

**Total No. of Pages : 01**

**Total No. of Questions : 08**

**M.Tech.(CAD/CAM) (Sem.-1)**

# TRIBOLOGY

**Subject Code : ME-502**

**Paper ID : [E0864]**

**Time : 3 Hrs.**

**Max. Marks : 100**

**INSTRUCTION TO CANDIDATES :**

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWENTY marks.

1. a) Explain conforming and non-conforming contacts. (10)  
b) Discuss the role of wear and friction in tribology. (10)
2. Explain in detail the Tabor's model of elastic thermos friction. (20)
3. a) What is wear? And discuss its types. (10)  
b) Write a short note on wear of cutting tools. (10)
4. What do you mean by boundary and squeeze film lubrication? (20)
5. a) Discuss the causes of turbulence in oil bearing. (10)  
b) What do you mean by co-efficient of friction in journal bearing? (10)
6. a) What is reynold's slip? (5)  
b) Discuss in detail elasto hydrodynamic lubrication. (15)
7. Explain the methods for prevention of wear and frictions in machines. (20)
8. What are solid lubricants and discuss their application in metal forming process? (20)