

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2018**

CONSTRUCTION MANAGEMENT AND SAFETY ENGINEERING

[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. What is mean by free float ?
2. What is earnest money deposit ?
3. List out classification of stores.
4. Define the term Entrepreneur.
5. Define total quality Management.

(5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Differentiate between feasibility report and project report.
2. What are the limitations of Bar chart ?
3. List out the contract system in construction works.
4. What are the advantages of Lump-sum contract ?
5. List out any six objectives of Human Resources Management.
6. List any six factors that may be considered before selecting the construction equipment.
7. What are the expectations of an 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) What are the factors considered in preliminary planning ?

5

(b) A project has nine activities; the expected time of each activity is as follows :

Activity	:	1-2	2-3	2-4	3-4	3-5	4-5	5-6	3-6	4-6
Expected time :		3	3	2	0	3	7	6	2	5

- (i) Draw the programme network.
- (ii) Identify critical path.
- (iii) Find duration of project.

10

OR

- IV (a) Draw the diagrams, representing the following logic for CPM.
- (i) Operation B can be begin only after operation A is completed.
 - (ii) Operation B & C can start only after A is over.
 - (iii) Operation C can begin only after operation A & B over.
 - (iv) Neither operation C & D can begin until both A & B are completed but C can be started independent of D or vice versa.
- (b) Comparison between CPM and PERT.

5

10

UNIT — II

- V (a) What are the details must contain contract document ?
- (b) Explain general instructions to be observed in recording measurements.

7

8

OR

- VI (a) List advantages of Lump-sum contract.
- (b) Explain clearly the rules to be followed bill maintaining imprest account.

7

8

UNIT — III

- VII (a) What is meant by Demurrage and Wharfage ?

7

- (b) Write short notes on :

- (i) Indent (ii) invoice

8

OR

- VIII (a) List any seven applications of Drag line.
- (b) Explain batching plant and advantages of ready mix plant.

7

8

UNIT — IV

- IX (a) What are the general principles of safety in construction ?
- (b) What are the primary factors which can make a successful entrepreneur ?

7

8

OR

- X (a) What are the major causes of accidents at project site ?
- (b) State elements of Total Quality Management (TQM)

7

8