

Roll No .....

**ME-8004 (3) (CBGS)**

**B.E. VIII Semester**

Examination, May 2019

**Choice Based Grading System (CBGS)**

**Maintenance Management**

*Time : Three Hours*

*Maximum Marks : 70*

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

1. a) How maintenance can be defined? Explain the difference between preventive maintenance and predictive maintenance. 7  
b) Discuss the importance of maintenance engineering in safety. 7
2. a) What is design out maintenance? Is it possible to achieve the objectives of design out maintenance in all operating system. 7  
b) Describe the on-line and off-line condition based maintenance. 7
3. a) Define the term 'Maintainability'. What factor affect maintainability. 7  
b) Write short notes on: 7
  - i) Universal maintenance procedures
  - ii) Shutdown programs

4. a) Explain maintenance planning and scheduling by assuming a suitable example. 7  
b) How 'management functions' differ from 'administrative functions' specially in the context of 'differentiation' and 'integration' activities involved in realising the organisational objectives? 7
5. a) Suppose you are a maintenance manager then how will you plan the maximum use of computer based management information systems. Also discuss its benefits. 7  
b) How maintenance data is documentations? Giving an examples of machine maintenance. 7
6. a) Compare sliding and rolling contact bearings. State any four advantages and three disadvantages of rolling contact bearings. http://www.rgpvonline.com 7  
b) What are different types and applications of lubricants? Explain lubrication process. 7
7. a) Analyse the seal and packing failure and its mechanism. 7  
b) Discuss the maintenance procedure for hydraulic components. Also compare it with pneumatic components maintenance. 7
8. a) Explain the terms "failure characteristics" and "failure data analysis". 7  
b) What are different models far one way classification analysis of variance? Explain. 7

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