**UTKALMANI GOPABANDHU INSTITUTE OF** 

# **ENGINEERING, ROURKELA**



## **LESSON PLAN**

## **SESSION: 2022-2023**

# **DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING**

**SUBJECT CODE:** Th.4 (B)

NAME OF THE SUBJECT: BASIC ELECTRONICS ENGINEERING

**SEMESTER: DIPLOMA 2<sup>ND</sup> SEM** 

NUMBER OF CLASSES ALLOTED PER WEEK: 2

TOTAL PERIODS ALLOTED TO THE SUBJECT ACCORDING TO SCTEVT: 30

NAME OF THE FACULTY: PRIYADARSHINI MISHRA



#### LESSON PLAN

#### DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

**SUBJECT CODE:** 

NAME:

**BRANCH:** 

**SEMESTER:** 

**PERIODS PER WEEK:** 

#### NAME OF THE FACULTY:

PRIYADARSHINI MISHRA

**BASIC ELECTRONICS** 

MECHANICAL

**DIPLOMA -II** 

2

**TH4 (B)** 

Week/Date	Lecture	Topic to be covered	REMARK
Week 1	1	Basic Concept of Electronics and its	
		application. Basic Concept of Electron	
20/03/2023		Emission & its types.	
TO			
23/03/2023	2	Classification of material according to	
		electrical conductivity (Conductor,	
		Semiconductor & Insulator) with respect to energy band diagram only.	
Week 2	1	Difference between Intrinsic & Extrinsic	
27/03/2023		Semiconductor.	
TO 01/04/2023	2	Difference between vacuum tube &	
01/04/2023	2	semiconductor.	
Week 3	1	Principle of working and use of PN junction	
03/04/2023		diode, Zener diode and Light Emitting Diode	
ТО		(LED)	
08/04/2023		Integrated circuits (I.C) & its advantages.	
	2	integrated encurs (i.e.) & its advantages.	
Week 4	1	Rectifier & its uses.Principles of working of	
10/04/2023		different types of Rectifiers with their merits	
ТО	2	and demerits.	
15/04/2023			
		Functions of filters and classification of	
		Filter circuit characteristic	



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NAME:	<b>BASIC ELECTRONICS</b>
BRANCH:	MECHANICAL
SEMESTER:	DIPLOMA -II
PERIODS PER WEEK:	2
NAME OF THE FACULTY:	PRIYADARSHINI MISHRA

Week/Date	Lecture	Topic to be covered	REMARK
Week 5	1	D.C power supply system with help of	
17/04/2023		block diagrams only.	
ТО	2	Transistor, Different types of Transistor Configuration and state output and input	
22/04/2023		current gain relationship in CE,CB and CC configuration( No mathematical derivation)	
Week 6	1	Need of biasing and explain different types of biasing with circuit	
24/04/2023	2		
ТО		Amplifiers(concept)and how the amplification of signal is achieved by the help of transistor	
29/04/2023			
Week 7	1	working principles of single phase CE amplifier	
01/05/2023	2	Basic functions Oscillator and its	
ТО		classification	
06/05/2023			



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**BRANCH:** 

**SEMESTER:** 

**PERIODS PER WEEK:** 

#### NAME OF THE FACULTY:

PRIYADARSHINI MISHRA

**BASIC ELECTRONICS** 

MECHANICAL

**DIPLOMA -II** 

2

**TH4 (B)** 

Week/Date	Lecture	Topic to be covered	REMARK
Week 8	1	Basic communication system with	
08/05/2023		help of Block diagram , Modulation ,	
ТО		Need of modulation	
10	2		
13/05/2023		Different types of Modulation (AM,	
15/05/2025		FM & PM)	
Week 9	1	Amplitude modulation and frequency	
15/05/2023		modulation based on signal, carrier	
ТО	2	wave and modulated wave	
10			
20/05/2023		Demodulation ,Working of super	
20/02/2023		heterodyne radio receiver	
Week 10	1	Block diagram of Radio Transmitter	
22/05/2023		and Receiver	
	2		
ТО		Concept of transducer and primary	
27/05/2023		sensor.	



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**BRANCH:** 

**SEMESTER:** 

**PERIODS PER WEEK:** 

#### NAME OF THE FACULTY:

MECHANICAL

**BASIC ELECTRONICS** 

**TH4 (B)** 

DIPLOMA -I

2

PRIYADARSHINI MISHRA

Week/Date	Lecture	Topic to be covered	REMARK
Week 11	1	Different type of transducer and	
29/05/2023	2	concept of active and passive	
ТО	2	transducer	
03/06/2023		Working principle of photo emissive transducer	
Week 12	1	Working principle of	
05/06/2023 TO	2	photoconductive transducer	
10/06/2023		Working principle of photovoltaic	
		transducer.	
		Applications of transducer	
Week 13	1	Multimeter and its application	
12/06/2023 TO 17/06/2023	2	Analog and digital multimeter and their difference	
Week 14	1	Working principle of multimeter	20/06/23 Holiday (Car
19/06/2023 TO	2	with basic block diagram	Festival) need one extra class for adjustment
24/06/2023		CRO,Working principle of CRO with simple block diagram	



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BRANCH:	MECHANICAL		
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PERIODS PER WEEK:	2		
NAME OF THE FACULTY:	PRIYADARSHINI MISHRA		

Week/Date	Lecture	Topic to be covered	REMARK
Week 15	1	Semester Question Discussion	
26/06/2023		Semester Question Discussion	