

GOVT. POLYTECHNIC NAYAGARH

DEPARTMENT OF MECHANICAL ENGINEERING

LESSON PLAN

SUBJECT: MECHANICAL ENGINEERING LABORATORY (PR-2)

PERIODS: 4p per week

SEMESTER: 3rd

NAME OF FACULTY: Ramya Rashmi Rout, PTGF(MECH)

No. of weeks: 15

Week	Class Day	Theory / Practical Topics
1 st	1 st	Determine end reactions in a simply supported beam using parallel force Apparatus (Theory of Experiment)
	2 nd	Determine end reactions in a simply supported beam using parallel force apparatus. (Practical Session)
2 nd	1 st	Determine end reactions in a simply supported beam using parallel force apparatus. (Checking Lab Record With Viva Voce)
	2 nd	Determination of Young's modulus using Searle's apparatus (Theory of Experiment)
3 rd	1 st	Determination of Young's modulus using Searle's apparatus (Practical Session)
	2 nd	Determination of Young's modulus using Searle's apparatus (Practical Session)
4 th	1 st	Determination of Young's modulus using Searle's apparatus (Checking Lab Record With Viva Voce)
	2 nd	Determination of torsional rigidity of the shaft using torsion testing machine (Theory of Experiment)
5 th	1 st	Determination of torsional rigidity of the shaft using torsion testing machine (Practical Session)
	2 nd	Determination of torsional rigidity of the shaft using torsion testing machine (Practical Session)
6 th	1 st	Determination of torsional rigidity of the shaft using torsion testing machine (Checking Lab Record With Viva Voce)
	2 nd	Determination of salient points (Young's modulus, yield point, fracture point) from stress-strain curve using Universal Testing Machine (Theory of Experiment)
7 th	1 st	Determination of salient points (Young's modulus, yield point, fracture point) from stress-strain curve using Universal Testing Machine (Practical Session)
	2 nd	Determination of salient points (Young's modulus, yield point, fracture point) from stress-strain curve using Universal Testing Machine (Practical Session)
8 th	1 st	Determination of salient points (Young's modulus, yield point, fracture point) from stress-strain curve using Universal Testing Machine (Checking Lab Record With Viva Voce)
	2 nd	Determination of hardness number by Rockwell/Vickers hardness testing machine (Theory of Experiment)
9 th	1 st	Determination of hardness number by Rockwell/Vickers hardness testing machine (Practical Session)
	2 nd	Determination of hardness number by Rockwell/Vickers hardness testing machine (Checking Lab Record With Viva Voce)
10 th	1 st	Determination of toughness using Impact testing machine (Charpy/Izod) (Theory of Experiment)
	2 nd	Determination of toughness using Impact testing machine (Charpy/Izod) (Practical Session)
11 th	1 st	Determination of toughness using Impact testing machine (Charpy/Izod) (Practical Session)

	2 nd	Determination of toughness using Impact testing machine (Charpy/Izod) (Checking Lab Record With Viva Voce)
12 th	1 st	Determination of Flash point and fire point(Theory of Experiment)
	2 nd	Determination of Flash point and fire point(Practical Session)
13 th	1 st	Determination of Flash point and fire point(Practical Session)
	2 nd	Determination of Flash point and fire point(Checking Lab Record With Viva Voce)
14 th	1 st	Joule's experiment(Theory of Experiment)
	2 nd	Joule's experiment(Practical Session)
15 th	1 st	Joule's experiment(Checking Lab Record With Viva Voce)
	2 nd	Revision

Ramya Lashmi Koul —
31/07/2023
Leet. Mech. Engg. (PTGF)