



NILASAILA INSTITUTE OF SCIENCE & TECHNOLOGY
SERGARH-756060, BALASORE (ODISHA)
(Approved by AICTE& affiliated to SCTE&VT, Odisha)



LESSON PLAN

SUBJECT: Th-4(B)(BASIC ELECTRONICS)

Name Of The Faculty :- Er. NIRANJAN SAHU

Branch :-AUTO/MECH/CIVIL

Session :- 2023-24

Semester :- 1ST

Examination :- 2023 (W)

CHAPTER WISE DISTRIBUTION OF PERIODS

Sl.No.	Name of the chapter as per the Syllabus	No. of Periods as per the Syllabus	No. of periods actually needed
1	Electronic Device	8	8
2	Electronic Circuit	9	9
3	Communication system	3	3
4	Transducers & Measuring instruments	10	10
	Total Period:	30	30

Discipline: AUTO/MECH/C IVIL	Semester: 1ST	Name of the Teaching Faculty: Er. NIRANJAN SAHU	
		SESSION : 2023-24	EXAMINATION : 2023 (W)
Week	Class Day	Topics to be Covered	
1 st	1 st	1. ELECTRONIC DEVICES 1.1 Basic Concept of Electronics and its application.	
	2 nd	1.2 Basic Concept of Electron Emission & its types.	
2 nd	1 st	1.3 Classification of material according to electrical conductivity (Conductor, Semiconductor & Insulator) with respect to energy band diagram only.	
	2 nd	1.4 Difference between Intrinsic & Extrinsic Semiconductor.	
3 rd	1 st	1.5 Difference between vacuum tube & semiconductor.	
	2 nd	1.6 Principle of working and use of PN junction diode,	
4 th	1 st	1.6 Principle of working and use of Zener diode and Light Emitting Diode (LED)	
	2 nd	1.7 Integrated circuits (I.C) & its advantages.	
5 th	1 st	2. ELECTRONIC CIRCUITS 2.1 Rectifier & its uses	
	2 nd	2.2 Principles of working of different types of Rectifiers with their merits and demerits	
6 th	1 st	2.3 Functions of filters and classification of simple Filter circuit (Capacitor, choke input and π)	
	2 nd	2.4 Working of D.C power supply system (unregulated) with help of block diagrams only	
7 th	1 st	2.5 Transistor, Different types of Transistor Configuration and state output and input current gain relationship in CE,CB and CC configuration(No mathematical	
	2 nd	2.6 Need of biasing and explain different types of biasing with circuit diagram.(only CE configuration)	
8 th	1 st	2.7 Amplifiers(concept) , working principles of single phase CE amplifier	
	2 nd	2.8 Electronic Oscillator and its classification	
9 th	1 st	2.9 Working of Basic Oscillator with different elements through simple Block Diagram	
	2 nd	3. COMMUNICATION SYSTEM 3.1 Basic communication system (concept & explanation with help of Block diagram)	

10th	1st	3.2 Concept of Modulation and Demodulation, Difference between them
	2nd	3.3 Different types of Modulation (AM, FM & PM) based on signal, carrier wave and modulated wave (only concept, No mathematical Derivation)
11th	1st	TRANSDUCERS AND MEASURING INSTRUMENTS 4.1 Concept of Transducer and sensor with their differences
	2nd	4.2 Different type of Transducers .
12th	1st	4.2 concept of active and passive transducer.
	2nd	4.3 Working principle of photo emissive and its application
13th	1st	4.3 Working principle of photoconductive and its application
	2nd	4.3 Working principle of photovoltaic transducer and its application
14th	1st	4.4 Multimeter and its applications
	2nd	4.5 Analog and Digital Multimeter and their differences
15th	1st	4.6 Working principle of Multimeter with Basic Block diagram
	2nd	4.6 Working principle of Multimeter with Basic Block diagram
16th	1st	4.7 CRO, working principle of CRO with simple Block diagram
	2nd	4.7 CRO, working principle of CRO with simple Block diagram
17th	1st	REVISION
	2nd	REVISION