Roll No. | | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(ME) (E-I 2011 Onwards) (Sem.–6)

MAINTENANCE & RELIABILTY ENGG.

Subject Code : DE/ME-2.6

M.Code : 71258

Time : 3 Hrs. Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students has to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students has to attempt any TWO questions.

SECTION-A

1. Explain briefly :

a) What are the objectives of maintenance?

b) What is the application of work measurement in maintenance?

c) Write advantages of total productive maintenance.

d) Define maintenance engineering.

e) Discuss the concept of reliability.

f) What do you mean by reliability of parallel elements?

g) What is the importance of reliability in design?

h) What do you mean by fault tree analysis?

i) Discuss applications of computerized maintenance information system.

j) What do you mean by maintenance schedule?

SECTION-B

2. Discus in detail various costs associated with machine breakdown.

3. Explain the development of preventive maintenance schedule.

4. Discuss the use of reliability concept in design and maintenance of different systems.

5. Discuss about statistical estimation of reliability indices in detail.

6. Explain the organization of maintenance system with the help of diagram.

SECTION-C

7. Write brief note on various condition monitoring techniques in maintenance planning. Discuss any one in detail.

8. Discuss the importance of reliability improvement in an organization. Also explain the concept of redundant and stand by systems.

9. Explain the steps of fault tree construction with the help of suitable example.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.