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# c16-c-502

## 6621

#### **BOARD DIPLOMA EXAMINATION, (C-16)**

#### JANUARY/FEBRUARY-2022

#### DCE - FIFTH SEMESTER EXAMINATION

CONSTRUCTION TECHNOLOGY AND PROJECT MANAGEMENT

Time : 3 hours ]

### PART—A

[ Total Marks : 80

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.** Define workability of concrete and state the relationship between workability and water-cement ratio.
- **2.** Write any three uses of construction machinery.
- **3.** State any three requirements of good lighting in building.
- **4.** State any three requirements of good electrical wiring.
- **5.** Define construction management.
- **6.** List any six engineering departments of the Government.
- **7.** Define earnest money deposit and security deposit.
- **8.** What is an invoice? State its use.
- **9.** What are the qualifications required for a licensed surveyor?
- **10.** List various assisting institutions set up for development of small business.

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**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 curing of concrete? Explain different methods of curing.
- **12.** State and properties and uses of (a) Fiber reinforced concrete and (b) Polymer concrete.
- **13.** List the aspects to be considered during preliminary planning of a road project.
- **14.** Draw the CPM network diagram for the following data. Identify the critical path. Find the total duration of the project :

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.** What are the different types of contract systems? Explain about lumpsum contract.
- **16.** State the need for departmental execution of works and state any five advantages of it.
- **17.** Explain about various recoveries to be made from the bills to be paid to the contractor.
- **18.** Explain the role of commercial banks in the development of small-scale industries.



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