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**Question Paper Code: 92012**

M.E. DEGREE EXAMINATION, OCTOBER - 2014.

Elective

CAD / CAM

01PCD517 – MAINTENANCE ENGINEERING AND MANAGEMENT

(Regulation 2013)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions.

PART A - (10 x 2 = 20 Marks)

1. State the purpose of maintenance function in an organization.
2. Define Maintenance cost.
3. List out the objectives of corrective maintenance.
4. What is meant by predictive maintenance?
5. Enumerate the benefits of maintenance staffing.
6. What is the importance of maintenance planning and scheduling?
7. What do you understand by the term ‘‘Reliability’’?
8. Briefly write about FMECA.
9. What is TPM? Give the benefits of it.
10. List the eight pillars of TPM.

PART - B (5 x 14 = 70 Marks)

11. (a) (i) Briefly explain about the various objectives of maintenance planning. (7)  
(ii) Explain in detail about the design for maintenance. (7)

Or

- (b) What are the objectives of maintenance organization? and what different types of organizations are used in Indian industries? (14)
12. (a) (i) Discuss briefly about the steps involved in preventive maintenance. (7)  
(ii) Explain why preventive maintenance is better than reactive maintenance? (7)
- Or
- (b) What is condition monitoring? and briefly explain about it. What type of condition monitoring is normally used in an industry? (14)
13. (a) Explain the different aspects of planning and scheduling of maintenance in detail. (14)
- Or
- (b) (i) Discuss the importance of human factors in maintenance management. (7)  
(ii) Briefly describe the utilization of skilled manpower in maintenance. (7)
14. (a) (i) Describe about the principles of Design for Maintainability. (7)  
(ii) Explain briefly about five zero concept. (7)
- Or
- (b) (i) Describe about the Reliability Centered Maintenance. (7)  
(ii) Briefly explain FMECA with an example. (7)
15. (a) Explain the procedure for achieving TPM. (14)
- Or
- (b) Discuss relationship between OEE and world-class maintenance in detail. (14)

PART - C (1 x 10 = 10 Marks)

16. (a) Discuss in detail about spares planning for an automobile industry. (10)
- Or
- (b) What do you understand by maintenance categories? Explain common types and explain the basis of their selection. (10)