



C14-C-505

4616

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH / APRIL - 2019

DCE - V SEMESTER EXAMINATION

PROJECT MANAGEMENT FOR CONSTRUCTION

Time : 3 Hours]

[Total Marks : 80

PART - A

3×10=30

- Instructions :**
- (1) Answer **ALL** questions.
 - (2) Each question carries **THREE** marks.
 - (3) Answer should be brief and straight to the point and shall not exceed five simple sentences.

- 1 Define management in civil engineering. 3×1
- 2 Distinguish between : $1\frac{1}{2} + 1\frac{1}{2}$
 - (a) Preliminary estimate
 - (b) Detailed estimate
- 3 List any three duties of Chief Engineer. 3×1
- 4 Define : $1\frac{1}{2} + 1\frac{1}{2}$
 - (a) EST (Earliest Start Time)
 - (b) Total float

4616]

1

[Contd...

- 5 Define PERT and CPM. 3×1
- 6 Distinguish between : 3×1
- (a) Dispute
- (b) Arbitration
- 7 Define : $1\frac{1}{2} + 1\frac{1}{2}$
- (a) Contract
- (b) Tender
- 8 Distinguish 3×1
- (a) Indent
- (b) Invoice
- 9 Distinguish between 3×1
- (a) Entrepreneur
- (b) Entrepreneurship
- 10 State Human relation in Construction industry. 3×1

PART - B

10×5=50

- Instructions :**
- (1) Answer any **FIVE** questions.
- (2) Each question carries **TEN** marks.
- (3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

- 11 (a) Draw the organizational structure of public sector construction company. 5
- (b) Mention any five duties of Executive Engineer". 5

- 12 (a) State the limitations of CPM. 5
 (b) Distinguish between CPM and PERT. 5
- 13 Draw the CPM network diagram for the following given 3+3+3+1 data :
- | Activity | 1-2 | 2-3 | 2-4 | 3-5 | 4-5 | 4-6 | 5-7 | 6-7 |
|------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Duration in days | 5 | 6 | 2 | 10 | 8 | 12 | 11 | 8 |
- (a) Calculate the project completion time
 (b) Calculate EFT, EST, LST, LFT, Float
 (c) Trace the critical path and tabulate.
- 14 (a) List the steps involved in fixing up agency through tender 5 system.
 (b) Explain item rate (K-2) contract systems used for 5 construction works.
- 15 Draft a tender notice for the construction of Over Head Tank 10 (OHT) of 20,000 lit capacity at an estimated cost of Rs. 2 crore under "Mission Bhagiratha" scheme at Vaadapally.
- 16 List the merits and limitations of contact systems 5+5
 (a) Percentage contract system
 (b) Lump sum contact "system.
- 17 (a) Explain the need for mechanization 5
 (b) Explain the need for optimum utilization of plant and 5 equipment.
- 18 Evaluate the Risks and Rewards for an Entrepreneur. 5+5