Discipline: Electronics and Telecommunication Engineering	**Semester:3**	**Name of the Teaching Faculty: ER. POONAM PANDA**	
Subject:ELECTRONIC MEASURMENT & INSTRUMENTS	**No. of Days/per week class allotted: 4**	**Semester From Date: 2nd SEPTEMBER 2020 To Date: 19TH MARCH 2021**	**No.of Weeks:15**
Week	**Class Day**	**Theory Topics**	**Remarks**
	CHAPTER 1:QUALITIES OF INSTRUMENT		
1st	1st (1)	DISCUSS STATIC CHARACTERSTICS	
	2nd (2)	ACCURACY,SENSITIVITY,ERRORS	
	3rd (3)	DYNAMIC CHARACTERSTICS	
	4th (4)	ERRORS OF INSTRUMENT	
2nd	1st (5)	SPEED OF INSTRUMENTS	
	CHAPTER 2:INDICATING INSTRUMENT		
	2nd (6)	INTRODUCTION OF INDICATOR, TYPES	
	3rd (7)	PRINCIPAL OF INDICATING INSTRUMENT	
	4th (8)	PMMC INSTRUMENTS	
3rd	1st (9)	MI INSTRUMENTS	
	2nd , (10)	AC AND DC AMMETER	
	3rd (11)	AC AND DC VOLTMETER	
	4th (12)	SERIES AND SHUNT OHNMETER	
4th	1st (13)	ANALOG MULTIMETER AND ITS APPLICATIONS	
	2nd (14)	DIGITAL TACHOMETER,MEASUREMENT OF FREQUENCY	
	3rd (15)	Q METER	
	CHAPTER 3: DIGITAL INSTRUMENT		
	4th (16)	PRINCIPLE OF DIGITAL VOLTMETER	
5th	1st (17)	RESOLUTION AND SENSITIVITY OF DVM	

	2nd (18)	WORKING AND APPLICATION OF DVM	
	3rd (19)	OPERATION OF DIGITAL VOLTMETER	
	4th (20)	MEASURMENT OF TIME	
6th	1sT (21)	DIGITAL FREQUENCY METER	
	2nd (22)	OPERATION OF DIGITAL TACHOMETER	
	3rd (23)	MEARUMENT OF FREQUENCY	
	4th (24)	OPERATION OF WORKING OF AUTOMATION IN DM	
7th	1st (25)	BLOCK DIAGRAM OF LCR METER	
	CHAPTER 4: OSCILLOSCOPE		
	2nd (26)	BLOCK DIAGRAM OF CRO	
	3rd (27)	OPERATION OF CRO	
	4th (28)	DUAL TRACE CRO	
8th	1st (29)	LISSAJOUS FIGURE	
	2nd (30)	MEASUREMENT OF AMPLITUDE, FREQUENCY USING CRO	
	3rd (31)	APPLICATION OF OSCILLOSCOPE	
	4th (32)	BLOCK DIAGRAM OF DSO	
9th	1st (33)	OPERATION OF DSO	
	CHAPTER 5:BRIDGES		
	2nd (34)	TYPES OF BRIDGES	
	3rd (35)	WHEATONE BRIDGE	
	4th (36)	MAXWELL'S BRIDGE	
10th	1st (37)	DESAUTY'S BRIGDE	
	2nd (38)	SCHERING BRIDGE	
	3rd (39)	HAY'S BRIDGE	
	4th (40)	Q METER CIRCUIT DIAGRAM	
11th	1st (41)	MEASUREMENT OF IMPEDANCE	
	2nd (42)	LCR METER	
	3rd (43)	APPLICATION OF BRIDGES,	
	4th (44)	FREQUENCY MEASUREMENT	

	CHAPTER 6 TRANDUCER AND SENSOR			
12th	1st	(45)	PARAMETER, METHOD OF SELECTING OF ELECTRICAL TRANSDUCER & RESISTIVE	
	2nd	(46)	WORKING PRINCIPLE OF STRAIN GAUGES, DEFINE STRAIN GAUGE	
	3rd	(47)	WORKING PRINCIPLE OF LVDT	
	4th	(48)	ADVANTAGE OF ELECTRICAL TRANSDUCER,STAIN GUAGE, LVDT	
13th	1st	(49)	WORKING PRINCIPLE OF CAPACITIVE TRANSDUCERS (PRESSURE)	
	2nd	(50)	WORKING PRINCIPLE OF LOAD CELL (PRESSURE CELL)	
	3rd	(51)	WORKING PRINCIPLE OF TEMPERATURE TRANSDUCER (RTD)	
	4th	(52)	OPTICAL PYROMETER, THERMOCOUPLE	
14th	1st	(53)	WORKING PRINCIPLE OF CURRENT TRANSDUCER AND KW TRANSDUCER.	
	2nd,	(54)	WORKING PRINCIPLE OF PROXIMITY & LIGHT SENSORS	
	CHAPTER 7: SIGNAL GENERATOR AND WAVE ANALYSER			
	3rd	(55)	CLASSIFICATION OF SIGNAL GENERATOR	
	4th	(56)	WAVE ANALYSER	
15th	1st	(57)	WORKING OF AF SINE	
	2nd,	(58)	SQUARE WAVE GENERATOR	
	3rd	(59)	FUNCTION OF WAVE ANALYSER	
	4th	(60)	BASIC CONCEPT OF DATA ACQUISITION SYSTEM (DAS)