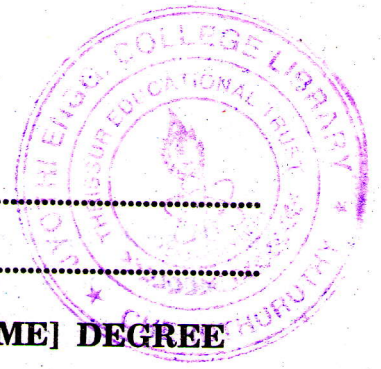


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Name.....

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**EIGHTH SEMESTER B.TECH. (ENGINEERING) [2014 SCHEME] DEGREE
EXAMINATION, APRIL 2018**

Mechanical Engineering

ME 14 805 F—INDUSTRIAL MAINTENANCE

Time : Three Hours

Maximum : 100 Marks

Part A

Answer any eight questions.

1. Discuss the objective of maintenance.
 2. Briefly explain the predictive maintenance.
 3. Elucidate the advantages of condition monitoring technique.
 4. Confer the working principle of FFT analyzer.
 5. Describe the various types of accelerometer used in vibration monitoring system.
 6. Briefly explain the working principle of shock pulse machine.
 7. Discuss the various resistance techniques used in condition monitoring.
 8. Elucidate the spectral oil analysis procedure.
 9. Confer the term maintainability
 10. Write short notes on :
 - (i) Maintenance budget. (2.5 marks)
 - (ii) Reliability. (2.5 marks)
- [8 × 5 = 40 marks]

Part B

11. Discuss the various steps involved in preventive maintenance.
Or
12. Confer the process involved in condition monitoring. And also explain off-load testing used in condition monitoring with its flow chart.
13. Explain the working principle of frequency analyzer in vibration monitoring system. Mention its application, advantages and disadvantages.

Or

Turn over

14. Describe the working principle of proximity analyzer in vibration monitoring system. Mention its application, advantages and disadvantages.
15. Draw a diagram of stationary anode x-ray illustrates and explains different parts.

Or

16. With neat sketch explain the liquid penetrant testing.
17. Derive the expression for Mean Time To Failure (MTTF).

Or

18. What do you mean by maintenance job planning ? Discuss various steps of maintenance job planning.

(4 × 15 = 60 marks)