2	188.2	193.2	4.44	5.87	5.33	5.54	5.68
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	6.92	6.92	24.92	9.67	10.2	22	10.8	11	25.92	2	2	2	2	2	3.65	2.93	2.93	2.93	2.93	18.25	12.5667	21.52	15.1	15.68	16.1	36.96	48.90	44.41	46.13	47.35
Total																										37%	49%	44%	46%	47%



SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ME

SUBJECT	DESIGN OF MACHINE ELEMENTS – II	SUBJECT CODE	18ME62
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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.

- **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: recognition of the need for, and an ability to engage in, to resolve Contemporary issues and acquire lifelong learning.

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FACULTY	NAM	E		DR.	NARE	ENDRA	VIS	WANAT	Ή			
BRAN	СН		MECH	ANIC	AL	A	CAD	EMIC Y	EAR		2022	-23
COURSE	B.1	E	SEM	ESTE	R	VI		SECTIO	N		-	
SUBJECT	DESI 11	GN O	F MAC	CHINE	ELE	MENTS	S-	SUBJE	CT C	ODE	18M	E62
CO & PO M	APPIN	NG										
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	1	1	1	1	1	2	3	1	1	1	1	2
CO2	3	2	1	1	1	1	1	1	1	1	-	2
CO3	3	2	1	1	1	2	2	1	1	1	1	2
CO4	3	1	1	1		2	3	1	1	1	1	2
CO5	3	1	1	1	1	2	2	1	1	1	1	2
AVERAGE	2.6	1.4	1	1.2	1	1.8	2.2	1	1	1	1	2
						OVE	RAL	L MAP	PING	OF SUI	BJECT	1.4

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO1 0	PO1 1	PO1 2
CO1	51	0.51	0.51	0.51	0.51	0.51	1.02	1.53	0.51	0.51	0.51	0.51	1.02
CO2	60	1.8	1.20	0.6	1.2	0.6	0.6	0.6	0.6	0.6	0.6	-	1.2
CO3	48	1.44	0.96	0.48	0.48	0.48	0.96	0.96	0.48	0.48	0.48	0.48	0.96
CO4	56	1.68	0.56	0.56	0.56	0.56	1.12	1.68	0.56	0.56	0.56	0.56	1.12
CO5	43	1.29	0.43	0.43	0.43	0.43	0.86	0.86	0.43	0.43	0.43	0.43	0.86
AVERA GE	51.6	1.34	0.73	0.51 6	0.63	0.51 6	0.91	1.12	0.51 6	0.51 6	0.51 6	0.49	1.03
7.5							100		Fi	nal att	ainmen	t level	0.74

PRINCIPAL SIET. TUMKUR.

FACULTY

HOD

PRINCIPAL SIET. TUMKUR.

Academic year	202	1-13		SEM	ľ		Tot	al stre	ength	12		Sul	ject	sign o	Mac	ine Ele	ments		Sı	ıbject C	ode	181	ME62		,					
SEM:V	IAT	EST 1	3011)	LAT	EST 2(3031)	IAT	EST 3	(3011)	ASSI	GNEN	ENT/	QUIZ	10 M)		SEI	MARK	S(60)				Total	Cos ATTA	UNENT			% of	individua	I CO	
USN	COl	CO2	TOTAL	CO2	CO3	TOTAL	CO4	CO5	TOTAL	CO1	CO2	CO3	CO4	CO5	01=	CO2	CO3	CO4	CO5	TOTAL	CO1=34	CO2=44	CO3=34	CO4=34	CO5=34	CO1	CO2	CO3	CO4	CO5
1SV20ME001	12	11	23	12	13	25	13	14	27	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	12	16.4	27.4	17.4	17.4	18.4	48%	62%	51%	51%	54%
1SV20ME002	11	17	28	14	15	29	15	15	30	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	17.2	37.2	21.2	21.2	21.2	51%	85%	62%	62%	62%
1SV20ME003	13	7	20	16	10	26	14	9	23	2	2	2	2	2	8.8	8.8	8.8	8.8	8.8	•44	23.8	33.8	20.8	24.8	19.8	70%	77%	61%	73%	58%
1SV20ME004	13	5	18	12	10	22	12	CKS	20	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	12	17.4	21.4	14,4	16.4	12.4	51%	49%	42%	48%	36%
1SV20ME005	12	6	18	11	12	23	11	11	22	2	2	2	2	2	0	0	0	0	0	0	14	19	14	13	13	41%	43%	41%	38%	38%
1SV20ME006	12	12.	24	14	10	24	16	11	27	2	2	2	.2	2	2.8	2.8	2.8	2.8	2.8	.14	16.8	30.8	14.8	20.8	15.8	49%	70%	44%	61%	46%
1SV20ME007	9	2	11	1	6	13	12	0	12	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	12	13.4	13.4	10.4	16.4	4,4	39%	30%	31%	48%	13%
1SV20ME008	13	11	24	13	10	23	15	7	22	2	2	2	2	2	4.4	4.4	4.4	MA.	4.4	22	19.4	30.4	16.4	21.4	13.4	57%	69%	48%	63%	39%
1SV20ME009	15	15	30	16	14	30	12	18	30	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21	21.2	37.2	20.2	18.2	24.2	62%	85%	59%	54%	71%
1SV21ME400	111	6	17	12	12	24	17	5	22	2	2	2	2	2	5	5	5	5	5	25	18	25	19	24	12	53%	57%	56%	71%	35%
1SV21ME401	7	4	11	5	5	10	11	1	12	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	12	11.4	13.4	9.4	15.4	5.4	34%	30%	28%	45%	16%
1SV21ME402	12	8	20	13	11	24	14	8	22	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	26	19.2	28.2	18.2	21.2	15.2	56%	64%	54%	62%	45%
TOTAL	140	104	244	145	128	273	162	107	269	24	24	24	24	24	44	44.2	44.2	44.2	44.2	221	208.2	317.2	195.2	230.2	175.2	5.12	7.21	5.77	6.77	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	11.67	8.667	20.33	12.08	10.67	22.75	13.5	8.92	22.42	2	2	2	2	2	3.68	3.68	3.68	3.68	3.68	18.417	17.35	26.43	16.35	19.18	14.5	51.03	60.08	48.09	55.42	42.94
Total																										51%	60%	48%	56%	43%

PRINCIPAL S.L.T. TUMKUR.



SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ME

SUBJECT HEAT TRANSFER	SUBJECT CODE	18ME63
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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.

- **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.

COLLI	EGE				TE	CHNC	LOC	GY, TUN	MAKU	JRU		
FACULTY	NAM	E				Prof.	Thar	ra				
BRAN	СН		MECH	ANIC	AL	A	CAD	EMIC Y	EAR		2022	-23
COURSE	B.I	E	SEM	ESTE	R	VI	5	SECTIO	N	,	-	
SUBJECT			HEAT ?	ΓRAN	SFER			SUBJE	CT C	ODE	18M	E63
CO & PO M	APPIN	\G										
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	1	1	1	-	2	3	1	1	1	1	2
CO2	3	2	1	2	-	1	1	1	1	1	-	2
CO3	3	2	1	1	1	2	2	. 1	1	1	1	2
CO4	3	1	1	1	-	2	3	1	1	1	1	2
CO5	3	1	1	1 -	1	2	2	. 1	1	1	1	2
AVERAGE	3	1.4	1	1.2	1	1.8	2.2	1	1	1	1	2
		J	JL			OVE	CRAL	L MAP	PING	OF SUI	BJECT	1.52

SHRIDEVI INSTITUTE OF ENGINEERING &

CO AND PO ATTAINMENT

NAME OF THE

	CO					PO	PO				PO1	PO1	PO1
	%	PO1	PO2	PO3	PO4	5	6	PO7	PO8	PO9	0	1	2
							1.4	•					
CO1	53	2.2	0.73	0.73	0.73	-	7	2.2	0.73	0.73	0.73	0.73	1.47
							0.6						
CO2	69	1.96	1.31	0.65	1.31	-	5	0.65	0.65	0.65	0.65	-	1.31
						0.4	0.9						
CO3	60	1.43	0.95	0.48	0.48	8	5	0.95	0.48	0.48	0.48	0.48	0.95
State of the Control							1.0						
CO4	65	1.58	0.53	0.53	0.53	-	5	1.58	0.53	0.53	0.53	0.53	1.05
						0.4	0.9						
CO5	64	1.42	0.47	0.47	0.47	7	5	0.95	0.47	0.47	0.47	0.47	0.95
AVERAG		1.71	0.79	0.57	0.70	0.4	1.0	1.26	0.57	0.57			1.14
E	62.2	8	8	2	4	8	1	6	2	2	0.57	0.55	6
							F	INAL	ATTA	INME	ENT LI	EVEL	0.83



HOD

PRINCIPAL SIET. TUMKUR.

Academic year	202	1.13		SEM	VI		To	tal stre	ngth	83		Sul	ject		Heat T	ansfer			S	ubject	Code	18	NE63							
SEM:V	LAT	EST 1(3	OM)	IAI	EST :	2(3011)	IAI	EST 3(301()	ASS	GNE)	ENI/	QUIZ(OM)		SEE!	LARK	5(60)				Total Co	ATTAL	MENT			% 0	individua	100	
USN	COl	CO2	TOTAL	CO:	CO3	TOTAL	CO4	COS	TOTAL	CO1	CO1	CO3	CO4	CO5	CO1=12	CO2	CO3	CO4	COS	Total	CO1=19	CO2=4	CO3=29	04=2	CO5=19	CO1	CO:	CO3	CO4	CO5
1SV20ME001	8	12	27	12	12	26	15	14	22	2	2	2	2	2	2	6	6	6	6	8	12	32	20	23	22	34%	72%	58%	66%	64%
1SV20AE002	14	15	25	00	15	28	15	14	24	2	2	2	2	2	5	6	6	6	6	27	21	31	23	23	22	63%	71%	69%	69%	66%
1SV20ME003	00	12	23	00	10	23	15	14	22	2	2	2	2	2	4	5	5	5	5	21	14	27	17	22	21	42%	60%	49%	64%	61%
1SV20ME004	13	15	18	12	80	28	15	15	23	2	2	2	2	2	5	5	5	5	5	27	20	34	15	22	22	60%	78%	45%	65%	65%
1SV20ME005	12	5	19	5	14	22	15	15	22	2	2	2	2	2	0	3	3	3	3	0	14	16	19	20	20	41%	36%	55%	58%	58%
1SV20ME006	14	14	23	CAD	15	19	15	12	22	2	2	2	2	2	2	5	5	5	5	9	`18	29	22	22	19	52%	66%	65%	65%	56%
1SV20ME007	10	11	19	CMC	10	21	15	15	19	2	2	2	2	2	2	5	5	5	5	8	14	26	17	22	22	40%	59%	50%	65%	65%
1SV20ME008	13	15	22	12	15	22	14	14	19	2	2	2	2	2	6	9	9	9	9	29	21	38	26	25	25	61%	86%	76%	73%	73%
1SV20ME009	15	15	28	15	15	28	15	15	24	2	2	2	2	. 2	7	6	6.	6	6	33	24	38	23	23	23	59%	86%	67%	67%	67%
1SV21ME400	12	13	22	12	13	24	15	15	14	2	2	2	2	2	4	6	6	6	6	1	15	33	21	23	23	45%	74%	61%	66%	66%
1SV21ME401	15	15	24	12	15	20	15	14	21	2	2	2	2	2	6	5	5	5	5	29	23	34	22	22	21	67%	78%	65%	65%	62%
1SV21ME402	12	14	25	7	15	29	15	15	23	2	2	2	2	2	7	4	4	4	4	35	21	27	21	21	21	62%	62%	62%	62%	62%
Total	145	156	275	120	157	290	179	172	255	24	24	24	24	24	47	64	64	64	64	233	217	364	245	267	260	6	8	1	8	8
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	13	23	10	13	24	15	14	21	2	2	2	2	2	4	5	5	5	5	19	18	30	20	22	22	1	1	1	1	1
Total																										53%	69%	60%	65%	64%



SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ME

SUBJECT	NTM	SUBJECT CODE	18ME641

COURSE OUTCOME

001	TY 1
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.
	- I was a second of the second

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

COLLI		TECHNOLOGY, TUMAKURU														
FACULTY	E	Prof. Ravikumar k r														
BRAN	СН		MECH	ANIC	AL	A	CAD	EMIC Y	EAR		2022-23					
COURSE	B.I	E	SEM	ESTEI	R	VI	S	SECTIO	N		-					
SUBJECT			1	NTM				SUBJE	CT C	ODE	18ME641					
CO & PO M	APPIN	NG														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12				
CO1	3	2	1	1 -		2	3	1	1	1	1	2				
CO2	3	2	1 2		-	1	1	1	1	1	-	2				
CO3	3	2	1 1		1	2	2	. 1	1	1	1	2				
CO4	3	2	1 1		-	2	3	1	1	1	1	2				
CO5	3	2	1	1		2	2	1	1	1	1	2				
AVERAGE	E 3 1.		1	1.2	1	1.8	2.2	1	1	1	1	2				
			J		IL.	OVI	ERAL	L MAP	PING	OF SUI	BJECT	1.52				

SHRIDEVI INSTITUTĖ OF ENGINEERING &

CO AND PO ATTAINMENT

NAME OF THE

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	52	1.86	1.24	0.62	0.6	-	1.24	1.86	0.62	0.62	0.62	0.62	1.24
CO2	49	1.98	1.32	0.66	1.3	-	0.66	0.66	0.66	0.66	0.66	-	1.32
CO3	46	1.47	0.98	0.49	0.5	0.49	0.98	0.98	0.49	0.49	0.49	0.49	0.98
CO4	46	1.89	1.26	0.63	0.6	-	1.26	1.89	0.63	0.63	0.63	0.63	1.26
CO5	42	1.44	0.96	0.48	0.5	0.48	0.96	0.96	0.48	0.48	0.48	0.48	0.96
AVERAG E								•					
	47	1.73	1.15	0.58	0.7	0.49	1.02	1.27	0.58	L	0.58	0.56	1.15
										Final a	ttainme	nt level	0.86

DOL FACULTY HOD

PRINCIPAL SIET. TUMKUR.

Academic year	2022	-23		SEM	V		Tot	al str	ength	12		Sub	ject		NI	M			S	ubject (Code	1811	E641							
SEM:V	AT	EST 1	(3011)	IA T	EST 2	(3011)	IA TEST 3(30M)			ASSIGNEMENT / QUIZ(10						SEE !	LARKS	5(60)			Total Cos ATTAINMENT					% of individual CO				
USN	COl	CO2	TOTAL	CO2	CO3	TOTAL	CO4	COS	TOTAL	COl	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
1SV201/E001	13	12	25	12	11	23	11	10	21	2	2	2	2	2	8.4	2.4	2.4	2.4	2.4	42	23.4	28.4	15.4	15.4	14.4	69%	65%	45%	45%	42%
1SV201AE002	10	16	26	17	9	26	12	15	27	2	2	2	2	2	4.8	5.2	5.2	5.2	5.2	24	16.8	40.2	16.2	19.2	22.2	49%	91%	48%	56%	65%
ISV20ME003	7	15	22	13	10	23	15	9	24	2	2	2	2	2	6.4	1.5	1.6	1.6	1.6	32	15.4	31.6	13.6	18.6	12.6	45%	72%	40%	55%	37%
SV20ME004	14	8	22	11	16	27	14	5	19	2	2	2	2	2	4.2	1.6	1.6	1.6	1.6	21	20.2	22.6	19.6	17.6	8.6	59%	51%	58%	52%	259
ISV20ME005	7	15	22	12	10	22	7	16	23	2	2	2	2	2	4.8	0	0	0	0	24	13.8	29	12	9	18	41%	66%	35%	26%	539
SV201AE006	13	6	19	80	17	25	13	9	22	2	2	2	2	2	6	1	1	1	1	30	21	17	20	16	12	62%	39%	59%	47%	355
SV20ME007	13	9	22	14	4	18	12	9	21	2	2	2	2	2	5	0.8	0.8	0.8	0.8	25	20	25.8	6.8	14.8	11.8	59%	59%	20%	44%	35
1SV20A/E008	15	7	22	6	13	19	12	11	23	2	2	2	2	2	8.2	1.4	1.4	1.4	1.4	41	25.2	16.4	16.4	15.4	14.4	74%	37%	48%	45%	425
1SV20ME009	24	4	28	15	11	26	17	11	28	2	2	2	2	2	9.6	4.8	4.8	4.8	4.8	48	35.6	25.8	17.8	23.8	17.8	105%	59%	52%	70%	525
ISV21ME400	22	0	22	17	4	21	19	6	25	2	2	2	2	2	4.6	2.4	2.4	2.4	2.4	23	28.6	21.4	8.4	23.4	10.4	84%	49%	25%	69%	315
ISV21ME401	9	16	25	8	13	21	7	17	24	2	2	2	2	2	4.2	2.4	2.4	2.4	2.4	21	15.2	28.4	17.4	11.4	21.4	45%	65%	51%	34%	63
ISV2IME402	19	7	26	15	10	25	19	3	22	2	2	2	2	2	9.6	2.6	2.6	2.6	2.6	48	30.6	26.6	14.6	23.6	7.6	90%	60%	43%	69%	22
TOTAL	166	115	281	148	128	276	158	121	279	24	24	24	24	24	75.8	26.2	26.2	26.2	26.2	379	265.8	313.2	178.2	208.2	171.2	7.82	7.12	5.24	6.12	5.0
o 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	1
AVERAGE	13.8	9.58	23.42	12.3	10.7	23	13.2	10	23.25	2	2	2	2	2	6.32	2.18	2.18	2.18	2.18	31.58	22.2	26.1	14.85	17.35	14.27	65.15	59.32	43.68	51.03	41.
Total																										52%	49%	46%	46%	42