

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2019**

**CONSTRUCTION MANAGEMENT & 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. List any two types of establishments in engineering department.
2. Identify any two purposes of tender.
3. Define reorder level.
4. List any two methods of procuring of equipments.
5. Define entrepreneurship.

(5 × 2 = 10)

PART — B

(Maximum marks : 30)

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

1. Explain the different stages of construction project.
2. Distinguish between CPM and PERT.
3. List the complete steps involved in tendering.
4. List any six rules to be followed in recording measurements in M'book.
5. Discuss the various welfare measures for labour.
6. Explain the factors related to selection of equipments.
7. Write the basic principles of construction safety.

(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) Discuss the functions of construction management. 8  
 (b) Explain the job lay out with the aid of a typical sketch of a site. 7

OR

- IV (a) Draw the organisational set up of PWD and list any four main duties of Executive engineer. 8  
 (b) Explain the components of CPM network diagram with the help of any sample network diagram. 7

## UNIT — II

- V (a) Explain the merits and demerits of Item rate and Lump sum contract systems. 8  
 (b) Give classifications of different types of bill forms used in making payments stating the situations for adopting each one. 7

OR

- VI (a) Discuss the various recoveries to be made in the preparation of bills. 8  
 (b) Describe the role of specifications and its need in construction activities. 7

## UNIT — III

- VII (a) Give the names of any eight earth moving equipments and write the specific use of each one. 8  
 (b) Discuss the main role of trade unions. 7

OR

- VIII (a) Explain the functions of human resource management. 8  
 (b) Describe the ABC and VED principles in stores management. 7

## UNIT — IV

- IX (a) Explain the expectations of an entrepreneur. 8  
 (b) Discuss any seven elements in total quality management. 7

OR

- X (a) Compare managerial and entrepreneurial style. 8  
 (b) Discuss the merits and demerits of ISO 9000 standard. 7