GOVT.POLYTECHNIC, GAJAPATI, PARALAKHEMUNDI
Academic Lesson Plan for Summer Semester- 2025-26

Name of the Teaching Faculty: Er. Aswin Pradhan   **Department: Mechanical Engineering**
Semester: 2ⁿᵈ   **Subject: ENGG. MECHANICS LAB**
No. of Periods per Week: 2   **Total Periods: 30**
End Semester Exam: 00   **Sessional: 25**
Total Marks: 25   **Practical – 4(b)**
Semester from Date: 09/01/2026   **To Date: 08/05/2026**
No. of weeks: 15   **W.e.f: 09/01/2026 (15 Weeks)**

Sl. No.	Week	Period	Topic to be covered
1.	1st	1st	Introduction to Engg Mechanics Lab, Discussion the experiments, Marks Evaluation Scheme, Rule & Regulations of Lab.
2.		2nd	
3.	2nd	1st	Determine resultant of concurrent force system graphically
4.		2nd	
5.	3rd	1st	Determine resultant of parallel force system graphically
6.		2nd	
7.	4th	1st	Determine support reactions for simply supported beam.
8.		2nd	
9.	5th	1st	Obtain support reactions of beam using graphical method.
10.		2nd	
11.	6th	1st	To find the M.A., V.R., Efficiency and law of machine for Differential Axle and Wheel.
12.		2nd	
13.	7th	1st	Derive Law of machine using Worm and worm wheel.
14.		2nd	
15.	8th	1st	Derive Law of machine using Single purchase crab.
16.		2nd	
17.	9th	1st	Determine coefficient of friction for motion on horizontal and inclined plane.
18.		2nd	
19.	10th	1st	Study forces in various members of Jib crane
20.		2nd	
21.	11th	1st	Verify Lami's theorem.
22.		2nd	
23.	12th	1st	To find the M.A., V.R., Efficiency and law of machine for Simple Screw Jack.
24.		2nd	
25.	13th	1st	To study various equipments related to Engineering Mechanics
26.		2nd	
27.	14th	1st	Determine resultant of concurrent force system applying Law of Polygon of forces using force table
28.		2nd	
29.	15th	1st	Determine centroid of geometrical plane figures.
30.		2nd	

The above lesson plan prepared by the concerned faculty.

Er.Aswin Pradhan
GF, MECHANICAL DEPARTMENT