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## **ME-8001-CBGS**

### **B.E. VIII Semester**

Examination, December 2020

## **Choice Based Grading System (CBGS)**

### **Advance Machine Design**

*Time : Three Hours*

*Maximum Marks : 70*

**Note:** i) Attempt any five questions.

ii) All questions carry equal marks.

1. What is a strain gauge? Explain different types of strain gauges.
2. a) Explain the stages involved in the design of a machine element.  
b) Discuss the design for reliability.
3. a) What is photoelasticity? Explain.  
b) Draw and explain any potentiometric circuit.
4. a) What is the difference between elastic design and plastic design?  
b) What is probability? Explain the normal curve.
5. Write short notes on:
  - i) Corrosive wear
  - ii) Lubricant additives

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6. a) Explain the Technical Systems, System Approach Fundamentals of Design process.  
b) Discuss the design on Uncertainty and Reliability.
7. a) Discuss about effect of variable co-efficient of Friction.  
b) What are the effects of surface characteristics?
8. a) Write about Limit Design Analysis.  
b) What is Unsymmetrical Bending? Give examples.

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