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TED (15) – 6026

(REVISION – 2015)

Reg. No.....

Signature .....

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2019

MAINTENANCE ENGINEERING

[*Time* : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

I Answer *all* questions in one or two sentences. Each question carries 2 marks.

1. Explain the importance of sound maintenance system.
2. Explain maintainability.
3. State any two applications of conditioning monitoring.
4. Explain ferrography.
5. Which maintenance method is suitable for material handling equipments ? (5×2 = 10)

PART — B

(Maximum marks : 30)

II Answer any *five* of the following questions. Each question carries 6 marks.

1. Explain functions of maintenance.
2. Explain the different functions of lubrication.
3. Explain bath tub curve.
4. Explain the uses and drawbacks of distribution curves.
5. Explain the methods of condition monitoring.
6. Explain the application and advantages of liquid penetrant testing.
7. Explain the uses of computers in maintenance. (5×6 = 30)

Marks

PART — C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each full question carries 15 marks.)

UNIT — I

III (a) Explain different maintenance categories. 8

(b) Explain TPM with its benefits. 7

OR

IV (a) Explain method of lubrication techniques. 8

(b) Explain the steps involved in planned maintenance activity. 7

UNIT — II

V (a) Define reliability with its objectives. 8

(b) Explain the causes of failure in machines/equipments. 7

OR

VI (a) Define maintainability with its design fundamentals. 8

(b) Explain series reliability model. 7

UNIT — III

VII (a) Explain conditioning monitoring technique. 8

(b) Write short note on any four temperature monitoring techniques. 7

OR

VIII (a) Explain machinery vibration standards, Severity chart and acceptable limit with example. 8

(b) Explain different vibration transducers. 7

UNIT — IV

IX (a) Explain radiographic testing with figure and give field of application. 8

(b) Explain spectral oil analysis procedure and give its application. 7

OR

X (a) Explain equipment record types and equipment record benefits. 8

(b) Explain the bearing maintenance in details. 7