

Roll No .....

**ME-8003(1) (CBGS)**

**B.E. VIII Semester**

Examination, May 2019

**Choice Based Grading System (CBGS)**

**Tribology**

*Time : Three Hours*

*Maximum Marks : 70*

- Note:** i) Attempt any five questions.  
ii) All questions carry equal marks.

1. a) Describe the importance of Tribology study.  
b) Differentiate between surface fatigue and creep.
2. a) What do you mean by viscoelastic behaviour of material?  
b) What is rolling friction? Explain.
3. Explain the following in brief.
  - i) Stick - slip characteristics of friction.
  - ii) Interface temperature.
  - iii) Plastic behaviour of material.
4. What is wear? Explain different types of wear mechanisms.
5. a) Write a note on wear prevention.  
b) What is corrosion? Explain.
6. a) Discuss desirable properties of good lubricant.  
b) What is DIN standards?

7. a) What do you understand by Nano Tribology? Give two examples.  
b) Discuss lubrication requirements of a two wheelers.
8. Write short notes on any three.
  - i) Surface preparation for wear measurement
  - ii) Wear mapping of materials
  - iii) Additives for lubricants
  - iv) Dynamic seal

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