## **Dynamics & Analysis of Structures Lab**

## **List of Experiments:**

#### Section - A:

# **Dynamics Lab:**

- 1) To Study the damped torsional oscillations and determine the damping coefficient.
- 2) To study the Un-damped free vibration of the equivalent spring mass system.
- 3) To Study the forced vibration equivalent of the beam for different damping.
- 4) Determination of the magnitude of the gyroscopic couple, angular velocity of precession and representation of vectors.
- 5) Static and Dynamic Balancing apparatus Rotating Masses.

### Section - B:

### **ANALYSIS OF STRUCTURES USING FEA PACKAGES**

- 1) Static Analysis.
- 2) Modal Analysis.
- 3) Harmonic Analysis.
- 4) Spectrum Analysis.
- 5) Buckling Analysis.
- 6) Analysis of Composites.
- 7) Fracture mechanism.
- 8) Transient Analysis.