

LECTURE PLAN

Subject: ELECTRONICS MEASUREMENT

CODE:EC35252

Lecture no.	TOPIC COVERED	Remarks
UNIT 1		
1	Measurement and their methods	
2	Classification of measuring instruments	
3	Static and dynamic characteristics of instruments	
4	Standards of resistance, voltage	
5	Standards of current, frequency and time	
6	Shielding and Grounding	
7	AC and DC Voltmeters	
UNIT 2		
8	Basics of Sensors and Transducers, Types of Transducers	
9	LVDT, RVDT	
10	Strain Gauge, Types of strain gauges	
11	Types of microphones, Types of speakers	
12	Opto-electronics and Piezoelectric transducers, their classification and application	
13	Universal product code	
UNIT 3		
14	Principle & Construction of CRO & its various controls	
15	Dual-beam and dual trace CROs	
16	Estimation of phase & frequency using CRO	
17	Digital Storage oscilloscope, Attenuators	
18	Measurement of RF frequency	
19	Measurement of Power and Impedance	
UNIT 4		
20	Principle, construction & application of frequency meter	
21	Types of frequency meter,	
22	Types of Q-meters	
23	AC bridges and their applications	
24	High frequency measurement	
25	Measurements of insertion gain & phase	
UNIT 5		
26	Signal & waveform generators	
27	Frequency synthesizers	
28	Digital Voltmeter, Digital frequency counters & millimeters	
29	Spectrum analyzer, RF impedance	
30	Voltage and power meter, Optical power meter	
31	Vector analyzer, Distortion analyzer	
32	VSWR and Return loss measurement	
33	Measurement of RF impedance,	
34	Measurement of RF voltage, RF power	

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