TED (15) – 5022

(REVISION — 2015)

Reg. No. .....

Signature .....

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2018

INDUSTRIAL 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. What is standard time ?
2. Explain about Simo Chart.
3. Explain functional inspection.
4. What is depreciation ?
5. Explain about dispatching. (5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. List various activities of preplanning and explain each one.
2. Draw the flow chart symbols and name the same.
3. Explain the objectives of quality control.
4. List various causes of depreciation.
5. Explain the need of improving Productivity.
6. Explain about PMTS.
7. Explain about cost of quality and classify various parameters. (5×6 = 30)

PART — C

(Maximum marks : 60)

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

UNIT — I

III (a) Explain different types of plant layouts. 8

(b) Explain the principles of material handling. 7

OR

Marks

IV (a) Explain in details different types of scheduling techniques. 8

(b) Explain value engineering. 7

UNIT — II

V (a) Compare micro motion study and macro motion study. 8

(b) Explain the rules concerning workplace layout. 7

OR

VI (a) Explain method study and its objectives. 8

(b) Explain the string diagram with sketch and its drawbacks. 7

UNIT — III

VII (a) Fine thermostatic control are tested to determine the temperature. The measured values are 344°C, 338°C, 342°C, 335°C and 336°C. These values constitutes the first sub group for certain control chart. Compute arithmetic mean, median, range and standard deviation. 8

(b) Explain the concept of variability in the process. 7

OR

VIII (a) Explain the C chart and P chart and also explain advantages of control charts. 8

(b) For the following data calculate mean and standard deviation ? 7

Cell midpoints	*Cell boundaries*	*Frequency*
385	382.5-387.5	8
390	387.5-392.5	10
395	392.5-397.5	15
400	397.5-402.5	17
405	402.5-407.5	8

UNIT — IV

IX (a) Explain overhead expenses and its classifications. 8

(b) Comparison of estimating and costing. 7

OR

X (a) Explain OC curve and its different regions. 8

(b) Explain the advantages of sampling inspection. 7