

co9-c-306

## 3222

# BOARD DIPLOMA EXAMINATION, (C-09) 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 any two common varieties of stones used in construction.
- 2. Write the standard common size of bricks as per IS specifications.
- 3. State the characteristics of good sand.
- **4.** Write the classification of cements.
- **5.** State the ingredients of RCC.
- **6.** List out the uses of admixtures in concrete.
- 7. Name any four characteristics of good paint.
- **8.** State the purpose of seasoning of the timber.
- **9.** List out any four types of paints.
- 10. Write any four uses of plastics in building.

**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. Explain the properties and uses of the following (
  - (a) Ogranite
  - (b) Marble
  - (c) Kadapa slab
- **12.** States the characteristics of good bricks.
- **13**. List out the uses of (a) fly ash bricks and (b) hollow concrete bricks.
- **14.** Explain manufacturing of cement by dry process.
- **15.** Explain the method of preparation of cement mortar.
- **16.** Briefly explain (a) water cement ratio and (b) workability of concrete.
- 17. (a) list out various types of distempers.
  - (b) Write any five characteristics of good timber.
- **18.** What is the role of civil engineer in the preparation of quality of mortar and concrete.

