

<b>SUBJECT: Electrical Measurements and Instrumentation</b>			<b>ACY: 2014-15</b>
<b>FACULTY: Mrs Debidasi Mohanty</b>		<b>SEMESTER-Odd</b>	
<b>S.NO.</b>	<b>PERIOD(S)</b>	<b>TOPIC TO BE COVERED</b>	<b>REMARKS</b>
1	1	Introduction to Electrical Measurements & Inst.	
2	2	Classification of measuring instruments, Errors	
3	3	Problems on errors	
4	4	Construction and working of PMMC meters	
5	5	Construction and working of MI meters	
6	6	Problems on extension range	
7	7	Construction and working of Electrodynamic type meters	
8	8	Single Phase dynamometer type wattmeter	
9	9	Single Phase Induction type Energy meter	
10	10	Three Phase energy meters	
11	11	Frequency meters	
12	12	Current Transformer, ratio & Phase angle errors	
13	13	Problems on ratio & Phase angle errors	
14	14	Potential Transformer, ratio & Phase angle errors	
15	15	D'Arsonval and Vibration Galvanometers,	
16	16	Ballistic Galvanometer	
17	17	DC Potentiometer, Crompton potentiometer	
18	18	AC Potentiometer, Drysdale polar potentiometer	
19	19	Standardization & Application of DC/AC potentiometers	
20	20	General equations for bridge balance	
21	21	Maxwell's Inductance Bridge	
22	22	Problems	
23	23	Hay's Bridge, Owen's Bridge	
24	24	Measurement of capacitance by Schering bridge	
25	25	Problems	
26	26	Wagner's earthing device, Kelvin's Bridge	
27	27	Strain Gauges, Thermistors, Thermocouples	
28	28	Linear Variable Differential Transformer	
29	29	Peizo-Electric transducers, Optical Transducer	
30	30	CRO: Block diagram	
31	31	Sweep generation, vertical amplifiers	
32	32	Problems on CRO	
33	33	Digital Multi-meter: Block diagram	
34	34	Problems	
35	35	Principle of operation of Digital multi-meter	
36	36	Transistor Voltmeter, Block diagram	
37	37	Problems	
38	38	Various types of electronic voltmeter	
39	39	Digital Frequency meter: Block diagram,	
40	40	Revision and discussion on previous papers	

