

Department of Mechanical Engineering

Theory of Machine Laboratory

❖ Objective :-

- ❖ To get practical knowledge of various types mechanisms like Governor, Gyroscope, Balancing etc. Also this practical helps to handle some instruments so they get practical knowledge working principle of various mechanisms.



❖ List of experiments:

- ❖ Determination of Rope brake dynamometer efficiency by applying constant & various speed
- ❖ Determination of Transmission efficiency of speed reducer Gear box by applying constant speed.
- ❖ To analyze the motion of a motorized Gyroscope when the couple is applying along its spying axis.
- ❖ To determine the position of sleeve against controlling force and speed of a watt governor & to plot the characteristics curve of radius of rotations.
- ❖ To determine the position of sleeve against controlling force and speed of a Porter Governor & to plot the characteristics curve of radius of rotations.

- ❖ To determine the position of sleeve against controlling force and speed of a Hartnell Governor & to plot the characteristics curve of radius of rotations.
- ❖ To determine the position of sleeve against controlling force and speed of a proell governor & to plot the characteristics curve of radius of rotations.

❖ **List of Equipment:**

- Rope Brake Dynamometer
- Power Transmission type Dynamometer
- Watt Governor
- Porter Governor
- Hartnell Governor
- Proell governor
- Gyroscope model