

Discipline: Mechanical Engineering	Semester : 3 <sup>rd</sup> Semester 2020- 21	Name of the Teaching faculty: C R Meher (Lect.)
Subject : Mechanical Engg Lab	No. of Days/Week Class Allotted: 60	Semester from date: / /2020 to date: / /2020 No of weeks :18
Week	Class Day	Practical Topics
1 <sup>st</sup>	1 <sup>st</sup>	Introduction of MEL lab
	2 <sup>nd</sup>	Introduction of MEL lab
2 <sup>nd</sup>	1 <sup>st</sup>	Determine end reactions in a simply supported beam using parallel force apparatus.
	2 <sup>nd</sup>	Determine end reactions in a simply supported beam using parallel force apparatus.
3 <sup>rd</sup>	1 <sup>st</sup>	Perform experiment
	2 <sup>nd</sup>	Perform experiment
4 <sup>th</sup>	1 <sup>st</sup>	Determination of Young's modulus using Searle's apparatus
	2 <sup>nd</sup>	Determination of Young's modulus using Searle's apparatus
5 <sup>th</sup>	1 <sup>st</sup>	Perform experiment
	2 <sup>nd</sup>	Perform experiment
6 <sup>th</sup>	1 <sup>st</sup>	Determination of torsional rigidity of the shaft using torsion testing machine
	2 <sup>nd</sup>	Determination of torsional rigidity of the shaft using torsion testing machine
7 <sup>th</sup>	1 <sup>st</sup>	Perform experiment
	2 <sup>nd</sup>	Perform experiment
8 <sup>th</sup>	1 <sup>st</sup>	Determination of salient points (Young's modulus, yield point, fracture point) from stress- strain curve using Universal Testing Machine
	2 <sup>nd</sup>	Determination of salient points (Young's modulus, yield point, fracture point) from stress- strain curve using Universal Testing Machine
9 <sup>th</sup>	1 <sup>st</sup>	Perform experiment
	2 <sup>nd</sup>	Perform experiment
10 <sup>th</sup>	1 <sup>st</sup>	Determination of hardness number by Rockwell/Vickers hardness testing machine
	2 <sup>nd</sup>	Determination of hardness number by Rockwell/Vickers hardness testing machine
11 <sup>th</sup>	1 <sup>st</sup>	Perform experiment
	2 <sup>nd</sup>	Perform experiment

12 <sup>th</sup>	1 <sup>st</sup>	Determination of toughness using Impact testing machine (Charpy/Izod)
	2 <sup>nd</sup>	Determination of toughness using Impact testing machine (Charpy/Izod)
13 <sup>th</sup>	1 <sup>st</sup>	Perform experiment
	2 <sup>nd</sup>	Perform experiment
14 <sup>th</sup>	1 <sup>st</sup>	Determination of Flash point and fire point
	2 <sup>nd</sup>	Determination of Flash point and fire point
15 <sup>th</sup>	1 <sup>st</sup>	Perform experiment
	2 <sup>nd</sup>	Perform experiment
16 <sup>th</sup>	1 <sup>st</sup>	Joule's experiment
	2 <sup>nd</sup>	Joule's experiment
17 <sup>th</sup>	1 <sup>st</sup>	Perform experiment
	2 <sup>nd</sup>	Perform experiment
18 <sup>th</sup>	1 <sup>st</sup>	Revision exp 1,2,3,4
	2 <sup>nd</sup>	Revision exp 5,6,7,8