

Paper ID & Roll No. to be filled in your Answer Book

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B.Tech.

UTU (VIIIth SEM.) (ODD SEM.) EXAMINATION, 2013-14

Maintenance and Safety Engineering

Time : Three Hours]

[Max. Marks : 100

Note: Attempt all questions. All questions carry equal marks.

1. Attempt any four of the following?

[5x4]

A. Explain the role of maintenance engineering department in industry?

B. What is safety engineering? Give safety precautions in the transportation of inflammable liquids.

C. What do you understand by manpower planning and material planning?

D. Define planned maintenance. Classify various planned maintenance approach.

(E) What do you understand by maintenance of material handling equipments? State the benefits of proper maintenance of material handling equipments.

F. Describe preventive methods for noise hazards with example.

2. Attempt any two of the following? [10x2]

A. Explain the following in detail with the help of suitable example: (i) Maintainability, (ii) Availability.

B. State the purpose of the maintenance function with an organization. Discuss maintenance as business.

C. What is Total Productive Maintenance (TPM) and discuss its similarities with TQM?

3. Attempt any two of the following? [10x2]

A. What are all the steps involved in preventive maintenance? How will you apply preventive maintenance technique for moving equipments?

maintenance management system? Explain the procedure of evaluation of maintenance management.

- C. List four common elements used in material handling equipments. Explain their care and maintenance procedure.

Attempt any two of the following?

[10x2]

- A. Explain the following in detail: (i) Design for maintenance, (ii) Design for reliability.
- B. Explain the general rules and guidelines in safety and hazard prevention in detail] Give effects of radiation hazards and their silent effects.
- C. What do you understand by maintenance strategy? Explain Break down maintenance and procedure of preventive inspection of equipment used in emergency.

Write short notes on any four of the following?

~~A.~~ Spare parts planning and control.

~~B.~~ ^{short notes} Replacement planning.

~~C.~~ Bath-tub curve.

~~D.~~ Zero break down.

~~E.~~ ^{Explain} Production maintenance system.

~~F.~~ Design out maintenance.