

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE, NOVEMBER - 2024**

INDUSTRIAL MANAGEMENT & SAFETY

[Maximum marks: 100]

[Time: 3 Hours]

PART – A

Maximum marks: 10

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

1. Define management.
2. Define labour turnover.
3. Define inventory.
4. What is meant by optimum solution in linear programming?
5. Define severity rate.

(5 x 2 = 10)

PART – B

Maximum marks: 30

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

1. List the different types of wages.
2. List the dimensions of quality.
3. Explain centralised and de-centralised store.
4. List the applications of CPM and PERT.
5. Explain transportation matrix.
6. List the functions of an entrepreneur.
7. Explain the role of safety officer in an industry.

(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 different types of organizational structure. (8)
(b) Outline the fourteen principles of management suggested by Henry Fayol. (7)

OR

- IV.** (a) Explain the functions of Human Resources Management. (8)
(b) Infer the minimum wage and its importance. (7)

UNIT - II

- V. (a) List the ten “manthras” of TQM. (8)
(b) Explain the steps for ISO 9000 installation. (7)

OR

- VI. (a) Explain EOQ and ABC inventory models. (8)
(b) Explain the purchase procedure. (7)

UNIT - III

- VII. (a) Draw the network diagram for the following project and find the critical path. Also determine the project duration. (9)

Activity	Predecessor activity	Duration (Days)
A		4
B	A	5
C	A	3
D	C	2
E	B	8
F	E&D	7
G	F	3
H	C	2
I	G&H	5

- (b) List the steps for solving LPP by graphical method. (6)

OR

- VIII. (a) Find the initial feasible solution for following transportation problem using Vogels approximation method. (8)

	D1	D2	D3	D4	Available
F1	1	5	3	3	34
F2	3	3	1	2	15
F3	1	2	2	3	12
F4	2	7	2	4	9
Requirement	21	15	17	17	

- (b) Explain Min-max and Max-min principle with example. (7)

UNIT – IV

- IX. (a) Explain various accident factors. (8)
(b) Explain the concept of DSIR and TBI. (7)

OR

- X. (a) List the steps involved in starting small-scale industry. (8)
(b) Explain unsafe acts and unsafe conditions. (7)
