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

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

Discipline CIVIL	Semester :2 <sup>ND</sup> Section-A	Name of the Teaching Faculty: NIBEDITA RAY, E&TC
Subject: BASIC ELECTRO NICS ENGG.	NO. OF DAYS/WEEK CLASS ALLOTTED:02 ( MON , THU ) 01 PERIOD EACH	SEMESTER FROM :- 20.03.2023 TO 24.06.2023 No of weeks : 14
Week No.	Class Day	Theory Topics
W1	20-03-2023	UNIT-1: ELECTRONIC DEVICES  1.1 Basic concept of Electronics& its applications.
	23-03-2023	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.
W3	03-04-2023	<ul><li>1.4 Intrinsic &amp; Extrinsic Semiconductor.</li><li>1.5 Difference between vacuum tube &amp; semiconductor.</li></ul>
	06-04-2023	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.
	13-04-2023	UNIT-2: ELECTRONIC CIRCUITS  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
	20-04-2023	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
	27-04-2023	2.5 Transistor, Different types of Transistor Configuration and state output and input current 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)
	04-05-2023	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
	11-05-2023	CLASS TEST-I
W9	15-05-2023	UNIT-3: COMMUNICATION SYSTEM  3.1 Basic communication system (concept & explanation with help of Block diagram)
	18-05-2023	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)
	25-05-2023	UNIT-4: TRANSDUCERS AND MEASURING INSTRUMENTS 4.1 Concept of Transducer and Primary sensor and difference
W11	29-05-2023	4.2 Different type of Transducers & concept of active and passive transducer
	01-06-2023	4.3 Working principle of photo emissive, photoconductive, photovoltaic transducer and its application.
W12	05-06-2023	4.4 Multimeter, types and applications
-	08-06-2023	4.5 Analog and digital multimeter and their differences
W13	12-06-2023	4.6 Working principle of Multimeter with basic block diagram
	15-06-2023	4.7 CRO , Block diagram of CRO and applications of CRO
W14	19-06-2023	CLASS TEST-II
	22-06-2023	IMPORTANT QUESTION DISCUSSION

Signature of Faculty

102/2093 Electronics & Telecomm. Engg. **BOSE, Cuttack** 

Principal