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Eighth Semester B.E. Degree Examination, July/August 2022 Maintenance Engineering

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. What are objective and functions of maintenance engineering? Define maintenance. (10 Marks)
b. Explain in brief: i) Condition based maintenance ii) Breakdown maintenance. (10 Marks)

OR

- 2 Explain the following with advantages and disadvantages in it:
i) Preventive maintenance ; ii) Design out maintenance ; iii) Predictive maintenance ;
iv) Total productive maintenance ; v) Planned maintenance. (20 Marks)

Module-2

- 3 a. Explain the various maintenance stages for lathe. (10 Marks)
b. Discuss the causes for machine failure. Enumerate types of machine failure. (10 Marks)

OR

- 4 a. What is spare part control? Explain the methods to optimize spare part control. (10 Marks)
b. Explain about maintenance planning and scheduling. (10 Marks)

Module-3

- 5 a. Write a detailed note on long range planning and short range planning. (10 Marks)
b. Briefly explain on estimation of maintenance work. (05 Marks)
c. Write about manpower allocation. (05 Marks)

OR

- 6 a. Explain repair vs replace. (05 Marks)
b. Explain repair complexity. (05 Marks)
c. Discuss various maintenance planning techniques and planning procedures. (10 Marks)

Module-4

- 7 a. Explain how computers can be effectively used in maintenance management. (10 Marks)
b. Explain the role of computers in human resource management. (10 Marks)

OR

- 8 a. Describe computerized maintenance models used in practice. (10 Marks)
b. Briefly describe the maintenance information system used for maintenance function. (10 Marks)

Module-5

- 9 a. With neat sketch, explain electrostatic precipitation filtration method. (10 Marks)
b. Briefly explain safety standards for chemical hazards and plant house keeping building. (10 Marks)

OR

- 10 a. Explain with the neat sketch construction and working of sound level meter. (10 Marks)
b. Explain in brief industrial vibration and its control. (05 Marks)
c. Briefly explain safety standards for electrical equipments. (05 Marks)