

GOVERNMENT POLYTECHNIC, MALKANGIRI
DEPARTMENT OF MECHANICAL ENGINEERING

LESSON PLAN

Discipline: Mechanical Engineering	Semester: 4TH	Name of the Teaching Faculty: Shantanu Kumar Maity
Subject: Theory of Machines & Measurements Lab	No. of <i>Class</i> days/week class allotted 2/04	Semester From date: 04.02.2025 To date:17.05.2025 No. of Week: 15
Course Outcomes	CO1: Analyzing centrifugal forces,	
	CO2: Understanding static balancing , journal bearing and equipment usage	
	CO3: Demonstrating CAM and Followers, epicycle gear train	
	CO4: Analysing measurement using Callipers, Micrometer and Gauges	
Week	Class Day	Theory/Practical Topics
1st	<i>2 classes/ Day</i> 1st	Determination of centrifugal force of a governor(Hart Nell/Watt/Porter)
	2nd	Determination of centrifugal force of a governor(Hart Nell/Watt/Porter)
2nd	1st	Determination of centrifugal force of a governor(Hart Nell/Watt/Porter)
	2nd	Study & demonstration of static balancing apparatus
3rd	1st	Study & demonstration of static balancing apparatus
	2nd	Study & demonstration of static balancing apparatus
4th	1st	Study & demonstration of journal bearing apparatus
	2nd	Study & demonstration of journal bearing apparatus
5th	1st	Study & demonstration of journal bearing apparatus
	2nd	Study of different types of CAM and Followers
6th	1st	Study of different types of CAM and Followers
	2nd	Study of different types of CAM and Followers
7th	1st	Study & demonstration of epicycle gear train
	2nd	Study & demonstration of epicycle gear train
8th	1st	Study & demonstration of epicycle gear train
	2nd	Determination of the thickness of ground M.S flat to an accuracy of 0.2mm using Vernier Caliper
9th	1st	Determination of the thickness of ground M.S flat to an accuracy of 0.2mm using Vernier Caliper
	2nd	Determination of the thickness of ground M.S flat to an accuracy of 0.2mm using Vernier Caliper
10th	1st	Determination of diameter of a cylindrical component to an accuracy of 0.01mm using micrometer
	2nd	Determination of diameter of a cylindrical component to an accuracy of 0.01mm using micrometer

11th	1st	Determination of diameter of a cylindrical component to an accuracy of 0.01mm using micrometer
	2nd	Determine the heights of gauge blocks or parallel bars to accuracy of 0.02mm using Vernier height gauge
12th	1st	Determine the heights of gauge blocks or parallel bars to accuracy of 0.02mm using Vernier height gauge
	2nd	Determine the heights of gauge blocks or parallel bars to accuracy of 0.02mm using Vernier height gauge
13th	1st	Determine the thickness of ground MS plates using slip gauges
	2nd	Determine the thickness of ground MS plates using slip gauges
14th	1st	Determine the thickness of ground MS plates using slip gauges
	2nd	Determination of angel of Machined surfaces of components using sin bar with slip gauges.
15th	1st	Determination of angel of Machined surfaces of components using sin bar with slip gauges.
	2nd	Determination of angel of Machined surfaces of components using sin bar with slip gauges.

Learning Resources:

R.S. Khurmi Text Book of Theory of machines (S.Chand)
R.K Rajput Text Book of Theory of machines (S.Chand)
P.L. Ballany Text Book of Theory of machines (Dhanpat rai)

Shantanu Kumar Maity
Signature of Faculty

B. Singh
03/02/25
Signature of HOD

[Signature]
06/02/2025
Signature of Academic Coordinator

[Signature]
15/02/25
Signature of Principal