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Eighth Semester B.E. Degree Examination, July/August 2021 Maintenance Engineering

Max. Marks: 80

Time: 3 hrs.

Note: Answer any FIVE full questions.

- 1 a. What is meant by maintenance? Mention different types of maintenance. Explain any four in detail. (08 Marks)
- b. What are objectives and importance of maintenance system? (08 Marks)
- 2 a. List the different functions of maintenance explain briefly. (08 Marks)
- b. Write a short notes on: i) Condition monitoring ii) Design out maintenance. (08 Marks)
- 3 a. Define machine failure. What are the types of failure? Explain briefly. (08 Marks)
- b. Describe the preventive maintenance procedure for a grinding machine. (08 Marks)
- 4 a. Explain briefly maintenance procedure for complete overhaul of shaping machine. (08 Marks)
- b. Write a short notes on the following: i) Maintenance planning and scheduling ii) Maintenance for spare parts control. (08 Marks)
- 5 a. Explain repair cycle, replacement and repair complexity. (08 Marks)
- b. What are the true economics of preventive maintenance? Explain briefly. (08 Marks)
- 6 a. Explain briefly long range and short range planning. (08 Marks)
- b. What is maintenance control? What are objectives of the maintenance control? Explain briefly. (08 Marks)
- 7 a. Define CMMS. What are the functions of CMMS, and also list the benefits of CMMS. (08 Marks)
- b. What are the factors affecting selection of CMMS. List the applications of computer to maintenance work. (08 Marks)
- 8 a. What is safety organization? What are the types of safety organization? Briefly explain. (08 Marks)
- b. Explain briefly what are steps taken for the analysis of accident safety standards for mechanical equipments. (08 Marks)
- 9 a. What are the safety standard to be followed in electrical equipment and systems? Briefly explain. (08 Marks)
- b. What are the safety standard to be followed for the following: i) Plant house keeping-building ii) Passages and Indoors iii) Washrooms iv) Canteens. (08 Marks)
- 10 a. What are the types of dust collectors? Explain with a help of neat diagram working principle of wet type collector. (08 Marks)
- b. Define noise and vibration control. What are the different methods of noise and vibration control? Explain with neat sketch two stage isolation vibration control. (08 Marks)

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.