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Fourth Semester B.E. Degree Examination, June/July 2019
Maintenance Engineering

Time: 3 hrs.

Max. Marks:100

**Note: Answer FIVE full questions, selecting
 atleast TWO questions from each part.**

PART – A

- 1 a. Define maintenance? List out objectives and functions of maintenance department in any organization. (07 Marks)
- b. List out various types of maintenance system. Explain any two in brief. (08 Marks)
- c. Write a note on condition monitoring. (05 Marks)
- 2 a. List out various activities involved in inspection, repair, replacement and overhaul in brief. (08 Marks)
- b. Explain in brief repair cycle and repair complexity. (06 Marks)
- c. Explain in brief the economical and financial factor to be consider while studying replacement analysis. (06 Marks)
- 3 a. Define failure. List out various modes of failures. (05 Marks)
- b. Explain in brief the performance evaluation of a maintenance department. (07 Marks)
- c. List out various steps followed in complete overhauling of a machine tool. (08 Marks)
- 4 a. List out various types of maintenance scheduling. Explain any two on brief. (10 Marks)
- b. List out various planning techniques used in maintenance planning and explain any two in brief. (10 Marks)

PART – B

- 5 a. Explain in brief, how computer play an important role in maintenance department. (08 Marks)
- b. Discuss the various benefits of computerizing maintenance systems. (06 Marks)
- c. Write a note on Computerised Maintenance Management System CMMS. (06 Marks)
- 6 a. Explain in brief any two types of safety organization in an industries. (08 Marks)
- b. How do you define industrial accidents? List out and explain various causes for an accidents. (06 Marks)
- c. Write a note on economic importance of accidents. (06 Marks)
- 7 a. What is meant by safety standards? Explain in brief safety standards in corporate for building Aisles and passages. (08 Marks)
- b. Explain in brief the safety standards incorporated in an :
 - i) Electrical equipments
 - ii) Material handling equipments
 - iii) Chemical hazards. (12 Marks)
- 8 a. Define noise. List out various source of noise in an industries. (06 Marks)
- b. Explain in brief working of mechanical dust collectors and electro static precipitators. (14 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
 2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.