## **LESSON PLAN**

## DEPARTMENT OF MECHANICAL ENGINEERING, ITT, CHOUDWAR

SUBJECT: Pr.1 Theory of Machine and Measurement lab Periods:6 per week SEMESTER:4th

NAME OF FACULTY: Manoranjan Sahoo, Instructor(Mech)

No. of weeks: 15

Week	Class Day	Theory / Practical Topics
1st	1 <sup>st</sup>	Determination of centrifugal force of a governor (Hart Nell / Watt/Porter).
	2 <sup>nd</sup>	Determination of centrifugal force of a governor (Hart Nell / Watt/Porter).
2 <sup>nd</sup>	1 <sup>st</sup>	Determination of centrifugal force of a governor (Hart Nell / Watt/Porter).
	2 <sup>nd</sup>	Study & demonstration of static balancing apparatus.
3 <sup>rd</sup>	1 <sup>st</sup>	Study & demonstration of static balancing apparatus.
	2 <sup>nd</sup>	Study & demonstration of static balancing apparatus.
$4^{\text{th}}$	1 <sup>st</sup>	Study & demonstration of journal bearing apparatus.
	$2^{nd}$	Study & demonstration of journal bearing apparatus.
5 <sup>th</sup>	1 <sup>st</sup>	Study & demonstration of journal bearing apparatus.
	$2^{nd}$	Study of different types of Cam and followers.
6th	1 <sup>st</sup>	Study of different types of Cam and followers.
	2 <sup>nd</sup>	Study of different types of Cam and followers.
7th 8th	1 <sup>st</sup>	Study & demonstration of epicyclic gear train.
	$2^{nd}$	Study & demonstration of epicyclic gear train.
	$\frac{2}{1^{\text{st}}}$	Study & demonstration of epicyclic gear train.
	$2^{nd}$	Determination of the thickness of ground M.S flat to an accuracy of 0.02mm using
	2	Vernier Caliper.
9th	1 <sup>st</sup>	Determination of the thickness of ground M.S flat to an accuracy of 0.02mm using
		Vernier Caliper.
	$2^{nd}$	Determination of the thickness of ground M.S flat to an accuracy of 0.02mm using Vernier Caliper.
10th	1 <sup>st</sup>	Determination of diameter of a cylindrical component to an accuracy of
	1	0.01mm using micrometer.
	$2^{nd}$	Determination of diameter of a cylindrical component to an accuracy of 0.01mm
	2	using micrometer.
11th	1 <sup>st</sup>	Determination of diameter of a cylindrical component to an accuracy of 0.01mm
		using micrometer.
	$2^{nd}$	Determine the heights of gauge blocks or parallel bars to accuracy of 0.02mm using
		Vernier height gauge.
12th	1 <sup>st</sup>	Determine the heights of gauge blocks or parallel bars to accuracy of 0.02mm using
	- nd	Vernier height gauge.
	$2^{nd}$	Determine the heights of gauge blocks or parallel bars to accuracy of 0.02mm using
10/1	1 <sup>st</sup>	Vernier height gauge.
13th	-	Determine the thickness of ground MS plates using slip gauges.
4.4.1	2 <sup>nd</sup>	Determine the thickness of ground MS plates using slip gauges.
14th 15th	1 <sup>st</sup>	Determine the thickness of ground MS plates using slip gauges.
	$2^{nd}$	Determination of angel of Machined surfaces of components using sin bar with slip
	1 <sup>st</sup>	gauges
		Determination of angel of Machined surfaces of components using sin bar with slip
	2 <sup>nd</sup>	gauges Determination of angel of Machined surfaces of components using sin bar with slip
		gauges