

## Lesson Plan

**Name of the Faculty: Shivani**

**Discipline : Instrumentation and Control**

**Semester : 3rd**

**Subject : Measurement and Instrumentation**

**Lesson Plan Duration : 15 weeks(from Aug to Dec 2024)**

Week	Day	Topic
1	1	Measurement of Resistance : Wheatstone Bridge , Potentiometer method
	2	Measurement of Inductance : Hay's bridge, Maxwell Bridge
	3	Measurement of capacitance
2	4	De Sauty's bridge
	5	Assignment of first unit
	6	Construction and working principle, applications of Ammeter and voltmeter
3	7	Moving Iron
	8	Permanent Magnet Moving Coil Meters
	9	Thermocouple type
4	10	Electrostatic type
	11	Rectifier type
	12	Class Test
5	13	Assignment of second unit
	14	Introduction to single-phase and three-phase system
	15	Comparison between three-phase and single-phase system
6	16	Working principle of dynamometer type watt meter
	17	Power measurement using 2 watt meter or 3 watt meter methods
	18	Working principle, construction and applications of energy meter
7	19	Assignment of third unit
	20	Working Principle and applications of Stroboscopes
	21	Digital frequency meters
8	22	Assignment of fourth unit
	23	Revision
	24	Class Test
9	25	Cathode Ray Oscilloscope
	26	Construction and working of Cathode Ray Tube (CRT)
	27	Block diagram and working principle of a basic CRO
10	28	Revision
	29	Digital storage oscilloscope (DSO): block diagram and working principle
	30	Assignment of fifth unit

11	31	Measurement of Resistance : Wheatstone Bridge , Potentiometer method
	32	De Sauty's bridge
	33	Working principle, construction and applications of energy meter
12	34	Class Test
	35	Construction and working principle, applications of Ammeter and voltmeter
	36	Digital frequency meters
13	37	Digital storage oscilloscope (DSO): block diagram and working principle
	38	Introduction to single-phase and three-phase system
	39	Class Test
14	40	Measurement of Inductance : Hay's bridge, Maxwell Bridge
	41	Revision of unit first and second
	42	Revision of unit third
15	43	Revision of unit fourth and fifth
	44	Revision of unit sixth
	45	Revision of unit seventh