

--	--	--	--	--	--	--	--	--	--



P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belagavi)

Sixth Semester, B.E. - Mechanical Engineering

Semester End Examination; May / June - 2019

Maintenance Engineering

Time: 3 hrs

Max. Marks: 100

Note: Answer FIVE full questions, selecting ONE full question from each unit.

UNIT - I

- 1 a. Define maintenance and explain the objective of maintenance system. 10
- b. State the steps involved in the system approach to ensure better maintenance performance. 10
- 2 a. Explain preventive maintenance. Briefly discuss the main activities of preventive maintenance. 10
- b. Explain the following : 10
 - i) Condition based maintenance
 - ii) Total productive maintenance

UNIT - II

- 3 a. Explain; i) Repair complexity ii) Replacement. 10
- b. Explain how to find most optional preventive maintenance frequency? 10
- 4 a. Discuss modes of machine failures and its causes. 10
- b. State the benefits of maintenance evaluation. 10

UNIT - III

- 5 a. Explain planning for maintenance function. 10
- b. Discuss 'man power allocation by maintenance management group'. 10
- 6 a. List the activities of scheduling process. 8
- b. Discuss maintenance control and explain estimation of maintenance work. 12

UNIT - IV

- 7 a. Discuss features and benefits of computer aided maintenance. 10
- b. Explain 'Noise pollution' control. 10
- 8 a. Write a note on industrial vibration and its control. 10
- b. Discuss application of computers in maintenance work. 10

UNIT - V

- 9 a. Discuss the economic importance of accident. 10
- b. Explain various causes of fire. 10
- 10 a. Write a note on analysis of accident safety standards for mechanical equipment and electrical system. 8
- b. Discuss chemical hazards. 6
- c. Explain the salient features of good plant house keeping. 6