

EIGHTH SEMESTER B. TECH DEGREE SUPPLEMENTARY EXAMINATION,

ME 04 804 B - MAINTENANCE ENGINEERING

Time: Three Hours

Maximum: 100 Marks

PART - A

(Answer all questions) (8X5= 40)

- I. 1. What is meant by opportunistic maintenance?
 - 2. Write short notes on predictive maintenance.
 - 3. Explain real time analysis.
 - 4. Explain vibration signature.
 - 5. What is ferrogram? Explain.
 - 6. Write a note on fluid contamination analysis.
 - 7. Write short notes on availability.
 - 8. Explain failure rate and mean failure rate.

PART - B

 $(4 \times 15 = 60)$

II. a. Explain the purpose, method, advantages and disadvantages of predictive maintenance.

(OR)

- Discuss in detail about condition monitoring principles and methods and its advantages and disadvantages.
- III. a. Explain in detail about vibration analysis and proximity analysis

(OR)

- b. Explain i) vibration limits ii) vibration severity criteria iii) vibration severity charts.
- IV.a. Explain in detail about i) non destructive testing ii) radio graphic inspection.

(OR)

- Explain the methods of corrosion monitoring.
- V. a. Explain in detail about the concepts of maintainability and availability.

(OR)

b. Explain about reliability and system reliability.
