



C. V. RAMAN POLYTECHNIC, BHUBANESWAR

LESSON PLAN Session (2025-2026)

Discipline: Electronics & Telecommunication Engineering	Semester: 4 th , Summer/2026	Name of the Faculty: Prabhakar Rath Asst. Prof Email ID: prabhakar@cvrp.edu.in
Subject: Analog Circuits ETCPC202	No. of Days/week: 03	Start Date: 22/12/2025 End Date: 18/04/2026

Week	Class Day	Theory/Practical Topics
1st	1st	DIODE CIRCUITS Half-wave rectifier – working & waveforms
	2nd	Full-wave rectifier – bridge & center tap
	3rd	Filter circuits – capacitor, ripple factor
2nd	1st	Clippers: series, shunt (positive & negative)
	2nd	Clampers: positive, negative & applications
	3rd	AMPLIFIERS Amplifier models: voltage, current amplifier
3rd	1st	Transconductance & transresistance amplifier
	2nd	Small signal analysis, low-frequency models
	3rd	Voltage gain, input/output resistance
4th	1 st	Design procedure of amplifier
	2 nd	Multistage amplifier & cascade amplifier
	3 rd	Frequency response & bandwidth
5th	1 st	TUNED AMPLIFIER Introduction & classification of tuned amplifiers
	2 nd	Parallel resonant circuit
	3 rd	Resonance curve & sharpness

6 th	1 st	Single tuned voltage amplifier
	2 nd	Double-tuned amplifier & limitations
	3 rd	OPERATIONAL AMPLIFIER Differential amplifier & significance
7 th	1 st	Op-Amp block diagram & symbol
	2 nd	Characteristics of Op-Amp
	3 rd	Open-loop & closed-loop operation
8 th	1 st	Virtual ground concept
	2 nd	IC 741 pin configuration
	3 rd	Op-Amp parameters: offset & bias
9 th	1 st	CMRR, slew rate
	2 nd	Bandwidth, gain-bandwidth product
	3 rd	Open-loop & closed-loop configurations
10 th	1 st	APPLICATIONS OF OP-AMP Adder & subtractor
	2 nd	Inverting & non-inverting summing amplifier
	3 rd	DC & AC amplifiers
11 th	1 st	Integrator & differentiator
	2 nd	Sample and Hold circuit
	3 rd	Comparator & Schmitt Trigger
12 th	1 st	Peak detector & active filter
	2 nd	IC TIMER 555 555 timer block diagram
	3 rd	Pin functions & internal operation
13 th	1 st	Astable multivibrator
	2 nd	Monostable multivibrator
	3 rd	PWM & pulse position modulator



14 th	1 st	POWER SUPPLY Bridge rectifier design
	2 nd	Filter circuits & ripple measurement
	3 rd	Unregulated power supply
15 th	1 st	Fixed voltage regulators (7800/7900)
	2 nd	Adjustable regulator using LM317
	3 rd	Dual regulated power supply (LM317 & LM337)

Signature of the Faculty

Signature of the H.O.D