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Question Paper Code: 31776

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2016

Elective

Mechanical Engineering

01UME917 - MAINTENANCE ENGINEERING

(Regulation 2013)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. Define reliability.
2. What is Mean Time Between Failures (MTBF)?
3. Define preventive maintenance. What is the reason it is to be adapted in the present times?
4. Why do you need lubrication?
5. Name any four instruments commonly used for condition monitoring methods.
6. State the various methods of corrosion monitoring techniques.
7. Define the term failure analysis.
8. Differentiate between fault tree diagrams and reliability block diagrams.
9. State the various phases present in a good maintenance management system.
10. What is the role of equipment records in maintenance?

PART - B (5 x 16 = 80 Marks)

11. (a) What are the objectives of maintenance organization? Explain about the different types of organizations in industries. (16)

Or

- (b) State the steps necessary to reduce the maintenance cost in an industry and explain it in detail (16)

12. (a) Discuss the different types of maintenance system in detail. (16)

Or

- (b) Briefly explain the various stages involved in implementation of TPM. (16)

13. (a) Describe the various types of condition monitoring methods/techniques. (16)

Or

- (b) Explain the various wear debris analysis techniques commonly used and compare their performance and uses. (16)

14. (a) Explain the repair methods for spindles. (16)

Or

- (b) Briefly explain the repair methods of machine beds by riveting and clamping. (16)

15. (a) Explain the repair methods for crane and belt conveyor. (16)

Or

- (b) State the objectives and applications of computers in maintenance management. Explain it briefly. (16)
