

30/12/16 AN

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Question Paper Code : 60838

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2016.

Eighth Semester

Mechanical Engineering

ME 2037/ME 803/10122 MEE 45 – MAINTENANCE ENGINEERING

(Common to Production Engineering, Mechanical and Automation Engineering)

(Regulations 2008/2010)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the objectives of Maintenance?
2. Define Reliability.
3. What is maintenance schedule?
4. What is TPM?
5. Define Condition monitoring.
6. Write about wear debris analysis.
7. Define FCFA.
8. What is the role of corrective maintenance?
9. What is meant by central workshop organization?
10. Why lubricants are required?

PART B — (5 × 16 = 80 marks)

11. (a) Describe the Accelerated Testing. (16)

Or

- (b) Explain Mean Time Between Failures (MTBF). (16)

12. (a) Explain the principles and methods of lubrication in detail. (16)

Or

(b) (i) Explain the repair cycle. (6)

(ii) What are the steps involved in preventive maintenance? (10)

13. (a) (i) Explain the principle and working of Pistol thermometer. (8)

(ii) Discuss the Maintenance Scheduling in detail. (8)

Or

(b) Describe the various types of Non-destructive testing techniques for condition monitoring. (16)

14. (a) What are the methods followed to Repair Gears, Lead screws and Slide ways? Explain.

Or

(b) What is failure analysis? Explain in brief about failures and their development.

15. (a) (i) Discuss about store layout design. (8)

(ii) Discuss the role of lubricants for maintenance. (8)

Or

(b) How can computers be useful in maintenance planning? Explain. (16)