



DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING

LESSON PLAN FOR ACADEMIC SESSION 2022-23

JHARSUGUDA ENGINEERING SCHOOL, JHARSUGUDA

Name of the Faculty: SUNIL KUMAR PAL	Academic Year: 2022-23
Course No.: Th-4b	Course Name: Basic Electronics
Program: Diploma	Branch: Civil/ Mechanical
Year/Sem: 1 st / 2 nd	Section: C, M(a), M(b)
Total Periods : 30 P/ Sem	End Semester Exam : 40marks
Examination : 3 Hours	Internal Assessment : 10 Marks
	TOTAL MARKS : 50 Marks

Sl. No.	Period	Time (min)	Unit/ Chapter	Topic to be covered	Teaching method
1.	1.	55	1	.ELECTRONIC DEVICES 1.1 Basic Concept of Electronics and its application.	Black board
2.	2.	55	1	Basic Concept of Electron Emission & its types.	Black board
3.	3.	55	1	Classification of material according to electrical conductivity (Conductor, Semiconductor & Insulator) with respect to energy band diagram only..	Black board
4.	4.	55	1	Classification of material according to electrical conductivity (Conductor, Semiconductor & Insulator) with respect to energy band diagram only.	Black board
5.	5.	55	1	Difference between Intrinsic & Extrinsic Semiconductor.	Black board
6.	6.	55	1	Difference between vacuum tube & semiconductor.	Black board
7.	7.	55	1	Principle of working and use of PN junction diode, Zener diode and Light Emitting Diode (LED)	Black board
8.	8.	55	1	Integrated circuits (I.C) & its advantages.	Black board
9.	9.	55	2	2. ELECTRONIC CIRCUITS 2.1 Rectifier & its uses.	Black board
10.	10.	55	2	2.2 Principles of working of different types of Rectifiers with their merits and demerits	Black board

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11.	11.	55	2	2.2 Principles of working of different types of Rectifiers with their merits and demerits	Black board
12.	12.	55	2	2.3 Functions of filters and classification of simple Filter circuit (Capacitor, choke Input and π)	Audio visual smart class
13.	13.	55	2	2.4 Working of D.C power supply system (unregulated) with help of block diagrams only	Black board
14.	14.	55	2	2.5 Transistor, Different types of Transistor Configuration .	Black board
15.	15.	55	2	output and Input current gain relationship in CE, CB and CC configuration(No mathematical derivation)	Black board
16.	16.	55	2	2.6 Need of biasing and explain different types of biasing with circuit diagram.(only CE configuration).	Black board
17.	17.	55	2	2.7 Amplifiers(concept) , working principles of single phase CE amplifier	Audio visual smart class
18.	18.	55	2	2.8 Electronic Oscillator and its classification	Black board
19.	19.	55	2	2.9 Working of Basic Oscillator with different elements through simple Block Diagram	Black board
20.	20.	55	3	3. COMMUNICATION SYSTEM 3.1 Basic communication system (concept & explanation with help of Block diagram)	Black board
21.	21.	55	3	3.2 Concept of Modulation and Demodulation, Difference between them	Black board
22.	22.	55	3	3.3 Different types of Modulation (AM, FM & PM) based on signal, carrier wave and modulated wave (only concept, No mathematical Derivation)	Black board
23.	23.	55	3	3.3 Different types of Modulation (AM, FM & PM) based on signal, carrier wave and modulated wave (only concept, No mathematical Derivation)	Black board
24.	24.	55	4	4. TRANSDUCERS AND MEASURING INSTRUMENTS 4.1 Concept of Transducer and sensor with their differences.	Black board
25.	25.	55	4	4.2 Different type of Transducers & concept of active and passive transducer.	Black board
26.	26.	55	4	4.3 Working principle of photo emissive, photoconductive, photovoltaic transducer and its application	Black board
27.	27.	55	4	4.4 Multimeter and its applications .	Black board
28.	28.	55	4	4.5 Analog and Digital Multimeter and their differences	Black board
29.	29.	55	4	4.6 Working principle of Multimeter with Basic Block diagram	Black board
30.	30.	55	4	4.7 CRO, working principle of CRO with simple Block diagram	Black board

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