

ASSIGNMENT

DESIGN OF MACHINE ELEMENT (ME5003)

UNIT-1

- Q.1 What is engineering design? What are the steps evolved in design?
- Q.2 Explain the process of design and role of designer in designing machine?
- Q.3 Explain preliminary design, detail design?
- Q.4 Describe design for quality and cost?
- Q.5 What is factor of safety and explain importance of this in design?

UNIT-2

- Q.1 Define shaft ? What are the types shafts used in industries?
- Q.2 What are the loads and stresses acting on the running shaft?
- Q.3 Explain the design procedure of shaft under twisting, bending?
- Q.4 Design of shaft under rigidity?
- Q.5 Define keys and coupling with their types and design any one Coupling.

UNIT-3

- Q.1 Write the method of power transmission?
- Q.2 Explain design of chain drive?
- Q.3 Discuss design of belt and pulley?
- Q.4 What are rope drives?
- Q.5 Explain design of rope drives?

UNIT-4

- Q.1 What is band and block brake?
- Q.2 What is internal expanding brakes?
- Q.3 What is disc brake?
- Q.4 What are centrifugal clutches?
- Q.5 What are the materials for friction surface?

UNIT-5

- Q.1 Explain Lewis equation?
- Q.2 What are the application of bevel gears?
- Q.3 What are the modes failure of gear?
- Q.4 Explain design of straight tooth spur gear?
- Q.5 What is form factor?