

# Department of Mechanical Engineering

## Mechanical Vibration Laboratory

### ❖ Objective :-

- Vibration is purely mechanical phenomenon where oscillation occur about equilibrium point. Here to study free vibration and forced vibration system.
- Main objective is to study basic concept of vibration analysis and familiar with principle of vibration measuring instruments.



### ❖ List of experiments:

- Experimental prediction of natural frequency of simply and compound pendulum.
- Experimental prediction of natural frequency of Helical spring.
- Experimental prediction of natural frequency of single and two rotary vibratory systems.
- Experimental and theoretical investigation of Whirling of shaft.
- Experimental investigation of viscous and coulomb dumping and prediction of dumping coefficient.

- Experimental & theoretical investigation of frequency response of mechanical system.
- Experimental balancing of single & multirotor system.

❖ **List of Equipment:**

- Universal vibration apparatus.
- Whirling of shaft apparatus.
- Balancing of rotary mass apparatus.