

4229

BOARD DIPLOMA EXAMINATION, (C-14) MARCH/APRIL—2021

DCE - THIRD SEMESTER EXAMINATION

CONSTRUCTION MATERIALS

Time: 3 hours [Total Marks: 80

PART—A

 $4 \times 5 = 20$

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

 $15 \times 4 = 60$

- **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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