TED (10) – 2004
(REVISION — 2010)

Reg. No.....
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DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE — APRIL, 2018

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. Define Espirite-De-Corps
2. What is an incentive ?
3. What is ISO-9000 ?
4. What is Bin card ?
5. What is accident proneness ? (5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. State functions of management.
2. Explain different methods of training.
3. Explain the link between ISO - 9000 and TQM.
4. Explain different steps in purchase procedures.
5. Compare CPM and PERT.
6. Explain 4 E's of accident Prevention Technique.
7. Explain different types of solid waste management. (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 Henry Fayol's principle of management. 8

(b) What are the types of business organization ? Explain any two. 7

OR

IV (a) Describe manpower planning process. 8

(b) Explain two types of Halsey Plan. 7

UNIT — II

V (a) Explain the steps for ISO-9000 installation. 8

(b) Explain the concept of Total Quality Management. 7

OR

VI (a) Explain Economic order quantity in inventory control. 8

(b) Explain the different methods of sales forecasting. 7

UNIT — III

VII (a) Write short note on :

(i) Earliest Finish Time (ii) Latest Finish Time (iii) Slack or Float 6

(b) A small engineering project consists of 9 activities, 3 times estimates for each activity are given below. Draw the network diagram and mark it on the diagram. Calculate the expected time for each activity. Show critical path and project duration.

Activity	*Optimistic time*	*Most likely time*	*Pessimistic time*
1 – 2	2	5	14
1 – 6	2	5	8
2 – 3	5	11	29
2 – 4	1	4	7
3 – 5	5	11	17
4 – 5	2	5	14
6 – 7	3	9	27
5 – 8	2	2	8
7 – 8	7	13	31

9

OR

Marks

VIII (a) Describe Queing theory and state its field of application. 6

(b) A company has 4 manufacturing units and which has to be distributed to 3 different wholesale distributors. The table shows the supply capacities of the manufacturing units and the demands of the wholesalers at three destinations. The cost of transporting one unit of the product from each of the manufacturing unit to each of the wholesaler is given in table.

Find total transportation cost by north west corner rule.

Whole salers

Factory	Dl	D2	D3	Supply
O1	2	5	7	5
O2	2	7	4	8
O3	5	4	7	7
O4	1	2	6	14
Demand	7	9	18	

9

UNIT — IV

IX (a) Explain various accident factors. 9

(b) What are the causes and effects of water pollution ? 6

OR

X (a) Explain the role of supervisors in organizing safety. 7

(b) Explain various noise control methods. 8