

LESSON PLAN

DEPARTMENT OF MECHATRONICS ENGINEERING, ITT, CHOUDWAR

SUBJECT: MS & MP LAB

Periods: 4 per week

SEMESTER: 5TH

NAME OF FACULTY: TAPAS RANJAN SAHOO

ACADEMIC YEAR.2022-23

Semester Start date: 15.09.2022

No. of weeks: 15

Week	Class Day	Theory / Practical Topics
1st	1 st	V to F Converter using ICL 8038
	2 nd	V to F Converter using ICL 8038
2 nd	1 st	F to V Converter using LM 2907
	2 nd	F to V Converter using LM 2907
3 rd	1 st	Study of types of Thermocouple and characteristics of Thermocouple
	2 nd	Study of types of Thermocouple and characteristics of Thermocouple
4 th	1 st	Study of RTD and characteristics of RTD
	2 nd	Study of RTD and characteristics of RTD
5 th	1 st	Temperature sensing using Diodes
	2 nd	Temperature sensing using Diodes
6 th	1 st	Using LM 35 and AD 590 as temperature sensor
	2 nd	Using LM 35 and AD 590 as temperature sensor
7 th	1 st	Study of ON OFF control using temperature controller using Thermocouple and RTD
	2 nd	Study of ON OFF control using temperature controller using Thermocouple and RTD
8 th	1 st	Finding error in the given pressure gauge with respect to Digital Gauge
	2 nd	Finding error in the given pressure gauge with respect to Digital Gauge
9 th	1 st	Finding error in the given pressure gauge with respect to Dead Weight
	2 nd	Finding error in the given pressure gauge with respect to Dead Weight
10 th	1 st	Measurement of Displacement using LVDT
	2 nd	Measurement of Displacement using LVDT
11 th	1 st	Designing a counter circuit using Proximity Sensor
	2 nd	Designing a counter circuit using Proximity Sensor
12 th	1 st	Measurement of load by using load cell (a) Expansion Method
	2 nd	Measurement of load by using load cell (b) Compression Method
13 th	1 st	Measurement of Speed using (a) Contact type (Tachometer)
	2 nd	Measurement of Speed using (b) Non-contact type (Proximity Sensor & Stroboscope)
14 th	1 st	Familiarization of Inductive Proximity
	2 nd	Familiarization of Capacitive Proximity
15 th	1 st	Familiarization of IR
	2 nd	Familiarization of Reed Switch