

LESSON PLAN

Program Name	Electrical Engineering
Course Title	ELECTRICAL CIRCUITS
Course Code	EEPC205
Semester	3 rd
Course Teacher Name	Er. Viveksheel Verma

Evaluation Scheme

Sr. No.	Subject Code	Subject	Study Scheme			Total Study Hours	Cr edits	Evaluation Scheme										Total Marks
								Internal Assessment			External Assessment							
			Th	Pr	DCS			Th	Pr	Total	Th	Hrs	Pr	Hrs	Total			
1	EEPC205	EC	3	-	2	5	3	40	-	40	60	3	-	-	60	100		

References Books/ Study Material

1. Ashfaq Husain, Networks & Systems, Khanna Book Publishing, New Delhi.
2. Gupta, B.R; Singhal, Vandana;, Fundamentals of Electrical Network, S.Chand and Co., New Delhi, ISBN : 97881-219-2318-7
3. Saxena, S.B Lal; Dasgupta, K; Fundamentals of Electrical Engineering, Cambridge University Press Pvt. Ltd., New Delhi, ISBN : 978-11-0746-435-3
4. Theraja, B. L. :Theraja, A. K;, A Text Book of Electrical Technology Vol-I, S. Chand & Co. Ramnagar, New Delhi, ISBN : 9788121924405
5. Sudhakar, A. ;Shyammohan, S. Palli; Circuit and network, McGraw Hill Education, New Delhi, ISBN : 978-933921-960-4

Course Outcomes (Cos)

CO-1	To have knowledge about the various elements related to AC series Circuits
CO-2	To have idea about the AC Parallel Circuits
CO-3	To reduce network of complicated circuit using mesh and nodal analysis
CO-4	To study three phase circuits including star and delta connections
CO-5	To study various network reduction theorem including Norton,s theorem, Thevenin,s Theorem etc.

Teaching Plan

Unit No	No. of Lect. Planed	Topic to be covered	Proposed date (as per time table)	Actual Date	Remarks
1	1	Single Phase A.C Series Circuits	01-08-2026		
	2	-Do-	03-08-2026		
	3	Generation of alternating voltage	04-08-2026		
	4	Phasor representation of sinusoidal quantities R, L, C	05-08-2026		
	5	circuit elements its voltage and	07-08-2026		

		current response			
	6	R-L, R-C, R-L-C combination of A.C series circuit	10-08-2026		
	7	-Do-	11-08-2026		
	8	Impedance, reactance impedance triangle Power factor,	12-08-2026		
	9	active power, reactive power, apparent power,	13-08-2026		
	10	power triangle vector diagram,	17-08-2026		
	11	Revision of above topics	18-08-2026		
	12	Resonance, Bandwidth,	19-08-2026		
	13	Quality factor and voltage magnification in series R-L, R-C, RL-C circuit	20-08-2026		
	14	-Do-	22-08-2026		
	15	Revision	24-08-2026		
	16	Numerical Problems	25-08-2026		
	17	-Do-	26-08-2026		
	18	-Do-	27-08-2026		
	19	Test	29-08-2026		
	20	Revision	31-08-2026		
2	21	Single Phase A.C Parallel Circuits R-L, R-C R-L-C parallel combination of A.C. circuits	01-09-2026		
	22	RL Parallel circuit Impedance, reactance, phasor diagram, impedance triangle	02-09-2026		
	23	power factor, active power, apparent power, reactive power, power triangle	03-09-2026		
	24	Revision	05-09-2026		
	25	CT-1	07-09-2026		
	26	RC Circuit	08-09-2026		
	27	Impedance, reactance, phasor diagram, impedance triangle	09-09-2026		
	28	power factor, active power, apparent power, reactive power,	10-09-2026		
	29	power triangle	14-09-2026		
	30	-DO-	15-09-2026		
	31	Resonance in parallel R-L,	16-09-2026		
	32	R-C, R-L-C circuit,	17-09-2026		
	33	-DO-	19-09-2026		
	34	Bandwidth,	21-09-2026		

	35	Quality factor and voltage magnification	22-09-2026		
3	36	Three Phase Circuits	23-09-2026		
	37	Phasor and complex	24-09-2026		
	38	representation of three phase supply,	26-09-2026		
	39	Phase sequence and polarity	28-09-2026		
	40	Types of three-phase connections, Phase and line quantities in three phase star and delta system	30-09-2026		
	41	-DO-	01-10-2026		
	42	Balanced and unbalanced load	03-10-2026		
	43	neutral shift in unbalanced load.	05-10-2026		
	44	-DO-	06-10-2026		
	45	Three phase power active, reactive	07-10-2026		
	46	apparent power in star system	08-10-2026		
	47	apparent power in delta system	12-10-2026		
	48	CT-2	13-10-2026		
	49	Network Reduction and Principles of Circuit Analysis	14-10-2026		
	50	Source transformation	15-10-2026		
	51	Star/delta transformation	17-10-2026		
	52	delta/star transformation	21-10-2026		
	53	Mesh Analysis	22-10-2026		
	54	Numericals	24-10-2026		
	55	Node Analysis	27-10-2026		
	56	Numericals	28-10-2026		
	57	Network Theorems	29-10-2026		
	58	Numericals	31-10-2026		
	59	Superposition theorem.	10-11-2026		
	60	-DO-	11-11-2026		
	61	HOUSE TEST	12-11-2026		
	62	Thevenin's theorem.	13-11-2026		
	63	Numericals	16-11-2026		
	64	Norton's theorem	17-11-2026		
	65	Numericals	18-11-2026		
	66	Maximum power transfer theorem	19-11-2026		
67		Reciprocity theorem	21-11-2026		

	68	Reciprocity theorem	23-11-2026		
	69	Duality in electric circuits.	25-11-2026		
	70	Revision	26-11-2026		
	71	Revision	28-11-2026		

Home Assignments

Ass. No	Contents of Syllabus Covered	Proposed date	Actual Date	Remarks
1	Unit-1&2	21-09-2026		
2	Unit-3& 4	22-10-2026		

Class /House Test

Name of Test	Syllabus Covered in Tests (Unit/Chapter Wise)	Proposed date	Actual Date	Remarks
Class Test-I	Unit-1&2	As per HPTSB Academic Calendar Schedule	07-09-2026	
Class Test-II	Unit-3& 4		13-10-2026	
House Test	80% of whole syllabus		03-11-2026	

Recommended for approval please.

(Vivek Sheel Veerna)

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