

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

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. State any two types of establishments in engineering department.
2. List the uses of dummy activity in the net work diagram.
3. Define work order.
4. Define demurrage charges.
5. Name any two IS standards on quality system.

(5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. What are the functions of construction management ? Explain any two of them.
2. Explain the difference between CPM and PERT.
3. What are the legal conditions for validity of contract ?
4. Discuss about the main recoveries to be made from the bill.
5. Write short notes on workmen compensation act.
6. List any six construction equipments and its use.
7. What are the elements of total quality management ?

(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) Explain the duties of executive engineer and mark his position in the organizational set up of PWD with the help of a diagram. 8
- (b) Draw the sketch of a job layout of a multistoried building project at a site having the dimensions 68.00 m × 47.00 m. The site has an access from the main road. The shortest side of the plot is forming as boundary with the main road. 7

OR

- IV (a) Explain the factors to be considered in preparing a project report. 8
- (b) Discuss about resource levelling and resource smoothing. 7

UNIT — II

- V (a) Explain the procedure of tendering for fix up the contracting agency. 8
- (b) The specifications have significant role in the construction activities. Justify it. 7

OR

- VI (a) Explain the merits and demerits of lump sum contract system and cost plus percentage system. 8
- (b) What are the rules to be followed in recording the measurements in the M² book ? 7

UNIT — III

- VII (a) Discuss the objectives of human resource management. 8
- (b) Explain the ABC principle in stores management. 7

OR

- VIII (a) Explain the steps in the process of selection and recruitments. 8
- (b) What are the factors affecting selection of equipment ? 7

UNIT — IV

- IX (a) Explain how the safety in construction industry is ensured by supervision. 8
- (b) Define the important terms used in quality systems. 7

OR

- X (a) Explain the role of entrepreneur and expectation about entrepreneurship. 8
- (b) Discuss the features between managerial and entrepreneurial styles. 7