

Lesson Plan

Name of the Faculty : **Ms. Sumitra Sangwan**
Discipline : **Electronics and Communication Engg.**
Semester : **3rd**
Subject : **Electronic Devices And Circuits-II**
Lesson Plan Duration : **4.8.2025-26.11.2025**
HOD : **Ms. Preeti Bhandari**

Work Load (Lecture/ Practical) per week (in hours): 03 HOURS (Lecture)

Week No	Lecture No	THEORY
1 week	1st lecture	Introduction to the subject and syllabus.
	2nd lecture	UNIT 1: Definition of single and multistage amplifier,need & gain of multistage amplifier.
	3rd lecture	bandwidth,frequency response,coupling device & classification of amplifiers
2 week	1st lecture	RC coupled and Transformer Coupled amplifier in detail.
	2nd lecture	Direct coupled amplifier in detail,Comparison of different amplifiers.
	3rd lecture	UNIT 2: Difference b/w voltage & Power Amplifiers,importance of impedance matching
3 week	1st lecture	Terms:collector Efficiency,Distortion,Heat dissipation capability,Heat sinks
	2nd lecture	Class A,B,C and AB amplifiers
	3rd lecture	Single ended Power Amplifiers,Heat Dissipation Curve,importance of heat sinks
4 week	1st lecture	Push pull and complimentary push pull amplifier in detail.
	2nd lecture	Single Tuned voltage amplifiers with Frequency response characteristics.
	3rd lecture	Double Tuned voltage amplifiers with Frequency response characteristics.
5 week	1st lecture	CLASS TEST-01(UNIT-01 & 02)
	2nd lecture	UNIT3: Definition,principle & types of feedback
	3rd lecture	derivation for gain of an amplifier with feedback
6 week	1st lecture	1st SESSIONAL
	2nd lecture	Effect of negative feedback on gain,stability,distortion and bandwidth of an amplifier.
	3rd lecture	RC coupled amplifier without emitter Bypass capacitor in detail and emitter follower amplifier and its application.
7 week	1st lecture	UNIT4: Definition of oscillator,use of Positive feedback,Tank circuit
	2nd lecture	Barkhausen criterion for oscillations
	3rd lecture	LC oscillators-Tuned collector,Hartley and Colpitt Oscillator
8 week	1st lecture	CLASS TEST-03(UNIT-03)
	2nd lecture	RC oscillators-Phase shift and Wien Bridge Oscillator
	3rd lecture	Piezoelectric effect and materials
	1st lecture	Crystal oscillator

9 week	2nd lecture	UNIT5:Working of Transistor as Switch,Astable multivibrator concept with applications.
	3rd lecture	Monostable and Bistable multivibrator concept with their applications
10 week	1st lecture	2nd SESSIONAL
	2nd lecture	Block and Pin diagram of IC555 and its applications.
	3rd lecture	IC555 as astable and monostable multivibrator
11 week	1st lecture	IC555 as bistable multivibrator
	2nd lecture	Definition,symbol,Block Diagram of Op-Amp and characteristics of ideal Op-Amp
	3rd lecture	IC-741 and its pin configuration.
12 week	1st lecture	Terms:Differential voltage gain,CMRR,PSRR,slew rate,input offst current
	2nd lecture	Op-Amp as inverter and Scale changer.
	3rd lecture	Op-Amp as Adder and Subtractor.
13 week	1st lecture	Op-Amp as Differentiator and Integrator.
	2nd lecture	Revision class
	3rd lecture	Revision class
14 week	1st lecture	3rd SESSIONAL
	2nd lecture	Revision class
	3rd lecture	Revision class
15 week	1st lecture	class test
	2nd lecture	class test
	3rd lecture	class test

Subject Teacher:

PRACTICAL
Introduction to the practical syllabus
Demonstration of frequently used devices like DSO etc
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Plot the frequency response of RC coupled amplifier and calculate the bandwidth .
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To measure the gain of Push pull amplifier at 1KHz
To measure voltage gain of emitter follower circuit & plot frequency response.
Revision and VIVA

Plot frequency response of Hartley and Colpitt Oscillator.
Plot frequency response of Phase shift and Wein Bridge Oscillator.
Revision and VIVA
Use of IC555 as monostable multivibrator
Use of IC555 as astable multivibrator
Use of IC741 as Inverter and Adder
Use of IC741 as Subtractor and Integrator.

HOD,ECE