

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2017**

**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. The labour turn over of an organization is high. What does it mean ?
2. Define management on the basis of human relation concept.
3. Define Total Quality Management (TQM).
4. Identify the rule used for numbering of events while drawing a network diagram.
5. List the key factors of accidents.

(5 × 2 = 10)

**PART — B**

(Maximum marks : 30)

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

1. State the functions of management.
2. List the steps for ISO-9000 Installation.
3. Identify the functions of sales department.
4. Define the terms :  
(a) pessimistic time    (b) most likely time    (c) optimistic time
5. Explain game theory.
6. Describe the roll of safety officer in an industry.
7. Explain the concept of student entrepreneur.

(5 × 6 = 30)

## PART — C

(Maximum marks : 60)

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

## UNIT — I

III (a) Compare the contributions of F. W. Taylor and Henry Fayol to the development of management. 8

(b) Explain functional organization with its merits. 7

OR

IV (a) Explain Joint Stock company. 8

(b) Explain the different methods of training. 7

## UNIT — II

V (a) List the "ten mantras of TQM". 8

(b) Explain the functions of store keeping. 7

OR

VI (a) Describe the three prong approach method to quality planning. 8

(b) Explain : 7  
(i) Tender (ii) Quotation.

## UNIT — III

VII (a) An engineering project consists of 7 activities as shown in the table. Find the critical activities using PERT.

Activity	Expected time
10-20	8
10-50	7
20-30	6
30-40	8
50-60	13
40-70	5
60-70	17

(b) Explain the linear programming. 7

OR

- VIII (a) A person wanted to have 3 nutrients from 3 different food at minimum cost. The nutrients that can be supplied by one unit of each food and related details are given in the table. Formulate the LPP for this model

<i>Food type</i>	<i>Nutrient</i> 1	<i>Nutrient</i> 2	<i>Nutrient</i> 3	<i>Cost/unit</i>
A	5	8	3	80
B	10	6	4	60
C	2	4	5	50
Minimum requirement of nutrient	60	300	200	

8

- (b) Differentiate CPM & PERT.

7

UNIT — IV

- IX (a) Explain the 4E'S of accident prevention techniques.

8

- (b) Describe the procedure for registration of SSI.

7

OR

- X (a) Explain factory act 1948.

8

- (b) Explain Technology Business Incubator (TBI).

7