

3222

BOARD DIPLOMA EXAMINATION, (C-09) MARCH/APRIL—2014 DCE—THIRD SEMESTER EXAMINATION

CONSTRUCTION MATERIALS

Time: 3 hours] [Total Marks: 80

PART—A

 $3 \times 10 = 30$

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.
- **2.** State the use of refractory bricks. Mention the main varieties of refractory bricks.
- **3.** State any three important functions of sand.
- **4.** Define the following terms :
 - (a) Initial setting time of cement
 - (b) Final setting time of cement
- **5.** Write a short note on shotcrete concrete.
- **6.** State the difference between plain cement concrete and reinforced cement concrete.
- **7.** State any six types of paints.
- 8. State three uses of enamel paint.
- **9.** State two types of gypsum and mention where they are used.
- **10.** State any three objectives of seasoning of timber.

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. List any six properties and four uses of Granite stone.
- 12. Explain about Mangalore tiles with advantages.
- **13.** (a) List various tests to be conducted on bricks.
 - (b) Explain any two standard tests on bricks.
- **14.** Write short notes on the following:
 - (a) Quick setting cement
 - (b) White cement
- **15.** What are the different steps involved in concreting? Explain any two.
- **16.** Explain briefly about the following with uses:
 - (a) Plasticizers
 - (b) Super plasticizers
 - (c) Air entraining agents
 - (d) Accelerators
 - (e) Retarders
- 17. What is varnish? Explain briefly about different varnishes.
- **18.** What is plywood? List the uses of plywood.

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