LESSON PLAN

Name of the Institute:	C. V. Raman Polytechnic
Department:	ELECTRONICS & TELECOMMUNICATION ENGINEERING
Semester/Division/Branch:	3rd SEM/ETC
Subject Name with code:	ELECTRONICS MEASUREMENT & INSTRUMENTATION(TH-4)
Total No. of Class (Required):	60
Faculty Name:	PRIYABRATA DASH

Class No.	*Brief description of the Topic/Chapter to be taught*	Remarks
1	Unit-1: Discuss the static characteristics.	
2	Accuracy,sensitivity, reproducibilit,& static error of instruments.	
3	Dynamic characteristics &speed of instruments.	
4	Errors of instruments.	
5	Unit-2: Introduction to Indicator.	
6	Principle of meter movement.	
7	Operation of moving iron instrument.	
8	Principle of operation of D.C ammeter	
9	Principle of operation of A.C ammeter	
10	Principle of operation of D.C voltmeter.	
11	Principle of operation of AC voltmeter.	
12	Principle of operation of Ohmmeter.	
13	Principle of operation of Q meter.	
14	Operation of display of Digital multimeter.	
15	Principle of operation of Frequency meter.	
16	Principle of operation of Digital tachometer.	
17	Principle of operation of Digital instrument.	
18	Block diagram of LCR meter.	
19	Basic principle of Oscilloscope & Block Diagram.	

20	Basic principle of CRO,DSO	
21	Application of Oscilloscope	
22	Operation of Digital Storage Oscilloscope	
23	Types of Bridge	
24	DC Bridge	
25	AC Bridge	
26	Measurement of capacitor by Schering Bridge	
27	Working principle of Q meter	
28	LCR matter and its measurement	
29	Parameter of selecting and advantages of Electrical Transducer	
30	Working principle of string gauges	
31	Aspect ratio, Rectangular switching ,Flicker	
32	Resolution,Video bandwidth,Interlaced scanning	
33	Composite video signal, Synchronization pulses	
34	Block diagram of TV transmitter	
35	Block diagram of Monochrome TV receiver	
36	Block diagram of SMPS of TV receiver	
37	Colour TV Signals	
38	LCD Display	
39	Large screen display	
40	Digital TV signals	
41	Working principle of Capacitive Transducer	
42	Working principle of Load cell	
43	Working principle of Temperature Transducer	
44	Working principle of Circuit Transducer	
45	Working principle of proximity and light sensor	
46	Unit-4: MICROWAVE ENGINEERING	
47	Digital TV receiver	

48	Advantages of microwave engineering & application	
49	Define Wave guide	
50	Rectangular wave guide operation & advantages	
51	Propagation of EM wave through wave guide	
52	TE & TM modes of wave propagation	
53	Circular wave guide, Cavity resonator	
54	Directional coupler,Isolators & Circulators	
55	Operation of two cavity Klystron	
56	Principle of Magnetron	
57	Principle of Travelling Wave Guides	
58	Doubt Class	
59	Unit-5: Broadband communication	
60	Network architecture of Broadband communication	

Signature of the Faculty

Signature of the H.O.D