## c20-c-305

## 7228

# BOARD DIPLOMA EXAMINATION, (C-20) <br> NOVEMBER/DECEMBER—2022 <br> <br> DCE - THIRD SEMESTER EXAMINATION <br> <br> DCE - THIRD SEMESTER EXAMINATION <br> CONSTRUCTION MATERIALS 

Time : 3 hours ]
[ Total Marks : 80
PART—A
$3 \times 10=30$
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. State the physical classification of rocks.
2. List three characteristics of good bricks.
3. List three uses of porcelain tiles.
4. State three grades of cement and their compressive strengths.
5. List the ingredients of RCC.
6. State the importance of water cement ratio in three sentences.
7. Write the composition of paints.
8. State any three uses of paints.
9. Define seasoning of timber.
10. List two merits and demerits of glass.

Instructions : (1) Answer all questions.
(2) Each question carries eight marks.
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.
11. (a) State any eight characteristics of good building stones.
(OR)
(b) List any four properties and four uses of granite.
12. (a) Explain the procedure and significance of water absorption test on bricks.

## (OR)

(b) Explain any four uses of (i) refractory bricks and (ii) fly ash bricks.
13. (a) State any eight characteristics of good tiles.

## (OR)

(b) Explain bulking of sand and state the percentage of bulkage allowance for construction work.
14. (a) Explain soundness test on cements.
(OR)
(b) List four uses of ordinary Portland cement and white cement.
15. (a) Explain the method of preparation of cement concrete.

## (OR)

(b) Explain about ready mix concrete and state its two advantages and disadvantages.

Instructions: (1) Answer the following question.
(2) The question carries ten marks.
(3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.
16. Explain the procedure of conducting compressive strength test on concrete.

