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A24 - 9601

Reg. No……
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DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE, APRIL – 2024

INDUSTRIAL MANAGEMENT & SAFETY

[Maximum Marks: **100**] [Time: **3** Hours]

PART-A

[Maximum Marks: **10**]

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

1. What is manpower planning?
2. Define the term management.
3. Define quality planning.
4. What is network analysis?
5. What is severity rate and frequency rate? (5 x 2 = 10)

PART-B

[Maximum Marks: **30**]

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

1. Describe the benefits of training.
2. What are the objectives of quality audit?
3. What are the functions of sales department?
4. What are the applications of CPM and PERT?
5. Explain Game theory and saddle point.
6. List any 6 roles of safety officer in an industry.
7. State the functions of an entrepreneur. (5 x 6 = 30)

PART-C

[Maximum Marks: **60**]

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

UNIT – I

III. a. List out the functions of HRM in detail. (7)

b. Explain the types of ownership. (8)

OR

IV. a. Explain Henri Fayol's principles of management. (7)

b. Describe the different types of wages. (8)

UNIT – II

V. a. State ten manthras for TQM. (7)

b. Discuss centralised and de-centralised stores. (8)

OR

VI. a. Explain ISO 9000 series. (7)

b. Explain the buying techniques. (8)

UNIT- III

VII. a. Find the feasible solution of the following transportation problem using North West comer method.

		Warehouse				
		W_1	W_2	W_3	W_4	Supply
Factory	F_1	14	25	45	5	6
	F_2	65	25	35	55	8
	F_3	35	3	65	15	16
	Requirement	4	7	6	13	

(7)

b. Write short notes on the following.

1. EFT
2. LFT
3. Critical path
4. Slack or float (8)

OR

VIII. a. A candy manufacturer has 130 kg of chocolate-covered cherries and 170 kg of chocolate-covered mints in stock. He decides to sell them in the form of two different mixtures. One mixture will contain half cherries and half mints by weight and will sell for Rs.2.00 per kg. The other mixture will contain one-third cherries and two-thirds mints by weight and will sell for Rs.1.25 per kg. How many pounds of each mixture should the candy manufacturer prepare in order to maximize his sales revenue? Find the solution using LPP method. (7)

b. A project has 9 activities. The expected time of each activity is as shown below.

Activity	1-2	1-3	2-4	3-4	4-6	5-6	3-5	5-7	6-7
Expected time in weeks	6	8	7	12	3	5	7	11	10

i. Draw the project network.
ii. Identify the critical path.
iii. Find project duration? (8)

UNIT - IV

IX. a. Explain the causes of accidents in an industry. (7)

b. What is a feasibility report? Explain in details about the major contents of feasibility report. (8)

OR

X. a. Explain 4 E's of accident prevention technique. (7)

b. Describe the steps involved in starting small-scale industry. (8)

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