

LESSON PLAN

SUBJECT: ENGINEERING MECHANICS LAB.

BRANCH: COMMON (COMP. SC. & ENGG. AND ELECTRICAL ENGG.)

SEMESTER: 2ND (2025-26)

NAME OF THE FACULTY: ASEEMA BARIK & TRUPTI RANJAN MISHRA



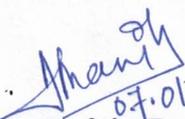
GOVERNMENT POLYTECHNIC, BHADRAK

Jahar
08/10/2024
HOD, Humanities & Sciences
H.O.D.
Humanities & Sciences
Govt. Polytechnic, Bhadrak

Trupti Ranjan Mishra
Academic Coordinator
Academic Co-ordinator

Principal
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GOVT. POLYTECHNIC BHADRAK		
DEPARTMENT OF HUMANITIES & SCIENCES		
LESSON PLAN (ACADEMIC SESSION 25-26)		
Discipline: Engineering Mechanics	Semester: 2nd	Name of the teaching faculty: Aseema Barik & Trupti Ranjan Mishra
Subject: Engineering Mechanics Lab.	No of Days/Week class allotted: 1	Semester from Date: 09/01/2026 to 08/05/2026 No of weeks: 17
Week	Class Day	Practical Topics
1st	1st	Discussion of relevant theory and demonstration of experiment 1 to experiment 4.
2nd	2nd	Conduction of the experiment to study various equipments related to Engineering Mechanics.
3rd	3rd	Conduction of the experiment to find the M.A. , VR., efficiency and law of machine for Differential Axle and Wheel.
4th	4th	Conduction of the experiment to find the M.A., V.R., Efficiency and law of machine for Simple Screw Jack.
5th	5th	Conduction of the experiment to derive law of machine using Worm and worm wheel.
6th	6th	Discussion of relevant theory and demonstration of experiment 5 to experiment 8.
7th	7th	Conduction of the experiment to derive law of machine using double purchase crab.
8th	8th	Conduction of the experiment to determine resultant of concurrent force system applying Law of Polygon of forces using force table.
9th	9th	Conduction of the experiment to determine resultant of concurrent force system graphically .
10th	10th	Conduction of the experiment to determine resultant of parallel force system graphically.
11th	11th	Discussion of relevant theory and demonstration of experiment 9 to experiment 12.
12th	12th	Conduction of the experiment to verify Lami's theorem.
13th	13th	Conduction of the experiment to study forces in various members of Jib crane.
14th	14th	Conduction of the experiment to determine coefficient of friction for motion on horizontal and inclined plane.
15th	15th	Conduction of the experiment to determine centroid of geometrical plane figures.
16th	16th	Conduction of make up lab.
17th	17th	Conduction of make up lab.


 Signature of the Teaching Faculty
 07.01.26

Signature of HOD, Humanities & Sciences