



C14-C-305

4229

BOARD DIPLOMA EXAMINATION, (C-14)
OCT/NOV—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. Define 'dressing of stones' and state its necessity.
2. What is the size of modular brick? List various operations involved in the process of bricks.
3. Write a short note on stone ware pipes.
4. What is bulking of sand?
5. State any six classification of cement.
6. Differentiate fine aggregate and coarse aggregate.

- * 7. Define the following :
- (a) Water cement ratio
 - (b) Hydration of cement
8. What are the ingredients of varnish?
9. Name the common varieties of timber used in AP for Civil engineering works.
10. State any six advantages of plastics.

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. State and explain ten characteristics of a good building stone.
12. Write about refractory bricks and state any six properties and used of refractory bricks.
13. Answer the following questions :
- (a) State any five characteristics of good tiles.
 - (b) Explain briefly about Mangalore tiles with advantages
14. State the importance and the application of flyash cement and slag based cement.
15. Explain ready mix concrete. Write any four advantages of it.

- * **16.** Explain the procedure of conducting the following tests on concrete :
- (a) Slump test
 - (b) Compressive strength
- 17.** (a) State and explain the ingredients of paint.
(b) Write the uses of paint.
- 18.** Explain briefly about the following :
- (a) Laminated board
 - (b) Straw board
 - (c) ECO board
