



C14-C-305

4229

BOARD DIPLOMA EXAMINATION, (C-14)
MARCH/APRIL—2017
DCE—THIRD 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) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. State the difference between stratified rocks and foliated rocks.

1½+1½=3

2. Name the classification of bricks as per ISI.

3

3. State different substitute materials for sand.

3

4. State the uses of stoneware pipes.

3

5. State any four uses of cement.

3

6. State the ingredients of concrete and give their functions.

1½+1½=3

7. What is meant by 'curing of concrete'? State its need. 1½+1½=3

- * 8. What are French polish and Wax polish? 1½+1½=3
9. Define the following terms : 1½+1½=3
- (a) Glass
- (b) Asbestos
10. State any three advantages of air seasoning. 1+1+1=3

PART—B

10×5=50

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

11. Describe the following methods of surface finishes with neat sketches : 3+4+3=10
- (a) Rough-tooled surface
- (b) Tooled surface
- (c) Polished surface
12. (a) List various tests to be conducted on bricks.
- (b) Explain any two standard tests on bricks. 4+6=10
13. Explain briefly about the following wall tiles : 5+5=10
- (a) Ceramic tiles
- (b) Vitrified tiles
- * 14. Write short notes on the following : 5+5=10
- (a) Quick-setting cement
- (b) White cement

- * **15.** Describe the method of preparing cement mortar by hand mixing and machine mixing. 5+5=10
- 16.** (a) State any five factors effecting 'water-cement ratio'.
(b) Explain briefly about reinforced cement concrete. 5+5=10
- 17.** State the properties and the uses of the following : 5+5=10
(a) Enamel paints
(b) Water paints
- 18.** What is fiber-reinforced plastic? Explain its application in building industry. 10
