TED (15) – 5001

(REVISION — 2015)

Reg. No.....

Signature .....

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

INDUSTRIAL MANAGEMENT AND SAFETY

[*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 meant by Sleeping Partner ?
2. Write full form of ISO and name the first ISO.
3. What is Dummy Activity ?
4. Define Accident.
5. List any two Quantitative Techniques in Management. (5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Write similarities in the contributions of Fayols and F.W.Taylor.
2. Explain the functions of store keeping.
3. State following game has a saddle point.

$$\begin{bmatrix} 5 & 0 \\ -3 & 4 \end{bmatrix}$$

4. Describe Procedure for Registration of Small Scale Industry (SSI).
5. List six objectives of Technology Business Incubator (T B I).
6. Describe Functional organizational structure.
7. Describe basic steps involved in purchase procedure. (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) Describe Joint stock companies. 8

(b) Briefly explain different types of training. 7

OR

IV (a) Explain Henry Fayols principles of management. 8

(b) Calculate the earnings of the worker under Rowan Plan and Halsey Plan (50-50). The standard time for a particular job is 10 hours and the time taken by the worker to complete the job is 8 hours. The hourly rate is Rs. 6. 7

UNIT — II

V (a) Draw and explain quality system documentation triangle. 8

(b) Describe Tender and Quotation. 7

OR

VI (a) Describe Store Layout. 8

(b) Describe the different type audits in the ISO implementation. 7

UNIT — III

VII (a) A project consists of 6 activities P, Q, R, S, T & U with a duration 4, 5, 6, 4, 3 and 6 days respectively. Draw the network diagram and mark the critical path. The dependency of activities as shown below : use A O A method.

Activity	*Dependency*	*Duration in Days*
A	.....	4
B	A	5
C	B	6
D	A	4
E	D	3
F	C & E	6

8

(b) For the following pay off matrix of firm A, determine the optimum strategies for the firms and the value of the game (using maximini - minimax principle)

Player A

$$\text{Player B} \begin{bmatrix} 3 & 4 & 2 \\ 5 & 7 & 3 \\ 7 & 5 & 4 \end{bmatrix}$$

7

OR

Marks

VIII (a) Solve the following Cost matrix Transportation problem by Vogel's Method.

Plants	W	X	Y	Capacity
P1	3	1	4	7
P2	4	5	1	6
P3	5	2	3	10
Requirement	6	9	8	

8

(b) Compare between CPM and PERT. 7

UNIT — IV

IX (a) Explain 4 E's of Accident Prevention Technique. 8

(b) What are the Functions of an Entrepreneur ? 7

OR

X (a) Explain various Accident factors. 8

(b) Describe constituents of feasibility study. 7