TED (15) – 5001 Reg. No. IMS·3

(REVISION — 2015) Signature .....

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. List three types of Incentives given to workers.
2. List any two requirements of quality.
3. What is successor events ?
4. What is the name of point at which Maximini equal to Minimax ?
5. List the factors using to compute Workplace safety performance. (5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Describe in brief different types of Ownerships.
2. Write different types of Wages.
3. List ten mantras of TQM.
4. Describe purchase procedure.
5. List applications of PERT and CPM.
6. Describe the Role of Safety Officers.
7. List the State Organizations for promoting Entrepreneurs. (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 Halsey plan. 8

(b) Compare the contributions of Taylor and Henry Fayol. 7

OR

IV (a) Describe Cooperative societies with its classifications. 8

(b) Explain functions of Management. 7

UNIT — II

V (a) Describe overview of ISO 9000 Series of standards. 8

(b) Explain duties and responsibilities of store keeper. 7

OR

VI (a) Describe the functions of Sales department. 8

(b) Explain three prong approaches to quality planning. 7

UNIT — III

VII (a) Draw PERT Network and find the critical path of a small project consists of eight activities has the following data.

Activity	*Proceeding Activity*	*Time Estimate*		
		Optimistic	*Most Likely*	*Pessimistic*
A	None	2	4	12
B	None	10	12	26
C	A	8	9	10
D	A	10	15	20
E	A	7	7.5	11
F	B, C	9	9	9
G	D	3	3.5	7
H	E, F, G	5	5	5

8

(b) Processing times in hours in machines I and II are follows :

Product	*A*	*B*	*C*	*Total Hours Available*
Machine I	3hrs.	2 hrs.	2 hrs.	480 hrs.
Machine II	2 hrs.	3 hrs.	3 hrs.	540 hrs.
Profit	Rs. 10	Rs. 6	Rs 5	

Note that the available hours of machines can't be exceeded. It is not possible to sell more than 120 of product A in the market per month. Formulate this problem to maximize the profit. 7

OR

Marks

VIII (a) By using North West corner Rule to find the initial solution of the Transportation problem, the necessary datas given below.

factories	*A*	*B*	*C*	*D*	*Availability*
1	10	9	7	11	10
2	8	6	9	7	8
3	11	12	14	11	7
4	4	6	3	9	9
Total Required	11	12	5	6	

8

(b) Find E F T, L F T, Float, Critical path of the Network, and Project duration from the following data.

Activity	*Predecessor activity*	*Time estimates (Weeks)*
A	None	5
B	None	3
C	A	1
D	C	7
E	B	2
F	E	2
G	D, F	3

7

UNIT — IV

IX (a) Describe steps involved in starting Small - Scale Industry. 8

(b) List any seven Unsafe conditions in an Industry. 7

OR

X (a) Describe Accident Prevention technique in Industry. 8

(b) Describe various factors contributing to failures of Entrepreneur Ventures. 7