

LESSON PLAN FOR SESSION 2023-24(SUMMER)

SUBJECT- ELECTRICAL MEASUREMENT & INSTRUMENTATION SEM -4th BRANCH -ELECTRICAL ENGG.

SI NO.	DATE	CHAPTER	TOPIC NAME	NO. OF PERIODS
1	16-01-2024	MEASURING INSTRUMENTS	1.1 Define accuracy , precision , Error , Resolutions sensitivity and tolerance.	1
2	17-01-2024		1.2 classification of measuring instruments.	1
3	18-01-2024		1.2 CONTINUEING	1
4	19-01-2024		1.3 Explain deflection , controlling and damping arrangement in indicating type of instruments.	1
5	22-01-2024		1.3 CONTINUEING	1
6	23-01-2024		1.4 calibration of instruments.	1
7	24-01-2024	ANALOG AMMETERS AND VOLTMETERS	2.1 Describe construction , principle of operation , errors , ranges merits and demerits of:	1
8	25-01-2024		2.1 CONTINUEING	1
9	29-01-2024		2.1.1 moving iron type instruments.	1
10	30-01-2024		2.1.2 Permanent magnet moving coil type instruments.	1
11	31-01-2024		2.1.2 CONTINUEING	1
12	01-02-2024		2.1.3 Dynamometer type instruments.	1
13	02-02-2024		2.1.4 Rectifier type instruments.	1
14	05-02-2024		2.1.5 induction type instruments.	1
15	06-02-2024		2.2 extend the range of instruments type wattmeter and methods of their correction.	1
16	07-02-2024		2.2 CONTINUEING	1
17	08-02-2024		2.3 solve numerical	1
18	09-02-2024	WATTMETERS AND MEASUREMENT OF POWER	3.1 Describe construction , principle of working of dynamometer type wattmeter. (LPF and upf type)	1
19	12-02-2024		3.1 CONTINUEING	1
20	13-02-2024		3.2 The Errors in dynamometer type wattmeter and methods of their correction.	1
21	15-02-2024		3.3 Discuss induction type watt meters.	1
22	16-02-2024	ENERGY METERS AND MEASUREMENT OF ENERGY	4.1 introduction	1
23	19-02-2024		4.2 single phase induction type energy meters- construction , working principle and their compensation & adjustments.	1
24	20-02-2024		4.2 CONTINUEING	1
25	21-02-2024		4.3 testing of energy meters	1
26	22-02-2024	MEASUREMENT OF SPEED FREQUENCY AND POWER FACTOR	5.1 tachometers types and working principles.	1
27	23-02-2024		5.2 principle of operation and construction of mechanical and electrical resonance type frequency meters.	1
28	26-02-2024		5.2 CONTINUEING	1
29	27-02-2024		5.3 principle of operation and working of dynamometer type single phase and three phase power factor meter.	1
30	28-02-2024		6.1 Classification of resistance	1
31	29-02-2024		6.1.1. Measurement of low resistance by potentiometer method	1
32	01-03-2024		6.1.1 CONTINUEING	1
33	04-03-2024		6.1.2. Measurement of medium resistance by wheat Stone bridge	1
34	06-03-2024		6.1.2 CONTINUEING	1



35	07-03-2024	MESURMENT OF RESISTANCE , INDUCTANCE& CAPACITANCE	6.1.3. Measurement of high resistance by loss of charge method.	1	
36	11-03-2024		6.2 Construction, principle of operations of Megger & Earth tester for	1	
37	12-03-2024		6.3 Construction and principles of Multimeter. (Analog and Digital)	1	
38	13-03-2024		6.4 Measurement of inductance by Maxewell's Bridge method.	1	
39	14-03-2024		6.5 Measurement of capacitance by Schering Bridge method	1	
40	15-03-2024		6.5 CONTINUEING	1	
41	18-03-2024		7.1. Define Transducer, sensing element or detector element and	1	
42	19-03-2024		CONTINUEING	1	
43	20-03-2024		7.2. Classify transducer. Give examples of various class of transducer.	1	
44	21-03-2024		7.2CONTINUEING	1	
45	22-03-2024	SENSORS AND TRANSDUCER	7.3. Resistive transducer	1	
46	27-03-2024		7.3.1 Linear and angular motion potentiometer.	1	
47	28-03-2024		7.3.2 Thermistor and Resistance thermometers.	1	
48	02-03-2024		7.3.3 Wire Resistance Strain Gauges	1	
49	03-03-2024		7.3.3 CONTINUEING	1	
50	04-04-2024		7.4. Inductive Transducer	1	
51	05-04-2024		7.4.1 Principle of linear variable differential Transformer (LVDT)	1	
52	08-04-2024		7.4.1 CONTINUEING	1	
53	09-04-2024		7.4.2 Uses of LVDT.	1	
54	10-04-2024		7.5. Capacitive Transducer.	1	
55	12-04-2024		7.5.1 General principle of capacitive transducer.	1	
56	15-04-2024		7.5.1 CONTINUEING	1	
57	16-04-2024		7.5.2 Variable area capacitive transducer.	1	
58	18-04-2024		7.5.3 Change in distance between plate capacitive transducer.	1	
59	19-04-2024		7.5.3 CONTINUEING	1	
60	22-04-2024		7.6. Piezo electric Transducer and Hall Effect Transducer with their	1	
61	23-04-2024		8.1. Principle of operation of Cathode Ray Tube.	1	
62	24-04-2024		8.2. Principle of operation of Oscilloscope (with help of block diagram).	1	
63	25-04-2024		OSCILLOSCOPE	8.3. Measurement of DC Voltage & current.	1
64	26-04-2024			8.4. Measurement of AC Voltage, current, phase & frequency.	1
			TOTAL CLASS	64	

Prasanta ku. kalasi
14-01-24

Prepared by
Prasanta ku. kalasi
Lect(Electrical)
G.P .Sonepur

G.P. Sonepur
14.01.24

H.O.D (Electrical)
G.P .Sonepur