

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR (M.P.)

A Govt. Added UGC Autonomous and NAAC Accredited Institute, Affiliated to R.G.P.V, Bhopal

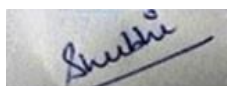
DEPARTMENT OF ELECTRONICS ENGINEERING

Multiple Mode Teaching Learning Pattern

Name of Course with Code: BEEE (100022)		Class: B. Tech. I Year	Session: Jan-June 2023	
S. No.	Unit	Content to be Covered	Teaching Session	Mode
1.	Unit 1	Voltage and current sources, Dependent and independent sources	1	Offline&Opendiscussions
2.		Source Transformation, KCL, KVL, MESH and Nodal analysis	2-3	Offline & problem solving based learning
3.		Network theorems- Thevenin's theorem, Nortons theorem	4-5	Offline & problem solving based learning
4.		Superposition theorem	6-7	Offline & problem solving based learning
5.		Numericals	8-9	Offline & problem solving based learning
6.	Unit 2	Generation of sinusoidal AC voltage, definitions: Average value,	10	Offline & problem solving based learning
7.		R.M.S. value, Form factor and Peak factor of AC quantity	11-12	Offline & problem solving based learning
8.		Concept of Phaser, analysis of R-L,R-C,R-L-C Series and Parallel circuit,	13-14	Offline & problem solving based learning
9.		Power and importance of Power factor	15	Offline & problem solving based learning
10.	Unit 3	Basic definitions, AC excitation in magnetic circuits, self-inductance and mutual inductance	16	Online&demonstrationbase dlearning
11.		Induced voltage, laws of electromagnetic Induction	17	Online & demonstration based learning
12.		directionofinducedE.M.F.Flux ,MMFandtheirrelation,	18-19	Offline & problem solving based learning
13.		Analysis of magnetic circujts.	20-24	Offline & problem solving based learning
14.	Unit 4	Singlephasetransformer,Basic concepts,	25	Online &demonstration based learning
15.		Construction and working	26	Offline & problem solving based learning

		principal,		
16.		Ideal Transformer and its phasor diagram at No Load, Voltage, current and impedance transformation,	27-29	Offline & problem solving based learning
17.		Equivalent circuits and its Phasor diagram, voltage regulation, losses and efficiency, testing of transformers, Construction & working principle of DC and AC machine.	30-31	Offline & demonstration based learning
18.	Unit 5	Number systems used in digital electronics, decimal, binary, octal, hexadecimal, their complements, operation and conversion	32	Offline & Open discussions
19.		Demorgan's theorem, Logic gates - symbolic representation and their truth table	33	Offline & problem solving based learning
20.		Introduction to semiconductors, Diodes, V-I characteristic. Bipolar junction transistors and their working, Introduction to CB, CE & CC transistor configurations	34-35	Offline & problem solving based learning

Online	Offline						
	BlackBoard Teaching	Group based Learning	Learning through projects	Learning through demonstration	Learning through experimentation	Activity based Learning	Onsite/field based learning
13.22%	85.71%	37.21%	13.95	27.90%	48.84.%	13.95%	-%



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