

THEORY OF MACHINE LAB

Name of Lab In-charge: Mr. Pankaj Kumar Chauhan

Name of technical assistant: Mr. Kapil Sharma

Course Outcomes:

CO Code	COURSE Outcome(CO)
RME652.1	Acquire basic concepts of mechanisms and machines.
RME652.2	Understand gyroscopic motion.
RME652.3	Understand the vibratory motion.
RME652.4	Describe various machine components like cam, follower, brakes and clutches.
RME652.5	Understand motion transfer by gear trains and motion control mechanism like governors.
RME652.6	Analysis of unbalance rotating masses.

List of Equipment:

1. Gyroscope
2. Universal Governor
3. Cam Apparatus
4. Balancing Machine
5. Whirling of Shaft
6. Different Gear Trains
7. Various Mechanism & Inversions
8. Vibration analysis apparatus
9. Models of clutches and brakes

List of Experiments:

Sr. No.	As per AKTU	Performed/ Not performed
1	Study of simple linkage models/mechanisms	YES
2	Study of inversions of four bar linkage	YES
3	Study of inversions of single/double slider crank mechanisms	YES
4	Experiment on Gears tooth profile, interference etc.	
5	Experiment on Gear trains	YES
6	Experiment on longitudinal vibration	YES
7	Experiment on transverse vibration	YES
8	Experiments on dead weight type governor	YES
9	Experiment on spring controlled governor	YES
10	Experiment on critical speed of shaft	YES
11	Experiment on gyroscope	YES

12	Experiment on static/dynamic balancing	YES
13	Experiment on Brake	YES
14	Experiment on clutch	YES

Pictures of Labs: