

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE, APRIL - 2021

INDUSTRIAL MANAGEMENT AND SAFETY

[Maximum Marks: 100]

[Time: 3 Hours]

PART-A

[Maximum Marks: 10]

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

- I.
1. What do you mean by staffing?
  2. What is a bin card.
  3. What do you mean by two person zero game?.
  4. Recall activity and event.
  5. Write down any two mechanical causes of accident? (5 x 2 = 10)

PART-B

[Maximum Marks: 30]

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

- II
1. What do you mean by incentive. List out the main types of incentives.
  2. Explain the process of Manpower planning.
  3. Explain the difference between mission, vision, and quality policy statement.
  4. Explain any six duties of store keeper.
  5. Discuss the procedure for finding critical path in CPM.
  6. Explain the role of safety officer.
  7. Explain the effect of air pollution. (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) Explain the advantages and disadvantages of a joint stock company. (10)  
(b) Discuss about different types of organizational structure. (5)

OR

- IV (a) Illustrate the different methods of training. (10)  
(b) Explain any two functions of HRM. (5)

UNIT - II

- V (a) List the mantras of TQM. (10)  
(b) List any five functions of sales department. (5)

OR

- VI (a) Briefly describe different methods of purchasing. (7)  
(b) Explain the concepts of store layout and explain different types of store layout. (8)

UNIT - III

- VII (a) A project consists of 8 activities A, B, C, D, E, F, G and H with duration 4, 5, 5, 4, 3, 5, 6 and 2 respectively. Draw the network diagram and mark the Critical path and find the project duration. Use AOA method.

Activity	Dependency	Duration in days	
A	-	4	
B	A	5	
C	B	5	
D	A	4	
E	D	3	
F	C&E	5	
G	F	6	
H	G	2	(10)

- (b) Briefly discuss the game theory of operation research. (5)

OR

- VIII (a) Solve the following game using Maxi-Mini and Mini-Max principle and find the saddle point, best strategy for both players and the value of the game.

		Player B		
		B1	B2	B3
Player A	A1	40	9	2
	A2	30	15	7
	A3	10	5	4

(8)

- (b) Distinguish between CPM and PERT. (7)

UNIT - IV

- IX (a) Illustrate 4 E's of accident prevention technique. (10)  
(b) Explain the role of workers in practicing safety procedures. (5)

OR

- X (a) Explain any 10 personal factors for various accidents. (10)  
(b) What are the methods of solid waste management? (5)

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