

C. V. RAMAN POLYTECHNIC, BHUBANESWAR

LESSON PLAN Session (2026-2027)

Discipline: ELECTRICAL ENGINEERING	Semester: 3 RD Semester, Winter/2026	Name of the Faculty: SUBHANKAR DASH ASST.PROF Email ID: Subhankar.dash@cvrp.edu.in
Subject Name with code: ELECTRICAL CIRCUITS(EEPC203)	No. of Days/week: 03 Total No. of Class (Required): 45	Start Date: 01.07.2026 End Date: 5.11.2026

Week	Class Day	Brief description of the Topic/Chapter to be taught
1st	1 st	1.Single Phase A.C Series Circuits Generation of alternating voltage
	2 nd	Phasor representation of sinusoidal quantities
	3 rd	R, L, C circuit elements its voltage and current response
2nd	1st	R-L, R-C, R-L-C combination of A.C series circuit Impedance, reactance, impedance triangle
	2 nd	Power factor, active power, reactive power, apparent power
	3 rd	Power triangle and vector diagram
3rd	1st	Resonance, Bandwidth, Quality factor and voltage magnification in series R-L, R-C, R-L-C circuit
	2 nd	2.Single Phase A.C Parallel Circuits R-L, R-C and R-L-C parallel combination of A.C. circuits
	3 rd	Impedance, reactance, phasor diagram, impedance triangle
4th	1st	Power factor, active power, apparent power, reactive power, power triangle
	2 nd	Resonance in parallel R-L, R-C, R-L-C circuit
	3 rd	Resonance in parallel R-L, R-C, R-L-C circuit
5th	1st	Resonance in parallel R-L, R-C, R-L-C circuit
	2 nd	Bandwidth, Quality factor and voltage magnification
	3 rd	Bandwidth, Quality factor and voltage magnification

6th	1st	3.Three Phase Circuits Phasor and complex representation of three phase supply
	2 nd	Phase sequence and polarity
	3 rd	Types of three-phase connections
7th	1st	Phase and line quantities in three phase star and delta system
	2 nd	Balanced and unbalanced load
	3 rd	Neutral shift in unbalanced load
8th	1st	Three phase power, active, reactive and apparent power in star and delta system
	2 nd	Three phase power, active, reactive and apparent power in star and delta system
	3 rd	4. Network Reduction and Principles of Circuit Analysis Source transformation
9th	1st	Star/delta and delta/star transformation
	2 nd	Mesh Analysis
	3 rd	Node Analysis
10th	1st	Node Analysis
	2 nd	5. Network Theorems Superposition theorem
	3 rd	Superposition theorem
11th	1st	Thevenin's theorem
	2 nd	Revision
	3 rd	Norton's theorem
12th	1st	Maximum power transfer theorem
	2 nd	Quiz
	3 rd	Reciprocity Theorem
13th	1st	Reciprocity Theorem
	2 nd	6. Two Port Network Open Circuit Impedance Parameters
	3 rd	Open Circuit Impedance Parameters
14th	1st	Short Circuit Admittance Parameters, Transmission Parameters , Hybrid Parameters
	2 nd	Short Circuit Admittance Parameters, Transmission Parameters , Hybrid Parameters
	3 rd	Inter Connection of Two Port Network

15th	1st	Inter Connection of Two Port Network
	2 nd	Question Discussion
	3 rd	Question Discussion



Signature of the Faculty



Signature of the H.O.D