

DEPARTMENT OF MECHANICAL ENGINEERING

DETAILS OF DYNAMICS & VIBRATIONS LABORATORY

Name of the Laboratory	:	DYNAMICS & VIBRATIONS LAB
Name of the Lab In-charge	:	Mr.P PRAKASH
Name of the Lab-Technician In-charge	:	Mr.D Eeshwariah
Area of the Lab	:	148.75 Sq.mts
Lab Occupancy	:	36
Cost of the lab as on 20.03.2020	:	Approximately 5.2 Lakhs
Description of the Lab	:	The Dynamics lab focuses on dynamic analysis of machine parts. The lab comprehends the student with fundamentals of dynamics of machine members theoretically and experimentally.

LIST OF EXPERIMENTS		
1. Test on Gyroscopic Unit		
2. Test on Universal Governor		
3. Test on static and Dynamic Balancing apparatus		
4. Test on Balancing of reciprocating masses		
5. Test on critical speed analyzer		
6. Test on vibration test rig		
7. Test on cam apparatus		
8. Whirling speed of shaft apparatus.		
9. Determination of pressure distribution in Journal bearing		
10. Determination of moment of inertia of Flywheel		
LIST OF EQUIPMENT		
S.NO	Name of the Major Equipment(Above Rs. 50,000)	Quantity
1	Universal Vibration test rig	1
2	Determination of pressure distribution in Journal Bearing	1
3	Coriolis's component of acceleration	1
S.NO	Name of the Minor Equipment(Below Rs. 50,000)	Quantity
1	Gyroscopic Unit	1
2	Test on cam apparatus	1
3	Test on Universal Governor	1
4	Determination Moment of inertia of Flywheel	1
5	Static and Dynamic balancing apparatus	1
6.	Balancing of reciprocating masses	1
7	Whirling of shaft apparatus	1
8.	Critical speed analyzer set up	1



OVERVIEW OF DYNAMICS & VIBRATIONS LAB



UNIVERSAL VIBRATION APPARATUS, JOURNAL BEARING AND CORIOLIS COMPONENT



ROTARY AND RECIPROCATING BALANCING APPARATUS



GYROSCOPE, CAM AND FOLLOWER AND GOVERNOR