



c16-c-502

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BOARD DIPLOMA EXAMINATION, (C-16)

AUGUST/SEPTEMBER—2021

DCE - FIFTH SEMESTER EXAMINATION

CONSTRUCTION TECHNOLOGY AND PROJECT MANAGEMENT

Time : 3 hours ]

[ Total Marks : 80

**PART—A**

3×10=30

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

1. What is high strength concrete? Mention where it is used.
2. Why cranes are used in construction work? What are the various types of cranes?
3. What are essential requirements of good ventilation in buildings?
4. Write various methods to avoid glare in buildings.
5. State the advantages of management techniques.
6. Mention the importance of preparation of preliminary planning.
7. What are the important features of lumpsum contract system?
8. State the importance of measurement book.
9. What is the role of APSFC in promoting small scale industry?
10. List the formalities to become a contractor.

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## PART—B

10×5=50

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

- 11.** What is polymer concrete? Explain the different types of polymer concretes. What are the advantages of polymer concrete?
- 12.** State and explain different methods of curing of concrete.
- 13.** Write the duties of superintending engineer.
- 14.** Draw the CPM network diagram for the following data. Identify the critical path. Find the total duration of the project. Draw the tabular form showing EST, LST, EFT, LFT and FLOAT.

Activity	1-2	2-3	2-4	3-5	4-5	4-7	3-6	5-7	5-8	6-8	7-8
Duration	6	12	10	36	6	8	10	14	16	0	12

- 15.** Explain the necessity of tender system and its advantages.
- 16.** Write about shortages, surplus and write-off of stores.
- 17.** Explain the necessities of sampling and testing of materials.
- 18.** Explain the concepts of contracting.

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