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B.E. (Full Time) DEGREE END SEMESTER EXAMINATIONS, APRIL 2013
INDUSTRIAL ENGINEERING
(Semester VII)

IE9034 MAINTENANCE ENGINEERING AND MANAGEMENT
(Regulation-R2008)

Duration: 3 hours

Answer ALL questions.

Max. marks =100

PART -A (10x2=20 marks)

1. What do you mean by 'economic life'?
2. State the six big losses considered while computing the overall equipment effectiveness of an equipment.
3. Distinguish between Preventive maintenance and Breakdown maintenance.
4. What is the significance of human factors in maintenance?
5. List out the costs involved in any maintenance activity.
6. What are the functions of a maintenance department in a manufacturing company?
7. Name the commonly used repair time distributions.
8. Give any one application of queuing theory in maintenance.
9. How are learning curves used in man power planning for maintenance?
10. What is CMMS?

PART -B (5x16=80 marks)

11. Bring out the applications of statistical methods and techniques in maintenance engineering and management.
- 12.a) Write short notes on the following:
 - i) Tero Technology
 - ii) Maintenance organization (8+8 marks)
- [OR]
- 12.b) i) What is the need for carrying out maintenance in any industry? (6 marks)
ii) Discuss about the maintenance policies available to upkeep the physical assets.
- 13.a) Describe the application of inspection decision making models to minimize the downtime and also to maximize the profit.
[OR]
- 13.b) i) Define maintainability. (3 marks)
ii) How can you predict maintainability when the repair time distribution follows log-normal distribution? (6 marks)
iii) List out the points to be considered while planning for optimum maintainability. (6 marks)
- 14.a) Write short notes on:
 - i) Spare parts planning (8 marks)
 - ii) Maintenance scheduling

[OR]

Incomplete