

**B.Tech. MECHANICAL ENGINEERING
(BTMEVI)**

Term-End Examination

June, 2012

00315

BIME-028 : MAINTENANCE ENGINEERING

Time : 3 hours

Maximum Marks : 70

Note: Answer any seven questions. All questions carry equal marks.

1. What do you understand by the shut-down state of a machine ? What are the adverse effects of this status ? 10
2. How is maintenance planning different from general planning and production planning ? Give suitable examples. 10
3. Distinguish between *any two* of the following : $2 \times 5 = 10$
 - (a) Breakdown Maintenance and Emergency Maintenance
 - (b) Productive Maintenance and Predictive Maintenance.
 - (c) Planned Maintenance and Scheduled Maintenance.
4. "Master Maintenance Scheduling" (MMS) can be used as the yardstick for measuring the effectiveness of the preventive maintenance (PM) in an organisation". Justify the statement. 10

5. Enumerate the functions of spare parts management with reference to Plant Engineering. What are its distinguishable features of maintenance spares as compared to general spares ? 10
 6. Illustrate the significance of condition-based maintenance with suitable example. 10
 7. Describe various failure trends that a machine can exhibit in its life span with suitable examples. 10
 8. Define and explain the terms reliability, availability and maintainability. Discuss on what factors each of these terms depend. 10
 9. Explain the use of computer in maintenance planning and scheduling. 10
 10. What is the goal of a maintenance programme ? List the costs associated with equipment break down. 10
-