C14–C–305

4229

BOARD DIPLOMA EXAMINATION, (C–14)
MARCH/APRIL—2018
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 physical classification of rocks with an example for each.

2. List the uses of a refractory brick.

3. Mention any six characteristics of good tiles.

4. State the characteristics of good sand.

5. List the standard tests for cement as per Indian standards.

6. Differentiate plain cement concrete and reinforced cement concrete.

7. What is the use of super plasticizer?

8. List any four substances that are used as vehicles in paints.

9. Differentiate plywood and laminated board.

10. State the advantages of asbestos products.

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. Explain the purpose of dressing of stones.

12. Explain the characteristics of a good brick.

13. *(a)* State the advantages and disadvantages of using crushed stone powder as a substitute for sand.   5

(b) List the types of tiles as per their usage.   5

14. *(a)* List various grades of cements.   3

(b) Write the procedure to perform compressive strength test on cement.   7

15. *(a)* State the advantages and disadvantages of ready mix concrete.   6

(b) Write short note on hydration of cement.   4

16. *(a)* State the factors affecting workability. 6

(b) List different tests for determining the workability of concrete. 4

17. *(a)* Mention the uses of surface protective materials. 6

(b) Write the composition of paint. 4

18. *(a)* What are the uses of plastics in building? 5

(b) List various types of glasses used in construction. 5

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