| Reg. No.: | | | | | |
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Question Paper Code: 39717

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2018

Elective

Mechanical Engineering

01UME917 - MAINTENANCE ENGINEERING

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - $(10 \times 2 = 20 \text{ Marks})$

- 1. Define maintenance.
- 2. Define machine availability.
- 3. What is meant by breakdown maintenance approach?
- 4. What is meant by maintenance schedule?
- 5. List down the key features of condition monitoring.
- 6. Differentiate on load testing and off load testing.
- 7. What is meant by sequential fault location?
- 8. What is the aim of event tree analysis?
- 9. Define root cause analysis.
- 10. Give the name of automobile used for material handling in industry.

PART - B (5 x 16 = 80 Marks)

| 11. | (a) | What do you mean by maintenance job planning? Discuss various step maintenance job planning. | os of (16) | | | | | | | |
|-----|-----|--|----------------|--|--|--|--|--|--|--|
| | | Or | | | | | | | | |
| | (b) | Explain MTBS, MTBF, MTTF, MTTR and failure rate. | | | | | | | | |
| 12. | (a) | Explain briefly about TPM with the help of flow chart. | (16) | | | | | | | |
| | | Or | | | | | | | | |
| | (b) | What are the functions of lubrication? and gives the tips on lubrication. | (16) | | | | | | | |
| 13. | (a) | Explain on-load and off-load testing used in condition monitoring with its flow | chart. (16) | | | | | | | |
| | | Or | | | | | | | | |
| | (b) | Briefly explain the cost comparison with and without condition monitoring. | (16) | | | | | | | |
| 14. | (a) | Briefly explain the procedure for the repair cycle of gears and lead screw. | (16) | | | | | | | |
| | | Or | | | | | | | | |
| | (b) | Explain the logical fault location methods. | (16) | | | | | | | |
| 15. | (a) | State and repair methods for material handling equipment. | (16) | | | | | | | |
| | | Or | | | | | | | | |
| | (b) | Explain about the job order system. | (16) | | | | | | | |
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