

Aid

Lesson Plan

Subject Electrical Measurements & Instruments (Code) TH-3 Name of faculty Smt. Sudrekhra Mohanty
 Semester Vth Class allotted 4P/week Branch Electrical Engg

Discipline	Semester	From date: 10/03/22 To date: 10/06/22	Teaching Aid
Subject:	No. of days/ per week <u>4P/week</u>	Theory/ Practical - Topics/Lesson	
Week	Date/Period		
1	10/03/22	Define Accuracy, Precision, Errors, Resolution sensitivity and tolerance. Classification of Measuring Inst. Explain Deflecting Controlling damping torque.	
	to		
	12/03/22		
2	14/03/22	Calibration of instruments. Describe construction, principle of operation errors, ranges methods and demerits. MI Inst. PMMC. Dynamometer type Inst.	
	to		
	19/03/22		
3	21/03/22	Rectifier type Inst. Induction Type Inst. Extend the range of instruments by use of shunt and multiplier. Solve Numerical.	
	to		
	26/03/22		
4	28/03/22	Describe construction principle of working of dynamometer type wattmeter (LPF and UPF type) The errors on dynamometer type wattmeter and method of correction.	
	to		
	02/04/22		
5	04/04/22	Discuss induction type watt meters. Introduction of IQ Induction type energy meters. Construction & working principle and their compensation & adjustment.	
	to		
	09/04/22		
6	11/04/22	Testing of energy meters. Tachometer, type and working principle. Principle of operation Mechanical Resonance type Frequency Meter.	
	to		
	16/04/22		
7	18/04/22	Principle of operation Electrical Resonance type Frequency Meter.	
	to		
	23/04/22		

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Week	Date Period	Theory/Practical - Topics/Lesson	Teaching Aid
8	25/04/22 to 30/04/22	Principle of operation and working of Dynamometer type single phase & 3 phase power factor meters.	
9	02/05/22 to 07/05/22	Classification of Resistance measurement of low resistance by potentiometers. High resistance of wheat bridge method. Measurement of high resistance of ^{loss element} .	
10	09/05/22 to 14/05/22	Construction principle of operation of meggers & earth tester of insulation resistance construction principle of multimeters (Analog and Digital)	
11	17/05/22 to 21/05/22	Measurement of inductance by Maxwell's Bridge Method. Measurement of capacitance by Schering Bridge Method. Def. fine transducer, sensing element.	
12	23/05/22 to 28/05/22	Define detector element and transduction elements. Classify transducers. Give example of various class transducer. Linear and angular motion potentiometer.	
13	31/05/22 to 04/06/22	Thermistor and Resistance thermometers. Wire resistance strain gauges. Inductive transducer, capacitive transducer. Piezo electric transducer.	
14	06/06/22 to 10/06/22	Principle of CRO, Oscilloscope. Measurement of DC voltage & current, & AC voltage, current, phase & frequency.	
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