

TED (15) – 5001  
(Revision – 2015)

**N22 - 07922**

Reg.No.....  
Signature.....

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/  
COMMERCIAL PRACTICE – NOVEMBER – 2022**  
**INDUSTRIAL MANAGEMENT AND SAFETY**

(Maximum Marks : 100)

(Time : 3 hours)

**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. What is Job evaluation?
3. Define Inventory.
4. What is dummy activity?
5. Define an accident.

(5x2=10)

**PART –B**  
(Maximum Marks : 30)

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

1. List the contributions of F.W Taylor towards Scientific management.
2. Identify the functions of Sales department.
3. List ten mantras of TQM.
4. List applications of PERT and CPM.
5. Explain Game theory.
6. Explain the role of safety officers in Organisational safety.
7. List the environmental factors causing accident.

(5x6=30)

**PART – C**

(Maximum Marks : 60)

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

**UNIT – I**

- III.** (a) Discuss briefly Henry Fayol’s principle of management. (8)  
(b) Explain Halsey plan. (7)

**OR**

- IV.** (a) Explain functions of management. (8)  
(b) List the advantages of training. (7)

**UNIT – II**

- V.** (a) Describe an overview of ISO 9000 series of standards. (8)  
(b) Write short note on purchase procedure. (7)

**OR**

- VI.** (a) Explain three prong approaches to quality planning. (8)  
(b) Explain duties and responsibilities of store keeper. (7)

**UNIT –III**

- VII.** (a) A project has 7 activities. Draw the network diagram. Three time estimates are given below.

Activity	Optimistic time (Weeks)	Most likely time (Weeks)	Pessimistic time (Weeks)
1 - 2	1	1	7
1 - 3	1	4	7
1 - 4	2	2	8
2 - 5	1	1	1
3 - 5	2	5	14
4 - 6	2	5	8
5 - 6	3	6	15

1. Draw the project network.
2. Calculate expected time.

3. Identify the critical path.

4. Find project duration. (8)

(b) Explain about Linear programming. (7)

**OR**

**VIII.** (a) A Company produces two articles A and B. There are two different departments through which the articles are processed, via assembling and finishing. The capacity of the assembly department is 60 hours a week and that of finishing department is 48 hours a week. Production of one unit of A requires 4 hours in assembly and 2 hours in finishing. Each of the unit B requires 2 hours in assembly and 4 hours in finishing. If profit is Rs.8 for each unit A and Rs.6 for each unit of B. Find out the number of units of A and B to be produced each week to get maximum profit. Solve it graphically. (8)

(b) What are the methods of operation research? (7)

**UNIT – IV**

**IX.** (a) Explain factory act 1948. (8)

(b) What are the functions of entrepreneur? (7)

**OR**

**X.** (a) Explain the 4E's of accident prevention techniques. (8)

(b) Describe steps involved in starting small scale industry. (7)

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