



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? $1\frac{1}{2}+1\frac{1}{2}=3$

9. Define the following terms : $1\frac{1}{2}+1\frac{1}{2}=3$

(a) Glass

(b) Asbestos

10. State any three advantages of air seasoning. $1+1+1=3$

PART—B

$10\times 5=50$

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
