

C14-C-305

4229

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH/APRIL-2021

DCE - THIRD SEMESTER EXAMINATION

CONSTRUCTION MATERIALS

Time: 3 hours]

PART-A

4×5=20

[Total Marks : 80

Instructions: (1) Answer any five questions.

- (2) Each question carries four marks.
- (3) Answers should be brief and straight to the point and shall not exceed five simple sentences.
- **1.** List the uses of granite stones.
- 2. Name the classification of bricks as per I. S. I.
- **3.** Write any four characteristics of good tile.
- 4. Define bulking of sand.
- 5. Define the following terms :
 - (a) Initial setting time of cement
 - (b) Final setting time of cement
- 6. Define the term concrete and list the ingredients in concrete.
- 7. Differentiate between fine aggregate and coarse aggregate.

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- 8. State any four types of paints.
- 9. List any four characteristics of good timber.
- **10.** State any two types of wood products used in construction work.

PART-B

15×4=60

- **Instructions**: (1) Answer *any* **four** questions.
 - (2) Each question carries fifteen marks.
 - (3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.
 - **11.** *(a)* List any five characteristics of good building stone.

(b) State any five uses of marble.

- **12.** List the various tests to be conducted on bricks and explain any one test.
- **13.** Explain the need for quarry dust and Robo sand as a substitute to sand.
- **14.** Explain fineness of cement test.
- **15.** Briefly explain water cement ratio and workability.
- 16. List the advantages and disadvantages of ready mix concrete.
- **17.** *(a)* List any five uses of surface protective materials.

(b) Explain the importance of seasoning of timber.

18. List out various types of materials used for constructing a building.

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