Name
Reg. No.
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Maximum: 100 Marks
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ve maintenance.
$(8 \times 5 = 40 \text{ marks})$
oring.
(15 marks)
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EIGHTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION, MAY 2011

ME 04 804 (B)—MAINTENANCE ENGINEERING

Time: Three Hours

Part A

Answer all questions.

- 1. (a) What are the advantages of condition based maintenance?
 - (b) Distinguish between Preventive maintenance and Predictive maintenance.
 - (c) Write short notes on proximity analysis.
 - (d) Explain vibration severity charts.
 - (e) What are the different types of non-destructive testing?
 - (f) What is a acoustic monitoring?
 - (g) What is Bathtub curve?
 - (h) Distinguish between reliability and quality of a Product.

Part B

2. (a) Explain the principles and the methods of condition monitoring.

Or

(b) Explain briefly the procedure of Preventive maintenance.

3. (a) Explain vibration signature analysis with suitable example.

Or

(b) Explain shock pulse method to test antifriction bearings.

(15 marks)

4. (a) Explain the techniques used in Wear Debris analysis.

Or

(b) Explain ferrography.

(15 marks)

5. (a) Describe the various components of the reliability - cost curve of a product.

Or

(b) Describe the important quantitative techniques for reliability analysis of components and systems.

(15 marks)