

Electronics and Communication Engg. Department
Session 2024-25 (2nd Semester)

Subject : EIM

Load:- L -3

P-4

Week	Theory		Practical	Topic
	Lecturer	Topics		
1st	1	Introduction to measurement, Instruments types	1st	introduction to Measurement
	2	Method of Measurement, Discussion of Specifications of Instruments		
	3	Loading Effect		
2nd	1	Importance and application of Standard and calibration	2nd	Measurement of voltage, resistance, frequency using analog multimeter
	2	Queries		
	3	Measurement of DC voltage and DC current		
3rd	1	Measurement of AC voltage and AC current	3rd	Measurement of voltage, resistance, frequency using digital multimeter
	2	introduction to PMMC instrument		
	3	Construction of PMMC instrument		
4th	1	Working of PMMC instrument	4th	File Checking
	2	Construction of Moving Iron type instrument		
	3	Working of moving Iron Instrument		
5th	1	Sessional 1st	5th	Study front panel controls of CRO
	2	Introduction to cathode Ray Tube		
	3	working of CRT		
6th	1	Block diagram of basic CRO	6th	Measurement of voltage ,frequency, timeperiod and phase using CRO
	2	working of CRO, Front Panel Control		
	3	Introduction to triggered sweep oscilloscope		
7th	1	Principle of Wheat Stone Bridge	7th	Measurement of PHASE using lissajous pattern on CRO
	2	Measurement of Voltage, Frequency Phase Using CRO		
	3	Revision		
8th	1	Introduction to DSO	8th	Measurement of voltage ,frequency, timeperiod and phase using DSO
	2	Block Diagram of DSO		
	3	Working Of DSO		
9th	1	Introduction to Bridges	9th	Measurement of unknown resistance using Wheat Stone Bridge
	2	Principle of Wheat Stone Bridge		
	3	Maxwell Induction Bridge		
10th	1	Hay Bridge	10th	File Checking
	2	De-Sauty Bridge		
	3	De-Sauty Bridge		
11th	1	Q-meter	11th	MEASUREMENT of Q of a coil
	2	Q-meter		
	3	Introduction to Low frequency and Radio frequency Generator		
12th	1	Explanation of Pulse Generator	12th	Measurement of impedance using Hay's Bridge
	2	Function Generator		
	3	Function Generator		
13th	1	Comparison of analog digital inst.	13th	Measurement of impedance using Maxwell Induction Bridge
	2	Comparison of analog digital inst.		
	3	block diagram and working of a digital multi-meter		

14th	1	block diagram and working of a digital multi-meter	14th	Measurement of imdedence using De Saunty's Bridge
	2	applications of digital multi-meters		
	3	limitations of digital multi-meters		
15th	1	working principle of logic-probe	15th	File Checking
	2	working principle of logic-pulser		
	3	Revision		
16th	1	Revision	16th	Viva-Voice
	2	Revision		
	3	Revision		

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