

Roll No.

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Total No. of Pages : 01

Total No. of Questions : 08

M.Tech. (CAD/CAM) (2018 Batch) (Sem.-I)

TRIBOLOGY

Subject Code : ME-502

M.Code : 23506

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

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

Q1 a) What do you mean by elastic and plastic deformation?

b) Discuss flash temperature theory?

Q2 What is friction? Discuss laws of friction and explain the concept of adhesion?

Q3 a) What is Lappling and honing?

b) Explain the methods for prevention of wear and frictions in machines?

Q4 a) Explain in detail the squeeze film lubrication?

b) Discuss the mechanism of lubrication using suitable diagram?

Q5 a) What do you mean by clearance in journal bearing and explain its importance?

b) What is Sommerfeld number?

Q6 What is rolling friction? Discuss various modes of bearing failures?

Q7 What are solid lubricants and discuss their application in metal forming process?

Q8 Discuss in detail the Heat-treated concept for selection of roller bearings?

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.