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C14-C-305

4229

BOARD DIPLOMA EXAMINATION, (C-14)

JUNE—2019

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 any four uses of granite stone.
2. What is the need for burning of a brick?
3. Write a short note on vitrified tiles.
4. List any three differences between river sand and pit sand.
5. Define initial setting time and final setting time of cement.
6. Define (a) Hydration of cement, (b) Workability
7. Write a short note on Ready Mix Concrete.
8. State the properties of emulsion.
9. List the uses of fiber-reinforced plastic.
10. What do you mean by seasoning of timber?

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## 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 any ten characteristics of a good building stone.
12. Explain the following tests on bricks :
- (a) Water absorption
  - (b) Compressive Strength
13. (a) List the characteristics of good sand. (6+4)  
(b) State the uses of stone ware pipes.
14. (a) List out various types of cement. (4+6)  
(b) Explain the dry process of manufacturing of Portland cement.
15. (a) State the importance of compaction of concrete. (3+7)  
(b) Explain the procedure to perform slump test on concrete.
16. (a) List different types of admixtures used in concrete. (4+6)  
(b) State the factors affecting water-cement ratio.
17. (a) List the functions of solvent in a paint.  
(b) Write a short note on French polish.
18. (a) Mention any six Properties of glass. (6+4)  
(b) Write a short note on usage of powder coated aluminum as a building material.

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