

GUJARAT TECHNOLOGICAL UNIVERSITY

M.E Semester: 2

Mechanical Engineering (Advanced Manufacturing Systems)

Subject Name: **Tribology of Machine Elements (Major Elective III)**

Subject Code: **1725006**

1. An introduction to tribology and its industrial applications.
2. Surface Topography, Friction and Wear
3. Introduction to Solid and Fluid lubrication; Reynolds equation and its use; Hydrodynamic, Hydrostatic and elasto-hydrodynamic lubrication
4. Tribology of Cutting tools and Machining
5. Design and Analysis of Journal bearings, Bearing selection

Text Books:

1. Tribology in Manufacturing Technology by D.J. Paulo, Springer
2. Principles of Tribology by J. Halling, Macmillan
3. Tribology in Industries by S. K. Srivastava., S. Chand and Company Ltd.

Reference Books:

1. Tribology by J A Williams
2. Tribology by Hutchings, Lubricant Selection – Lansdown