



C-09-C-306

3222

BOARD DIPLOMA EXAMINATION, (C-09)

MARCH / APRIL - 2019

DCE - III SEMESTER EXAMINATION

CONSTRUCTION MATERIALS

Time : 3 Hours]

[Total Marks : 80

PART - A

3×10=30

- Instructions :**
- (1) Answer **ALL** questions.
 - (2) Each question carries **THREE** marks.
 - (3) Answer should be brief and straight to the point.

- 1 State any three characteristics of good building stone .
- 2 State the use of refractory bricks. Mention the main varieties of refractory bricks.
- 3 State the different types of sand.
- 4 State six different types of cements.
- 5 Define the term 'concrete'. State its ingredients.
- 6 Define 'mortar'. How are mortars classified?
- 7 State the ingredients of paint.
- 8 State any three types of varnishes.
- 9 State any three objectives of seasoning of timber.
- 10 State three uses of Eco-Boards.

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[Contd...

PART - B**10×5=50**

- Instructions :**
- (1) Answer any **FIVE** questions.
 - (2) Each question carries **TEN** marks.
 - (3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

- 11 Explain briefly the characteristics of good building stone.
- 12 Describe in brief the following tests on bricks
 - (a) Water absorption
 - (b) Compressive strength.
- 13 Explain about mangalore tiles with advantages.
- 14 State the importance and the application of Portland puzzolona cement.
- 15 Explain ready mix concrete. Write any four advantages of it.
- 16 What is water cement ratio? What are the different aggregates used in concrete and explain sieve analysis.
- 17 State the properties and the uses of :
 - (a) Enamel paints
 - (b) Water paints
- 18 Explain briefly about the following with uses :
 - (a) Geo textiles
 - (b) Geo grids
 - (c) Geo membranes
 - (d) Geo composites