

**BHUBANANANDA ORISSA SCHOOL OF ENGINEERING, CUTTACK**  
**ACADEMIC LESSON PLAN**

**Subject :Basic Electronics Engineering(TH-4(b))**

<b>Discipline MECH.</b>	<b>Semester :2<sup>ND</sup> Section-F</b>	<b>Name of the Teaching Faculty: MIHIR KUMAR MOHANTY, E&amp;TC JYOTI PRAKASH BEHURA, E&amp;TC</b>
<b>Subject: BASIC ELECTRO NICS ENGG.</b>	<b>NO. OF DAYS/WEEK CLASS ALLOTTED:02 ( MON , TUE ) 01 PERIOD EACH</b>	<b>SEMESTER FROM :- 20.03.2023 TO 24.06.2023 No of weeks : 14</b>
<b>Week No.</b>	<b>Class Day</b>	<b>Theory Topics</b>
W1	20-03-2023	<b>UNIT-1 : ELECTRONIC DEVICES</b> 1.1 Basic concept of Electronics& its applications.
	21-03-2023	1.2 Basic concept of ElectronEmission and its type.
W2	27-03-2023	1.3 Classification of material according to electrical conductivity (Conductor, Semiconductor & Insulator) with respect to energy band diagram only.
	28-03-2023	1.4 Intrinsic & Extrinsic Semiconductor.
W3	03-04-2023	1.5 Difference between vacuum tube & semiconductor.
	04-04-2023	1.6 Principle of working and use of PN junction diode, Zener diode, Light Emitting Diode (LED)
W4	10-04-2023	1.7 Basic concept of integrated circuits (I.C) & its uses.
	11-04-2023	<b>UNIT-2 : ELECTRONIC CIRCUITS</b> 2.1 Define Rectifier & its use.
W5	17-04-2023	2.2 Principles of working of different types of Rectifiers and their merits and demerits
	18-04-2023	2.3 Functions of filters and classification of simple Filter circuit
W6	24-04-2023	2.4 Working of D.C power supply system (unregulated) with help of block diagrams only
	25-04-2023	2.5 Transistor, Different types of Transistor Configuration and state output and inputcurrent gain relationship in CE,CB and CC configuration( No mathematical derivation).
W7	01-05-2023	2.6 Need of biasing and explain different types of biasing with circuit diagram. (only CE configuration)
	02-05-2023	2.7 Amplifiers(concept) , working principles of single phase CE amplifier Amplifier

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W8	08-05-2023	2.8 Electronic Oscillator and its classification
	09-05-2023	<b>CLASS TEST-I</b>
W9	15-05-2023	<b>UNIT-3 : COMMUNICATION SYSTEM</b> 3.1 Basic communication system (concept & explanation with help of Block diagram)
	16-05-2023	3.2 Concept of Modulation and Demodulation, Difference between them
W10	22-05-2023	3.3 Different types of Modulation (AM, FM & PM) based on signal, carrier wave and modulated wave (only concept, No mathematical Derivation)
	23-05-2023	<b>UNIT-4 : TRANSDUCERS AND MEASURING INSTRUMENTS</b> 4.1 Concept of Transducer and Primary sensor and differences.
W11	29-05-2023	4.2 Different type of Transducers & concept of active and passive transducer
	30-05-2023	4.3 Working principle of photo emissive, photoconductive, photovoltaic transducer and its application.
W12	05-06-2023	4.4 Multimeter, types and applications
	06-06-2023	4.5 Analog and digital multimeter and their differences
W13	12-06-2023	4.6 Working principle of Multimeter with basic block diagram .
	13-06-2023	4.7 CRO , Block diagram of CRO and applications of CRO
W14	19-06-2023	<b>CLASS TEST-II</b>
	20-06-2023	<b>IMPORTANT QUESTION DISCUSSION</b>

*Mihir Kumar Mohanty*  
Signature of Faculty

*12/02/2023*  
**HOD, E&TC**  
**Electronics & Telecomm. Engg.**  
**BOSE, Cuttack**

*[Signature]*  
Principal