

R.G. Government Polytechnic, Banikhet, Distt. Chamba (H.P)-176303

Department of Electrical Engineering

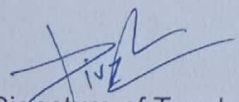
Lesson Plan

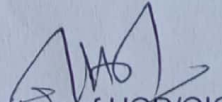
Name of Faculty	Mr. X
Discipline	Electrical Engineering
Semester	4 th
Subject	EDC-2 (L-4 Hrs./week)
Lesson Plan Duration	February – June 2023

Week	Topic	Theory
1st (14 Feb. – 21 Feb.)	1. SINUSOIDAL OSCILLATORS	Working Principle of Oscillator, Use of positive feedback in amplifier circuit Barkhausen criterion, Difference between Oscillator & Electrical Generator Different Types of Oscillator circuits: Tuned collector Hartley
2nd (22 Feb. – 28 Feb.)	1. SINUSOIDAL OSCILLATORS	Colpitts, Phase shift Wien Bridge Crystal oscillator-Their working principle, frequency range and applications
3rd (01 Mar. – 07 Mar.)	2. TUNED VOLTAGE AMPLIFIER	Series and Parallel Resonant Circuits Comparison between Series and Parallel Resonant circuit Single & Double Tuned Voltage Amplifier Circuits and their frequency responses
4th (09 Mar. – 16 Mar.)	3. WAVE SHAPING CIRCUITS	Integrating and differentiating circuits: Their working and applications
5th (17 Mar. – 23 Mar.)	3. WAVE SHAPING CIRCUITS	Diode Clipping circuits, biased Clipping circuits Clamping circuits
Class Test – 1	In third week of March 2023	
6th (24 Mar. – 31 Mar.)	4. MULTIVIBRATOR CIRCUITS	Working principle of Transistor as Switch Concept of Multi-vibrator: Astable, Monostable, and Bistable
7th (01 Apr. – 10 Apr.)	4. MULTIVIBRATOR CIRCUITS	Block diagram of IC555 and its working and applications Working of IC555 as astable & monostable multivibrator Applications of Multivibrator Circuits

8 th (11 Apr. – 19 Apr.)	4. MULTIVIBRATOR CIRCUITS 5. OPERATIONAL AMPLIFIER	Applications of Multivibrator Circuits Characteristics of an ideal operational amplifier and its block diagram Identification of IC741 Definitions: Differential voltage gain, CMRR, slew rate, input offset
9 th (20 Apr. – 27 Apr.)	5. OPERATIONAL AMPLIFIER	total output offset voltage. Open loop configurations: Differential, Inverting & Non Inverting modes
10 th (28 Apr. – 04 May)	5. OPERATIONAL AMPLIFIER	limitations of open loop configuration Closed loop configuration: As an Inverting & Non-inverting amplifier Schmitt trigger circuit, Comparator, Differentiator and Integrator
11 th (06 May – 12 May)	6. OPTOELECTRONIC DEVICES	Working principle of Photo-resistor, photo diode, photo transistor and their Applications
Class Test - 2	In third week of April 2023	
12 th (15 May – 20 May)	6. OPTOELECTRONIC DEVICES 7. REGULATED POWER SUPPLIES	Need for Opto-isolation in electronic circuit, Working of optocoupler Circuit. Working of DC regulated power Supply
13 th (23 May-29 May)	7. REGULATED POWER SUPPLIES	Line and load side regulation Regulator ICs (78XX, 79XX)
House Test	In 2 nd week of May 2023	
14 th (30 May-05 June)	7. REGULATED POWER SUPPLIES	Switching Mode Power Supply (SMPS)-Working Principle, advantages & applications.
15 th (06 June – 09 June)	Revision and doubt clearance	Revision and doubt clearance

NOTE: - Lesson Plan is Tentative, subject to availability of Time, Students & Faculty.


Signature of Teacher/Prepared by
(Er. Divya)


Signature of HOD/OIC
(Er. Amit Attri)