

Roll No.

Total No. of Pages : 01

Total No. of Questions : 08

M.Tech. (ME) (Sem.-2)

TRIBOLOGY

Subject Code : MTME/202

M.Code : 74978

Date of Examination : 11-05-2024

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTIONS TO CANDIDATES :

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

1. a) Explain what do you mean by Cost of friction and wear.
b) Write a short note on types of contact and types of motion with respect to tribology.
2. **Write a short note on :**
 - a) Topography of engineering surfaces.
 - b) Abrasive and adhesive wear?
3. a) What do you mean by measurement of friction?
b) Discuss the concept of wear measurement in dry and wet environments.
4. What is wear mechanism? Discuss in detail how friction effects wear in metals and non-metals.
5. a) Discuss the selection criteria of Ball bearing and needle roller bearing.
b) What do you mean by clearance in journal bearing?
6. **Write a short note on :**
 - a) Tribology of bearings
 - b) Coefficient of friction in journal bearing.
7. Discuss in detail the Industrial application of tribology with respect to paper and glass fibre industry.
8. Discuss in details the concept of elasto-hydrodynamic and plasto-hydrodynamic lubrication.

NOTE : Disclosure of identity by writing mobile number or making passing request on any page of Answer sheet will lead to UMC case against the Student.