Reg. No. : | | | | | | | | | | |

Question Paper Code: 39717

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2021

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. Define machine availability.
3. Define preventive maintenance. What is the reason it is to be adapted in the present times?
4. What is meant by maintenance schedule?
5. Name any four instruments commonly used for condition monitoring methods.
6. Differentiate on load testing and off load testing.
7. Define the term failure analysis.
8. Differentiate between fault tree diagrams and reliability block diagrams.
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 steps of maintenance job planning. (16)

Or

(b) Explain MTBS, MTBF, MTTF, MTTR and failure rate. (16)

12. (a) Explain briefly about TPM with the help of flow chart. (16)

Or

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

13. (a) What is leakage monitoring? Explain some of the leakage mediums used for condition monitoring. (16)

Or

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

14. (a) Explain FMEA with the help of flow chart. (16)

Or

(b) Explain the logical fault location methods. (16)

15. (a) Explain about the job order system. (16)

Or

(b) Explain the general structure of six phases of good maintenance management. (16)

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