COs & POs 2021-22

.

ODD SEMESTER



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

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

SUBJECT	ELECTRIC CIRCUIT ANALYSIS	SUBJECT CODE	18EE32
---------	---------------------------	--------------	--------

COURSE OUTCOME

- CO1: Understand the basic concepts, basic laws and methods of analysis of DC and AC networks and reduce the complexity of network using source shifting, source transformation and network reduction using transformations
- CO2: Solve complex electric circuits using network theorems
- CO3: Discuss resonance in series and parallel circuits and also the importance of initial conditions and their evaluation
- CO4: Synthesize typical waveforms using Laplace transformation

CO5: Solve unbalanced three phase systems and also evaluate the performance of two port networks.

PROGRAM OUTCOMES

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

G.H. Rom He. Electrica o TUMKUR-572106:

PRINCIPAL SIET. TUNINA

COLLEGE		SHR	IDEVI	INSTI	TUTE	OF E	NGIN	EERIN	G & T	ECHNO	DLOGY	
FACULTY	NAM	Œ	Mr. G.	H. RA	VIKU	MAR				+		
BRAN	СН		F	EE		A	CADI	EMIC Y	EAR		2021	-22
COURSE	B .	E	SEM	ESTEI	R	¢ш	s	ECTIO	N		EEE	
SUBJECT	E	LECT	RIC CI	RCUT	T ANA	LYSI	s	SUBJE	ст со	DDE	18EI	32
CO & PO M	APPI	NG										
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
COI	2	3	2	-							•	2
CO2	2	3	2	-	-	-	-	-				2
CO3	1	3	1	•	-	-			-	-	-	1
CO4	3	3	3		-	-	-		-	-	-	3
CO5	2	3	2		-	-	-	-				2
AVERAGE	2	3	2	-	-		-	-	-	-	-	2
T. C.	THE P	198.9	THE ST			ÖVI	ERAL	L MAP	PING	OF SUI	BJECT	2.25

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	POS	PO9	PO10	PO11	PO12
CO1	55.78	1.115	1.673	1.115	-	-		-	-	-	-	•	1.115
CO2	51.27	1.025	1.538	1.025		-		-	-	·			1.025
CO3	48.71	0.487	1.461	0.487		-						•	0.487
CO4	53.89	1.616	1.616	1.616	-	-	-	-		-	-2	-	1.616
CO5	53.45	1.069	1.603	1.069	-					•			1.069
AVERAGE		1.062	1.578	1.062	-	-	-		-		•	-	1.062
								FIN/	AL AT	TAINN	IENT I	EVEL	1.191

G. U Rame

Head of the Department Electrical & Electronics Engineering Shridevi Institute of Engineering & TUMKUR-572106

PRINCIPAL SIET., TUMAKUKU

G. LA R Head of the Department Electrical & Electronics Engineering Shadevi institute of Engineering & Technology TUMKUR-572106.

Academic year	202	1-22	Sec. 1	SEM	1111	0.000	Te	cal str	ength	8		Sal	gent	CTRI	IC CIR	CUET.	ANAL.	AN 197	Salig	ext Code	181	18.32	12115-01							1.1.1.1
SEMINI	IA T	EST I	(30M)	IA 1	IEST :	2(3051)	14.1	EST.	3(3031)	ASSI	GNEA	IENT /	QUIZ	(20 M)		SEE	MAR	\$5(60)	1.000	1000	Total CO	ATTAIN	MENT			Waf	Individua	CD		SEE 7
USN	COL	C01	TOTAL	C03	C04	TOTAL	C04	COS	TUTAL	COL	C01	C03	CO4	C08	CO1=1	CO1	C03	CO4	0.01	CO1+29	C01×34	C03-34	CO4-34	CO1-49	CO1	CO2	C0)	C04	COS	685
11V19EE003	.10	10	20	10	. 9	19	. 6	é	12	1	-2	1	2	2	5.2	5.2	5.7	5.2	5.2	17.2	17.2	16.2	16.2	13.2	59.31	\$0.58	47.65	47.65	26.94	26
15V19EE018	11	10	25	7	7	14	30	13	23	1	2	1	1	2	4.8	4.8	4.8	4.1	4.8	17.8	23.8	13.8	16.8	28.8	61.38	54.09	47.59	37.93	64.28	24
15V20EE001	0	0	0	4	. 4		6	6	u	2	3	2	2.	2	4.2	4.2	4.2	4.2	4.2	6.2	10.7	10.2	12.2	12.2	21.38	23.18	25.17	42.07	42.07	21
31V20EE002	10	10	20	6	5	- 11	5	4	11	2	2	1	2	2	1.0	1.8	1.8	1.8	1.8	13.8	19.8	8.8	8.8	9.8	47.50	45.00	30.34	30.54	33.79	. 9
15V20EE003	34	-13	27	1	6	33	30	10	20	2	2	1	2	2	8.2	8.2	8.2	8.2	8.2	24.2	30.2	16.2	20.2	26.2	83.45	68.64	55.86	69.66	05.66	41
15V20EE004	12	11	23	30	10	30	7	7	14	2	2	1	1	1	4.8	4.5	4.8	4.8	4.8	18.8	27.8	36.8	13.8	13.8	54.83	65.18	\$7.93	47.59	47.59	24
15V20EE006	17	-11	29	58	13	26	13	-14	27	2	2	1	2	2	7.8	7.8	7.8	7.8	7.8	21.8	33.8	27.8	22.8	29.8	75.17	76.82	78.62	78.62	82.07	39
15V2066007	3	2	5	4	4		10	10	20	2	2	1	2	1	4.6	4.6	4,6	4.6	4.6	9.6	12.6	10.6	16.6	16.6	33.10	28.64	36.55	57.24	\$7.24	23
-	-									-						-		-	-						-		-			-
																									55.78	51.27	48.71	\$3.89	53.43	25.87
																														43.12

.

PRINCIPAL VIET. TUMAKURU \sim 6

ŧ



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

DEPARTMENT OF EEE

.

21-21

38

SUBJECT

TRANSFORMER & GENERATOR

SUBJECT CODE

18EE33

COURSE OUTCOME

- CO1. Explain conduction and breakdown phenomenon in gases, liquid dielectrics and breakdown Phenomenon in solid dielectrics.
- CO2. Summarize generation of high voltages and currents
- CO3. Outline measurement techniques for high voltages and currents
- CO4. Summarize overvoltage phenomenon and insulation coordination in electric power systems.

CO5. Explain non-destructive testing of materials and electric apparatus, high-voltage testing of electric apparatus

PROGRAM OUTCOMES

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

LAD

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

> G I Rown Head of the Department Electrical & Electronics Engineering Shridevi Institute of Engineering & Technology TUMKUR-572106.

COLLEGE		SHR	IDEVI	INSTI	TUTE	OFE	NGIN	EERIN	G & T	ECHNO	DLOGY	1
FACULTY	NAM	Œ	MRS. S	SWET	НА Т	м						
BRAN	СН		I	EEE		A	CAD	EMIC Y	EAR		2021	-22
COURSE	B.	E	SEM	ESTE	R	ш	5	SECTIC	N			
SUBJECT	TR	ANSF	ORMI	ER & 0	ENE	RATO	R	SUBJE	ст с	DDE	18E8	33
СО & РО М	APPIN	NG										
	PO1	PO2			PO5	PO6	PO7	POS	PO9	PO10	PO11	PO12
COI	3	3	3	2	-		2	· ····································	and and		2	1
CO2	2	3	3	2			2				2	1
CO3	1	3	3	ī			2				2	1
CO4	2	3	3	2			2				2	1
CO5	2	3	3	2			2				2	1
AVERAGE	2	3	3	1.8			2		-	-	2	1
	C. C. C.		1000		1000	OVE	RAL	L MAP	PING	OFSUE	BJECT	2.11

	C0%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	POS	PO9	PO10	PO11	PO12
CO1	58.4	1.75	1.75	1.75	1.17	C.B.S		1.17	12 13			1.17	0.58
CO2	50.3	1.01	1.51	1.51	1.01			1.01				1.01	0.50
CO3	67.9	0.68	2.04	2.04	0.68			1.36			Tarre I	1.36	0.68
CO4	65.7	1.31	1.97	1.97	1.31			1.31			1	1.31	0.66
CO5	55.4	1.11	1.66	1.66	1.11			1.11				1.11	0.55
AVERAGE	59.54	1.172	1.786	1.786	1.055			1.191				1.191	0.595
NH H			1 18	1978-7	1900	2.42	STATE:	FIN	ALAT	TAINN	MENT I	EVEL	1.25

G. H Rome

Head of the Department Electrical & Electronics Engineering Shindexi Institute of Engineering & Tech TUMKUR-672106

υ An DENINCIPAL UMAKURU.



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

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

SUBJECT CODE ANALOG ELECTRONIC CIRCUITS 18EE34 SUBJECT

COURSE OUTCOME

CO1	Obtain the output characteristics of clipper and clamper circuits	
CO2	Design and compare biasing circuits for transistor amplifiers & explain the transistor switching.	
CO3	Explain the concept of feedback, its types and design of feedback circuits	
CO4	Design and analyze the power amplifier circuits and oscillators for different frequencies.	
CO5	Design and analysis of FET and MOSFET amplifiers	

PROGRAM OUTCOMES

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

G. H Roma Mend of the Department Electrical & Electronics Exponenting Stridevi Institute of Engineering & Technology TUMKUR-572106.

PRINCIPAL

SIET., TUMAKURU

COLLEGE		SHR	IDEVI	INSTI	TUTE	OF E	NGIN	EERIN	G & T	ECHNO	DLOGY	6
FACULTY	NAM	IE 1	Mr. RA	JESH	ким	AR. V						
BRAN	СН		I	EEE		А	CAD	EMIC Y	EAR	-	. 2021	-22
COURSE	B.	E	SEM	ESTE	R	ш	5	ECTIO	N		EEE	
SUBJECT	AN	ALOG	ELEC	TROM	AIC CI	RCUI	rs	SUBJE	ст с	DDE	18EI	234
CO & PO M	APPI	NG					-			2		1
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	POII	PO12
COI	2	2					Sector			-1		2
CO2	2	2										2
CO3	2	2		1.I.d						- Contraction		2
CO4	2	2					-		-	1		2
CO5	2	2				111				-		2
AVERAGE	2	2										2
	1					OVI	RAL	L MAP	PING	OF SUI	BJECT	2

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
COI	52.33	1.046	1.046										1:046
CO2	54.39	1.087	1.087										1.087
CO3	53.22	1.064	1.064				4	1		1.22			1.064
CO4	58.82	1.176	1.176										1.176
· CO5	63.00	1.26	1.26										1.26
AVERAGE		1.126	1.126				1.0						1.126
		1	Beer 1					FIN/	AL AT	TAINN	MENT I	EVEL	1.126

G. H Ranz

 Head of the Department Electrical & Decliphics Engineering Strictical studicts of Engineering & Terrinology TOVE/UR-672106

Manun PRINCIPAL SIET., TUMAKURU.

Academic yes	202	1-22	1.1	SEM	ш	1.10	To	tal str	ength	8		Sub	ject	ANA	LOG EL	ECTR	DNIC C	IRCUIT	Subje	et Code	188	E34 -					1.1			
SEM:ER	IA T	EST 1	(30M)	IA.T	EST 2	(30M)	IA T	EST 3	3(30M)	ASSI	GNEM	ENT /	QUIZ(10 M)		SEE	MARK	S(60)	3	1.1.1.2	Total CO	S ATTAI	INMENT	1	(% of	Individual	100		SE
USN	COL	C02	TOTAL	C03	C04	TOTAL	C04	C05	TOTAL	COL	C02	CO3	C04	C05	CO1=12	CO2	CO3	CO4	CO5	CO1=29	CO2=34	CO3=34	CO4=34	CO5~49	CO1	CO1	C03	C04	C05	685
15V19EE003	12	10	22	- 8	6	14	10	13	23	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	19.2	17.2	13.2	13.2	20.2	66.21	50.59	38.82	38.82	41.22	26
15V19EE018	12	13	25	13	13	26	13	13	26	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	18.8	32.8	19.8	19.8	19.8	64.83	74.55	68.28	68.28	68.28	24
15V20EE001	0	0	0	7	8	15	10	11	21	2	2	. 2	2	2	4.2	4.2	4.2	4.2	4.2	6.2	13.2	14.2	16.2	17.2	21.38	30.00	48.97	55.86	59.31	21
15V20EE002	6	7	13	8	7	15	10	13	23	2	2	2	2	2	1.8	1.8	1.8	1.8	1.8	9.8	18.8	10.8	13.8	16.8	33.79	42.73	37.24	47.59	57.93	9
15V20EE003	11	12	23	12	12	24	10	13	23	2	2	2	2	2	8.2	8.2	8.7	8.2	8.2	21.2	34.2	22.2	20.2	23.2	73.10	77.73	76.55	69.66	80.00	41
15V20EE004	11	12	23	6	б	12	12	12	24	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	17.8	24.8	12.8	18.8	18.8	61.38	56.36	44.14	64.83	64.83	24
15V20EE006	12	12	24	11	10	21	11	12	23	2	2	2	2	2	7.8	7.8	7.8	7.8	7.8	21.8	32.8	19.8	20.8	21.8	75.17	74.55	68.28	71.72	75.17	39
15V20EE007	0	0	0	6	6	12	9	10	19	2	2	2	2	2	4.6	4.6	4.6	4.6	4,6	6.6	12.6	12.6	15.6	16.6	22.76	28.64	43,45	53.79	57.24	23
		-		-	-		-		-	-	-	-		-		-	-	-	-		-		-					-	-	+
																									52.33	54.39	53.22	58.82	63.00	25.8

PRINCIPAL SIET., TUMAKURU.

浸

G. H. R. V. S. Head of the Department Electrical & Electronics Engineering Stridew Institute of Engineering & Techrolog TUMKUR-572108.

when



SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

SI	TD 1	IF	CT

SHRIDEV

DIGITAL SYSTEM DESIGN

18EE35

SUBJECT CODE

COURSE OUTCOME

CO1	Develop simplified switching equation using Karnaugh Maps and Quine McClusky techniques.
CO2	Design Multiplexer, Encoder, Decoder, Adder, Subtractors and Comparator as digital combinational control circuits.
CO3	Design flip flops, counters, shift registers as sequential control circuits.
CO4	Develop Mealy/Moore Models and state diagrams for the given clocked sequential circuits.
C05	Explain the functioning of Read only and Read/Write Memories, Programmable ROM EPROM and Flash memory

PROGRAM OUTCOMES

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

G. H Rac Head of the Department Electrical & Electronics Engineering Stridevi Institute of Engineering & Technology TUMKUR-572106.

PRINCIPAL

COLLEGE		SHR	IDEVI	INSTI	TUTE	OF E	NGIN	EERIN	G & T	ECHNO	DLOGY	
FACULTY	NAM	IE I	Mrs. N	AYAN	A. M. :	S .						
BRAN	СН		I	EEE		A	CAD	EMIC Y	EAR		2021	-22
COURSE	B.	E	SEM	ESTE	R	ш	5	SECTIO	N	÷.,	EEE	
SUBJECT		DIGI	TAL S	YSTEM	M DES	IGN		SUBJE	стс	DDE	18EI	235
CO & PO M	APPE	NG	2					100	94			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	2	1	1			1000					2
CO2	2	2		-							-	2
CO3	2	2					-					2
CO4	. 2	2										2
CO5	2	2				1911						2 .
AVERAGE	2	2								-		2
	E R L					OVE	RAL	L MAP	PING	OF SUI	BJECT	2

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	POS	PO9	PO10	PO11	PO12
COI	41.98	0.839	0.839			10-11-1 10-11-0				in feater			0.839
CO2	41.56	0.831	0.831		-								0.831
CO3	46.06	0.921	0.921										0.921
CO4	56.56	1.131	1.131										1.131
CO5	60.16	1.203	1.203										1.203
AVERAGE		0.985	0.985										0.985
				-	-			FIN.	AL AT	TAIN	MENT I	EVEL	0.985

·Na thυ

PRINCIPAL SIET, TUM-KURU

Anna	Tutal Hudsons	TUTAL	1201000000	10013320041	VICE STATES	0001810/mil/1/1	disciplicit ALT.	NONDERVEL	\$101MINUS	600kW(WC	10M	52M (W) [110
11.435		100	×	14	11	11		11	. 13	11	103	1.000.01
10131		108	10	-	Ĩ	1		-		11	100	
N HE			10	4	Ļ	Ļ		1	-	-	10141	
11000		101	-		Ļ	1	ļ	÷			100	TURKY
11.0		11	1	1		ļ	Ļ	Ļ	4	Ļ	194	
127.94		111	ļ		Ļ	-	4	Ļ	ļ		MON NUL	-
-	-		10	14	=	-	-	ļ	4	-	04 SOM	1 LAND
12.615		101	-	1	-	=	-	-	ŀ		Ĺ	
14.825		191	16	10	-	-		-	10		1014 00	-
		=	~	-		-	Ļ	Ļ	Ļ	Ļ	100	A Local Division of the local division of th
		×	-	-	Ļ	-		Ļ	Ļ	Ļ	10	ļ
		¥	~	~	Ļ	-	Ļ	Ļ	-	Ļ	13	
-	-	*		~	ľ	-	-	-	ŀ	Ļ		
*	-	×	-	-	ŀ	-	-	ŀ	ŀ		Patra Patra	
	-	8	ä	-		=	-	ŀ		4	A 100	
111.	-	110	2	2	5	-	ŀ	4	ł	2	100	
- In	-	31.5	2	1	4			k	¥	5		IH
-	-	12	1	1	1		ŀ	k	ł	2	1004	ī.
ALLAN .	Γ	1	1	1	ŀ	-	Ļ	F	F	ł	109	ana
55	Г	11	1	1	1	-	ŀ	1	ł	-	MUDU	
11111	0	Γ	1	Γ		Γ		-		Ĩ	(m0000)	H
				Γ	[Г	Γ	15.8	Γ	1	theorem of the	
1111				l				114			0404000 040	NOON.
111								1111			MUMBER 194	*
IL IN		F		Γ	Γ	Г	Г	8.80			websong law	
14.41	-						1	11.8			1001	-
1	-	l	1	ľ			14	2	10	4	100	
			3	Γ			1		2		101	
-		ŝ	11	ľ					-		- Hold	
1	-	10	5	12	2		*	1	3	3	ł	

Dist Contra

No G. Head of the Defanment Electrical & Electronics Engineering Shridevi Institute of Engineering & Technology TUMKUR-572106. atte dia.

PRINCIPAL SIET., TUMAKURU,

1.00 ÷

Academic year	202	1-22	1.1	SEM	111		To	tal str	ength	280		Sub	ject	DIGIT	AL SYS	EM D	ESIGN		Subj	ect Code	186	E35								
SEMATH	IA T	EST I	(3051)	IA	TEST 2	(30M)	IA T	EST 3	(30M)	ASS	IGNEN	IENT /	QUIZO	0 M)		SEE	ARK	S(60)	1		Total C	Os ATTA	INMENT		in a start of the	% of	Individua	I CO	learning	SEE TO
USN	COL	CO2	TOTAL	COJ	C04	TOTAL	CO4	C05	TOTAL	COL	CO2	COJ	CO4	C05	CO1=12	CO2	CO3	C04	C05	CO1=29	C02-34	C03-34	CO4=34	CO5=49	CO1	CO2	CO3	CO4	COS	60M
15V19EE003	6	6	12	10	10	20	12	12	24	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	13.2	13.2	17.2	17.2	19.2	45.52	38.82	50.59	50.59	39.18	26
15V19EE018	- 4	5	9	2	2	4	10	10	20	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	10.8	13.8	8.8	16.8	15.8	37.24	31.36	30.34	57.93	57.93	24
15V20EE001	0	0	0	4	4	8	13	-14	27	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	6.2	10.2	10.2	19.7	20.2	21,38	23.18	35.17	66.21	69.55	21
15V20EE002	2	2	4	2	0	2	7	8	15	2	2	2	2	2	1.8	1.8	1.8	1.8	1.8	5.8	7.8	3.8	10.8	11.8	20.00	17.73	13.10	37.24	40.69	9
15V20EE003	9	8	17	12	12	24	12	15	27	2	2	2	2	2	8.2	B.2	8.2	8.2	8.2	19.2	30.2	22.2	22.2	25.2	66.21	68.64	76.55	76.55	85.90	41
15V20EE004	5	5	10	10	9	19	11	12	23	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	11.8	21.8	15.8	17.8	18.8	40.69	49.55	54.48	61.38	64.83	24
15V20EE006	12	12	24	15	15	30	11	11	22	2	2	2	2	2	7.8	7.8	7.8	7.8	7.8	21.8	35.8	24.8	20.8	20.8	75.17	83.64	85.52	71.72	71.72	- 39
15V20EE007	2	1	3	1	0	.1	.7	8	15	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	8.6	8.6	6.6	13.6	14.6	29.66	19.55	22.76	46.90	50.34	23
	-	-	-	-	-		-	-	_		-		-	-	-	_	-		-	-	-							-	-	-
		-	-	-	-			-	-		-			-		-		-	-	-					41.98	41.56	46.06	58.56	60.16	25.88

Head of the Department Electrical & Electronics Engineering Stridevi Institute of Engineering & Technology TUMKUR-572106.

0

P 20

RSP

SIE: MANAL

ĨL.

1

8

194

DEPARTMENT OF EEE

SUBJECT	Electrical & Electronic Measurement	SUBJECT CODE	18EE36	
---------	-------------------------------------	--------------	--------	--

COURSE OUTCOME

CO1	Measure resistance, inductance and capacitance using bridges and determine earth resistance.
CO2	Explain the working of various meters used for measurement of Power, Energy & understand the adjustments, calibration & errors in energy meters.
CO3	Understand methods of extending the range of instruments & instrument transformers.
CO4	Explain the working of different electronic instruments.
CO5	Explain the working of different display and recording devices.

PROGRAM OUTCOME

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

Head of the Department Electrical & Electronics Engineering Shridevi Institute of Engineering & Technology TUMKUR-572196.

G. H R ou

DRINITIDAL Sibi (UNVRU.J

COLLEGE		SHR	DEVI	INSTI	TUTE	OFE	NGIN	EERIN	G & T	ECHN	DLOGY	1
FACULTY	NAM	IE	UMAB	AI				1				
BRAN	СН		I	EEE		A	CAD	EMIC Y	EAR		2021-	2022
COURSE	В.	E	SEM	ESTE	R	ш		SECTIO	N		-	
SUBJECT	Ele	ctrical	& Ele	ctronic	Meas	ureme	nt	SUBJE	стс	DDE	18EE	36
CO & PO M	APPIN	NG					1	197		1		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
COI	3 .	2	2	2	2	2				-		1
CO2	3	2	2	2	2	2		-				1
соз	3	2	3	2	2	2						1
CO4	3	2	2	2	2	2	-					1
CO5	3	2	2	2	2	2					* 11	2
AVERAGE	3	2	2.2	2	2	2				-		1.2
				1		OVE	RAL	L MAP	PING	OF SUI	BJECT	2.05

	C0%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	43	1.29	0.86	0.86	0.86	0.86	0.86					1	0.43
CO2	44	1.32	0.88	0.88	0.88	0.88	0.88	-					0.44
CO3	60	1.8	1.2	1.8	1.2	1.2	1.2				1		0.6
CO4	49	1.47	0.98	0.98	0.98	0.98	0.98				-		0.49
CO5	49	1.47	0.98	0.98	0.98	0.98	0.98				Carlo Carlo		0.49
AVERAGE	49	1.47	0.98	1.1	0.98	0.98	0.98	1					0.49
	箱 是		PLAY.	1	Testa a	1	1	FIN/	AL AT	TAINN	MENT I	EVEL	0.997

G . H R and Head of the Department Electrical & Electronics Engineering Shindevi Institute of Engineering & Technology TUMKUR-572106.

PRINCIPAL SIET., TUMAKUKU

A Company of the second		and the second second		-		and the second second									All second				. 11178.								_	1.2.2		-	
SEM: V, EEE	14	TEST	1	1	A TES	T 2 -	1	A TEST	13	- L	N	Assig	ament			10,140			SEE		A.U.			TOTAL	li i			0.0	AVER	GE + .	
USN	C01	CO2	TOTAL	CO3	C04	TOTAL	C04	COS	0	C01-	. CO2	CO3	COa	COS	TOTAL	C01	C01	CO3	C04	CO5 .	TOTAL	CO104	C02(34)	03(34	CO4(54)	CO5(34)	CO1	COL	C03	CO4	*C05
1sv19EE003	10	12	22	10	13	23	12	12	24	2	2	2	2	2	10	4.2	4.2	4.2	4.2	4.2	21	16.2	18.2	16.2	31.2	18.2	48	54	48	58	54
15V19EE018	10	12	22	10	7	17	13	13	26	2	2	2	2	2	10	4.6	4.6	4.6	4.6	4.6	23	16.6	18.6	16.6	26.6	19.6	49	55	49	49	58
15V20EE001	0	0	0	9	11	14	10	14	24	2	2	2	2	2	10	2.4	2.4	2.4	2.4	2,4	12	4.4	4.4	13.4	25.4	18.4	13	13	39	47	54
15V20EE002	5	6	9	12	8	20	10	4	14	2	2	2	2	2	10	3.6	3.6	3.6	3.6	3.6	18	10.6	9.6	17.6	23.6	9.6	31	28	52 '	44	28
15V20EE003	10	15	25	13	13	26	10	14	24	2	2	2	2	2	10	6.2	6.2	6.2	6.2	6.2	31	18.2	23.2	21.2	31.2	22.2	54	68	62	58	65
15V20EE004	9	. 9	18	20	7	27	12	13	25	2	2	. 2	2	2	10	4.6	4.6	4.6	4.6	4,6	33 .	15.6	15.6	26.6	25.6	19.6	46	46	78	47	58
15V20EE006	16	10	26	17	10	27	17	11	28	2	2	2	2	2	10	-5	5	5	5	5	25	23	17	24	34	18	68	50	71	63	53
15V20EE007	3	4	7	20	7	27	0	0	0	2	2	2	2	2	10	6	6	6	6	6	30	11	12	28	15	8	32	35	82	28	24
TOTAL	63	66	129	111	76	181	84	81	165	16	16	16	16	16	80	36.6	36.6	35.6	36.6	36.6	193	115.6	118.6	163.6	212.6	133.6	340	349	481.2	395.7	392.94
fotal students	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	18	8	8	8	8	B	8	8		8	8	8	
Average	1.25	1.5	2.75	1.25	1.63	2.875	1.5	1.5	3	2	2	2	2	2	10	0.53	0.53	0.53	0.53	0.53	2.63	2.03	2.28	2.03	3.90	2.28	43	44	60	49	49

ELECTRICAL & ELECTRONICS MEASUREMENTS 2021-22 18EE36

Studew Institute of Engineering & Technology State, Constant, State, Constate, State, Constate, State, Constant, State, Const

18

SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGG

SUBJECT MANAGEMENT & SUBJECT CODE

18EE51

COURSE OUTCOME

COI	Explain the field of management, task of the manager, planning and steps in decision making
CO2	Discuss the structure of organization, importance of staffing, leadership styles, modes of communication, techniques of coordination and importance of managerial control in business
CO3	Explain the concepts of entrepreneurship and a businessman's social responsibilities towards different groups
CO4	Show an understanding of role of SSI's in the development of country and state/central level institutions/agencies supporting business enterprises
CO5	Discuss the concepts of project management, capital budgeting, project feasibility studies, need for project report and new control techniques

PROGRAM OUTCOMES

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

PRINCIPAL SIET., TUMAKURU

G H Read of the Department Electrical & Electronics Engineering Shridevi Institute of Engineering & Technology TUMKUR-572106.

COLLEGE		JUN	IDEVI	11311	TUTE	OF E.	GIN	EERING	, a 11	CHNO	LOGY	-
FACULT	Y NAM	1E	CHAR	AN C								
BRAN	NCH		ŀ	EEE		A	CAD	EMIC Y	EAR		2021	-22
COURSE	B.	E	SEM	ESTEI	R	v		SECTIO	N		EEE	
SUBJECT	1.0000	0.000000000	AENT &	T ()			1	SUBJE	стс	DDE	18EI	E51
CO & PO M	APPIN	€G										
1114. 	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
	1	2	3	4	5	6	7	8	9	10	11	12
CO1	-				-		-	3	2	3	-	2
CO2	-	-	-	-	-	2	-	2	3	3		2
CO3	-	14	-	- 23	-	3		2	3	2		2
CO4	-	-	-	-	-	-	-	2	2	2	-	3
C05		-	-			-	-	2	3	3	2	2
AVERAGE	-	-	-	-	14	2.5		2.2	2.6	2.6	2	2.2
						OVE	RAL	L MAP	PING	OF SUP	JECT	2.35

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	44.30				13				0.97	1.15	1.15		0.97
CO2	29.83						0.74		0.65	0.77	0.77		0.65
CO3	44.30						1.10		0.97	1.15	1.15		0.97
CO4	44.30								0.97	1.15	1.15		0.97
CO5	44.30			1					0.97	1.15	1.15	0.88	0.97
AVERAGE	47.37						0.92		0.90	1.22	1.22	0.88	0.90
					1.20	-	158	FIN	AL AT	TAIN	MENTI	EVEL	1.00

B. H. Rome

Head of the Department Electrical & Electronics Engineering Shridevi Instituta of Engineering & TUMKUR-572106.

Damen PRINCIPAL SIET., TUMAKURU.

- C	
-	
10.	
· · · ·	
1.00	
1000	6
019	× .
-201	- m
Sec. 2	4.4
40.5	- e
25.0	Sec. 1.1
- 1 H I	- en
- C - P	σ.
nginet	
- cn e	r .
101 3	-
100	-
144 5	
	a
	-
· • • •	a (
	-
	-

÷

diriology

PRINCIPAL SIET. TURGAL

		11.000		18.11				claf reveau					tert.	N.Y. W.E.A.	1111 1111	110770			. Budger	11.00	101		in the second second						
FR.7.181.101		11111.10	P100	_	_			TERT AN	CMB	1.1	1488.34	ALC: NO. 1	to a page and a set			14.1	1 TO NOR WAR	100			. tonal to	A ATTAC	CHENT				F miletikas	10.00 ·····	
1.50	178	1.00	THEFT	110	1111	DUM.	1.144	110	DIST N.		110	1.111	1105	1100	1100-101	1111	1288	-108M	100	100.01	-1101-00	11018	1444-18	10.001.01	101.	1.141	4.888	1100	1116
11010-081	1.4	1.1.8	1.108-1	1.8	11110	11.8	3.4	5.4	21.4	1			- R		1.000.000		111.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	- P	1000	1.0.0		114.4	14.8	14.8	31.419444	723.00.00	111,1214444	[11.05444]	30.03488
ENVIRONMENT ROLL	1.47		30.4		1.1	10.8	1.4	3.8	10.4			1	1		1.4	5.8	1.4	1.6	1.8	1.1.8	- 47 V -		- 13.4 -	10.1	2020011	317919	11.1.1100	41.47244	45.33201
Payring com-	1.98	1.4	83.6	5.1	1.1.1	10.6	5.0	3.4			1.1	1	1.1		1.8	5.4	4.4	4.4	1.4	TOT .	1.11	1111	10.7	- 617	2412010	10 6h 100.	41,7611	A3.7981	41.7910
happened and		11	17.6	. 41	- F.I.	38.4	6.1	6.3	324	1	1.1	1	1.	1	1. 2.4	1.13.8	1.83		3.8	180	1111	33.5	1115	34.5	46.55(11)	01/08.860	46.5117.1	40.98213	46.15175
TWO DESCRIPTIONS	10	8.8	8.4	44	4.1	.8.6	8.8	4.1	. 6.0	1	1	1	1	1		4.6	4.0		4.8	ELC.	111	. 10.4	104	11.1	ALT:N.	A1019	81.27184	28.37586	10.27584
WYYRCO.	1.1	1.1	10.0	5.4	1.1	01.8	1.1	5.3	194		1		1		3.6		14	10	1.4	114.0	14.4	110	10.0	14.0	() 1910	1144.004	11.57531	11.17911	11.1744
CONTRACTOR -		4.5		41			#3	45			1	4	4	1		1	- F	1		115	1144	44.5	155	61.5	40.010.11	41141757	46.57173	46.013.721	46.31172
CONTRACTOR -		2.3	. 82		4.0	42	8.6	. 44	. 4.3	- 1	1	1	1	1	44		4.6	4.5	4.5	110	1107	48.2	312	11.2	25 6,7 911	A PARA	10.4.2.02	An Allenan	12.5.100
The Party of Lot	1.5	1.4	11.0	14	1.0	11.8	1.8	5.8	114		1	1	1	1	3.8	6.4	. 8.4	4.4	4.8	103	1.122	4.6.4	31.5	- 612	413441	10100	43 8660	43.0007	40.0484
Contractor.			11		6	14			14		1.1	1	1			41		44	4.0	11.1	1.114	1/+	114		#1 848.19	14-14-14	01.04414	11.446.02	41 24114
And the other states		3.5		1.0			4.5	45		1	1	A.	1	1	5.8	5.4	1.4	1.4	1.4	11.1	1.16.8	11.1	14.3	11.4	81 81 314	1- 0.414	AL 41174	42.41179	42,45119
LONG THE COLOR	44	2.0	11	14	1.0	0	316	14	11	1	1	1	1	1	11	1.1	11	17	4.3	8.0		4.8	0.0	4.4	AT. 14441		10.14483	PT 24481.	80.1488.1
PROVIDENCE:		41		1.11	1.1.1	44	4.5	1.1	- 84		1.1			1			41	4.2	4.7	10.0	10.1	84.5	841.	14/1	81.0001	1100.00	41,7184	16.3060	10.000.0
Tree Merris		1.1	10.2	8.4		14.4	6.1	8.4	14.4	_			1	1	1					14.1	1.100	11.1	111	14.6	an a surral	10000	10.0100		
PROPERTY.	1.1			45			45	4.5		-		1	1	1	1.0		8.6	2.6		14.1	101	15.1	14.5	111	41.1141	14.0516	41.17141	41.11244	
Wilsian	1.8	6.4	16.0	64	1000	11.8	1.4	1.8	11.8	1	1.1	1 2	1	1		1.7	6.7	- 67	1	1.11	14	14	14	10	49.77.49	C state	10.1718		11.7 - 14
TWO IS A		11	10.0			10.4	1.1	11	10.4	1		-		1			4.1			13.3	1111	10.0	10.5	15.5	1.1.844.75	10 10 10 10	A 4 Anni 10		
TRANKI MIL	1.6	1.4	11.0	1.4	1.4	31.4	14	3.4	114		* G	1	1		1 11	1.0	14	14	14	11.4	10.0	100	12.4	12.4	A h internet	1.1		Statutes .	
The Rel and	1.1	11	84	41	- 21-	44	45	11	- 22-		1.5.						200		- 12	110	111				U. C. MA	10.1000	35.317.794		
											6-1-1 T 1					-				 And the second se	Highl	the states		ten Calard	100 00100		AL DELLA	AL MAINT	41.11

5

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

21-22

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGG

SUBJECT	MICROCONTROLLER	SUBJECT CODE	18EE52	
The second s				

COURSE OUTCOME

CO1	Outline the 8051 architecture, registers, internal memory organization, addressing modes
CO2	Discuss 8051 addressing modes, instruction set of 8051, accessing data and I/O port programming
CO3	Develop 8051C programs for time delay, I/O operations, I/O bit manipulation, logic and arithmetic operations, data conversion and timer/counter programming.
CO4	Summarize the basics of serial communication and interrupts, also develop 8051 programs for serial data communication and interrupt programming
CO5	Program 8051 to work with external devices for ADC, DAC

PROGRAM OUTCOMES

- PO1 Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- PO2 Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- PO3 Design / development of solutions: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- PO4 Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and provide valid conclusions.
- PO5 Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling to complex engineering activities.
- PO6 The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- 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: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.

COLLEGE		SHR	IDEVII	NSTIT	UTE (OF EN	GINE	ERING	& TE	CHNO	LOGY	
FACULT	Y NAM	1E	V.RAJE	SHK	UMAR	a K						
BRA	NCH		F	EE		A	CAD	EMIC Y	EAR		2021	-22
COURSE	B.	E	SEM	ESTEI	2	v	5	SECTIO	N		EEE	
SUBJECT	18	М	ICROCO	ONTRO	DLLEF	ł		SUBJE	стс	DDE	18EI	E35
CO & PO M	APPIN	G	12									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
and the second	1	2	3	4	5	6	7	8	9	10	11	12
CO1	2	2										
CO2	2	2	2									
CO3	2		2							-		
CO4	2	2	2									
CO5	2									20		
AVERAGE	2	1.66	2									
						OVE	RAL	L MAP	PING	OF SU	BJECT	1.8

CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
41.58	0.83	0.69										
38.59	0.77	0.64	0.77									
40.11	0.80		0.80							2		
40.11	0.80	0.66	0.80									
40.11	0.80					-						
40.1	0.8	1.55	0.79	1							-	
	41.58 38.59 40.11 40.11 40.11	41.58 0.83 38.59 0.77 40.11 0.80 40.11 0.80 40.11 0.80	41.58 0.83 0.69 38.59 0.77 0.64 40.11 0.80 0.66 40.11 0.80 0.66 40.11 0.80 0.66	41.58 0.83 0.69 38.59 0.77 0.64 0.77 40.11 0.80 0.66 0.80 40.11 0.80 0.66 0.80 40.11 0.80 0.66 0.80	41.58 0.83 0.69 38.59 0.77 0.64 0.77 40.11 0.80 0.80 0.80 40.11 0.80 0.66 0.80 40.11 0.80 0.66 0.80	41.58 0.83 0.69 38.59 0.77 0.64 0.77 40.11 0.80 0.80 40.11 0.80 0.66 0.80 40.11 0.80	41.58 0.83 0.69 38.59 0.77 0.64 0.77 40.11 0.80 0.80 40.11 0.80 0.66 0.80 40.11 0.80	41.58 0.83 0.69 38.59 0.77 0.64 0.77 40.11 0.80 0.80 40.11 0.80 0.66 0.80 40.11 0.80	41.58 0.83 0.69 38.59 0.77 0.64 0.77 40.11 0.80 0.80 40.11 0.80 0.66 0.80 40.11 0.80	41.58 0.83 0.69 38.59 0.77 0.64 0.77 40.11 0.80 0.80 40.11 0.80 0.66 0.80 40.11 0.80 40.11 0.80 40.11 0.80 40.11 0.80 40.11 0.80 <t< td=""><td>41.58 0.83 0.69 <</td><td>41.58 0.83 0.69 <</td></t<>	41.58 0.83 0.69 <	41.58 0.83 0.69 <

G - 4 Roment Head of the Department Electrical & Electronics Engineering Shridevi Institute of Engineering & TUMKUR-572106.

Kender

PRINCIPAL SIET. TUMAKURU

1. A		some ser		11.11.1	1		11	Contraction of the						V RAJESH	RUMAR	21.507	11			100 - AZ		1.11					1. 17		11
Academic year	10.005	2020-21	10.00	SEM			1.00	Lotal strees	ph	19	Same	5.	bject	100000	MICHOCO	VTROLLI	R	Alter C	Staffige	et Cide	188	8.52	Second 1				Concerna de la concer	-	1
ENGLARC BAR	1A	TEST HM	iMy.	100.000	THE REAL PROPERTY.	Thomas I.		TEST NA	0MI)	1833	ASSIGNE	MENTIC	(12)10 M)	CONT.	1000	58	E.MARKS	4640	10.05	1.55	Total C	or ATTAIN	MENT	onver e	10000	16	of instruction	000	ALC: NOT
1.55	COL	CUI	TOTAL.	COT	C01	TOTAL.	0.04	0.05	TUTAL	105	C02	C00	0.01	1:05	C01+12	CO2	0.03	COL	C105	C01=29	6.632-44	C03+29	CO1-29	C09+31	0.01	cod	6.003	0.04	C04
1SV1REED01	5.5	5.5	33	5.5	5.5	11	3.5	3.5	11	- 2	2	E	2	1	1	8.2	8.2	8.3	8.2	14.5	31.2	45.7	15.7	15.7	90	491 38383	54 13793	34,13791	54 1179
15V19EE001	5.6	5.6	11.7	5.6	5.6	11.7	3.6	5.6	11.3	1	2	2	2	2	4.8	\$.6	6.6	6.6	6.6	32.4	35.8	14.7	54.2	14.2	43.75867	45	48.9685.2	48.1655J	48.9655
1591966002	5.8	5.8	10.6	5.1	5.3	10.6	5.2	5.3	10.6	- 2	2	2	2	2	3.8	8.6	8.5	8.6	8.6	51	21.3	15.9	25.9	15.9	12.17991	48.58582	54.82750	\$4.82755	34.8279
15v1908005	5.6	5.3	12.9	5.1	5.8	10.6	5.5	5.3	30.6	- 2	2	2	2	2	5.4	. 8	8.		8	- 14	35.6	15.3	25.3	15.3	48.27580	46.93838	52.7506.2	12.75862	57.7546
151/1968/006	5.5	5.5	35.2	4.1	4.2	8.4	4.2	4.2	8.4	5	2	2	- 2	2	- 4.4	. 5	5		5	11.5	36.8	11.7	11.2	11.2	39.65537	17.04545	38 6,206/9	18.42068	38.6.200
15/1901007	5.8	- 6	13.4	. 6	6	12		6	12	- 2	2	1	- 2	-2	- 7.2	6.2	6.2	6.2	6.2	34.8	30.3	14.7	34.2	34.2	51 01448	45.90909	48.96552	48.96552	48,96753
15/1905008	2.5	3.5	31	4.5	4.5		45	4.5	. 9	- 2	2	2 .	- 2	1	4.4	8.4	5.4	8.6	6.8	11.9	18.4	12.9	12.9	12.9	41:03448	41.91818	44,48276	44.48276	44.4627
15v1966909	5.6	4.8		-4.1	6.8	8.6	4.3	4.1	8.6	-7	1	2	2	1.	1.2	4.8	4.8	4.8	4.8	30.8	15.4	11.1	11.1	11.3	17,24138	15	38.275.86	38.27546	38.2758
15v19(891)	5	6.9	12.5	4.5	6.5	1.8	- 6.5	6.5	13	1	1	2	3	1	4.8	9.7	9.7	9.7	9.7	12.8	34.5	16.2	38.2	38.2	44.13793	14138.80	62.75862	62.75862	62.7586
15/1968012	5.1	- 3.	10.2		5	1/3	5		10	- 7	3	3	3	3	3.4	7.6	2.6		7.6	30.1	19.6	14.6	34.6	14.6	36.2009	44.54545	30.34483	30.34483	\$0.3448
1141966813	5.5	5.5	11	3.8	3.8	3.6	3.8	3.8	7.6	1	1	1	3	1	2.0	0	0	0	Đ.	30.1	11.9	9.8	5.8	5.8	34,82759	25.68182	20	20	211
15V2#EEE14	5	16	10	4.5	4.5	9	45	4.5		1	3	1	1	- 2	1.0.8	- 11	0	- 10	-0	7.8	11.5	65	6.5	6.5	36.89655	26.13636	22.41279	22,41379	224117
154/1988036	- 53	1.8	91	3.8	3.8	7.6	3.8	3.8	7.6	1	1	2	2	2	4.2	- 5		1.9	. 8.	-11.5	34.6	10.4	10.8	10.8	29.65517	33.18182	17.24138	17.24138	87.74138
1971060017		. 6	1.2	6.5	6.5	13	8.5	6.5	18	- 2	- 2	2	2	1	. 7	8.6	満ち	8.6	8.6	15	22.1	17.1	17,1	37.1	51.72A18	51.5	58 96553	58.96552	18.9655.3
194194.0030	5.8	5.8	11.6	5.1	5.3	10.6	8.3	5.1	10.4	- 2	1	2	2	1	9		9			36.8	22.1	16.)	36.3	18.3	57.93101	36.23727	56 2068	16.2069	34.2068
15V298E400	5	5	18		5	10		- 5	10	1.1	3	2	3	1	6		6	6	. 6	11	- 18	18	18	11	44.82114	40 90909	44.82759	44.82759	44.6279
1592061401	1.1	3.8 -	10.6	3.1	5.8.1	10.6	5.3	5.8	10.6	3	3	3	8	1	1.1	1	. P.	1.1.1		34.3	15.6	14.3	34.3	34.3	49.33034	44.54545	49.31034	49.33634	413303
1.1VV20EE#02	4.6	1.6	9.7.	4.6	-4.6	9.2	4.6	4.6	9.2	1	1	3	1	1	3	1		- B			34.2	1.6	8.4	9.6	83.10345	41.111179	88.36345	33.10345	30.1014
17W201E#04	1.6	5.6	11.7	3.8	3.6	11.2	5.8	5.6	11.3	3	1	1	1	1	1	1	1	- P - 1	1	. 14.6	10.1	34.6	14.0	34.6	30.34461	45.90909	50.94483	50.54489	30.3448
																		1.000		12.36843	18.52632	11.72637	13.33637	13.22617	42.64979	42 105.06	45.00798	45.80799	45.60700

PRINCIPAL SIET. TUMMURU 3

ł

G. U. R. Continent Head of the Department Electrical & Electronics Engineering Sindew Institute of Engineering & Technology Tuencur Stantos

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

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGG

SUBJECT	POWER ELECTRONICS	SUBJECT CODE	18EE53
SUBJECT	POWER ELECTRONICS	SUBJECT CODE	TOLLS

COURSE OUTCOME

SHEER FYT

C01	To give an overview of applications power electronics, different types of power semiconductor devices, their switching characteristics
CO2	To explain power diode characteristics, types, their operation and the effects of power diodes on RL circuits
CO3	To explain the techniques for design and analysis of single phase diode rectifier circuits
CO4	To explain different power transistors, their steady state and switching characteristics and imitations.
CO5	To explain different types of Thyristors, their gate characteristics and gate control requirements.

PROGRAM OUTCOMES

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

G. 4 / Head of the Department Electrical & Electronics Engin sui institute of Engineering & isus alogy

PRINCIPAL SIET., TUMAKURU

COLLEGE		SHR	IDEVI	INST	TUTI	OFE	NGIN	EERIN	G & T	ECHNO	DLOGY	ć.
FACULTY	NAN	IE	RAVIE	CUMA	RGH	1						
BRAN	СН		I	EEE		A	CAD	EMIC Y	EAR		2021	-22
COURSE	B.	E	SEM	ESTE	R	v	1	SECTIO	N		EEE	
SUBJECT	OP	ERAT	TONA LIN	L AMP EAR I		ERS AN	D	SUBJE	стс	DDE	18E1	E53
CO & PO M	APPI	NG										
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
	1		3	4	5	6	7	8	9	10	11	12
CO1	2			•			-	-	-	-	-	2
CO2	2	•	•				-					2
CO3	2	2		-			-		-		-	2
CO4	2	2		-	-	-	-	-	•	•	-	12
C05	2	2	•	-	-	-	-			-	-	-
AVERAGE	2	2		-	-				-			2
- Contraction						OVE	RAL	L MAP	PING	OF SUE	JECT	2

小橋に行	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C01	38.43	0.76											0.76
CO2	25.33	0.50											0.50
CO3	38.43	0.76	0.76				-						0.76
CO4	38.43	0.76	0.76										
CO5	38.43	0.76	0.76										0.76
AVERAGE	35.81	0.70	0.76			6							0.69
	1			100			-	FIN	AL AT	TAIN	MENT L	EVEL	0.71

G. C R me

Head of the Department Electrical & Electronics Engineering Striction Instatute of Engineering & IL TUCKUR-572106

utt Jam PRUNCIPA: SIET., TOMAK, J.

	_										1000			RAVIEUR	MARGH							_							
Academic yes		3921-27		NRM .	1		1.1.1.1.1	Induit virong	18	1.910		544	hind	1	OWEREL	CTR05H	3		Babje	Code .		643							
NUMBER OF STREET		TETTIN	(M)				14	TEST & A	4545		450H_NI	INTENT (Q	C52(19.54)			14.	EMARKS	681			Total 6	IN ATTAP	MENT		1.1		d sedministrati	100	
155	1.00	0.002	TOTAL	-001		TUTAL	100	1.014	THEAL	P-101	4.098	0.01	6.834	100	C01+11	1:02	6.03	0.00	E.05	0.101-129	100+44	4 899-29	6'0341-77	-CD5=72	401	1102	0.08	6104	4:05
TWINETIST	6.8	4.8	9.6	4.8	4.8	8.4	4.8	4.8	9.8	4	1.1	1	1	1.	3.8	5.6	5.8	5.6	5.6	32.4	32.8	12.4	17.4	11.4	47.75863	38 58187	21.75862	41.75862	42,75862
the mean of the second	3.8	5.8	11.6	5.8	3.5	11.6	5.8	5.8	81.6	1	1		2	1	1.8	3.6	C	1.6	1.0	9.4	9.4	9.4	9.4	3.4	32,45379	23.36384	52.41359	\$2,43379	32.45379
15479482007	43	4.5		4.5	45		45	4.5			1	1	1	1	4.2	4.2		1.1	A.I	10.7	38.7	HEF	38.7	38.7	38.89055	24,31818	20.29655	36.8M35	36,09655
29/1901005	1.6	5.8	38.2.1	5.6	5.4	11.1	3.8	5.6	11.7	1	1.	1	1	1	4.3	4.2			41	11.0	10.4	11.8	11.0	11.0	40.68966	25.61818	-9158966	40.0006	80.60966
VW1H1DDs:	8.1	4.1	30.2	8.1	41	8.2	4.1	4.1	8.3	1	1	- 21-	1.1	3	4.1	4.5	4.8	4.4	3.1	10.0	42.6	10.9	.10.8	30.8	1138621	38.22211	47.58623	37,58621	82.58621
TIVISELULT	1.1.1	3.3	20.8	5.1	3.1	10.8	. 1.1	51	36.6	1	1	1	1		4.4	8.6	4.4	4.4	4.4	11.P	11.7	13.P	11.1	11.7	42.34481	38.1/07/1	101104451	80.34865	00.04481
Division.	41.	4.5		4.5	41		4.5	.4.5		1.1	1.	1	1	1	- 4.7	4.3	.4.2	4.1	4.1	BLT	- 34.7	10.7	16.7	18.7	16.29955	24.210.10	10.37611	16.89515	16.896.5.5
1011010009	- 4.8		9.6	4,8	3.6	9.6	4.8	- 4.4	8.4	1	1	1	1	1	1.7	1.2		1.2	- 34				1		22.50633	38.38181	27.38671	27,58673	277.MHO1
TW1901011	18.9	65		6.5	4.5	- 10	8.5	6.5	-10	1	1	1	. A.	1	4.4	6.4	1.4	6.4	6.4	- 14.9	34.8	14.0	34.8	34.8	31.17901	11,86364	51.17903	11.17911	51.07931.
TIMIMETOTIC	- N	¥	340		8.	10		N	30	1	1	2	1	1	2.2	1,8	11	11	2.2	. 8.2	. 9.2	9.7	. 9.7	9.2	31,72414	22.8098.0	31,71434	Contraction of the last	and a state of the second s
NVPH1011	41	4.3	4.6	4.1	4.1	8.5	4.5	4.1	2.4	1	1	1	2	1	2.8		2.6	16	3.4	9.9	9.9	5.9	3.9		34.13795	22.5	10.11791	14.11/98	34.15793
\$5x598101A	14	14	7.2	5.6	3.6	12	3.6	3.8	14	1	1	1	1	1	12	3.2	1 14		11	7.8	14	7.8	14	7.8	28.89615	47,72517	26.89651	38.8961A	26.89851
15V19E80.00	.4.8	5.5	. 11			- 11	3.5	. 55	.11	1	3.	- 2	1	1					1.1	-10.5	30.5	10.2	36.5	40.5	36.3089	23.86364	14.7969	96.2065	38.2505
39A1464311		0.5	11	8.3	4.4	11	8.5	6.5	-11	1	1	1	1	1	2.2		- 12	- 12	- 11	-14.8	.11.7	10.1	19.7.5	15.2	\$4,33791	19.48187	14.11188	34,13797	54.13781
PROPERTY.	1.8.8	6.9	30.6	5.1	5.3	10.6	3.1	51	10.4	1	1	1	1	1	4.1	-4.8	- 8.8	4.1	4.4	11.7	11.1	11.7	11.5		40,34483	26,54041	40.199483	40.14461	40.04483
1842001440	÷.,		10	6	6	N.			.11	1	1	1	1	1	4.2	4.7	.+2	. A.I.	.4.3	37.1	11.1	ALT:	111	11.1	42.04891	11.202144	1) [6897	42.36897	43.06881
1110081411		A	10	. 1.	1	10	. 8 .	1	.10	. 1	1	1	1	1	11	3.2			34	11.1	.12.2	0.1	11.3	-11.3	42.06801	10 10 12 1	1. 16.817	4218861	4.) (8.811
3542088-812	1.4.7	1.6	11.7	5.8	14.	11.8	1.8	54	11.3	1	1	1.	1	1	10	1.8				.10.4	30.4	10.8	30.4	30.4	11.86307	Jan in he	T 36,737	15.86.2021	15.86207
13x/200 abs	0.11	4.5	84	4.8	4.1	8.6	1.3	4.3	8.6	1	1	1	1	1	3.4	5.4	5.4	5.8	3.4	11.7	11.7	11.7	11.1	11.1	42 34481	36.590%)		40,56681	40.54481
		1.00					1.								1	1		1		35,98787	11.14737	11.14747	11,14787	11.14797	38.4192	25.55443	18.4.993	18.4393	38-4392

1

100-

PRINCIPAL SIET_TUMARURU Head of the Departments of the Period S and G. H R ~

tň

-4.57210a.

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

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGG

SUBJECT	SIGNALS & SYSTEM	SUBJECT CODE	18EE54
---------	------------------	--------------	--------

COURSE OUTCOME

	CICOM.
COI	Explain the generation of signals, behavior of system and the basic operations that can be performed on signals and properties of systems.
CO2	Apply convolution in both continuous and discrete domain for the analysis of systems given impulse response of a system.
CO3	Solve the continuous time and discrete time systems by various methods and their representation by block diagram
CO4	Perform Fourier analysis for continuous and discrete time, linear time invariant systems.
C05	Apply Z-transform and properties of Z transform for the analysis of discrete time systems

PROGRAM OUTCOMES

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

G . H Riffe Department Electrical & Electronics Engineering

PRINCIPAL SIET. TUMAKURU

COLLEGE	1.1	SHI	RIDEVI	INSTI	TUTE	OF EN	GIN	EERING	5 & TI	ECHNO	LOGY	
FACULT	Y NAM	1E	RAVIK	UMA	RGH							
BRAM	NCH		F	EEE		А	CAD	EMIC Y	EAR	T	2021	-22
COURSE	B.	E	SEM	ESTE	R	v	1	SECTIO	N		EEE	
SUBJECT	SIGN	ALS	& SYST	EMS				SUBJE	стс	DDE	18E1	E54
CO & PO M	APPIN	G				1.1						
and the second	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
A State of the	1	2	3	4	5	6	7	8	9	10	11	12
C01	2	3	-		-	1	-				-	2
CO2	2	3			+	-	-	-	-	-		
CO3	3	3	-	-	2	-	-	-	-	2	-	2
CO4	2	3	-	12	2	2	4		-			-
CO5	2	3	-	-	2	-			-			-
AVERAGE	2.2	3			2		-			-		2
						OVE	RAL	L MAP	PING	OF SUE	BJECT	2.3

and a fill	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	39.78	0.87	1.31										0.79
CO2	26.22	0.57	0.78										
CO3	39.78	0.87	1.31			0.79							0.79
CO4	39.78	0.87	1.31	1		0.79							
CO5	39.78	0.87	1.31	1		0.79							
AVERAGE	37.06	0.81	1.20			0.79	1				-		0.79
	S T	-1 M	1.10					FIN	AL AT	TAINM	MENT I	EVEL	0,89

G. H Romes

Head of the Department Electrical & Electronics Englished Shridevi Institute of Engineering & Ko. By TUMKUR-572106

Nr. m AL MAKURU s....

		_		11		1	11			10.55522				ANTELMA	AGH		12 1	_	in the second	1000		10		11 11					
Academic year		2011-22		SEM	. ,		1 1	Tatal stress	ph.	58	1.1.2012	. Se	bjert	51	GNALS AN	DSISTER	45.		Salipre	t Code	1.58	8,54	CONTRACT						
MINANES CAR	1.5	TEST ID	010				14	TEST AS	9381	122.00	ASSIGNE	MENT OF	U 175110 MJ			34.0	MARKS	(647)		1000	Total C	on ATTAIN	MENT	No. of Street	1.1	N-1	d instructure	40	10.00
- 155	COL	0.003	TOTAL.	C02	COJ.	10156	0.014	CO5	TOTAL	0.01	C01	4.00	- CO4	C05	C9H=57	1.01	0.03	CB4	0.05	0.01-19	C02=44	C03+29	C04-79	COP+29	0.01	4007	C0)	C04	C05
35/INFE000	6.3	4.5		-85	4.5		4.5	43		1	- A	3	1	1	4.2	1.44	4.2	4.3	4.7	38.7	10.7	10.7	10.7	1.11.1	16.89655	24.35858	36.89651	10.099475	34.89655
EN30EE001			13			12	- 6	. 6	17	2	1	1	1	- 2	3.4	1.4	1.4	3.4	3.4	11.4	11.4	11.4	11.4	11.4	10 11004	25.98904	39.31014	19.11014	99.31034
LIV1961007		- 3.	10	5.		10	- 8	3	10	1	1	1	1	1	1		1			10	10	18	10	10.00	34.48276	33,72737	34.48376	14-48,78	34.46276
1011011011011	1910	5.8	10.6	3.1	3.3	30.6	5.53	3.8	30.6	3	- 2	1	1.	:2	4.2	4.7	4.3	4.7	4.2	31.5	11.1	11.5	11.5	-0.5	10.05517	36.1.00.00	39.65517	10.65517	29.65517
1001901006	. 11	3.5	11	5.5	5.1	11	-55	14	-11	1	1	1	1	- 2	6.2	- 6.2	4.7	4.7	4.2	11.1	11.1	-11.7	11.7	. 411	40.34483	36.59091	43.34463	40.34483	80.34483
ENTATION !!	8.8	8.3	13.6	6.)	8.3	32.6	6.3	4.8	17.6	1	1	1	1	- 2			1		1	15.3	36.3	15.3	15.1	11.1	52,75862	14.27223		57.75862	\$2,75862
DRA911000	01	4.5		45	4.5.		4.5	14.9		1	1	- 2	1	2	4.7	4.2	4.2	8.3	4.2	30.7	10.7	30.7	30.7	31.1	36.89655	34.31838	16.89655	14.09655	36.89655
ADM/METODO	. 3.2	5.5	11.	5.5	3.5	11	5.5	5.5	11	2	1	1	1	1	2.3	-11	1.1	23	- 22	.0.7	.97	9.1	9.7	97.	11.44828	33.04545	83.44829	13.44528	13.44828
INPASSAGE 1	8.5	6.5	18	8.5	8.5	13	6.5	.6.9	3.3	1	1	1	1	1		0	+			34.5	14.5	14.5	14.1		50	12:35455	. 58	542	50
15459EEDJJ	3.6	5.6	11.7	5.6	5.8	11.2	5.8		33.2	1	1	1	1	1	4.2	4.2	4.1	- A2	4.2	11.8	11.0	13.8	11.8	11.8	40.08966	36.83838	40.68164	40.58966	#3.68966
154(35KE0).3	1.8	5.8	11.6	5.8	5.8	11.6	5.8	1.8	3.1.6	1	1	×.	1	1	6.4	4.4	4.4	4.4	4.4	11.1	12.3	32.2	17.2	122	42.06897	27.7777	42.06891	43.06897	42.06897
19/9948014	1.6	1.8	7.8	3.8	1.8	7.6	3.8	1.8	7.6	1	1	1	2	. 2	0.6	0.0	0.6	0.8	0.8	6.4	6.4	8.4	6.6	5.4	22.06897	34,54545	22.06897	22.06897	12.06897
discipation of the literature	8.2	5.1	38.2	.9.1	51	10.2	5.1	. 11	10.2	1	1	- 2 - 1	1	1	4.2		4.1	+3	4.2	31.8	11.1	-11.1	11.3	11.3	18.96557	25.68182	10.96553	38.06552	18.96557
Wi901012	4.1	6.5	11	8.5	0.5	13	6.5	8.5	11	1	1	2	1.	1	7,6	- 7.6	1.6	1,8	7.8	36.1	10.1	16.1	30.1	196.7	-55-5172M	36.59091	\$5.51724	53.51724	55.51724
100194411/0	10	8.1	10.2	\$1	5.1	10.3	5.1	3.1	10.2	1	1	- 2	1	2	4.8	4.10	4.8	4.8	4.8	31.8	11.0	11.9	11.9	11.9	43.03648	27.04545	41.05440	41.03448	4121448
DWARTAN	1.0	3.8	11.6	5.8	5.8	11.6	5.8	5.8	11.6	1	1	- 2	3	3	4.3	4.7	4.3	4.1	6.2	12	12	13	12	- 14	41.37981	17,17773	41.17931	41.37981	41.37931
10/2011411	1.1	3.1	58.2	8.1	.91	10.3	5.1	1.8	10.2	1	1	1	1	1	4.J	4.2	4.1	4.3	4.2	11.4	11.3	.11.1	33.3	11.1	18.96752	35.68142	10.96557	18.96557	10,96552
1.139/2011412	1.8	3.8	11.6	5.8	3.8.	11.6	5.8	3.8	11.6	1	1	1	1	1	3.4	- 2.4	3.4	3.4	14	38.7	10.3	10.7	30.2	10.2	15.17241	33.181302	15.17241	15.17243	15.37241
100,2011404	4.1	41	8.2	8.1	4.1	8.7	4.1	40	8.3	3	1	1	1	3	4.4	4.6	6.4	4.4	4.4	30.5	10.5	30.5	30.5	- 19 N	10.2083	21.81364	10.2319	10.7(%.0	34.2009
-	-	-									-									11.5.86.84	33.53664	13.53664	1153644	1131084	19.78223	26.2201	19.78221	19.26223	19.78221

*

PRINCIPAL SIET., TUMAKURU G. u.S. 34 ii.

ĩ'n

1

	-	
	60	¥
	100	
1.4	min	2
- 54	1KIL/	EVI

SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS

SUBJECT

ELECTRICAL MACHINE DESIGN

N SUBJECT CODE

18EE55

COURSE OUTCOME:

CO1: The properties of electrical, magnetic and insulating materials used in the design of electrical machines.

CO2,: The output equation of DC machine, single phase, three phase transformers, induction motor and synchronous machines. The selection of specific loadings, for various machines The separation of main dimensions for different electrical machines. The design of field windings for DC machines and synchronous machines. To evaluate the performance parameters of transformer, induction motor.

CO3: The design of cooling tubes for the transformer for a given temperature rise, The short circuit ratio and discuss its effect on machine performance, The output equation of DC machine, single phase, three phase transformers, induction motor and synchronous machines. The selection of specific loadings, for various machines, The separation of main dimensions for different electrical machines, The design of field windings for DC machines and synchronous machines. To evaluate theperformance parameters of transformer, induction motor.

CO4: The design of rotor of squirrel cage rotor and slip ring rotor, The output equation of DC machine, single phase, three phase transformers, induction motor and synchronous machines. The selection of specific loadings, for various machines, The separation of main dimensions for different electrical machines, The design of field windings for DC machines and synchronous machines. To evaluate the performance parameters of transformer, induction motor.

CO5: The output equation of DC machine, single phase, three phase transformers, induction motor and synchronous machines, The separation of main dimensions for different electrical machines. The design of field windings for DC machines and synchronous machines. To evaluate the performance parameters of transformer, induction motor.

PROGRAM OUTCOMES:

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

PO2 Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3 Design / development of solutions: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.

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

PO5 Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling to complex engineering activities. PO6 The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.

PO7 Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8 Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9 Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

Head of the Department. Electrical & Electronics Engineering Shridevi Institute of Engineering & Technology TUMKUR-572106.

PRINCIPAL SIET., TUMAKURU PO10 Communication: Communicate effectively on complex engineering activities with the engineering community and with the society.

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

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

COLLEGE		SHR	DEVI	INSTI	TUTE	OF E	GIN	EERIN	0 æ 1	conve	1.001	
FACULTY	NAM	E 1	ranu.	JA K.S	8		÷			-		
BRAN	СН		I	EEE		A	CAD	EMIC Y	EAR		2021	-22
COURSE	B.	E	SEM	ESTE	R	VI	. 5	SECTIO	N .		EEE	
SUBJECT	EL	ECTR	ICAL	MACH	IINE I	DESIG	N	SUBJE	стс	DDE	18EI	255
CO & PO M	APPE	NG			-			- 2				
Total 1	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
18EE.54,1	2		2			2	2					10.00
18EE54.2	. 1		2				2	1				
18EE54.3	1	3	3	3				1			2	
18F.E 54.4	1	3	3					1		+		
18FF54.5	2	3.	3	3								-
Avg Map	1.4	3	2.6	3		2	2	1	-	-	2	-
				1		OVE	RAL	L MAP	PING	OF SUI	BJECT	2.29

CO AND PO ATTAINMENT

	C0%	PO1	PO2	PO3	P04	PO5	PO6	PO7	POS	PO9	PO10	POII	PO12
CO1	81.89	1.64		1.64	hill		1.64	1.64					
CO2	32.56	0.33		0.65				0.65					-
CO3	49.58	0.496	1.49	1.49	1.49	1						0.99	
CO4	51.94	0.52	1.56	1.56									
CO5	54.81	.1.1	1.64	1.64	1.64					-			
AVERAGE	54.16	0.82	1.56	1.4	1.57		1.64	1.15				0.99	

G. H Repartment Electrical & Electronics Engineering Shridevi institute of Engineering & Technology TUMKUR-572106

10 bander Ber. PRINCIPAL

SIET., TUMAKURU

Academia 4	243	9-31	ARM .				folal strong	rh	19			hjert	RUCC	TRICAL M	ACHINES	HINGN		Sahip	et Cinde	111	855							
MUCHANN'S RIV	IA TEAT	C 1(DriN)	EA.	TEST 2(2)	sNI)	14	TENT ADV	(M)		ASSIGNE	MENTIQ	GREAT HALL			36	E MARKS	0000	_		Total C	in ATTAR	NMENT	-			el institution	100	-
3155	COL	TOTAL	-601	C00	TOTAL	.004	. COR	TUTAL	COL	.001	-C00	C04	100	C0(=i)	-001	4100	COA	109	C06+29	102+44	1104+21	-004-27	£106+19	103	1002	C00	0.01	
197188100	1.0	14	1	2	5	6	- P	11	1	1	1	1.	1	4.1	5.1	6.2	3.1	5.2	144	10.7	9.2	11.2	342	84.89655	25.18182	21.72414	45.51724	48.96552
1573988001		0	10	10	23	34	34	28	1	2	1	1	1	4.2	4.2	4.2	-4.2	4.7	67	.0.2	38.2	25.7	10.1	21.12901	MATRIA	33,86307	49,65517	154551
1515968000	.18	10		1	31	4	4	- 1	1	1	1	1	3	5.8	- 5.8	5.8	- 14	5.8	25.8	13.8	12.8	11.8	11.8	#8.96552	21.36364	44.33793	40.68946	40.68964
10/18/1007	15	15	. N.	1			1	35			- 2	1	. 2	- 14	- 5.6	5.4	5,8	5.8	22.8	10.8	38.8	34.8	15.8	78.62069	24.54545	\$7,24138	53.03448	and the second second
15+2411004	. 5	. 8	- A	. 5		7	1	15			1	1	1	6.6	6.5	6.6	6.6	6.6	TER	13.6	13.8	15.6	38.4	46.89653	30,90909	46,89635	\$3,7911	37,2413
1943918002	.90	10			16	10	13	26		1	1	1	1	<u>U</u>	52	1.2	- 54	.10	112	13.7	15.2	20.7		118,2758	34.54345	\$2,41379		86,3568
11111101	-16	15				1		15	1	1	1	1	1		12	22	2.2	3.3	34.7	11.1	13.5	34.7	11.1	83,44828	30	45.51738	Contraction of the local division of the loc	and the second second second
211/2 90 0.000			1		15		4		1	1	1	1	1	1	1	1			N	. 11	- 12			11.84.707	. 15	41,32931	71.03444	27.6662
3.59/3003311	-74	-14	1.8	.]#	.28	34	11	- 18	1	1	1	1	11	14	1.1	1.8	1.8	6.8	11.8	11.4	214	114	314	109.41152	40.54545	75.17241	75,17241	23,630
211/1800012	11	-11	1		- 15	1		-18-	1	2	1.	1.	1	. 6.4	6.4	6.0	6.4	6.6	29.4	15.4	31.4	15.4	10.4	101.3793	. 35	18.55172.	M.10945	54,5517
Internation of the second seco	10	7.10	1		10	6		H		2	1	1	1	3		1	<u> </u>	1		12.1	12	- 10		199.65117	27.27279	41,87911	44.82759	
TAXABLE IN CONTRACTOR	- 20	- 38	-1	4	1	1	1	1	1	1	1	2	1	0	0		.0.	· 8	12		6 1	1		71.86207	11.26364	30.68954	and the second se	13.7911
EPATHORNAL CONTRACT	- 19	35	8		32			. 15	1	1	1	1	1	54	5.4	5.4	5.6	5.4	32.4	13.4	33.4	54.4	13.4	77.34538	30.45455	46.3069	49.85557	\$3,10341
25V19EE013	- 95	10	13	.17	25		13	33	1	1	1	1.		8.4	8.4	1.1	8.6	8.4	40.4	23.4	22.4	21.4	22.4	119.3003	58.18182	77.241.18	23,2931	77.2413
TRATALIST		15	8		12	1		15	1	1	1	1	1	12	4.2	- 6.1	82	42	10.7		36.2	37.2	14.2	104.1379	35.81018	35.86207	59,31034	\$2,7585
ENVIREACE	- 11	. 12	1	1	14			10		1			1	4.4	8.4	- 8.4	6.4	4.4	30.4	13.4	15.4	36.4	17.4	104.8276		\$1.10145	\$8.55577	40
15V2001403	22		1		15			1	1	1	1	1	1	4.5	4.8	4.1	4.8	4.2	26.8	13.8	34.8	.7.8	6.8	90,41179	31,36364	11.03448		25,44831
15V21ET402	0	.0	10		15	- 10	14	11		1	1	1	1	4.7	4.2	42	4.2	.82	6.7	16.1	13.2	18.2	20.1	11.17411	31.81838	12.41118	85,2568	48.4511
15VOIDED404	0	0	1.1		15	1		- 15		1	1	1	1	6.6	6.0	4.4	8.6	6.6		15.6	16.8	114	18.6	29.85517	25.45455	57,24538	33,29(1)	37,2418
																			28.74735	14.53633	14.37885	15.06310	15.89474	83.88748	32,55993	48.56218	11.04192	14.80044

23

G. H Roma

Head of the Department Electrical & Electronics Er Shridevi Institute of Engineeri TUMKURATO 18EE 55

ET.

4-5



SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF EEE

SUBJECT	High Voltage Engineering	SUBJECT CODE	18EE56
exection of the second			

COURSE OUTCOME

- CO1. Explain conduction and breakdown phenomenon in gases, liquid dielectrics and breakdown Phenomenon in solid dielectrics.
- CO2. Summarize generation of high voltages and currents
- CO3. Outline measurement techniques for high voltages and currents
- CO4. Summarize overvoltage phenomenon and insulation coordination in electric power systems.
- CO5. Explain non-destructive testing of materials and electric apparatus, high-voltage testing of electric apparatus

PROGRAM OUTCOMES

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

G. HRa Head of the Department Electrical & Electronics Engineering Shriday lositure of Engineering & Technology-TUNKUR-572106

PRINCIPAL

SIET., TUMARURU

COLLEGE		SHR	IDEVI	10511	TUTE	OFE	NGIN	EERIN	G&T	ECHNO	DLOGY	
FACULTY	NAM	IE	MRS. S	WET	HATN	M.						
BRAN	СН		I	EEE		А	CAD	EMIC Y	EAR		2021	-22
COURSE	B.	E	SEM	ESTE	R	v	5	SECTIO	N			
SUBJECT		Hig	h Volta	age En	gineeri	ing		SUBJE	стс	DDE	18E8	56
CO & PO M	APPI	NG	- 8					2.1	- ²⁷ -	1		
The state					PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	3	2	2	1				100	.+	2	1
CO2	2	2	3	1	2						2	1
CO3	2	3	3	2	1	1000	1. in		la sel	ato an	2	1
CO4	2	2	2	2	2						2	1
CO5	2	3	3	1	1		30				2	1
AVERAGE	2	2.6	2.6	1.6	1.4		-				2	1
	1					OVE	RAL	L MAP	PING	OF SUE	BJECT	1.88

	C0%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	POS	P09	PO10	PO11	PO12
CO1	68.9	1.378	2.067	1.378	1.378	0.689		Unit	este	lisqui		1.378	0.689
CO2	62.5	1,25	1.25	1.875	0.625	1.25		1				1.25	0.625
CO3	66.9	1.338	2.007	2.007	1.338	0.669						1.338	0.669
CO4	61	1.22	1.22	1.22	1.22	1.22						1.22	0.61
CO5	59.4	1.188	1.782	.1.782	0.594	0.594	-				12/13	1.188	0.594
AVERAGE	63.74	1.2748	1.6652	1.6524	1.031	0.8844						1.2748	0.6374
FINAL ATTAINMENT LEVEL										1.202			

In

19.12

1124

Acta

PRINCIPAL SIET., TUMAKURU.

G. H RAME

Head of this Department Electrical & Electronics Engineering States institute of Engineering & Tech. - Har -TutakuR-572106

Viti Sem		IA TI	EST1	1	A TES	T 2 ·	JA	TEST	13			Ass	ignime	at .	14.	111-5	+ SE	E HVE	2021-2	022				TOTAL			1.00		Ave	rage.	1.1
USN	COL	CO2	TOTAL.	CON	CO4	TOTAL	CO4	CO5	OTA	C01	CO1	CO3	CO4	C05	TOTAL.	C01	CO2	C03	C04	CO5	TOTAL	COL	CO2	CO3	CO4	COS	C01	CO2	COJ	C04	COS
15V18EE001	15	15	- 31	7	14	21	19	15	34	2	2	2	2	-2	10	6.8	6.8	6.8	6.8	6.8	34	24.8	23.8	15.8	37.8	23.8	73	70	46	70	70
15V19EE001	17	17	34	19	14	33	20	14	34	2	2	2	2	2	10	6.6	6.6	6.6	6.6	6.6	33	25.6	25.6	27.6	36.6	22.6	75	75	81	68	66
15V19EE002	13	14	27	16	4	20	18	12	30	2	2	2	2	2	10	7.2	7.2	7.2	7.2	7.2	36	22.2	23.2	25.2	25.2	21.2	65	68	74	47	62
15V19EED05	19	35	- 34	18	16	34	14	8	22	2	2	2	2	2	10	8.4	8.4	8.4	8,4	8,4	42	29.4	25.4	28.4	34.4	18.4	85	75	84	64	54
15V19EE006	9	7	16	7	8	15	14	15	29	2	2	2	2	2	10	8.4	8.4	8.4	8.4	8,4	42	19.4	17.4	17.4	33.4	25.4	57	51	51	62	75
15V19EE007	19	19	38	15	14	29	19	17	36	2	2	2	2	2	10	4.2	4.2	4.2	4.2	4.2	21	25.2	25.2	21.2	37.2	23.2	74	74	62	69	68
15V19EED08	19	15	34	10	14	24	9	8	15	2	2	2	2	2	10	4.2	-4.2	4.2	4.2	4.2	21	25.2	21.2	16,2	28.2	14.2	74	62	48	52	42
15V19EE009	5	13	18	16	7	23	20	15	35	2	2	2	2	2	10	1	1	1	1	1	5	8	16	19	25	18	24	47	56	46	53
15V19EE011	19	17	36	19	20	39	17	15	32	2	2	2	2	2	10	B	8	8	0	8	40	29	27	29	45	25	85	79	85	83	74
15V19EE012	16	14	30	18	15	33	14	16	30	2	2	2	2	2	10	4.4	4.4	4,4	4,4	4.4	22	22.4	20.4	24.4	37.4	22.4	66	60	12	69	65
15V19EE013	16	書	24	16	14	30	16	7	23	2	2	2	2	2	10	4.8	4.8	4.8	4.8	4.8	24	22.8	14.8	22.8	27.8	13.8	67	44	67	51	41
15V19EE014	19	13	32	16	-14	30	16	7	23	2	2	2	2	2	10	2.8	2.8	2.8	2.8	2.8	14	23.8	17.8	20.8	25.8	11.8	70	52	61	48	35
1SV19EE016	11	14	25	13	14	27	8	7	15	2	2	2	2	2	10	3	3	3	3	3	15	16	19	18	26	12	47	56	53	48	35
15V19EE017	19	17	36	19	20	39	19	15	34	2	2	- 2	2	2	10	9.6	9,6	9.6	9.6	9.6	48	30.6	28.6	30.6	46.6	26.6	90	84	90	86	78
15V19EE020	18	8	26	15	16	31	19	15	34	2	2	2	2	2	10	7.4	7.4	7.4	7.4	7,4	37	27.4	17.4	24.4	40.4	24.4	81	51	72	75	72
15V20EE400	15	14	29	16	16	32	19	15	34	2	2	2	2	2	10	4.4	4,4	4.4	4,4	4.4	22	21.4	20.4	22.4	37.4	21.4	63	60	66	69	63
15V20EE401	17	15	32	17	7	24	16	17	33	2	2	2	2	2	10	4.8	4.8	4.8	4.8	4.8	24	23.8	21.8	23.8	30.8	23.8	70	64	70	57	70
15V20EE402	19	19	38	18	15	33	15	9	24	2	2	2	2	2	10	3.2	3.2	3.2	3.2	3.2	16	24.2	24.2	23.2	29.2	14.2	71	71	68	54	42
15V20EE404	16	7	13	14	0	14	4	14	18	. 2	2	2	2	2	10	5.8	5.8	5.8	5.8	5.8	29	23.8	14.8	21.8	21.8	21.8	70	44	64	40	64
OTAL	302	261	553	289	242	531	296	241	535	38	38	38	38	38	190	105	105	105	105	105	525	445	404	432	626	364	1309	1188	1271	1159	11
Total 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	19
Avearge	15.9	14	29.10526	15	12.7	27.95	15.6	12.7	28.2	2	2	2	2	2	10	5.526	5.526	5.526	5.526	5.526	27.632	23.42	21.26	22.74	32.95	20.211	68.9	62.5	66.9	61.0	59

18EE56 HVE 2021-2022

TUNKUR-5721 Head of the Dep G. 4 Ro 中 of En Shridew Inst Electric

PRINCIPAL SIET., TUMAKU

	1	c	N	
		9	1	
14	зí	121	SFV.	É.

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

DEPARTMENT OF ELECTRICAL AND ELECTRONICS

SUBJECT	POWER SYSTEMS-2	SUBJECT CODE	18EE71	
SCHOLLT				

COURSE OUTCOME:

CO1: form the different incidence matrices for a given power system network

formulate network matrices by different methods for a given power system

network

CO2: Identify different types of buses

CO2,3 : perform load flow analysis for a given power system

CO4 :perform economic generation scheduling of power generation plants

CO4,5: perform transient stability study of a given power system

PROGRAM OUTCOMES:

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

PO2 Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3 Design / development of solutions: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.

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

PO5 Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling to complex engineering activities. PO6 The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.

PO7 Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8 Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9 Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10 Communication: Communicate effectively on complex engineering activities with the engineering community and with the society.

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

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

21-22

PRINCIPAL SIET. TUMAKURU

COLLEGE		SHR	DEVI	INSTI	TUTE	OF EN	GIN	EERING	G & TI	ECHNO	DLOGY	2
FACULTY	NAM	E	ranuj	A K.S	2							
BRAN	СН		F	EE		A	CAD	EMIC Y	EAR		2021	-22
COURSE	B.	E	SEM	ESTE	R	VII	5	SECTIO	N	2	EEE	
SUBJECT		P	OWER	SYST	EMS-2	2		SUBJE	ст со	DDE	18EI	271
CO & PO M	APPI	NG			-							
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
18EE71.1	1	3	3	2	3	3			•		3	3
18EE71.2	1	3	3	2	3	3				-	• 3	3
18EE71.3	1	3	3	2	3	3					3	3
18EE71.4	1	3	3	2	3	3					3 ·	3
18EE71.5	1	3	3	2	3	3					3	3
Avg. Mapping	1	3	3	2	3	3	•	*	•		• 3	3
			14.91		1	OVI	RAL	L MAP	PING	OF SUI	BJECT	1.75

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	\$0.65	0.51	1.52	1.52	1.01	1.52	1.52			*	36	1.52	1.52
CO2	33.39	0.334	1.002	1.002	0.67	1.002	1.002				-	1.002	1.002
CO3	66.71	0.67	2.001	2.001	1.33	2.001	2.001		-			2.001	2.001
CO4	67.18	0.67	2.02	2.02	1.34	2.02	2.02					2.02	2.02
CO5	47.56	0.48	1.43	1.43	0.95	1.43	1.43		14			1.43	1.43
AVERAGE	53.09	0.533	1.59	1.59	1.06	1.59	1.59					1.59	1.59
				12	15.65			FIN	ALAT	TAINM	IENT I	EVEL	1.39

G. H Rome

Head of the Department Electrical & Electronics Engineering Shridevi Institute of Engineering & Technology TUMKUR-572106.

払い

PRINCIPAL SIET., TUMAKURU

c.e

SIET. III Pick in

		the second se		# NOT THE- PP				1		and the second se		THI ANALY	MIZ			1000	SUBJECT E	oox: 18	EE1					_				
CM, UNEXT BAS	IA TER	C 1230MD		TENT ION			TEST 30	and the set of the set of			NEMENT		1000	Company of		EMARKS	the state of the s			a construction of the local data	a ATTAIN	and a lot of the second	1000	10110010	No	d individual	0.00	1000
KSN .	1001	TOTAL	6.032	C05	TOTAL	1033	004	TOTAL.	4134	1.031	003	COH	4.005	6:00+12	1113	001	0.04	6339	CU1+29	CODe44	C03+29	004-38	6.034-01	.001	COL	103	1004	C08
154540008	11.	11	7	8	38	45	13	80	2	1	3	3	1	11.1	11.2	13.2	41.2	11.2	24.7	20.2	28.2	28.2	19.2	99,65517	45,30909	97,24338	97.24138	46,208
KENTHEROOM	12	- 12		4		. 11	12	23	1		1	1	1	. 8	. 6	6	÷		30	12	35	26	10	44.82755		65.51734	48.96552	41,279
15V1NOLER1	- 11	15			14	15	15	80	1		1		1	. 8	. 4							11	16	18.17JA1	36,36164	79.13234	79,31094	11.1.124
LEWYNELLIA	12	1		4	14		.11	10	1	1	1	1	1	7.4	7.4	7.4	2.4	2.4	311.4	12.A	29.4	21.4	33.4	40	19.54545	70,28423	73.7881	\$2,3034
ENVIREMENT	11	1.0			-11			- 11	1	1	1	E	1	24	11	8.4	6.4	8.4	31.4	19.4	18.4	19.4	18.4	44.89935	44.010161	61.44822	86.81655	46.2901
1041708001	19	19	- P.C.		34		2	13	1	1	1	1	1	1		Y	- T	1	- 18	14	17	.18	18	16.17241	36.26764	34,43068	55.17243	1 18.1714
USV17DBB0#	- 12	12		- A.	- 18		.11	11	1	1	1	1	1	22	1.1	11	12	2.2	.11.1	17.2	18.2	20.2	112	18.43034	39.09081	46,7069	#8.65537	18.2500
111/3701004	13	19			38	15	11	80	2		1	1	3	4.6	4.6	4.6	4.8	4.8	25.4	14.6	31.6	10.6	15.4	50.34483	33 IAIAI	74.48276	71,01448	\$3.797
15/12/02/02/02	14	- 34	10	11	- 33	15	34	29	1	1	1	3	. 1	6.6	5.8	6.8	6.6	6.8	22.6	38.4	21.6	31.6	19.8	64.13793	42.27278	81,37931	77.83358	67.5863
11V1705008		12	10	9	29	.15	18	80	2	2	3	3	2	4.8	5.8	6.8	6.6	5.8	25.8	18.8	21.8	72.6	17.8	64.82759	42,72727	61.06957	82.06892	45.9791
19/1758011	- 13	18	÷	7	18			17	1	. 1		1.	1		11	12	14	7.4	21.1	15.2	22.2	10.1	16.7	51.45179	34.34545	76.55172	80	14.8575
SIVEPERGER	11	13	A	4.		11	. 11	12	1	1	1	1	1.	42	6.2	4.2	4.2	4.1	19.4	13.2	20.2	19.2	11.2	45.55724	- ML	65:65517	64.2069	38.6206
SIVEREDOOD 1	1	8	. D.	0	.0	. 1	. 4		1	1	1	1	1	.12	11	12	5.7	8.2	11.1	7.1	32.2	11.2	12	14,82758	15,36368	42.06897	38.42049	34.827
15V1810000	1				38	1.0	. 84	11	1	1	1	1	1	3.6	5.8	5.6	5.8	3.6	18.4	84.8	23.4	63.6	16.6	\$7,24138	37.73.537	73.03448	74.482N	17,240
35V18EE004	29	29	18	1	25	. 8	6	11	1	1	- 2	1	1	4.4	4.4	4.4	4.4	4.4	38.4	34.4	32.4	12.4	11.4	84.13793	55.45455	42,7580	41.75842	46,106
11/1861003	18	18		11	- 11	10	14	17	1	1	1	1	1	1.1		1	1	1	D	11.	18	. 59	. 18	31.72414	34.09091	62.06897	65.11728	8.175
10VLHEIDDE	-11	11.	10	6.		.15	10	10	1	1	1	1.	1	4.4	4.6	4.4	4.4	4.4	37.4	29.4	31.4	71.6	32.4	70.34883	46.35364	73,7931	73.7931	47,7580
35V18EE007	. T.	7	14	4	- 8	.11	10	28	3	1	1	3	1	4.8	4.8	4.8	4.8	4.8	11.0	25.8	17.4	18.8	32.8	73.77414	47,27271	61.37931	64,83758	44.117
15V1BEROOM	18	1.6	4	4.0		15	19	. 30	2	1	2	1	1	4.2	4.3	4.2	4.2	-4.2	24.2	30.2	31.2	21.2	10.2	35.17241	23.18182	73.30545	78.10145	15.1724
35V18E1009	10	18	1	2	3			19	2	1	1	1	2		0	0			12	. 5	- 52	53	4	17.24138	51.36365	41.37911	\$7,91323	1.15.793
15VLHE0011					12			18		2	1	2	. 2	5.2	1.2	14	5.2	5.2	16.2	13.2	14.2	25.2	18.2	45.51734	541	48.96552	52,41379	45.517
15V180E013	- 3	. 5		1		12	12	2A .	1	1	2.	1	x.			0		18	1		. 34	34	4	10.34483	6.RITIELE	48.27589	48.275.84	13.797
INVIATEND:	30			1	30	1		15	1	1	1	1	1	41	4.2	4.2	4.2	4.2	16.2	12.2	13.2	54.2	11.7	42.06897	27.52527	45.51724	48.96557	45.5172
15V1906400	8		1		35	.12	.13	26	-1	1	1	1	1	4.2	63	4.2	4.3	43	11.3	13.2	18.2	18.7	14.2	45.53734		62,75862	62,75862	48.9451
15V19EE401	15	25			0	15	15	80	1	0.2	1	1	1	4.2	4.2	4.2	4.2	4.3	31.2	8.3	21.2	71.7	8.2	1132911	14.09081	73.30945	73.10345	25.379
15VENEE402	38	16	10	11	-11	15	15	80	1	1		1	1	44	4.8	4.8	4.8	4.8	11.8	15.4	21.8	23.8	17.8	57,89101	38.18182	75.17241	75.1TH4	11.3793
15V1912408	24	24	1.		11	15	15	10	1	1	1	1	1	4.2	4.7	43	43	43	367	35.8.	21.2	11.3	12.0	18.62005		73.30345	73.10345	42.0881
15vimtenba	11	1.0		1	38	18	15	10	1	1	2	1	1	1.0	4.4	8.8	6.8.	4.4	11.8	12.8	21.8	11.0	17.8	61.17933	40.45459	82.06997	\$1.00897	83.379
10v1980340%	28	19	1	7	34	15	15	80	3	1	1	1	1	4.2	4.8	4.7	4.3	8.3	25.7	15.7	71.7	21.2	18.2	45.51724	30	78.32545	75.10345	45.557

G. II RAM

EQ.	1.1	SUBJECT	OWER SYS	TEM ANAL	VSRS2				SUBJECT C	006							_
GA	1. CONTRACTOR	ASSI	INEMENI	10008	Chine Learning	allower.		E MARKS	10.00	Arrest Course	and a second	Tutal C	IN ATTAIN	MENT	in the second se	1.000	11-2-10-0
1	C01	6.03	C03	C04	C08	CO1=12	6.02	C03	C04	0.08	CO1+29	C02-44	C03+19	CO4+29	C05+29	001	00
1	2	2	2	2	2	11.2	11.2	11.2	31.7	11.2	24.2	30.5	28.2	28.2	19.2	88.65517	45.909
I	2	2	2	2	2	6	6		6		20	13	.19	26	12	44.92759	29.545
1	2	2	2	2	2	. 8	6	. 6	. 6	4	-23	36	7.9	23	15	55.17241	36.363
1	2	2	2	2	2	7.4	2.4	2.4	7.6	7.4	11.4	17.4	21-A	21.4	15.4	#D	99.545
I	1	2	2	2	2	5.4	9.4	1.4	9.4	5.4	26.6	18.4	38.4	19.4	19.4	65,89655	44.096
I	2	2	2	2	2	.7	· 7.	7		7	28	16	17	15	16	55.17241	36.363
1	2	2	2	2	2	7.2	7.2	7.2	7.2	7.2	25.2	17.2	15.2	20.2	17.1	59.31094	19.090
	2	1	2	1	2	4.5	4.6	4.6	4.6	4.6	25.6	14.6	71.6	20.6	15.6	50,34483	88.383
T	2	2	2	2	2	8.8	5.6	. 8.8	6.6	5.5	22.6	18.6	21.6	22.6	39.6	64.13793	42.272
Т	2	2	2	2	2	6.8	6.8	6.8	6.8	6.8	25.8	18.8	25.8	21.8	17.8	64.82753	42.727
T	1	2	1	2	1	7.2	1.2	7.2	7.2	7.2	21.2	15.2	32.2	28.2	36.2	52.41379	34.545
Т	1	2	1	2	1	6.2	6.2	6.7	6.2	6.2	19.2	13.2	20.3	19.3	31.2	45.51724	30
T	1	1	2	2	1	5.2	5.2	5.2	5.2	5.2	18.2	7.2	12.4	11.7	7.2	24.82759	26.36
Τ	2	2	3	3	1	5.6	5.6	5.6	5.6	5.6	16.6	15.8	20.6	21.6	15.6	57.24138	17.723
Т	1	1	2	3	2	4.4	4.4	4.4	4.4	4.4	34.4	24.4	12.4	12.4	13.4	94.11793	15.454
Т	2	2	1	2	2	1	1	1	1	3	.22	15	1.8	19	16	51.72414	84.090
T	1	2	3	1	2	4.4	4.6	8.4	4.4	4.4	17.4	30.4	71.4	21.4	12.4	70.34483	46.363
Т	2	2	3	2	2	6.8	4.8	4.8	4.0	4.8	11.8	20.8	17.8	18.8	12.8	71.72414	47.272
Τ	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	24.2	30.2	21.2	21.1	30.2	35.17341	71.181
T	1	1	1	1	2	.0	0	0	0	0	12	5	13	11	- 4	17.14138	11,363
Т	2	1	1	1	1	5.7	5.2	\$.7	5.2	5.2	10.7	11.2	14.2	15.2	10.2	45.53724	80
Т	1	1	1	1	2			0	0		1	3	34	14	4	10.34463	6.8181
Т	1	1	1	1	2	4.3	4.2	4.2	4.2	4.2	16.2	12.2	11.2	14.3	18.2	42.06897	11.727
Т	1	2	1	3	1	4.3	4.2	4.3	1 43	4.1	13.2	13.2	18.2	18.2	34.2	45.53734	HD
T	2	1	1	2	1	4.2	4.2	4.2	4.3	4.2	21.2	6.2	21.2	31.3	6.2	31,37911	
T	2	2	1	2	2	4.8	4.8	4.8	4.8	4.8	22.8	16.8	21.8	21.8	17.8	\$7,98300	
t	2	2	1	1	2	4.2	4.2	4.2	4.2	4.3	30.2	11.7	21.2	31.3	13.3	18.63069	and the second second
t	2	1	I	1	2	6.8	6.8	6.8	6.8	8.8	31.8	17.8	33.8	21.8	17.8	41,37911	
t	2	1	I	1	1 2	4.1	4.2	4.2	4.2	4.3	25.2	12.7	21.3	33.2	13.7	45.51724	ستقلبنا لاتسوا
-						a	1.262	11000	100	1.000	30.75862		10.34483	18.48276	13.7935	10.05398	

 \mathbb{Z}_{+}

Head of the Department Electrical & Electronics Engineering Shindew Institute of Engineering & Turthology TUMKUR-572166.

ф П

Ranz

۷

ŧ

PRINCIPAL SIET. TUMAKURU YC 6

DEPARTMENT OF EEE

SUBJECT	POWER SYSTEM PROTECTION	SUBJECT CODE	18EE72	
Contraction and the second second	and the second	A loss a substances of the subsection of the	Contraction of the second s	£

COURSE OUTCOME

21-25

C01	Discuss performance of protective relays, components of protection scheme and relay terminology over current protection.
CO2	Explain the working of distance relays and the effects of arc resistance, power swings, line length and source impedance on performance of distance relays.
CO3	Discuss pilot protection, construction, operating principles and performance of differential relays and discuss protection of generators, motors, transformer and Bus Zone Protection.
CO4	Explain the construction and operation of different types of circuit breakers.
CO5	Outline features of fuse, causes of over voltages and its protection, also modern trends in Power System Protection

PROGRAM OUTCOME

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

G. Il Rome Head of the Department Electrical & Electronics Engineering Shidevi Institute of Engineering & Technology

TUMKUR-572106.

Manual James

PRINCIPAL SIET., TUMAKURU

COLLEGE		SHR	DEVI	INSTI	TUTI	OFE	NGIN	EERIN	G & T	ECHN	OLOGY	(
FACULTY	NAM	E	RAJES	SH KU	MAR	v						-
BRAN	CH		1	EEE		A	CAD	EMIC Y	/EAR	T	2021-	2022
COURSE	B.	E	SEM	ESTE	R	VII	1	SECTIO	ON	-		
SUBJECT	PC	OWER	SYST	EM PI	ROTE	CTION	•	SUBJE	ст с	ODE	18E	72
СО & РО М	APPIN	łG					-					
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	-		-	-		-	-	-	-	-	
CO2	2	2	•	-	-	2	•	-	•	•	-	
CO3	3				-	2		-	-	-	-	-
CO4	3	1992	-	-	-	2	•	-	-	•	•	-
CO5	2	2	•	-		2	2	-	10-101	-		2
AVERAGE	2	•	•			2	2		-	5		2
	12.27		12-2	101 21	and the	OVE	RAL	L MAPI	PING	OF SUE	JECT	1.92

	C0%	POI	PO2	PO3	PO4	PO5	PO6	PO7	POS	PO9	PO10	PO11	PO12
COI	21.2	0.63	-		-			-	-	-	23-24	1	-
-CO2	23.2	0.46	0.46		•	•	0.46	-	-	-			
CO3	20.2	0.60	1.50	1	-		0.40		-	-		1 - 1	
CO4	20.2	0.60	-	•	-	-	0.40	-	-	-		-	-
CO5	26.2	0.52	0.52		•		0.52	0.52	1	1		-	0.52
AVERAGE	22.2	0.56	0.49	123			0.35	0.52					0.52
	Core and	Contraction of the	CHARLES OF		1	13.24	Table 1	FIN	AL AT	TAIN	MENTI	EVEL	0.48

Denter

PRINCIPAL SIET., TUMAKURU.

G. HRma Head of the Department Electrical & Electronics Engineer Stridevi Institute of Engineering & T TUMKUR-572106.



SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF EEE

SUBJECT	Solar & Wind Energy	SUBJECT CODE	18EE731
---------	---------------------	--------------	---------

COURSE OUTCOME

- CO1. Discuss the importance of the role of renewable energy, the concept of energy storage and the principles of energy storage devices.
- CO2. Discuss the concept of solar radiation data and solar PV system fabrication, operation of solar cell, sizing and design of PV system.
- CO3. Describe the process of harnessing solar energy and its applications in heating and cooling.
- CO4. Explain basic Principles of Wind Energy Conversion, collection of wind data, energy estimation and site selection
- CO5. Discuss the performance of Wind-machines, energy storage, applications of Wind Energy and environmental aspects.

PROGRAM OUTCOMES

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

G. HRM Head of the Department Electrical & Electronics Engineering Shridevi Institute of Engineering & Technology TUMKUR-572106

PRINCIPAL

SIET., TUMAKURU

COLLEGE		SHR	IDEVI	INSTI	TUTE	OFE	NGIN	EERIN	G & T	ECHN	OLOGY	(
FACULTY	NAM	IE	MRS. S	SHWE	THA 1	ΓМ		1.11		*		
BRAN	СН		I	EEE		A	CAD	EMIC Y	EAR	1	2021	-22
COURSE	B.	E	SEM	ESTE	R	VII	1	SECTIO	N			
SUBJECT		5	Solar &	Wind I	Energy	2		SUBJE	ст со	DDE	18EE	731
CO & PO M	APPI	NG						10				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
COI	2	3	3	111		1	1	101.5				1
CO2	2	3	3			1	1					1
CO3	2	3	3			1	1				+	1
CO4	2	3	3			1	1					1
C05	2	3	3			1	1	1			•	1
AVERAGE	2	3	3			1	1			×		1
						OVI	RAL	L MAP	PING	OF SUI	SJECT	1.83

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	61	1.22	1.83	1.83	1		0.61	0.61					0.61
CO2	58	1.16	1.74	1.74			0.58	0.58		+			0.58
CO3	63	1.26	1.89	1.89			0.63	0.63			172.00		0.63
CO4	63	1.26	1.89	1.89			0.63	0.63			-		0.63
CO5	61	1.22	1.83	1.83		154	0.61	0.61					0.61
AVERAGE	61.2	1.224	1.836	1.836		47	0.612	0.612					0.612
	11 8		1.5.25			S. etc		FINA	AL AT	TAINN	MENT I	EVEL	1.122

G.H RAME

Head of the Department Electrical & Electronics Engineering Shridevi Institute of Engineering & TumkuR-572106.

. 8 ...

BRINCIPAL SIE

	1/	TES	T1	1	A TES	F 2	1/	A TES	13			Assi	inment	. · · ·			5	EE SWE	2021-2	022		Total	-	1			-		- 1	VERAGE	1.1
USN	C01	CO2	TOTAL	C03	CO4	TOTAL	CO4	C05	TOTAL	C01	CO1	C03	C04	COS	TOTAL	CO1	CO2	CO3	CO4	CO5	TOTAL	CO1(34	CO2 .	CO3	CO4	C05	CO1(34)	CO2(34)	CO3(34)	CO4(54)	CD5(34)
15V17EE006	12	14	26	13	12	25	14	13	27	2	2	2	2	2	10	8.2	8.2	8.2	8.2	8.2	41	22.2	24.2	23.2	36.2	23.2	65	71	68	67	68
15V17EE012	13	10	23	11	9	20	13	13	26	2	-2	2	2	2	10	5.2	5.2	5.2	5.2	5.2	26	20.2	17.2	18.2	29.2	20.2	59	51	54	54	59
15V18EE002	'9	8	17	9	10	19	11	10	21	2	2	2	2	2	10	7.6	7.6	7.6	7.6	7.6	38	18.6	17.6	18.6	30.6	19.6	55	52	55	57	58
15V18EE003	14	10	24	13	12	25	14	12	26	2	2	2	2	2	10	7	7	7	7	1	35	23	19	22	35	21	68	56	65	65	62
15V18EE004	17	10	27	13	12	25	13	13	26	2	2	2	2	2	10	7.6	7.6	7.6	7.6	7.6	38	26.6	19.6	22.6	34.6	22.6	78	58	66	. 64	66
15V18EE005	12	13	25	.14	13	27	-14	12	26	2	2	- 20	2	2	10	- 9	9	9	9	9	45	23	24	25	38	23	68	71	74	70	68
15V18EE006	14	14	28	13	13	26	18	12	30	2	2	2	2	2	10	9	9	9	9	9	45	25	25	24	42	23	74	74	71	78	68
15V18EE007	6	7	13	9	8	17	10	8	18	2	2	2	2	Z	10	6.2	6.2	6.2	6.2	б.2	31	14.2	15.2	17.2	26.2	16.2	42	45	51	49	48
15V18EE008	12	10	22	12	12	24	15	14	29	2	2	2	2	.2	10	6.4	6.4	6.4	6.4	6.4	32	20.4	18.4	20.4	35.4	22.4	60	54	60	65	66
15V18EE009	9	в	17	10	9	19	11	10	21	2	2	2	2	2	10	6.6	6.6	6.6	6.6	6.6	33	17.6	16.6	18.6	28.6	18.6	52	49	55	53	55
15V18EE011	9	9	3.8	11 .	9	20	12	10	22	2	2	2	2	2	10	7	1	7	7	7	35	18	18	20	30.	19	53	53	59	56	56
1SV18EE012	9	9	18	12	8	- 20	9	10	19	2	2	2	2	2	10	5.2	+ 5.2	5.2	5.2	5.2	26	16.2	16.2	19.2	24,2	17.2	48	48	56	45	51
15V19EE400	13	13	26	13	12	25	17	10	27	2	2	2	2	2	10	7	7	7	ĩ	7	35	22	22	22	38	19	65	65	65	70	56
15V19EE401	10	10	20	13	11	24	14	14	28	2	2	2	2	2	10	7	7	7	7	7	35	19	19	22	34	23	56	56	65	63	68
15V19EE402	13	13	26	15	13	28	16	14	30	2	2	2	2	2	10	8.4	8.4	8.4	8.4	B.4	42	23.4	23.4	25.4	39.4	24,4	69	69	75	73	72
15V19EE403	12	12	24	12	14	26	15	10	25	2	2	2	2	2	10	8	8	8	8	8	40	22	22	22	39	20	65	65	65	72	59
15V19EE404	11	9	20	13	10	23	14	12	26	2	2	2	-2	2	10	6.4	6.4	6.4	6.4	6.4	32	19.4	17.4	21.4	32.4	20.4	57	51	63	60	60
15V19EE405	12	12	24	14	13	27	15	14	29	2	2	2	2	2	10	7.2	7.2	7.2	7.2	7.2	36	21.2	21.2	23.2	37.2	23.2	62	62	68	69	68
OTAL	207	191	398	220	200	420	245	211	456	36		36	36	36	180	129	129	129	129	1,29	645	372	356	385	610	376	1094	1047	1132	1130	1106
otal students	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	38	18	18	16	.18	18	18
Avearge	12	11	22	12	11	23	14	12	25	2	2	2	2	2	10	7	7	7	7	7	36	21	20	21	34	21	61	-58	63	63	61

18EE731 SVE 2021-2022

R-572106

5

DEPARTMENT OF EEE

SUBJECT Utilization Of Electrical Pov	SUBJECT CODE 18EE742
---------------------------------------	----------------------

COURSE OUTCOME

COI	Discuss different methods of electric heating & welding.
CO2	Discuss the laws of electrolysis, extraction, refining of metals and electro deposition process.
C03	Discuss the laws of illumination, different types of lamps, lighting schemes and design of lighting systems.
CO4	Analyze systems of electric traction, speed time curves and mechanics of train movement.
C05	Explain the motors used for electric traction, their control & braking and power supply system used for electric traction

PROGRAM OUTCOME

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

G. HR man

Head of the Department Electrical & Electronics Engineering Shridevi Institute of Engineering 1 Turnelogy TUMKUR-572196

PRINCIPAL

PRINCIPAL SIET., TUMAKURU

COLLEGE		SHR	DEVI	INSTI	TUTE	OFE	NGIN	EERIN	G & T	ECHN	OLOGY	(
FACULTY	NAM	IE I	UMAB	AI								
BRAN	СН		I	EEE		A	CAD	EMIC Y	EAR	1	2021-	2022
COURSE	В.	E	SEM	ESTE	R	vп	5	SECTIO	N			
SUBJECT	Uti	lizati	on Of	Elec	trica	l Pow	er	SUBJE	ст с	DDE	18EE	742
CO & PO M	APPIN	NG								1		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	3	2	2	2	1	1		1	•	•	1
CO2	2	3	3	3	2	1	1		1		•	3
CO3	2	3	2	1	2	1	1		1	-		1
CO4	2	3	•	1	2	1	1	-	1			1
CO5	2	3	2	1	2	1	2	-	1	-		3
AVERAGE	. 2	3	2.25	1.62	2	1	1.2		1			1.8
	tan in					OVE	RAL	L MAPI	PING	OF SUE	BJECT	1.763

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	POS	PO9	PO10	PO11	PO12
CO1	51	1.02	1.53	1.02	1.02	1.02	0.51	0.51		0.51			0.51
CO2	45	0.9	1.35	1.35	1.35	0.9	0.45	0.45		0.45			1.35
CO3	52	1.04	1.56	1.04	0.52	1.04	0.52	0.52		0.52		2700	0.52
CO4	53	1.06	1.59		0.53	1.06	0.53	0.53		0.53			0.53
C05	52	. 1.04	1.56	1.04	052	1.04	0.52	1.04		0.52		1122	1.53
AVERAGE	50.6	1.012	1.518	1.112	0.788	1.012	0.506	0.61		0.506			0.888
	0111		1123		14.6	LE		FIN	AL AT	TAIN	MENTI	EVEL	0.8835

11.1

VILSEM EEE.	1/	TES	TI.	1/	TEST	12	1/	A TES	13		11222	Assig	nment.						EE.				12	TOTAL	in and the			is contract	AV	ERAGE	and the second
USN	C01	CO2	TOTAL	COM	CO4	TOTAL	C04	C05	TOTAL	C01	CO2	CON	CO4	C05	TOTAL	CO1	CO2-	CO3	CO4	CO5	TOTAL	CO1(34)	CO2	CO3	CO4	CO5	CO1(34)	CO2(34)	CO3(34)	£04(54)	CO5(34)
15V17EE006	10	16	26	13	15	28	16	14	30	2	2	2	2	2	10	7.6	7.6	7.6	7.6	7.6	38	19.6	25.6	22.6	40.6	23.6	0.576	0.753	0.665	0.752	0.6941
15V17EED12	9	7	16	÷9	11	20	10	14	24	2	2	2	2	2	10	4.2	4.2	4.2	4.2	4.2	21	15.2	13.2	15.2	27.2	20.2	0.447	0.388	0.447	0.504	0.5941
15V18EE002	8	1	9	3	9	12	9	6	15	2	2	2	2	2	10	6.4	6.4	6.4	6.4	6.4	32	16.4	9.4	11.4	26.4	14.4	0.482	0.276	0.335	0.489	0,4235
15V18EE003	10	8	18	13	7	20	13	12	25	2	2	2	2	2	10	5.2	5.2	5.2	5.2	5.2	26	17.2	15.2	20.2	27.2	19.2	0.506	0.447	0.594	0.504	0.5647
15V18EE004	16	10	26	12	13	25	12	15	27	2	2	2	2	2	10	6.2	5.2	6.2	6.2	6.2	31	24.2	18.2	20.2	33.2	23.2	0.712	0.535	0.594	0.615	0.6824
L5V18EE005	10	14	24	14	11	25	11	15	26	.2	2	2	2	2	10	6.6	6.6	6.6	6.6	6.6	33	18.6	22.6	22.5	30.6	23.5	0.547	0.665	0.665	0.567	0.6941
1SV18EED06	13	15	28	16	10	26	18	12	30	2	2	2	2	2	10	5.8	5.8	5.8	5.8	5.8	29	20.8	22.8	23.8	35.8	19.8	0.612	0.671	0.700	0.663	0.5824
15V18EE007	9	7	16	10	9	19	9	10	19	2	2	2	2	2	10	4.6	4.6	4.6	4.6	4.6	23	15.6	13.6	16.6	24.6	16.6	0.459	0.400	0.488	0.456	0.4882
SV18EE008	5	3.	8	3	7	10	7	.5	12	2	2	2	2	2	10	4.8	4.8	4.8	4.8	4.8	24	11.8	9.8	9.8	20.8	11.8	0.347	0.288	0.288	0.385	0.3471
15V18EE009	9	2	10	1	4	12	3	5	8	2	2	2	2	2	10	0	0	0	0	0	0	10	4	10	9	7	0.294	0.118	0.294	0.167	0.2059
ISV18EE011	34	6	20	9	7	3.6	11	13	24	2	2	2	2	.2	10	5.2	5.2	5.2	5.2	5.2	26	21.2	13.2	16.2	25.2	20.2	0.624	0.388	0.476	0.467	0.5941
15V18EE012	5	3	8	8	4	12	4	6	10	2.	2	2	2	2	10	0	0	0	0	0	0	7	5	10	. 10	8	0.206	0.147	0.294	0.185	0.2353
15V19EE400	9	11	20	13	11	24	13	15	28	2	2	2	2	2	10	4.4	4.4	4,4	4,4	4.4	22	15.4	17.4	19.4	30.4	21.4	0.453	0.512	0.571	0.563	0.6294
15V19EE401	7	13	20	13	10	23	15	11	26	2	2	2	2	2	10	5.4	5.4	5.4	5,4	5.4	27	14.4	20.4	20.4	32.4	18.4	0.424	0.600	0.600	0.600	0.5412
15V19EE402	13	15	29	18	10	28	19	11	30	2	2	2	2	2	10	5.4	5.4	5.4	5.4	5.4	27	20.4	23.4	25.4	36.4	18.4	0.600	0.558	0.747	0.674	0.5412
15V19EE403	10	5	15	14	11	25	12	8	20	2	2	2	2	2	10	5.4	5.4	5.4	5,4	5.4	27	17.4	12.4	21.4	30.4	15,4	0.512	0.365	0.629	0.563	0.4529
15V19EE404	13	3	22	9	20	29	10	14	24	2	2	2	2	2	10	4.4	4.4	4.4	4,4	4.4	22	19.4	25.4	15.4	36.4	20.4	0.571	0.453	0.453	0.674	0.6000
15V19EE405	20	6	26	8	17	25	17	10	27	2	2	2	2	2	10	6.2	6.2	6.2	6.2	.6.2	31	28.2	14.2	16.2	42.2	18.2	0.829	0.418	0.476	0.781	0.5353
DTAL	189	152	341	193	186	379	209	196	405	36	36	36	36	. 36	180	87.8	87.8	87.8	87.8	87,8	439	312.8	275.8	316.8	519	319.8	9.7	8.11176	9.31765	9.60741	9.40588
otal students	18	18	18	18	18	18	18	18	18	18	18	18	18	-18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Avearge	11	8	19	11	10	21	12	11	23	2	2	2	2	2	10	5	5	5	5	5	24	17	15	18	29	18	51	45	52	53	52

UTILIZATION OF ELECTRIC POWER 18EE742 2021-22

G. G. R. R. W. Head of the Department Electrical & Electronics Engineering Shridevi Institute of Engineering & I... TUMKUR-572186

PRINCIPAL STET, TUMARURU 0

ŧ

Sri Shridevi Charitable Truat (R.) SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

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

TRIDEVI Phone: 0616 - 2212629 (Principal 0816 - 2212627, 9686114899 (Telefax: 0816 - 2212628 Email: info@shrideviengineering.org. principal@shrideviengineering.org | Website: www.shrideviengineering.org Principal@shrideviengineering.org | Website: www.shrideviengineering.org Principal@shrideviengineering.org | Website: www.shrideviengineering.org | Principal@shrideviengineering.org | Principal@shrideviengineering.org | Principal@shrideviengineering.org | Website: www.shrideviengineering.org | Principal@shrideviengineering.org | Principal@shridevien

21-22

Academi	c Year :2021-22 (Odd Sem)	Faculty	: MS. Niranjani B
Subject	ENVIRONMENTAL PROTECTIO AND MANAGEMENT	N Semester	: 7
Code	: 18CV753		
THE PARTY	CourseOutcomes		The second second
CO1	Appreciate the elements of Corporate Environm tointernationalenvironmental management system	standards.	
CO2	Lead pollution prevention assessment team and in	plement waste minin	nization options.

CO3 Develop, Implement, maintain and Audit Environmental Management systems for Organizations.

PROGRAM OUTCOMES

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

PO2 Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3 Design / development of solutions: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.

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

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

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

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.

- H R Electrical & Electronics Engineering Shridevi Institute of Engineen 13:303 TUMKUR-572105.

PRINCIPAL

PRINCIPAL SIET., TUMAKURU

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

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

Phone: 0816 - 2212629 | Principal 0616 - 2212627, 9689114899 | Telefax, 0616 - 2212628 SHRIDEVI Email. InfaitshrideviengIneering.org. principal@sbrideviengIneering.org | Website: www.ahrideviengIneering.org roved by AICTL. New Delhi, Renegalised by Gost, of Karnataka and Affiliated to Visvesseraya Technological University, Belagavi)

P011 Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.

P012 Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.

	3.50		1150	(O-PO) Mapp	ping		111	131-2	-	
					1	POs						
COS	1	2	3	4	5	6	7	8	9	10	11	12
CO1	2	0	0	0	0	2	2	2	0	1	0	1
CO2	2	0	0	0	0	2	2	2	0	1	0	1
CO3	2	0	0	0	0	2	2	2	0	1	0	1
Average	2	θ	0	0	0	2	2	2	0	1	θ	1

OVERALL MAPPING OF SUBJECT

1.67

25.15	TANK	11 m	261	12.35	CO-P	O ATT	AINM	ENT	allo/			152.00		
COS	% COS	1	2	3	4	5	6	7	8	9	10	11	12	
CO1	64.45	1.29	0	0	0	0	1.29	1.29	1.29	0	0.64	0	0.64	1.07
CO2	62.95	1.26	0	0	0	0	1.26	1.26	1.26	0	0.63	0	0.63	1.05
CO3	73.26	1.47	0	0	0	0	1.47	1.47	1.47	0	0.73	0	0.73	1.22
Average	66.89	1.34	0.00	0.00	0.00	0.00	1.34	1.34	1.34	0.00	0.67	0.00	0.67	1.12

FINIAL ATTAINMENT 1.12

rincreal SIFT

HOD Head of the Department Electrical & Electronics Engineering TUMKUR-572106.

G.H

PRINCIPAL SIET., TUMAKURU

ourse Instructor

Sub-Code: 18CV753 VII TH SEM NIRANJANEB SUB ENVIRONMENTAL PROTECTION AND MANAGEMENT

d, Na.	USN NO	1	A1	Ľ	A2	, I			ASSIG	NMENT			IE MARI	cs	s	IE MARI	cs	60 MARKS	cos	PERCEN	TAGE
		CO1	TOTAL.	CO2	TOTAL.	CO3	TOTAL.	coi	CO2	CO3	TOTAL.	COL	CO2	CO3	coi	CO2	CO3	SIE	CO1	C02	C03
1	1SV17EE006	24	24	23	23	-23	23	3,33	3.33	3.33	10	27.33	26.33	26.33	11.67	13.67	11.67	35	73.13	71.25	71.
2	1SV17EE012	21	21	26	26	29	29	3.33	3.33	3.33	10	74.11	29.33	32.33	15	15	15	45	73.75	83.12	88.
3	15V18EE002	20	20	5	5	26	26	3.33	133	3.33	10	23.33	8.33	29.33	13.47	13.67	13.67	41	69.38	41.25	80.
4	ISVI8EE003	19	19	23	23	30	30	3.33	1.33	3,33	10	22.13	26.33	33.33	33	33	31	33	62.50	70.00	83.
3	ISV18EE004	25	29	20	20	30	30	3.33	1.33	3.33	10	32.33	23.33	33.33	IJ	13	13	39	85.00	68.12	16.
6	ISVI8EE005	17	17	11	11	30	30	3.33	1.13	3.31	10	20.33	14.33	33.33	14.67	14.67	14.67	44	65.63	54.38	90
7	1SV18EE006		27	27	27	30	30	3.33	3.33	3.33	10	30.33	30.33	\$3.33	11	11	11	33	77.50	77.50	83
8	ISV18EE007	17	17	17	17	-15	15	1.33	3.33	3.33	10	20.33	20.33	18.33	9			27	55.00	55.00	51
9	15V18EE00%	.20	20	17	17	9	9	3.33	3.13	3.33	10	23.33	20.33	12.33	11.67	11.67	11.67	35	65.63	60.00	45
10	ISV18EE009	11	11	8	8	8	8	3.33	133	3.33	10	14.33	11.33	11.33	0	0		0	26.87	21.25	21
11	ISV18EE011	23	23	18	18	24	24	3.33	1.33	3.33	10	26.33	21.33	27.33	u	12	12	36	71.87	62.50	23
12	ISVIBEE012	11	11	9	9	24	24	3.33	3.33	3.33	10	14.33	32.33	27.33	9.67	9.62	9.67	29	45.00	41.25	69
13	ISV19EE400	17	17	22	22	30	30	3,33	3.13	3.13	10	29.33	25.33	33.33	12.67	12.67	12.67	38	61.88	71.25	86
14	15V19EE401	19	19	17	17	23	23	3.33	1.33	3.33	10	11.33	30.53	26.33	11	11	31	33	62.50	58.75	70
15	ISV19EE402	25	25	29	29	30	30	1.33	1.33	1.33	10	28.83	32.33	33.33	11.67	11.67	11.67	35	75.00	82.53	
16	15V19EE403	22	22	26	26	23	23	3.33	3.33	3.33	10	25.33	29.33	26.33	20.33	10.33	10.33	33	66.87	74.37	68
17	1SV19EE404	23	23	21	21	30	30	3.33	133	3.33	10	26.33	24.33	13.33	i1.67	11.67	11.67	35	71.25	67.50	64
18	1SV19EE405	24				30	30			3.33		27.33	29.33		9.67				65.45	and the second se	And in case of the local diversion of the loc

G. U Ramo

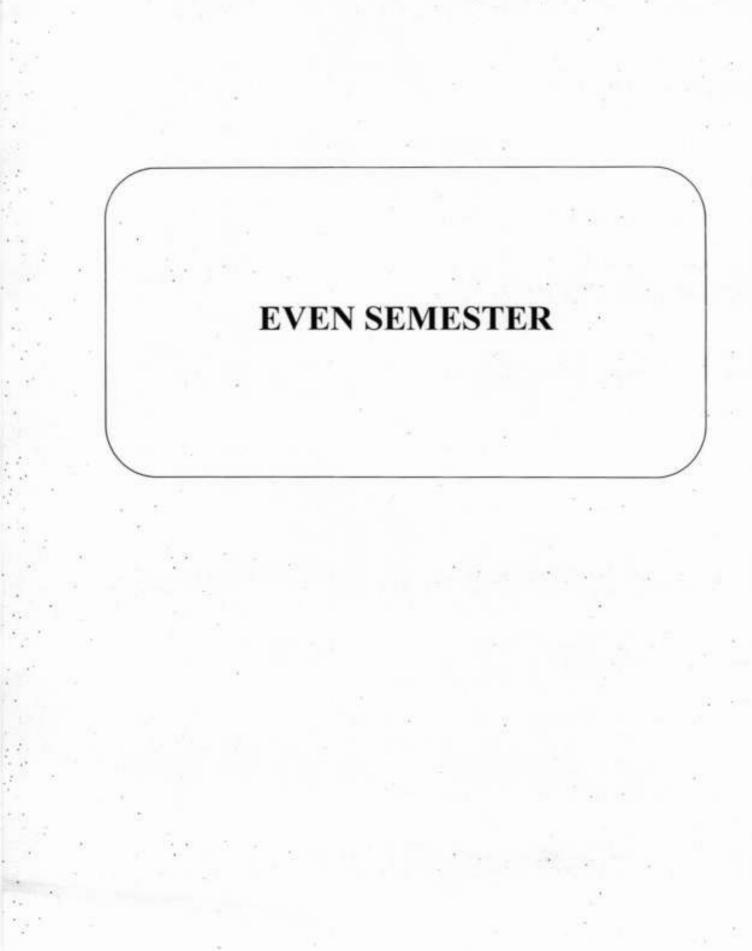
Shridevi Institute of Engineering & Technology TUMKUR-572106.

MAKURU.

*** 1.c......

COs & POs

2021-22





SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF EEE

4 21-22

SUBJECT POWER GENERATION ECONOMICS

SUBJECT CODE

18EE42

COURSE OUTCOME

- CO1. Describe the working of hydroelectric, steam, nuclear power plants and state functions of major equipment of the power plants.
- CO2. Classify various substations and explain the functions of major equipments in substations.
- CO3. Explain the types of grounding and its importance
- CO4. Infer the economic aspects of power system operation and its effects
- CO5. Explain the importance of power factor improvement.

PROGRAM OUTCOMES

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

G. LE Row-Head of the Department Electrical & Electronics Engineering Shridevi Institute of Engineering & Technology TUMKUR-572106.

PRINCIPAL

SET LIMAKIRU

COLLEGE		SHR	DEVI	INSTI	TUTE	OF E	NGIN	EERIN	G & T	ECHNO	DLOGY	۲. st.
FACULTY	NAM	E	MRS. S	WET	HAT	м						1
BRAN	СН		I	EEE		А	CAD	EMIC Y	EAR		2021	-22
COURSE	B.I	ε	SEM	ESTE	R			SECTIO	ON			
SUBJECT	POW	ER G	ENER	ATION	ECO	NOM	ics	SUBJE	стс	DDE	18E8	42
CO & PO M	APPIN	G										
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	.3	3	2			2	2	1	1	1.		1
CO2	2	2	2			2	1	1	1	1		1.
CO3	3	2	2			2	2	1	1	1		1
CO4	.2	2	2			2	2	1	1	1		1
CO5	3	2	2			2	1	1	1	1	-	1
AVERAGE	2.6	2.2	2			2	1.6	1	1	. 1		1
		131			THE A	OVE	RAL	L MAP	PING	OFSU	BJECT	1.6

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
COI	76	2.28	2.28	1.52		-	1.52	1.52	0.76	0.76	0.76		0.76
CO2	68	1.36	1.36	1.36			1.36	0.68	0.68	0.68	0.68		0.68
CO3	72	2.16	1.44	1.44	1200		1.44	1.44	0.72	0.72	-0.72	ECCEPTION OF THE	0.72
- CO4	77	1.54	1.54	1.54			1.54	1.54	0.77	0.77	0.77		0.77
CO5	60	1.8	1.2	1.2			1.2	0.6	0.6	0.6	0.6	199	0.6
AVERAGE	70.6	1.828	1.564	1.412			1.412	1.156	0.706	0.706	0.706		0.706
	1844	Sec.	1	in the second				FIN	AL AT	TAINM	IENT L	EVEL	1.1328

G. H. Rows Head of the Department Electrical & Electronics Engineering Bhildevi Institute of Engineering & Tou-TUMPUR-572106

min -He-PRINCIPAL SIET. TUMAKURU

2

46.14 IV.128	100	Et		TEST	1	1	TEN	1.1		1		-	_	Arri	ernant .	_			-			1.468.2	1112022			0	1.1	TOTAL	11		-		Antrep		
1.50	6.01	C001	101.41	1000	0.04	FUEA	001	C00	0.00	0.04	0.01	TUCAL	2001	-cm	CON	004	005	TOTAL.	1001	CON	CDB		0.04	001	1004	COUD41	1000040	0096540	104(%)	001(14)	COSTHE	mainer	CONDER	algeoryal.	DONCHLI
1341961014	12	18	88	18	18	34	18	.11.	3.6	1	1					-	1	1	0 7	u	12	. 3.3	7.7	- 22		6 9	e 8	1. 1	4	18. J	4 - 1	1			4
LTV1-9626319	38	5.	19	19	11	11	17	18	. 9	1	1 1	1 7	P	1		- · · · ·	2	1 1	0 7	4	7.67	7.6	2,6	. 7.8		1	5 A		A	4	1 0	1	1	11	
TAXAGETOR	12	11	33	.10	18.	28	18	. 9	12	-	r 11	5	1	1	(· · · ·)	()	1	1 1	0 i	1.1	4.1	4.3	6.2	8.2		1 2	N 2	1 2	8	6 1	4 3	1	A	- Y	- 40
15920F8092	-15		- 25	34	35	- 81	18	11.	. 0	1	F	4	6	1	-	-	2	3 1	0 1	12	9.3	9,2	9.2	84		6	2	1 1	1 1	9 3	A	1 5		- 10	11
119200300	37	1.9	36	39	81	39	19	319		1	9 L	1 1	f	()	· · · ·	()	2	1 1	12	4	. 1					1 1	1 4	1 4	9 9	0	4 5	1 1		11	1 28
11x2011004	10.	11		39	17.		19.	. 19	3.8		7)	9	0		-	1	2	1	£	1						·		1 4	4 4	0	AB			- H	
12/2010/008	18	13		18	14	11	18	117	. 15	- 1	1 1	1	1	1	-		1	1 1	1		1.8	1.80	7.8	11			1	1 6	4 4	4	A8	1 1			
13V20E1007	1		34		18	11	18	11.	19	1	1		1	-		-	1	1 1	8 ·	1	7			1		9	1 1	<u> </u>	81	B	6 <u> </u>		f		
TOTAL	1.1.8	100.	- 716	126	171.	201	1.126	117	218	7,77	87	- 1/1	14	34	10	10				10	78			295				10	0	2 11	1 60	14	- 3.7		445
Total students	. 8	1		. 8.	Χ.	. 4	1	. 8				1		8	A	1	1	1	1.1.	4	-							1	1		1	1	. B.		
Average	14.5	12.5	27	15.8	10.88	32,63	1 NR.	344	13.5	164.0	10.875	71,975	1 3	2	1 2	1		- 38	3.375	7.97	5	將	7,375	31.175	48.875	87	1 10	- 49	- 70	- 29	26	- 66	1.78		- 647

PG82025-2022

÷

1. de 11.

28

TUMKUR-572106



SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS

SUBJECT

TRANSMISSION & DISTRIBUTION SUBJECT CODE

18EE43

COURSE OUTCOME:

CO1: Explain transmission and distribution scheme, identify the importance of different Transmission systems and types of insulators.

CO2:Analyze and compute the parameters of the transmission line for different configurations. CO3: Assess the performance of overhead lines.

CO4: Interpret corona, explain the use of underground cables.

CO5: Classify different types of distribution systems; examine its quality & reliability.

PROGRAM OUTCOMES:

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

PO2 Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3 Design / development of solutions: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.

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

P05 Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling to complex engineering activities. P06 The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.

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.

> G - LI & Head of the Department Electrical & Electronics Engineering Shridevi Institute of Engineering & Technology TUMKUR-572196.

PRIAL CAL

COLLEGE		SHR	IDEVI	INSTI	TUTE	OF EN	GIN	EERING	5 & TI	CHNO	DLOGY	
FACULTY	NAM	E 1	FANUJ	A K.S								
BRAN	CH		I	EEE		A	CADI	EMIC Y	EAR		2021	-22
COURSE	B.	E	SEM	ESTE	R	IV	s	ECTIO	N		EEE	
SUBJECT	TR	ANSM	ISSIO	N & D	ISTRI	BUTIO	N	SUBJE	ст со	DDE	18EJ	E43
CO & PO M	APPI	NG					-					
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
18EE54.1	3		2	•	3	2	2			2	(all)	
18EE54.2	1	2	2		2		2					
18EE54.3	1	3	3	3		2				2	2	
18EE54.4	1	3	3		2							
18EE54.5	2	3	3	3				191		2 *	2	
Avg Map	1.6	2.75	2.6	3	2.33	2	2	1		2	2	
and or the		1991		1.1	1911	OVI	RAL	L MAP	PING	OF SUE	BJECT	2.25

×.

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C01	86.64	2.6		1.73		2.6	1.73	1.73			1,73		
CO2	34.38	0.34	0.69	0.69		0.69		0.69					
CO3	52.59	0.53	1.6	1.6	1.6		1.05		1		1.05	1.05	
CO4	48.71	0.49	1.46	1.46		0.97							
CO5	49.14	0.98	1.47	1.47	1.47						0.98	0.98	
AVERAGE	61.81	1	1.3	1.39	1.54	1.42	1.39	1.21		-	1.25	1.02	

160 Dunto

PRINCIPAL SIL LUMARUM.

EER

Acedemic tread	187	14.21	hE.M.				Tutal strong	111		T	Se	light .	TRANS?	CRISION AT	NE BUTT	101/110/1		Sabje	et Cude	100	£43			-		1.	T	-
SENSAMEC' FAR	1A TES	T HORM:		7137.30	0M0	14	101730	RMD .		ASSIGNE	MENT (Q	UB2210 N			66	E MARKS	(00)			Total	IN ATTAI	NHENT			¥.,	of individual	0	
liss	6.04	TOTAL	001	.000.	TOTAL	0.00	C09	TOTAL.	. 000	6.66	000	001	1001	.CO1+12	C03	003	7 684	0.05	C01+29	-000-44	0.00-09	004-19	CQ8=29	001	0.00	6.01	609	001
TEAL BOOM DE LA COMPACTION DE LA COMPACTICIÓN DE LA COMPACTICICA DE LA COMPACTICA DE LA COMPACTICICA DE LA COMPACTICA DE LA COMPACTICA DE LA COMPA	11	21			11	1	1	4	1	1	3		1	4.4	4.4	4.8	4.4	4.4	17.4	11.4	17.4	8.4	8.4	94,48376	25.90908	42.75842	38.96152	18.9655
15Y5ME008	. 8	D	- Y			30	38	20	2	1	1	1	1	4.2	4.2	4.2	43	4.2	4.2	11.7	12.2	16.7	36.2	21.37901	101	43.06817	95.86207	15.9420
111/20151005	14	54	. 4	4		6	5	-11	2	2	1	- 2	1	24	2.4	2.4	. 2.4	2.4	38.4	8.4	8.4	10.4	9.4	43,44828	29.09091	38.06552	15.86207	31,4187
131/2068002	18	15			18		. 6	11	1	1	1	1	1	3.4	3.4	3.6	3.4	1.4	30.4	38.6	14.4	10.8	11.8	70,24485	42.72727	49.6/1517	15.86207	39,3325
1542066903	30	80.		18	10	1		15	2	2		1.2	2	2	y					24			12	334.4826	54,54545	82,75862	95.37343	58.8206
11+2000004	11	23			10	10	- 10	.10	2	3	1	1		4.2	4.3	.4.2	.8.5	4.1	19.2	18.8	14.7	16.3	16.2	100.6887	30	48.96555	15.86207	55.8620
11+29(10)06	16	18	19	11	24	11	. 15	30	1	1	1	1	1		- F	1	. 1	1	28.	25			.24	86,2068	47.72727	12,41379	82,25862	82,7586
115/2018/007	19	73			14		. h.	10	2	1	1	1		4.4	4,4	4.4	4.4	8.6	71.4	15.4	15.4	11.4	15.4	112.068	.15	\$8,30945	79.31034	19.3000
										1									25.125	15.529	18.25	14,125	14.25	85.61718	34.175	1234671	A8.7069	48.1379

1

Tangfu.s

ä.,

KEO

G. U. R. A. Head of the Department Head of the Department Head of the Department Recting a Technology TUMNUN-5/2109

Stat-

1

DEPARTMENT OF EEE

SUBJECT	ELECTRIC MOTORS	SUBJECT CODE	18EE44	

COURSE OUTCOME

C01	Explain the construction, operation and classification of DC Motor, AC motor and Special purpose motors
CO2	Describe the performance characteristics & applications of Electric motors.
CO3	Demonstrate and explain the methods of testing of DC machines and determine losses and Efficiency
CO4	Control the speed of DC motor and induction motor.
C05	Explain the starting methods, equivalent circuit and phasor diagrams, torque angle, effect of change in excitation and change in load, hunting and damping of synchronous motors

PROGRAM OUTCOME

- PO1 Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- PO2 Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- PO3 Design / development of solutions: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- PO4 Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and provide valid conclusions.
- PO5 Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling to complex engineering activities.
- PO6 The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- 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: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.

Head of the Department Electrical & Electronics Engineering Shridevi Institute of Engineering & Technology TUMKUR-572186.

PRINCIPAL SIET

COLLEGE		SHRI	DEVI	INSTI	TUTI	OFE	GIN	EERIN	G & T	ECHNO	DLOGY	
FACULTY	NAM	E I	UMAB	AI								
BRAN	СН		I	EEE		A	CAD	EMIC Y	EAR		2021-2	2022
COURSE	В.	Е	SEM	ESTE	R	IV	1	SECTIO	N			
SUBJECT		EL	ECTR	IC MO	OTOF	as		SUBJE	ст с	DDE	18E8	44
CO & PO M	APPIN	NG.							. 4			
	POI	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	POII	PO12
CO1	3	2	2	2	2	2						1
CO2	3	2	2	2	2	2						1
CO3	3	2	3	2	- 2	2						1
CO4	3	2	2	2	2	2						1
CO5 -	3	2	2	2	2	2	100	i denzi d	120			2
AVERAGE	3	2	2.2	2	2	2						1.2
ALS NO T			19-10			OVI	RAL	L MAP	PING	OF SUI	BJECT	2.05

	C0%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	62	1.86	1.24	1.24	1.24	1.24	1.24						0.62
CO2	49	1.47	0.98	0.98	0.98	0.98	0.98					-	. 0.49
CO3	69	2.07	1.38	2.07	1.38	1.38	1.38					in the second	0.69
CO4	61	1.83	1.22	1.22	1.22	1.22	1.22						0.61
C05	63	1.89	1.26	1.26	1.26	1.26	1.26			•	1		0.63
AVERAGE	60.8	1.824	1.216	1.354	1.216	1.216	1.216						0.608
	Part &			TIT	1795		1	FIN	ALAT	TAIN	MENT I	EVEL	1.235

PRINCIPAI SIET., TUMAKURU

G. U. Row----Head of the Department Electrical & Electronics Enginetring Shridevi Institute of Engineering & Iccurriciogy TUMKUR-572106

SEM: IV, EEE	I.	A TEST	1	1	A TES	12	. 1	A TES	13			Assig	ament		and the second			SE	æ		unaise of			TOTAL.	0.000	Land A	1 August	A	VERA	GE	
USN	COL	C02	TOTAL	CO3	C04	TOTAL	CO4	C05	TOTAL	C01	C02	CO3	C04	COS	TOTAL	C01	CO2	CO3	C04	COS	TOTAL	C01(34	CO2(34	CO3(34)	04(54	C05(34)	CO1	CO1	CO3	CO4	COS
15V19EE003	20	9	29	14	17	31	18	13	31	2	2	2	2	2	10	4.8	4.8	4.8	4.8	4.8	24	26.8	15.8	20.8	37	19.8	79	46	61	69	58
15V19EE018	20	12	32	13	8	21	19	- 9	28	2	2	2	2	.2	10	4.2	4.2	4.2	4.2	4.2	21	26.2	18.2	19.2	29	15.2	77	54	56	54	45
15V20EE001	4	30	14	16	. 9	25	14	8	22	2	2	2	2	2	10	2.4	2.4	2.4	2.4	2.4	12	8.4	14.4	20.4	25	12.4	25	42	60	46	36
15V20EE002	11	0	11	18	б	24	12	20	32	2.	2	2	2	2	10	4.8	4.8	4.8	4.8	4.8	21	17.8	6.8	24.8	20	26.8	52	20	73	37	79
15V20EE003	16	15	31	19	17	36	20	18	38	2	2	2	2	.2	10	7.6	7.6	7.6	7.6	7.6	38	25.6	24.6	28.6	39	27.6	75	72	84	72	81
15V20EE004	15	10	25	17	19	36	18	18	36	2	2	2	2	2	10	3.6	3.6	3.6	3.6	3.6	18	20.6	15.6	22.6	39	23.6	61	46	66	72	69
15V20EE006	13	16	29	16	16	32	20	20	40	2	2	2	2	2	10	7.8	7.8	7.8	7.8	7.8	39	22.8	25.8	25.8	38	29.8	67	76	76	70	88
1\$V20EE007	11	4	15	17	16	33	18	9	27	2	2	2	2	2	10	6.4	6.4	6.4	6.4	6.4	32	19.4	12.4	25.4	36	17.4	57	36	75	67	51
TOTAL	110	76	186	130	108	238	139	115	254	16	16	16	16	16	80	41.6	41.6	41.6	41.6	41.6	205	167.6	133.6	187.5	263	172.6	493	393	552	487	508
fatal students		8	1	8	: 8	8	8	8		8	.8		1	. 8	. 8	8	8			8	8	8	8	8		8	8	8	8	8	8
Average	13.75	9.5	23.25	16.3	13.5	29.75	17.4	14.38	31.75	2	2	2	. 2	2	10	5.2	5.2	5.2	5.2	5.2	25.63	20.95	16.7	23.45	32.9	21.575	62	49	69	61	63

ELECTRIC MOTOR: 18EE44 2021-22

NURC

G - - & C Head of the Department Head of Electronics Engineering a matrove of Engineering & Techr TUMKUR-572106

6

SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF EEE

SUBJECT	ELECTROMAGNETIC FIELD THEORY	SUBJECT CODE	18EE45
Sebaler	THEORY		000000000

COURSE OUTCOME

COI	Use different coordinate systems, Coulomb's Law and Gauss Law for the evaluation of electric fields produced by different charge configurations.
CO2	Calculate the energy and potential due to a system of charges & Explain the behavior of electric field across a boundary conditions
CO3	Explain the Poisson's, Laplace equations and behavior of steady magnetic fields.
CO4	Explain the behavior of magnetic fields and magnetic materials.
CO5	Asses time varying fields and propagation of waves in different media.

PROGRAM OUTCOMES

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

Nome l Dolut -0

Slat. Lune

COLLEGE		SHR	IDEVI	INSTI	TUTI	E OF E	NGIN	EERIN	G & T	ECHN	OLOGY	(
FACULTY	NAM	E	MR. G	H. RA	VIKU	JMAR			3	1	- 22	
BRAN	СН		I	EEE		A	CAD	EMIC Y	EAR		2021	-22
COURSE	B.1	E	SEM	ESTE	R	IV	1	SECTIO	N			
SUBJECT	F	ELEC	TROM	AGNE		FIELD		SUBJE	стс	ODE	18E	E45
CO & PO M	APPIN	G										
	'PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2		10.00	•		•		•			- "
CO2	3	2	•	-	-	-	4		-	-	-	-
CO3	2	3		-		·			-			
CO4	2	3		-				-	-	-		
CO5	2	3	•		•		+	1		•		-
AVERAGE	2.4	2.6						-	-			
fairle h	5177		TTTT.		125	OVE	RAL	L MAP	PING	OF SUI	BJECT	2.5

	C0%	POI	PO2	PO3	PO4	PO5	PO6	PO7	POS	209	PO10	POIT	PO12
CO1	73.79	2.213	1.475										1.0
°CO2	65.92	1.977	1.318								is and		
CO3	56.39	1.127	1.691	CERCIL!			2.55						1.25
CO4	66.30	1.326	1.989										
CO5	73.16	1.463	2.194		1			-	Same	2 123 manufi	COCTI Mictory		Raisr Balan
AVERAGE	53.73	1.621	1.733							134.0			
			1231		tac.		121110	FIN	AL AT	TAIN	MENT I	EVEL	1.677

G. H. R. Head of the Department Electrical & Electronics Engineering Shridevi Insulae of Engineering & Technology TUMKUR-572106.

Academic yea	2021	1-22		SEM	IV -		To	tal str	ength	8	1.12	Sut	ject	ELEC	TRO MA	GNETI	C FIEL	D THEC	Subje	et Cede	18E	E45							÷	
SEMHY	IA T	EST 1	(30M)	1A 1	EST 2	(30M)	IA T	EST 3	5(30M)	ASSI	GNEM	dENT /	QUIZ(10 M)		SEE	MARKS	S(60)			Total CO	S ATTA	INMENT	t	annota	% of a	ndividua	100	Same	SEE TO
USN	COL	CO2	TOTAL	CO3	C04	TOTAL	C04	COS	TOTAL	C01	C01	C03	CO4	CO5	CO1=12	CO2	COM	CO4	CO5	C01+29	CO2=34	C03=34	CO4=34	CO5+49	CO1	CO2	C03	C04	C05	6054
15V19EE003	15	15	30	10	8	18	13	15	28	2	2	2	2	2	6.2	6.2	6.2	6.2	6.2	23.2	23.2	16.2	16.2	23.2	80	68.24	47.65	47.65	47.35	31
15V19EE018	13	9	22	'11	9	20	13	14	27	2	2	2	2	2	2.2	2.2	2.2	2.2	2.2	17.2	24.2	13.2	17.2	18.2	59.31	55.00	45.52	59.31	62.76	11
15V20EE001	13	11	24.	8	10	18	14	15	29	2	2	2	2.	2	4.4	4.4	4.4	4.4	4.4	19.4	25.4	16.4	20.4	21.4	66.90	57.73	56.55	70.34	73.79	22
15V20EE002	13	12	25	6	11	17	11	15	26	2	2	2	2	2	1.2	1.2	1.2	1.2	1.2	16.2	21.2	14.2	14.2	18.2	\$5.86	48.18	48.97	48.97	62.76	6
15V20EE003	15	15	30	13	11	24	12	14	26	2	2	2	2	Z	9.6	9.6	9.6	9.6	9.6	26.6	39.6	22.6	23.6	25.6	91.72	90.00	77.93	81.38	\$8.28	48
15V20EE004	15	13	28	9	9	18	11	16	27	2	2	2	2	2	4.4	4.4	4.4	4.4	4.4	21.4	28.4	15.4	17.4	22.4	73.79	64.55	53.10	60.00	77.24	22
15V20EE006	14	14	28	11	9	20	15	15	30	2	2	2	2	2	9	9	9	- 9	9	25	36	20	26	26	86.21	81.82	68.97	89.66	89.66	45
15y20EE007	13	9	22	9	6	15	12	15	27	2	2	2	2	2	7.2	7.2	7.2	7.2	7.2	22.2	27.2	15.2	21.2	24.2	76.55	61.82	52.41	73.10	83.45	36
	-		-		-		-	-		-	-		-				-	-			-	-				-	-		-	
	-		-																						73.79	65.92	56.39	66.30	73.16	27,63

G. H. Rama

.

11.

G. HRang

Shndevi Institute of Engineering & Technology TUMKUR-572105.

19.25

PRINCIPAL

No mon PRINCIPAL SIET. TUMAKURU

PRINCIPAL SIET., TUMAKURU 2 4

SHRIDAY

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

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

SUBJ	ECT	Operational Amplifiers & Linear ICs	SUBJECT CODE	18EE46
OURSE C	UTCOME			
CO1	Describe	the characteristics of ideal and practical operational	l amplifier.	(注意)
000				

CO2	Design filters and signal generators using linear ICs.
CO3	Demonstrate the application of Linear ICs as comparators and rectifiers.
CO4	Analyze voltage regulators for given specification using op-amp and IC voltage regulators.
CO5	Summarize the basics of PLL and Timer.

PROGRAM OUTCOMES

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

G. U Qans Host of the Department Electronics Engineering - inscribe of Engineering & Technology UUKUR-572106

PRINCIPAL SHET TUMAKURU

COLLEGE		SHR	IDEVI	INSTI	TUTE	OF E	NGIN	EERIN	G & T	ECHNO	DLOGY	
FACULTY	NAM	E	Mr. NA	VEEN	KUM	AR					1	
BRAN	СН		ł	EE		A	CADI	EMIC Y	EAR		2021	-22
COURSE	B.	E	SEM	ESTE	R	IV	s	ECTIO	N		EEE	
SUBJECT	o	perati	onal An	nplifier	s & Lin	ear ICs		SUBJE	ст со	DDE	18EI	E46
CO & PO M	APPI	NG										
Carl and and and	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	POII	PO12
CO1	2	2	1.10									2
CO2	2	2										2
CO3	2	2		111								2
CO4	2	2			-							2
CO5	2	2										2
AVERAGE	2	2										2
						OVE	RAL	L MAP	PING	OF SUE	BJECT	2

Stane w	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
COI	76.03	1.52	1.52										1.52
CO2	78.52	1.57	1.57				100						1.57
CO3	66.81	1.336	1.336					-164					1,336
CO4	82.93	1.658	1.658									_	1.658
• CO5	50.07	1.001	1.001				-					1. A. S.	1.001
AVERAGE		1.417	1.417									1. min-	1.417
	Y		144		Set.	The L		FINA	LAT	TAIN	MENTI	EVEL	1.417

3

PRINCIPAL SIET., TUMAKURU.

Shides was TUMKUR-572106.

Academic yea	- 202	1-22		SEM	IV		To	tai str	ength	8	4	Sub	jeet	Op	Amps & l	LINEA	RIcs		Subje	et-Code	18E.	E45			24			1.1	C	
SEM:IV	IA T	EST I	(30M)	IAT	EST 2	(30M)	IA T	EST J	(3051)	ASS	IGNEN	IENT /	QUIZ(1	0 M)	1000	SEE	MARKS	s(60)	-	1	Futal CO	ATTA	INMEN	T	- CHARGE	% of	Individu	al CO		SEE T
USN	COL	C02	TOTAL	C03	CO4	TOTAL	CO4	COS	TOTAL	COL	COL	CO3	CO4	COS	CO1=12	CO1	CON	CO4	COS	CO1=29	CO2=34	CO3-34	CO4-34	CO5-49	CO1	CO2	C03	CO4	COS	603
15V19EE003	15	15	30	13	11	24	6	5	11	2	2	2	2	2	3.4	3.4	3.4	3.4	3.4	20.4	20.4	16.4	20.4	10.4	70.34	60	48.24	60	25.22	17
ISV19EE018	15	15	30	12	12	24	10	8	18	2	2	2	2	2	4.6	4.6	4.6	4.6	4.5	21.6	33.6	18.6	26.6	14.6	74.48	76.36	64.14	91.72	50.34	23
1SV20EE001	14	13	27	13	14	27	6	8	14	2	2	2	2	2	1.6	1.6	1.6	1.6	1.6	17.6	29.6	17.6	21.6	11.6	60.69	67.27	60.69	74.48	40.00	8
15V20EE002	15	15	30	11	10	21	5	8	13	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	21.8	32.8	16.8	19.8	14.8	75.17	74.55	57.93	68.28	51.03	24
15V20EE003	15	15	30	15	14	29	12	13	25	2	2	2	2	2	8.4	8.4	8.4	8.4	8,4	25.4	40.4	24.4	34.4	23.4	87.59	91.82	84.14	118.62	80.69	42
1SV20EE004	15	15	30	15	12	27	8	10	18	2	2	2	2	2	7	7	7	7	7	24	39	21	27	19	82.76	88.64	72.41	93.10	65.52	35
15V20EE006	15	15	30	14	12	26	7	11	18	2	2	2	2	2	7	7	7	7	7	24	38	21	26	20	82.76	B6.36	72.41	89.66	68.97	35
15V20EE007	15	15	30	15	15	30	_0	0	0	2	2	2	2	2	4.6	4,6	4.6	4.5	4.6	21.6	36.6	21.6	19.6	6.6	74.48	83.18	74,48	67.59	22.76	23
		-	-	-	-		-	-			-	-		_				-	-	-	-	-			-	-	-		-	1
				-	-		_	-			-	-													76.03	78.52	66.81	82.93	\$0.07	25.1

PRINCIPAL SIET TUMAKURU

0

G. H. Racco Contractment Contract Engineering Contracting & Technology Contracting & Technology

.

20

 \mathbb{C}^{1}



SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS

SUBJECT

CONTROL SYSTEMS

SUBJECT CODE

18EE61

S11.

COURSE OUTCOME:

CO1: Analyze and model electrical and mechanical system using analogous.

CO2: Formulate transfer functions using block diagram and signal flow graphs.

CO3: Analyze the stability of control system, ability to determine transient and steady state time response.
CO4: Illustrate the performance of a given system in time and frequency domains, stability analysis using Root locus and Bode plots.

CO5: Discuss stability analysis using Nyquist plots, Design controller and compensator for a given specification.

PROGRAM OUTCOMES:

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

PO2 Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3 Design / development of solutions: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.

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

PO5 Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling to complex engineering activities. PO6 The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.

PO7 Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8 Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9 Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10 Communication: Communicate effectively on complex engineering activities with the engineering community and with the society.

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

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

G. 11 6 m Head of the Department Electrical & Electronics Englishming Shridevi Institute of Engineering & Teamology TUMKUR-572106

PRINCIPAL SIE1., RUMAKURU.

COLLEGE		SHR	IDEVI	INSTI	TUTE	OF E	NGIN	EERIN	G & T	ECHNO	DLOGY	6
FACULTY	NAM	E	FANU	JA K.S								
BRAN	СН		H	EEE	-	A	CADI	EMIC Y	EAR		2021	-22
COURSE	B.	E	SEM	ESTE	R	VI	s	ECTIO	N	1	EEE	
SUBJECT		C	ONTRO	OL SY	STEM	s		SUBJE	CT CO	DDE	18EI	261
CO & PO M	APPE	NG			11							
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
18EE61.1	2	3	2	2		1	1	1			÷1	1
18EE61.2	2	3	2	2	1		1	1			1	1
18EE61.3	3	3	2	2		1		1			4	1
18EE61.4	2	3	2	2		-	1	1			1	1
18EE61.5	3	2	3	3		1		1			• 1	1
Avg Map	2.4	2.8	2.2	2.2	1	1	1	1		-	1	1
		11-1	-			OVI	RAL	L MAP	PING	OF SUI	BJECT	1.56

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	POS	PO9	PO10	PO11	PO12
CO1	78.29	1.57	2.35	1.57	1.57			0.78	0.78			0.78	0.78
CO2	44.02	0.88	1.32	0.88	0.88	0.44		0.44	0.44			0.44	0.44
CO3	46.72	1.4	1.4	0.93	0.93		0.47		0.47				0.47
CO4	53.25	1.07	1.59	1.07	1.07			0.53	0.53			0.53	0.53
CO5	53.43	1.6	isa.	1.6	1.6		0.53		0.53			0.53	0.53
AVERAGE	55.14	1.3	1.67	1.21	1.21	0.44	0.5	0.58	0.55			0.57	0.55
1-1-10-10	No.			-		21	1. Stall	FIN	AL AT	TAIN	MENT I	EVEL	1.00

G - H Rave Head of the Department Electrical & Electronics Engineering Shridevi Institute of Engineering & Technology TUMKUR-572196.

PRINCIPAL SIET., TUMAKURU.

1							D41	1983	et Cinda	Bulge		P	SYSTEMS	CONTROL	16	gert.			19	n .	fotal strateg				SEM	9-12		deepin as
	00	of institutions				MENT -	ATTAD	TelsI C	10.0.00		1001	MARKS	543			UE2(10 ND	MENT/Q	ASSIGNE		(M)	TEST JUN	1.4	(M)	TENT 3130	14	T HOUSE		(48) 64
	004	000	100	001	008-29	CB#2P	100-01	092+44	C00+29	CDM	C04	0.00	6.02	CO1+13	cion.	0.04	102	000	C01	TOTAL	101	C04	TOTAL		000	TUTAL	EUI.	UNN.
5 44	#6. P0055	#6.89E35	30.60809	81.379033	11.6	11.6	82.8	11.6	35.4	4.6	4.8	4.8	4.6	4.0		1	1	1	1	- 14	1.	7	14	1	1.	17	17	10001
	40	48.65517	30.41451	#2.58623	17.4	17.4	88.4	13.4	25.4	3.4	3.4	5.4	8.4	3.4	3	1	1	1	1	30	10	10	10	7		10	18	1001
	47,06812	15,37241	23.18382	76.55172	11.2	12.2	90.7	16.7	22.3	4.7	- 43	47	4.2	+2	1	1	1.	1	1	- 12					A	H	16	10001
1.11	60	44.2069	\$7,73727	17.24138	36.4	32.4	33.4	25.4	22.8	4.4	4.4	8.6	1.4	8.4		1.	2.1	1	1	19	E	1	10	1	- E	- 14	14	3001
	31,72414	11.03948	20.45455	85.52734	15	15			19		. 9		. 1	8	3	1	1	1	. 2	36				1	1	37.	12	1004
	\$2,75862		48.18182		19.2	18.2	21.2	111	. 14.7	51	- 52	52	52	52	1	1		2	- 1	23	12	11	29.	. 18	34	27	11	CORE .
	\$2,41379	42.06897	and the second strategy and		14.7	15.2	11.1	32.2	. 11.7	5.1	5.1	1.1	- 5.2	- 5.2	1	1.	1	1		.)5	. t		30	. 4.	. 6.	15	18	1004
	49.35764	42.068111	48.18181	11.30845	18.7	0.2	12.2	12.2	21.2	4.2	-4.2	4.1	4.2	43	1	1	1	1	1	34		P	. 11		- 15	18	- 0.	200*
14	86.89611	76.35372	50.41451	131.7241	25.2	26.2	22.2	12.2		8.2	- 8.2	. 1.7	- KI: .:		1.1		1.	1	1	:10	18				52	18	. 19	2221
	43.55724	19.37143	31.90908	100.8847	11.1	13.2	30.2	15.8	29.2	4.2	4.2	4.2	4.3	- 1.]	1	1	1	1	1	.14		1		4		11	11	5531
84.	37,89100	31.03448		93.173 4 1	13	11					- 11	8		P	1	1	1	1	1	18		· •	34	1		14	14	2212
	\$2,4137	21.37933	24.59081		11.7	13.2	- 62	67	18.7	4.7	4.2	42	-4.2	42	2	1	1			3.8	-1			.0		11	11	0.004
	28,27586	38.62069	8.545455	14.48279	4.2	12	11.2	42	4.2	4.2	- 41	41	4.1	4.1		- I -	1.		1.8	4	1		11	- 1		17	17	8014
14	#5.53724	85.51724	222,2727	133.7651	24.8	24.8	24.4	10.8	38.8	7.8		7.8	34	3.4	1	1	1	1	1	30	19	-15	30	-19	15			0007
	48,27586	41,37991	50	15.17241	35	14	12	11	26	. 5	. 5.	. 5	5	. 5	1	1	2	1	1	-15	4	2	- 13	- 3	- ¥.	+	9	(8420)
11.4	47.38621	47.54623		71.72814	11.8	13.8	15.8	25.8	20.8	4.8	4.8	4.8	4.8	4.8	7	1	2	1	1	3.8	2	2	-11	1	_A	14	14	(2400
6 14	40.68964	30,34461	And in the second second	85.51724	11.0	311.8	14	18.8	24.8	1.4	2.8	1.8	11.	2.8	1	1	1		. 2	14	1			- 4	4	10	30	18401
11. 4	61,1781	41,37931		1. A. P. M. P. M. P. L.	18.8	17.8	17.0	11.8	22.4	1.8	5.8	1.1	5.4	5.8	1	1	× .	1		- 11	11	.10		- 30	10			0.401
17 1	155.88201	57.41379		34,42759 78,39401	16.2	34,2	10.2	.15.2		- 54	. \$.)	52	. A.I	5.3	1	1	3.	1	1	18			36			. ÷.	0	17.404

14 MR 14

G. II @ Head of the Department Electrical & Electronics Engineering Sheidew Institute of Engineering & Technology TUMKUR-572106.

angs kis

EFE .

PRINCIPAL SHET., TUMAKURU

COF	CD4	008
87,24138	97.24138	86.2069
45.31724	68.96552	41.37931
79.31084	75.13034	35 17241
70.34485	73.7981	53 10845
63.44828	NO. 29455	66.85655
58.62069	\$5,17341	55 17241
65.2069	69.85517	59.51034
74,48278	71.03448	51.7935
81.37993	77.51103	87.58621
82.06897	82.06897	61.37931
76.55177	80	55.86207
65.65517	\$5.2069	38.62069
42,05857	88.63068	24,82750
71,03448	74.48226	57.24138
42,75862	42,75862	46.2069
62.06897	65.51724	15.17241
73.7931	73,7931	42.75862
61,37931	64.83759	44,13790
73.10345	73.10345	25.17241
43,37991	17,90303	13,2991
48.98552	\$2,41179	45.51724
48.27586	48.27586	13.7901
45.53724	48.96552	45.51724
62,75863	62,75862	48.96552
77.11345	73.10345	21.37901
75.17241	75 17241	41,37991
73,11145	73.30945	42.06897
82.06897	83,06897	41.87901
73,30343	73.10345	45.51724

DEPARTMENT OF EEE

SUBJECT	POWER SYSTEM ANALYSIS 1	SUBJECT CODE	18EE62
SUBJECT	POWER SYSTEM ANALYSIS 1	SUBJECT CODE	18EE62

COURSE OUTCOME

CO1	Model the power system components & construct per unit impedance diagram of power system.
CO2	Analyze three phase symmetrical faults on power system.
CO3	Compute unbalanced phasor in terms of sequence components and vice versa, also develop sequence networks.
CO4	Analyze various unsymmetrical faults on power system.
CO5	Examine dynamics of synchronous machine and determine the power system stability

PROGRAM OUTCOME

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

G - H Romme Head of the Department Electrical & Electronics Engineering Shridevi Institute of Engineering & Tex TUMKUR-572196.

PRINCIPAL SIET., TUMAKURU

COLLEGE	3	SHR	DEVI	INSTI	TUTI	OFE	NGIN	EERIN	G & T	ECHNO	DLOGY	1
FACULTY	NAM	E	UMAB	AI					+			
BRAN	СН		1	EEE		A	CAD	EMIC Y	EAR		2021-	2022
COURSE	В.	E	SEM	ESTE	R	VI		SECTIO	N			pd'
SUBJECT	P	OWE	R SYS	ГЕМ А	NAL	YSIS 1		SUBJE	CTC	DDE	18È8	62
CO & PO M	APPIN	i G			al.							
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	-		-		1			-	-	
CO2	3	3	•		-		1	-	•		•	
CO3	2	3		-	1.	1			- + 4	•	1.0	•
CO4	2	3	•	3	-	1			1	•		2
CO5	2	3	-	3		1	1		1	1.1.1	-	2
AVERAGE	2.4	3		3	-	1	1		1		• •	2
		SPACE NE	in the			OVE	RAL	L MAP	PING	OF SÚE	BJECT	1.92

	C0%	PO1	PO2	PO3	P04	PO5	PO6	PO7	PO8	PO9	PO10	POII	PO12
CO1	52.9	1.587	1.587			1			0-9-5			an interest	-
CO2	52.9	1.587	1.587					0.529	1/12	-			
CO3	40.1	0.802	1.203			194	0.401	- 11		1.			
CO4	60.5	1.21	1.815		1.815		.605			0.605			1.21
CO5	53.3	1.33	1.59		1.59	1	0.533	0.533		0.533			1.33
AVERAGE	51.94	1.30	1.55		1.70		0.513	0.531		0.569.			1.27
1212-1	All a la			100	1100	E phi	1-57	FIN	AL AT	TAINA	MENT L	EVEL	1.061

G. U. R. A. Head of the Department Electrical & Electronics Engineering Shridevi Institute of Engineering & Tex. TUMKUR-572196

8 13 L					S	den er er		S.c.		1.11						145		1000	a		_		_	and the			- P	- 65 -			
	1/	TEST	1	L/	A TES	T 2	1/	A TES	ST 3			Assign	ment	-				SEI	5	1		1 J	6	TOTAL			1.17	1.13	AVERA	GE	
USN	CO1	CO2	OTAL	CO3	C04	TOTAL	°C04	C05	TOTAL	COL	CO2	C03	C04	C05	TOTAL	C01	CO2	CO3	CO4	CO5	TOTAL	C01	CO2	CO3	CO4	CO5	COI	CO2	C03	C04	COS
15V18EE001	15	12	27	7	20	27	20	9	29	2	2	2	1	2	10	4.2	4,2	4.2	4.2	4.2	21	21.2	18.2	13.2	46,2	15.2	62	54	39	86	45
15V19EE001	5	18	23	5	18.	23	10	20	30 .	2	2	2	2	2	10	. 5	5	5	. 5	5	25	12	25	12	35	27	35	74	35	65	79
15V19EE002	11	12	23	0	0	0	15	0	16	2	2	2	2	2	19	2.4	2.4	2.4	2.4	2.4	12	15.4	16,4	4,4	20,4	4.4	45	48	13	38	13
15V19EE005	10	5	15	14	12	26	10	0	10	2	2	2	2	2	10	5.2	5.2	5.2	5.2	5.2	26	17.2	12.2	21.2	29.2	7.2	51	36	62	54	21
15V19EE006	5	6	11	0	0	0	.9	18	27	2	2	2	2	2	10	5.2	5.2	5.2	5.2	5.2	26	12.3	13.2	7,2	16,2	25.2	36	39	21	30	74
15V19EE007	14	0	14	11	16	27	20	13	33	2	2	2	2	2	10	7.8	7.8	7.8	7.8	7.8	39	23.8	9.8	26,8	45.8	22.8	70	29	61	85	67
15V19EE008	5	5	10	6	12	18	20	0	20	2	2	2	2	2	10	5.8	5.8	5.8	5.8	5.8	29	12.8	12.8	13.8	39,8	7.8	38	38	41	74	23
15V19EE009	9	11	20	12	13	25	16	0	16	2	2	2	2	2	10	4.2	4.2	4.2	4.2	4.2	21	15.2	17.2	18.2	35.2	6.2	45	51	54	65	18
15V19EE011	20	20	40	10	20	30	19	14	33	2	2	2	2	2	10	8	8	.8	8	8	40	30	30	20	-49	24	88	88	59	91	71
15V19EE012	.4	.14	18	10	20	30	5	13	18	2	2	2	2	2	10	7	7	7	7	7	35	13	23	19	34	22	38	68	56	63	65
15V19EE013	12	13	25	0	16	16	6	20	26	2	2	2	2	2	10	0	0	0	0	0	0	14	15	2	24	22	41	44	6	44	65
15V19EE014	9	6	15	0	0	0	10	10	20	2	2	2	2	2	10	2.8	2.8	2.8	2.8	2.8	14	13.8	10,8	4.8	14,8	14.8	41	32	14	27	44
15V19EE016	10	10	20	4	8	12	10	20	30	2	2	2	2	2	10	5.2	5.2	5.2	5.2	5.2	26	17.1	17,2	11.2	25.2	27.2	51	51	33	47	80
15V19EE017	20	18	38	7	20	27	20	9	29	2	2	2	2	2	10	8.8	8.8	8.8	8.8	8.8	44	30.8	28,8	17.8	50.8	19.8	91	85	52	- 94	58
15V19EE020	12	9	21	5	15	20	18	0	18	2	2	2	2	2	10	6.4	6.4	6.4	6.4	6.4	32	20.4	17,4	13.4	41,4	8.4	60	51	39	77	25
15V20EE400	13	12	25	10	20	30	5	13	18	- 2	2	1	2	2	10	4.2	4.2	4.2	4.2	4.2	21	19,2	18.2	16.2	31.2	19,2	56	54	48	58	56
15V20EE401	4	10	14	4	0	4	10	20	.50	2	2	2	2	2	10	6	6	6	6	6	- 30	12	18	12	18	28	35	53	35	33	82
15V20EE402	19	12	31	6	20	26	2	11	13	2	2	2	2	2	10	6.4	6.4	6.4	6.4	6.4	32	27.4	20,4	14.4	30,4	19.4	81	60	42	56	57
15V20EE404	6	10	16	9	20	29	6	15	-21	2	2	2	2	2	10	6.4	6.4	6.4	6.4	6,4	32	14.4	18.4	12.4	.34,4	23.4	42	54	51	64	69
TOTAL	203	203	406	120	250	370	232	205	437	38	38	38	38	38	199	101	101	101	101	101	505	342	342	259	621	344	1006	1006	762	1150	101
otal 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	19
Avearge	10.7	10.7	21.4	6.32	13.16	19.47	12.2	10.8	23	- 20	2	.2	2	2	10.5	5.3	5.3	5.3	5.3	5.3	26.6	18.0	18.0	13.6	32.7	18.1	52.9	52.9	40.1	60.5	53.3

3 Ad

135

5

Shrid

0

Power System Analysis - I 2021-22 18EE62



SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

SUBJECT	DIGITAL SIGNAL PROCESSING	SUBJECT CODE	18EE63	

COURSE OUTCOME

CO1: Apply DFT and IDFT to perform linear filtering techniques on given sequences to determine the output.

CO2: Apply fast and efficient algorithms for computing DFT and inverse DFT of a given sequence

- CO3: Design and realize infinite impulse response Butterworth and Chebyshev digital filters using impulse invariant and bilinear transformation techniques
- CO4: Develop a digital IIR filter by direct, cascade, parallel, ladder and FIR filter by direct, cascade and linear phase methods of realization

CO5: Design and realize FIR filters by use of window function and frequency sampling method

PROGRAM OUTCOMES

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

G -11 Route Head of the Department Electrical & Electronics Engineering Shindevi Institute # Engineering & Teuturouge TUMKUR-572196.

PRINCIPAL SIET., TUMAKURU.

COLLEGE	1	SHR	IDEVI	INSTI	TUTE	OF E	NGIN	EERIN	G & T	ECHNO	DLOGY	1
FACULTY	NAM	E I	Mr. G.	H. RA	viku	MAR		50			122.4	
BRAN	СН		ł	EEE		А	CADI	EMIC Y	EAR		2021	-22
COURSE	В.	E	SEM	ESTE	R	VI	s	ECTIO	N		EEE	
SUBJECT	D	IGITA	L SIG	NAL P	ROCE	SSING	;	SUBJE	стсо	DDE	18EI	E63
CO & PO M	APPI	NG					1					
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	3			-	•	•		-			
CO2	3	2	2	•	•		-	-			-	-
CO3	3	2	2		2	•	1.0		•	• •		•
CO4	3	2	2		2	-	-				•	
CO5	2	3			2			•		•	•	
AVERAGE	2.6	2.4	2	-	2			-	-			
SHOULD I	1					OVE	RAL	L MAP	PING	OF SUE	JECT	2.25

	C0%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	POS	₽0 9	PO10	PO11	PO12
CO1	51.84	1.03	1.55	-					-			-	
CO2	55.78	1.67	1.11	1.11		•	-	-		•			-
CO3	44.14	1.32	0.88	0.88		0.88	-	-	•	•		-	-
CO4	47.28	1.41	0.94	0.94	-	0.94	-	- "	-	-	-	-	•
C05	54.03	1.08	1.62			1.08			-	-	-		
VERAGE	50.61	1.30	1.22	0.97		0.966			-	-		-	-
Sta La Sta							120	FIN/	AL AT	TAIN	MENT I	EVEL	1.114

G - IS. Round Head of the Department Electrical & Electronics Engile - ing Shridevi Institute of Engineering & recurrology TUMKUR-572106.

hen 100

PRINCIPAL SIET. TUMPENDRU.

Academic year	202	1-22	1	SEM	VI		Te	stal str	ength	18		Sul	ject	ITAL	SIGNAI	L PRO	CESS		Subj	ect Code	181	E63							50 million (
SEM:VE	IA T	EST 1	(30M)	IA	TEST 2	(30M)	IA 1	TEST .	(30M)	ASSIC	INEM	ENT /	QUIZ	(10 M		SEE N	ARK	S(60)			Total C	Os ATTA	INMENT			% of	individu	al CO	-	SEE TO
USN	COL	C03	TOTAL	C03	C04	TOTAL	C04	COS	TOTAL	C01	CO1	COJ	CO4	C05	CO1=11	C01	C03	CO4	C05	CO1=29	C02=34	CO3=34	CO4=44	CO5=49	CO1	C02	COS	CO4	CO5	60M
15V18EE001	12	11	23	12	8	20	6	11	17	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	18.8	17.8	14.8	18.8	19	64.83	52.35	43.53	55.29	38.78	24
15V19EE001	13	14	17	0	0	0	8	10	18	2	2	2	2	2	5	5	-5	5	5	20	21	7	15	17	68.97	47.73	24.14	51.72	58.62	25
15V19EE002	6	5	11	6	3	9	-8	- 6	14	2	2	2	2	2	0.2	0.2	0.2	0.2	0.2	8.2	13.2	5.2	10.2	8.2	28.28	30.00	17.93	35.17	28.28	1
15V19EE005	7	6	13	5	4	9	8	12	20	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	13.2	17.2	10.2	14.2	18.2	45.52	39.09	35.17	48.97	62.76	21
15V19EE006	12	9	21	8	2	.10	12	5	17	2	2	2	2	2	4.6	4.6	4.6	4.6	4,6	18.6	23.6	8.6	38.6	11.6	64.14	53.64	29.66	64.14	40.00	23
15V19EE007	11	10	21	11	8	19	9	9	18	2	2	2	2	2	6.6	6.6	6.6	6.6	6.6	19.6	29.6	16.6	17.6	17.6	67.59	57.27	57.24	60.69	60,69	33
15V19EE008	7	.5	12	12	2	14	5	12	17	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	13.6	23.6	8.6	11.6	18.6	46.90	53.64	29.66	40.00	64.14	23
15V19EE009	8	10	18	6	4	10	4	13	17	2	2	2	2	2	1.6	1.6	1.6	1.6	1.6	11.6	19.6	7.6	7.6	16.6	40.00	44.55	26.21	26.21	57.24	8
15V1966011	15	15	30	15	35	30	12	12	24	2	2	2	2	2	6 -	б	6	6	6	23	38	23	20	-20	79.31	86.36	79.31	68.97	\$8.97	30
15V19EED12	10	13	23	13	10	23	9	12	21	2	2	2	2	2	3.2	3.2	3.2	3.2	3.2	15.2	31.2	15.2	14.2	17.2	\$2.41	70.91	52.41	48.97	59.31	16
15V19EE014	.9	8	17	-8	9	17	7	8	15	2	2	2	2	2	0.2	0.2	0.2	0.2	0.2	11.2	18.2	11.2	9.2	10.2	38.62	41.36	38.62	31.72	35.17	1
15V19EE016	- 4	6	10	12	8	20	- 4	11	15	2	2	2	2	2	2.8	2.8	2.8	2.8	2.8	8.8	22.8	12.8	8.8	15.8	30.34	51.82	44.14	30.34	54.48	14
15V19EE017	15	15	30	-13	13	26	11	13	24	2	2	2	2	2	5.4	6.4	6.4	6.4	6.4	. 23.4	36.4	21.4	19.4	21,4	80.69	82.73	73.79	66.90	73.79	32
15V19EE020	10	9	19	10	5	15	10	7	17	2	2	2	2	2	4.2	4.2	4,2	4,2	4.2	16.2	25.2	11.2	16,2	13.2	55.86	57.27	38.62	55.86	45.52	21
15V20EE400	5	-8	13	12	8	20	7	12	19	2	2	2	2	2	1.8	1.8	1.8	1.8	1.8	8.8	23.8	11.8	10.8	15.8	30.34	54.09	40.69	37.24	54.48	9
15V20EE401	4	5	9	10	11	21	5	12	17	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	10.6	21.6	17.6	11.6	18.6	36.55	49.09	60.69	40.00	64.14	23
15V2DEE402	7	8	15	12	11	23	8	22	20	2	2	2	2	2	2.4	2.4	2.4	2.4	2.4	11.4	24,4	15.4	12.4	16.4	39.31	55.45	\$3.10	42.75	56.55	12
15V20EE404	12	14	26	9	8	17	7	8	15	2	2	2	2	2	4.4	4.4	4.4	4,4	4.4	18.4	29.4	14.4	13.4	14,4	63.45	66.82	49.66	46.21	49.66	22
		-		_			_									_		_							51.84	55.79	44.14	47.29	54.03	18.77
									-	-				1	-		1	-			-		-		34.84	35.79	44.14	-7.69	54.03	31.29

G - II-R accel Head of the Department Electrical & Electronics Engineering Shindevi Institute of Engineering & Teamongy TUMKUR-572106

' 문제 위험

ω.

india

-

15

. PRINCIPAL SIET. TUMAKURU

10.1



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

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

	SUBJECT	SENSORS & TRANSDUCERS	SUBJECT CODE	18EE647
--	---------	-----------------------	--------------	---------

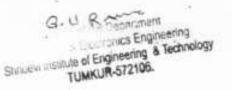
COURSE OUTCOME

CO1: Use gauges and transducers to measure pressure, direction and distance

- CO2: Discuss the use of light transducers and other devices used for the measurement of electromagnetic radiations
- CO3: Explain the working of different temperature sensing devices
- CO4 : Discuss the principles and applications of audio electrical sensors and transducers used for the Measurement of sound
- CO5: Discuss the use of sensors for the measurement of mass, volume and environmental quantities

PROGRAM OUTCOMES

- PO1 Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- PO2 Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- PO3 Design / development of solutions: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- PO4 Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and provide valid conclusions.
- PO5 Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling to complex engineering activities.
- PO6 The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- 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: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.



PRINCIPAL SIET. TUMAKURU

COLLEGE		SHR	IDEVI	INSTI	TUTE	OF E	NGIN	EERIN	G & T	ECHNO	DLOGY	1
FACULTY	NAM	E	Mr. G.	H. RA	VIKU	MAR				4	0.00	1
BRAN	СН		F	EEE		А	CAD	EMIC Y	EAR		2021	-22 ·
COURSE	· B.	E	SEM	ESTE	R	VI	5	SECTIO	N		EEE	
SUBJECT		SENS	ORS &	TRAN	NSDUC	ERS		SUBJE	стс	DDE	18EE	647
CO & PO M	APPIN	NG								-		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	-		•	•	-	3					3
CO2	2		-	-	-	-	-	-	-	-		-
CO3	2	-		•		-	2	-		• •		2
CO4	2		-				2	1 :	•	-	•	2
CO5	3		•	-	•	-	3		•			3
AVERAGE	2.4					-	2.5		-			2.5
		- United	- Side		100	OVE	RAL	L MAP	PING	OF SUE	BJECT	2.2

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C01	73.524	2.20	•	-	-	•		2.20	•		•.		2.20
CO2	78.497	1.57			• •						•		-
CO3	75.057	1.50	•					1.50		•	-		1.50
CO4	72.519	1.45					:	1.45				•	1.45
CO5	76.590	2.30		+				2.30	-	-	•	•	2.30
AVERAGE	75.23	1.80					•	1.86		-		-	1.86
	31.6	400						FINA	LAT	TAINN	AENT İ	EVEL	1.84

PRINCIPAL SIET. TUMANURU.

Academic year	202	1-22		SEM	VI		T	otal st	rength	18		Su	bject	Sen	sors and	Transd	acers		Sub	ject Code	18E	E647							1	
SEMINT	IA T	EST	1(30M)	14.1	TEST 2	(30M)	IA '	TEST	3(30M)	ASSI	GNE	MENT.	QUIZ	(10 M	1	SEE N	ARK	S(60)	2	Sec. 1	Total Co	Ds ATTA	INMENT	in the second second		% of	Individu	al CO	1	SEE TO
USN	C01	CO2	TOTAL	C03	C04	TOTAL	C04	COS	TOTAL	C01	CO	CO3	CO4	COS	CO1=12	C01	COJ	C04	C05	CO1=29	CO2=29	CO3=29	CO4=44	CO5+29	CO1	C02	C03	CO4	C05	60M
15V18EE001	14	14	28	14	14	28	12	15	27	2	2	2	2	2	7	7	7	7	7	23	23	23	33	29	79.31	79.31	79.31	75	100	35
15V19EE001	13	13	26	. 13	14	27	12	15	27	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	19,2	32.2	20.2	18.2	21.2	66.21	73.18	69.66	62.76	73.10	21
15V19EE002	14	12	26	14	13	27	15	12	27	2	2	2	2	2	2.4	2.4	2.4	2.4	2,4	18.4	30.4	17.4	19,4	16.4	63.45	69.09	60.00	66.90	56.55	12
15V19EE005	13	14	27	14	14	28	34	14	28	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	19.6	34.6	20.6	20.6	20.6	67.59	78.64	71.03	71.03	71.03	23
15V19EE006	14	13	27	13	14	27	13	14	27	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	21.8	33.8	21.8	20.8	21.8	75.17	76.82	75.17	71.72	75.17	29
15V19EE007	14	14	28	15	.14	29	14	15	29	2	2	2	2	2	5.8	5.1	5.8	5.8	5.8	21.8	36.8	21.8	21.8	22.8	75.17	83.64	75.17	75.17	78.62	42
15V19EE008	13	13	26	13	14	27	12	15	27	2	2	2	2	2	8.4	8.4	8.4	8.4	8.4	23.4	36.4	24.4	22.4	25.4	80.69	82.73	84.14	77,24	87.59	26
15V19EE009	-14	14	28	14	14	28	13	15	28	2	2	2	2	2	5.4	5,4	5.4	5.4	5,4	21,4	35.4	21.4	20.4	22.4	73.79	80.45	73,79	70.34	77.24	27
15V19EE011	14	14	28	14	- 15	29	14	15	29	2	2	2	2	2	8.4	8.4	B.4	8.4	8.4	24,4	38,4	25.4	24.4	25.4	84.14	87.27	87.59	84.14	87.59	42
15V19EE012	14	13	27	12	15	27	13	13	26	2	2	2	2	2	7.4	7.4	7.4	7.4	7.4	23.4	34.4	24.4	22.4	22.4	80,69	78.18	84.14	77,24	77.24	37
15V19EE014	13	12	25	13	13	26	17	34	26	2	2	2	2	2	3	3	3	3	3	18	30	10	17	19	62.07	68.18	62.07	58.62	65.52	15
15V19EE016	-14	13	27	12	14	26	13	14	27	2	2	2	2	2	5.8	5.8	5.8	5.8	5.8	21.8	32.4	21.8	20.8	21.8	75.17	74.55	75.17	71.72	75.17	29
15V19EE017	14	14	28	14	15	29	14	15	29	2	2	2	2	2	8.2	8.2	8.2	8.2	8.2	24.2	38.2	25.2	24.2	25.2	\$3,45	86.82	86.90	83,45	86.90	41
15V19EE020	14	34	28	14	14	28	14	14	28	2	2	2	2	2	6.6	6.6	6.6	6.6	6.6	22.6	36.6	22.6	22.6	22.6	77.93	83.18	77.93	77.93	77.93	33
15V20EE400	13	14	27	13	15	28	14	14	28	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	19.8	33.8	21.8	20.8	20.8	68.28	76.82	75.17	71.72	71.72	24
15V20EE401	14	14	28	14	14	28	13	15	28	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	20.2	34.2	20.2	19.2	21.2	69.66	77.73		66.21	73.10	21
15V20EE402	14	14	28	13.	14	27	13	15	28	2	2	2	2	2	3,4	3.4	3.4	3.4	3.4	19.4	32.4	19.4	18.4	20.4	56,90	73.64	66.90	63.45	70.34	17
15V20EE404	13	14	27	14	14	28	15	13	28	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	21.4	36.4	22.A	23.4	21.4	73.79	82.73	77.24	80.69	73.79	32
	_	-	-	-	_	-			-		_	-				2	-		-			_			73.52	78.50	75.06	23 63	76.59	28.11
										*	_		1				-								13.34	78.30	13.00	74.54	10.39	46.851

10

G. U. B. Head of the Department Electrical & Electronics Enor-Shridevi Institute of Engineerin TUMKUR-57210+

Nender PRINCIPAL SIET., TUMAKURU. ۰.

1.7

SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGG

SUBJECT	NON CONVENTIONAL ENERGY	SUBJECT CODE	18ME651
SUBJECT	SOURCES	SUBJECT CODE	10012001

COURSE OUTCOME

STREET

CO1	Describe the environmental aspects of non-conventional energy resources. In Comparison with various conventional energy systems, their prospects and limitations.
CO2	Know the need of renewable energy resources, historical and latest developments
CO3	Describe the use of solar energy and the various components used in the energy production with respect to applications like-heating, cooling, desalination, power generation, drying, cooking etc.
CO4	Appreciate the need of Wind Energy and the various components used in energy generation and know the classifications.
CO5	Understand the concept of Biomass energy resources and their classification, types of biogas Plants- applications

PROGRAM OUTCOMES

- PO1 Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- PO2 Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- PO3 Design / development of solutions: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- PO4 Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and provide valid conclusions.
- PO5 Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling to complex engineering activities.
- PO6 The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- 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: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.

COLLEGE		SHR	IDEVI	INSTI	TUTE	OFE	NGIN	EERIN	G & T	ECHN	DLOGY	(
FACULTY	NAN	1E ·	гнірр	ESWA	MY							
BRAN	СН		I	EEE	T	A	CAD	EMIC Y	EAR		2021	-22
COURSE	B.	E	SEM	ESTE	R	VI		SECTIO	N		EEE	
SUBJECT	N	ON CO		NTION		VERG	Î	SUBJE	стс	DDE	18MF	651
CO & PO M	APPE	NG										
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
AB SEA	1	2	3	4	5	6	7	8	9	10	11	12
COI	3	1	2									
CO2	1	2	3			2			2			
CO3	3	1	2									
CO4	1	2	3		2		2		2			
C05	3	1	3		2		2		2			
AVERAGE	2.2	1.4	2.6		2	2	2		2			
.7	1					OVE	RAL	L MAP	PING	OF SUE	JECT	2.02

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C01	45	0.99	0.63	1.17									
CO2	41	0.90	0.57	1.06			0.82			0.82			
CO3	45.02	0.99	0.63	1.17									
CO4	45.02	0.99	0.63	1.17		0.90		0.90		0.90			
C05	45.02	0.99	0.63	1.17		0.90		0.90		0.90			
AVERAGE	44.21	0.97	0.62	1.14	17	0.9	0.82	0.90		0.87			
100			-					FIN	AL AT	TAINM	MENT L	EVEL	0.88

G. H. R. March Head of the Department Electrical & Electronics Engineering Shridevi Institute of Engineering TUMKUR-572106. DOM:

PRINCIPAL SIET., TUMAKURU.

1415 C		-10. COL 24			_			ener -	1.11			1.2	57/	ATT NAME	THIPPESWA	MY	-000-V075		0.000	1.111	in and	Res Det 1							
Academic		3621-32	10.00	SEM		N		Fatal strong	cib .	14	100000	56	tijvet	ON CON	VENTIONA.	LENENG	S SOL RET		Subje	ct Cale	1854	East:	Second Second					-	
distant' Re-		TEST 10	ents	Colores .	CONT. S	2155535	1.4	TEST AN	0MI	10000	ASSIGNE	MENTIQ	C12(10.M)	123222		54	J. MARKS	0984	1	12.11	Total C	as ATTAP	MENT			- N	d individua	100	1000
LSN	1.131	C01	TOTAL	C03	601	20LAL	4004	0.05	TUTAL	4:01	C01	100	C04	608	C09+12	002	600	0.04	6.09	6301-29	C 102-68	C03+14	CD4-29	CO1-74	009	0.07	C00	0.04	01
WINESOCT	- 5	5	38	5	5	10	5	15	10	- 2	2	2	2	2	8.2	8.2	8.2	8.2	8.2	15.2	30.3	15.2	15.2	25.2	52.41379	45.90909	52.41379	32.61379	52.41279
\$V19EE00	4.1	4.7	8.4	4.1	4.2	5.4	4.2	8.2	6.4	1	2	- 2	1	1	8.6	6.6	6.6	6.6	8.6	13.9	1.7	12.8	32.8	12.8	44.13793	38.63636	46.13793	44.13791	44.17793
SVIHIIdo.		- 4	н.				4			1	1	1	2	1	8.6	8.6	8.6	8.8	8.6	34.6	38.8	14.6	24.8	54.0	50.34483	42.27273	50.34483	10.44483	50.34483
\$9191100	3.8	53	10.6	5.8	5.8	10.6	5.1	5.8	18.6	1	2	2	2	2						15.3	30.6	15.3	- 19.3	21.1	52.75862	46.81818	52.75862	12 75863	52.75862
\$9191100	42	4.3	8.4	4.2	4.2	8.4	42	4.2	8.4	2	1	1	1	2	5	5	÷	- 9	5.	112.2	15.4	11.8	31.4	11.3	18.62061	35	38.62069	18.62069	30.67969
\$V19E100	- ft	- 6	37	6	6	12	- 6	. 6	12	1	1	2	1	1	8.2	6.2	6.2	6.2	6.2	34,2	20.2	14.3	34.2	34.2	48 96152	45.90909	48.95552	88 9675.7	48.96552
54191100	43	45		4.5	4.5		4.5	4.5	. 9	1	1	4	- 2	3	8.4	8,4	6.4	5.4	-64	. 12.9	17.4	12.9	32.9	- 32.8	44.48376	79.54545	44.48236	41.48276	44.48276
\$V19E300	4.1	4.3	8.0	4.3	4.8	8.6	4.1	4.8	8.6	1	1	1	1	3	4.8	4.8	4.8	4.8	4.8	11.1	25.4	11.1	11.1	33.8	38.27546	35	38.27586	18.17546	38.77586
SW19E1011	- 65	6.5	18	8.5	8.9	13	6.5	4.5	3.9	1	1.1	1	1	3	9.7	187.1	10, 2	8.7	9.7	38.2	24.7	18.7	18.7	18.7	6.2.75862	56.136.00	47.75857	117.062	67.75862
SV19E101	5	5	30	5	N	10	5	1.1	30	2	1	1	1	- 3	7.6	7.6	7.6	7.6	7.6	18.6	-1946	14.6	14.6	34.6	50.34488	81.54545	58.34483	10.34481	10.34481
SV190101	3.8	1.8	7.6	1.8	18	7.6	3.8	18	7.6	- 2	1	- 1	1	- 2		. 11	.0.	0	0	5.8	9.6	5.8	5.8	5.0	- 20	21.81818	20	. 26	20
SW19EEEEE	4.1	4.5	8.8	4.5	45	9	4.5	-45		- 2	2	1	1	1	0	10	- 0	9	.0	6.1	11	65	6.5	+5	31.72434	25	22.41379	22.43379	22.41379
\$V1966111	1.0	2.8	7.6	3.8	- 3.8	7.6	3.8	1.8	3.6	2	2	1	1	2	5	15.1			3.	20.0	14.6	10.0	10.8	10.0	37,24138	11.18162	37.24138	17,24158	37.24138
SW19EEU3	. 55.	0.5	11	6.5	6.5	13	6.5	6.5	1.8	3	1	3	3	3	8.6	.84	8.6	8.6	8.0	15.1	73.6	12.1	17.1	57.4	58.95552	13 63636	58.96552	18/96552	\$8.96552
SV1HE0JE	5.1	2.2	10.6	5.1	5.1	10.6	3.8	5.8	10.6	- 2	1	1	2	2				. 9	9	38.9	25.6	10.3	36.3	16.3	16.306#	49.09093	56.2268	56.2009	56.2089
SV20E1406	<u>s</u> .	1	1.0	6	. 8	10	5		30	1	2	1	2	3	- 6		0		6	11	18	13	11	.13	44.82759	40.90909	44.82758	44.83758	44.82759
SV204140	(15.F.	3.3	10.6	1.1	5.8	10.6	5.1	2.8	10.6	. 2	1	1	1	1	1	1		1	1	14.3	19.6	34.3	34.3	24.3.1	49.31034	84.54545	49.11034	40.31034	49.31034
\$1415405	4.6	4.6	9.2	4.6	4.6	9.2	-4.6	4.6	9.2	1	1	1	1	1	8	8	1	3	1	9.0	14.2	9.6	9.6	10	33.10.145	32.27273	33 10145	13.10345	33.10345
SV2047404	5.6	5.6	112	5.6	5.6	11.3	3.6	3.6	11.2	2	1	1	1	1	1	11	1	1	- F	14.6	20.2	14.6	34.0	19.4	50.54483	45,90909	55.34481	50.14463	55.34483
		-					10000									-		11		15.04737	37.97Hitt.	11.05295	13.05789	13.25789	44.0980933	40.849338	45.03733	0.0002	#5.02722

106

PRINCIPAL SIET. TUMARURU C when

G - 4 R Mend of the Department Hand of the Department Electrical & Electronics Engine Shridev Institute of Engineering 2, 1,1 1UMKUR-572106



SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

SIRA ROAD, TUMKUR- 572 106.

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

SUBJECT	POWER SYSTEM OPERATION & CONTROL	SUBJECT CODE	18EE81
---------	-------------------------------------	--------------	--------

COURSE OUTCOME

- CO1: Describe various levels of controls in power systems, architecture and configuration of SCADA CO2: Develop and analyze mathematical models of Automatic Load Frequency Control.
- CO3: Develop mathematical model of Automatic Generation Control in Interconnected Power system
- CO4: Discuss the Control of voltage, Reactive Power and Voltage collapse

CO5: Explain security, contingency analysis, state estimation of power systems

PROGRAM OUTCOMES

- PO1 Engineering knowledge: An ability to apply knowledge of mathematics, science, and engineering for solving Engineering problems and Knowledge.
- PO2 Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- PO3 Design / development of solutions: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- PO4 Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and provide valid conclusions.
- PO5 Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling to complex engineering activities.
- PO6 The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- 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: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.

G - H R Head of the Department Electrical & Electronics Engineering Electrical & Electronics Engineering Striden Institute of Engineering & Inc. 4-94 Striden Institute of Engineering & Inc.

Rimbo PRINCIPAL

SIET., TUMAKURU

COLLEGE	1	SHI	RIDEVI	INST	ITUTE	OFE	NGIN	EERIN	G & TI	ECHNO	LOGY	
FACULTY	NAM	E	Mr. G.	H. RAV	VIKUN	IAR						
BRAN	СН		E	EEE		A	CAD	EMIC Y	EAR		2021	-22
COURSE	B.1	E	SEM	ESTEI	R	VIII	5	SECTIO	N		EEE	5°.
SUBJECT POWER SYSTEM OPERATION & CONTROL SUBJECT CODE 18EE												
CO & PO M	APPIN	NG				-	•					
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	3		-	2		-		-		-1 T	1
CO2	2	3	2	-	2		-	-	-			1
CO3	2	3			2						•	1
CO4	2	3			2		-			-		1
CO5	2	3			2		-	+		-		i
AVERAGE	2	3		-	2	-		-	-			1
CALL R						ov	ERAI	LL MAP	PING	OF SUI	BJECT	2

COAD	IUAI	L'ALLAND		-	_	_				_	_		_
	C0%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	POS	PO9	PO10	PO11	PO12
COI	59.04	1.18	1.77			1.18							0.590
CO2	62.27	1.245	1.868			1.245							0.622
CO3	62.43	1.248	1.872			1.248		and and a					0.624
CO4	70.61	1.412	2.118			1.412		-					0.706
CO5	56.90	1.138	1.707			1.138	-						0.569
AVERAGE	62.25	1.244	1.867			1.244							0.622
		a a						FIN/	AL AT	TAIN	MENT I	EVEL	1.244

he the. PRINCIPAL SIET., TUMAKURU

cademic yea	2021	1-22		SEM	VШ	1-20	To	tal str	rength	18		Seb	ject	POW	RSYS	TEM O	PERA	TION &	Subje	et Code	188	E81			- 4 - 1				0	1.1.1
SEM:VIII	IA T	EST 1	(30M)	1A 1	EST 2	(30M)	IA T	EST.	3(30M)	ASSI	GNEM	IENT /	QUIZ	10 M)		SEE	MARK	S(60)			Total CC	S ATTAL	NMENT			% of	individua	al CO		SEE TO
USN	CO1	C02	TOTAL	CO3	C04	TOTAL	C04	C05	TOTAL	C01	C03	C03	C04	C05	C01	CO2	C03	CO4	C05	CO1=29	C02=34	C03-34	CO4+44 (05-49	CO1	CO2	CO3	CO4	C05	603
SV17EE006	14	13	27	15	14	29	14	15	29	2	2	2	2	2	5.4	5.4	5.4	5.4	5.4	21.4	20.4	22.4	30	22.4	73,79	60.00	65.882	88.24	45.71	27
SV17EE012	12	14	26	14	12	26	9	5	14	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	18.2	34.2	20.2	23	11.2	62,76	77.73	69.66	79.31	38.62	21
SV1#EE002	7	5	12	7 .	2	9	6	5	11	2	2	2	2	2	6	6	6	6	6	15	20	15	10	13	51.72	45.45	51.72	34.48	44.83	30
SV18EE003	13	14	27	13	11	24	13	14	27	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	19.2	33.2	19.2	26	20.2	66.21	75.45	66.21	89.66	69.66	21
SV18EE004	13	13	26	14	10	24	8	12	20	2	2	2	2	2	5.2	5.2	5.2	5.2	5.2	20.2	34.2	21.2	20	19.2	69.66	27.73	73.10	68.97	66.21	26
SV1#EE005	12	8	20	12	14	26	13	14	27	2	2	2	2	2	6	6	6	6	6	20	28	20	29	22	68.97	63.64	68.97	100.00	75.86	30
SV(BEE006	13	13	26	13	13	26	15	15	30	2	2	2	2	2	6.2	6.2	6.2	6.2	6.2	21.2	34.2	21.2	30	23.2	73.10	77.73	73.10	103.45	80.00	31
SV18EE007	9	8	17	11	9	20	5	3	8	2	2	2	2	2	2.2	2.2	2.2	2.2	2.2	13.2	23.2	15.2	16	7.2	45.52	52.73	52.41	55.17	24.83	11
SV18EE008	7	10	17	8	6	14	7	11	18	2	2	2	2	2	4,4	4.4	4.4	4,4	4,4	13.4	24.4	14.4	15	17.4	46.21	55,45	49.66	51.72	60.00	22
SV18EE011	9	4	13	15	12	27	13	14	27	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	17.4	27.4	23,4	27	22.4	60.00	62.27	80,69	93.10	77.24	32
SV18EE012	11	7	18	12	11	23	11	12	23	2	2	2	2	2	1.6	1.6	1.6	1.6	1.6	14.6	22.6	15.6	24	15.6	50.34	51.36	53.79	82.76	53.79	8
SV19EE400	12	11	23	34	.9	23	6	8	14	2	2	2	2	2	5,4	5.4	5,4	5.4	5.4	19.4	32.4	21.4	17	15.4	66.90	73.64	73.79	58.62	\$3.10	27
SV19EE401	15	14	19	12	2	14	12	13	25	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	21.2	32.2	18.2	16	19.2	73.10	73.18	62.76	55.17	66.21	21
SV19EE402	11	10	21	11	7	18	12	15	27	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	19.4	29.4	19.4	21	23.4	66.90	66.82	66.90	72.41	80.69	32
SV19EE403	10	9	19	13	11	24	9	11	20	2	2	2	2	2	4.6	4.6	4.6	4.6	4.6	16.6	28.6	19.6	22	17.6	57.24	65.00	67.59	75.86	60.69	23
SV19EE404	14	13	27	13	-14	27	8	12	20	2	2	2	2	2	4.册	4.8	4.8	4.8	4.8	20.8	32.8	19.8	24	18.8	71.72	74.55	68.28	82.76	64.83	24
SV19EE405	9	7	16	15	14	29	- 7	10	17	2	2	2	2	2	6	6	- 6	6	6	17	30	23	23	18	58.62	68.18	79.31	79,31	62.07	30
		-	-	_	_			_		_	_					_		_	_					_	59.04	62.27	62,43	70.61	56.91	24.4

GIE H PLOS

G NR ANG

PRINCIPAL manin

PRINCIPAL SIET., TUMAKURU.

Herd of the Department Electrical & Electronics Engine Shritlevi Institute of Engineering TUMKUR-572196.



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

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

SUBJECT	POWER SYSTEM PLANNING	SUBJECT CODE	18EE824	

COURSE OUTCOME

- CO1: Discuss primary components of power system planning, planning methodology for optimum power system expansion and load forecasting
- CO2: Understand economic appraisal to allocate the resources efficiently and appreciate the investment decisions
- CO3: Discuss expansion of power generation and planning for system energy in the country, evaluation of operating states of transmission system, their associated contingencies and the stability of the system
- CO4: Discuss principles of distribution planning, supply rules, network development and the system studies
- CO5: Discuss reliability criteria for generation, transmission, distribution and reliability evaluation and analysis, grid reliability, voltage disturbances and their remedies
- CO6: Discuss planning and implementation of electric –utility activities, market principles and the norms framed

PROGRAM OUTCOMES

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

atte

PRINCIPAL SIET., TUMAKURU

COLLEGE		SHR	IDEVI	INST	TUTE	OFE	NGIN	EERIN	G & TI	ECHNO	LOGY	
FACULTY	NAM	E N	4r. G. 1	H. RAV	IKUN	AAR						(4) (4)
BRAN	СН		E	EE		A	CAD	EMIC Y	EAR		2021	-22
COURSE	B.I	ε	SEM	ESTEI	2	VIII	5	SECTIO	N		EEE	
SUBJECT	1	POWE	R SYS	TEM I	LANN	NING		SUBJE	стсо	DDE	18EE	824
CO & PO M	APPIN	G					-			9 B		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	POI
CO1			3	-		2			-	-	-	
CO2		3					-	•	•			2
CO3		-	3		ard	2	1			-		2
CO4			3	3	· .	2	-				-	2
CO5	-	-	-	3	-	2	-	-		-		2
CO6	-	-		3	-	2		-	-	-		2
AVERAGE	-	3	3	3		2	-					2
	115.20	-	1		12.14	ov	ERAI	LL MAP	PING	OF SUI	BJECT	2.4

	C0%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	58.876	-	-	1.76	•	-	1.177		-		•		inder sold
CO2	61.533	-	1.84	-		-		-	-	-	-		1.23
CO3	58.118	-	-	1.743			1.162			•		-	1.162
CO4	58.118			1.743	1.743		1.162	-	-	•		-	1.162
CO5	61.1607	-	-	-	1.834		1.223						1.223
CO6	62.598	-	•		1.877	•	1.251		-			Pin-	1.251
AVERAGE	60.067		1.84	1.75	1.818	- These	1.195			•		1.	1.205
100000	TRUE T	and the second	- College	Constanting		-		FINAL	ATT	AINMI	ENT LE	VEL .	1.561

Head of the Department Electrical & Electronics Engine vicot Stridevi Insolute of Engineering & Icc. 499 TUMKUR-572106.

Manuel nemer PRINCIPAL SIET. TUMAKURU

cademic year	. 263	1-17		SKM	VIII	1.1	To	tal at	rength	17		Sul	ijeri	PO	WER 5	YSTEM	PLANN	ING	1.1		Subje	et Code	146	E834				1	4.0.00		1.1	1.1		-
REMATE:	IA I	TST I	(30M)	IA T	EST 2	(30M)	IA 1	EST.	3(3656)		ASSIGN	NEMEN	T/QU	EZ(10 M	9		. 5	EE MAI	RKS(60	1.1			Te	tal COs A	TTAINM	ENT		_	1.1.1	% of Indiv	(dual CO			SEE Tot
USN	COL	CO1	TOTAL	COJ	C04	TOTAL	C05	CO	TOTAL	COL	C01	C03	-CO4	C05	CO5	C01×AJ	C01	C03	C04	C05	CD6	01-26.6	02~26.6	03+26.66	104-26.66	CO5-1.69	CD5-3.66	001	C01	C03	CO4	COS	C06	603
SV17LE006	- 11	9	20	14	- 14	28	- 14	35	29	1.665	1.666	1.666	1.665	1.665	1.668	5.67	5.67	5,67	5.67	5.67	3.67	18.33	16.33	21.33	21.33	21.33	22.33	68.75	61.25	80.08	80.00	80.00	83,75	м
SVI7EE012	10	. 9	19	12	11	23	- 11	-11	22	1.666	1.666	1.666	1.666	1.666	1.666	3.33	5.33	5.10	5.53	5.33	5.33	17.00	28.00	18.00	\$8.00	18.00	18.00	\$8.62	63.63	52.07	62.07	62.07	62.07	32
SVINEE002	\$	0	0	10	10	30	3	7	12	1.666	1.666	1.666	1.666	1.666	1.665	6.00	6.00	6.00	6.00	6.00	6.00	7.67	17.67	17.67	12.67	12.67	14.67	26.43	40.15	60.92	60.92	43.68	50.57	38
VHIEE001	14	18	27	-14	- 14	28	- 14	18	11	1.666	1.666	1.666	1.666	1.666	1.665	7,00	7:00	7.00	7.00	7.00	7.00	22.67	25.67	22.67	22.67	22.67	21.67	78.16	81.06	78.16	78,16	78.16	74.71	43
VITEE004	19	3.2	25	1	. 6	- 34	- 11	10	21	1.666	1.666	1.666	1.665	1.666	1.666	5.50	5.50	5.50	5.50	5.50	5.50	20.17	27.17	13.17	18.17	18.17	17.17	69.54	61.74	45.40	45.40	62.64	39.18	31
VIREE003	10	30	20	10	5	19	10	32	22	1,666	1.866	1.666	1,666	1.666	1.665	3.50	3.50	3,50	3.50	3.50	3.50	15.17	25.17	14.17	15.17	15.37	17.17	\$2.30	\$7.20	48.85	48.85	\$2.30	59.19	2
VIIII II006	13	32	35	12	13	25	13	34	27	1.666	1.666	1.666	1.665	1.666	1.665	6.50	6.50	6.50	6.50	6.50	6.50	21.17	32.17	21.17	21.17	21.17	32.17	72.99	73.10	72,89	72.99	72.99	76.43	
V18EE007	7	8	15	0	0	0	1	5	12	1.666	1.666	1.666	1.665	1.665	1,666	3.85	3.83	3.52	3.83	3.83	3.83	12.50	13.50	3.50	12.50	12.50	30.50	43.10	30.68	38.96	18,96	43.10	36.20	2
VIIIEDOF.	6	8	14	0	0	8	6	6	12	1.666	1.666	1.666	1.665	1.665	1.665	5.50	5.50	5.50	5.50	5.50	5.50	13.17	15.17	7.17	\$3.37	13.17	13.17	45.40	34,47	34,71	24,71	45.40	45.40	3
VINEED11	12	54	26	9	11	20	10	12	22	1.665	1.666	1.665	1.665	1.665	3.665	5.30	5.83	5.31	5.33	5.33	5.38	19.00	30.00	18.00	17.00	17.00	19.00	45.51	68.58	62.07	62.07	58.62	65.51	1
VIBEE012	6		34	1	- 11	19	- 14	-15	19	1.666	1.666	1.666	1.666	1.665	1.666	3,50	3.50	3.50	3.50	1.50	3.50	11.17	21.17	16.17	19.17	29.37	30.17	38.50	48.10	35.74	55.74	66.09	69.54	- 2
V19EE400	12	30	22	10	10	20	11	IJ	23	1.666	1.666	1.666	1,666	1.665	1.665	6.00	6.00	6.00	6.00	6.00	6.00	19.67	27.67	17.67	18.67	18.87	19.67	67,81	62.88	60.92	60.92	64.37	67.81	3
V19EE401	11	12	23	11	11	22		11	20	1.666	1.666	1.666	1.666	1.665	1.665	3.83	3.83	3.83	3.83	3.83	3.83	16.50	28.50	16.50	14.50	14.50	16.50	56.89	64.77	56.80	56.89	50.00	56.89	2
V19EE402	14	54	28	15	14	29	15	14	29	1.666	1.666	1.666	1.666	1.666	1.665	6.50	6.50	6.50	6.50	8.50	6.50	22.17	37.17	22.17	23.17	23.17	22.17	76.43	84.47	76,43	76.43	79.88	76.43	1
V19EE403	-11	52	23	13	- 11	24	- 12	11	23	1.666	1.666	1.665	1.665	1.666	1.665	0.00	0.00	0.00	D.00	0.00	0.00	12.67	26.67	12.67	18.67	13.67	12.67	43.58	60.60	43.68	43.68	47.12	43.68	0
V19EE404	15	14	29	34	15	29	14	15	29	1.666	1.666	1.666	1.666	1.666	1.666	3.50	3.50	3.50	3.50	9.50	9.50	20.17	38.17	20.17	19.17	19.17	20.17	89.54	75.38	69.54	09.54	66.09	\$9.54	3
V19EE405	34	15	29	34	15	29	14	14	28	1.666	1.668	1.665	1.666	1.666	1.665	3.83	3.83	3.83	3.83	3.85	3.83	18.50	34.50	20.50	19.50	19.50	19.50	67.24	78.41	70.69	70.69	67.24	67.24	1
_					_	_				_					_	_	_	_			_		_			-	_						1	-
														1														56.88	61.53	58.12	58.12	\$1.16	62.60	28.7

G. H. Q. Head of the Department Electronics Enr Shridesa In contract Contra

Mander

PRINCIPAL SIET., TUMAKURU