LESSON PLAN FOR ACADEMIC SESSION 2025-26 (~~Winter~~) (Summer)

Discipline: Electrical Engineering & Metallurgy	Semester:2nd (G1/G2/G3)	Name of the Teaching Faculty: Dinesh Kumar Sahu
Subject: Engineering Mechanics Lab	No of days/ week class allotted=2	Semester From: 09/01/2026 to 08/05/2026 No of weeks per semester :15
Week	**Class Day**	**Name of the Experiment**
1st	1st	1. To study various equipments related to Engineering Mechanics.
	2nd	2. To find the M.A., V.R., Efficiency and law of machine for Differential Axle and Wheel.
2nd	1st	
	2nd	3.To find the M.A., V.R., Efficiency and law of machine for Simple Screw Jack.
3rd	1st	
	2nd	4. Derive Law of machine using Worm and worm wheel.
4th	1st	
	2nd	5. Derive Law of machine using Single purchase crab.
5th	1st	
	2nd	6. Derive Law of machine using double purchase crab.
6th	1st	
	2nd	7. Derive Law of machine using Weston's differential or wormed geared pulley block.
7th	1st	
	2nd	8. Determine resultant of concurrent force system applying Law of Polygon of forces using force table.
8th	1st	
	2nd	9. Determine resultant of concurrent force system graphically.
9th	1st	
	2nd	10. Determine resultant of parallel force system graphically.
10th	1st	
	2nd	11. Verify Lami's theorem.
11th	1st	12. Study forces in various members of Jib crane.
	2nd	
12th	1st	13. Determine support reactions for simply supported beam.
	2nd	
13th	1st	14. Obtain support reactions of beam using graphical method.
	2nd	
14th	1st	15. Determine coefficient of friction for motion on horizontal and inclined plane.
	2nd	
15th	1st	16. Determine centroid of geometrical plane figures.
	2nd	

Dinesh 06/01/26

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