

Lesson Plan

Name of Faculty : Shiwani

Discipline : I&C

Semester : 5th sem

Subject : PI

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

Work Load (lecture/practical)per week Lecture-4, Practical-3

Week	Theory		Practical	
	Lecture Day	Topic(including assignment/test)	Practical week	Practical Topic
1	1	Define following process variables along with their importance and measuring	1	Measurements of flow using Rotameters
	2	Temperature, Pressure		
	3	Level, Flow		
	4	Construction, working principle, applications, advantages & disadvantages		
2	5	Thermocouples , Thermistors , Radiation pyromet	2	Measurement of flow using Venturi tube and U-tube manometer
	6	IR detectors ,Fiber Optic Thermometer		
	7	Pressure Measurements (Construction, working principle, applications, advantages & disadvantages of the	3	Measurement of Level using capacitive method
	8	Pressure Measurements using Manometers (U, Well and Inclined)		
3	9	Pressure Measurements using elastic elements (Bourdon, Bellow, Diaphragm)	4	Measurement of Level using resistive method
	10	Low Pressure Measurements using (Thermocouple, Pirani, Ionization, McLeod, kundsans gauges		
	11	Flow Measurements (Construction, working principle, applications, advantages & disadvantages of the following)		
	12	Variable flow meter (Venturimeter and Orifice) ,Rotameters		
4	13	Electromagnetic flow meter	5	Measurement of Pressure using U-tube manometer
	14	Hot Wire Anemometers		
	15	First sessional test		
	16	Turbine Flow Meters		

5	17	Level Measurements (Construction, working principle, applications, advantages & disadvantages of the	6	Measurement of Pressure using Bourdon tube
	18	Level Measurements using Sight glass		
	19	Level Measurements using Pressure Transducers (Two Scheme only)	7	Measurement of Temperature using IR detector
	20	Level Measurements using Pressure Transducers (Two Scheme only)		
6	21	Assignment 1	8	Level Measurements using Ultrasonic Method
	22	Ultrasonic Flow meter		
	23	Level Measurements using Electrical Resistive method		
	24	2nd sessional test revision		
7	25	2nd sessional test	9	VIVA - VOCE
	26	Revision		
	27	Revision		
	28	Assignment 2		
8	29	All notebooks are checked	10	All files are checked
	30	Revision		
	31	Revision	11	VIVA - VOCE
	32	Revision		
9	33	Revision	12	VIVA - VOICE
	34	Assignment 3		
	35	Revision		
	36	Level Measurements using Buoyancy		
10	37	Level Measurements using Electrical	13	VIVA - VOCE
	38	Assignment 1		
	39	Level Measurements using Gamma Rays	14	VIVA-VOCE
	40	Level Measurements using Ultrasonic		
11	41	3rd sessional test revision	15	All files are checked
	42	3rd sessional test revision		
	43	3rd sessional test		
	44	Revision		
	45	Revision		