



c09-c-306

**3222**

**BOARD DIPLOMA EXAMINATION, (C-09)**

**OCT/NOV—2014**

**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. 1½+1½
2. State three uses of refractory bricks.
3. What is 'bulking of sand'?
4. State any three uses of cement.
5. State the difference between plain cement concrete and reinforced cement concrete.
6. List different types of mortars and give one use for each of them.
7. What are the ingredients of varnish?
8. State any six types of paints.
9. What is geosynthetics? Mention the types of geosynthetics.
10. Name the common varieties of timber used in AP for civil engineering works.

\*

**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.** (a) Explain the physical classification of rocks and give an example for each.  
(b) State any five characteristics of good building stone.
- 12.** Explain briefly about the following wall tiles :  
(a) Ceramic tiles  
(b) Vitrified tiles
- 13.** Explain briefly the characteristics of a good brick.
- 14.** Briefly explain about the following tests : 4+3+3  
(a) Normal consistency of cement.  
(b) Initial setting time of cement.  
(c) Final setting time of cement.
- 15.** What are the different steps involved in concreting? Explain any two.
- 16.** (a) Define water cement ratio and mention the factors effecting water-cement ratio.  
(b) What is meant by ready mix concrete Mention the advantages of RMC.
- 17.** Write short notes on the following : 3+3+4  
(a) French polish  
(b) Wax polish  
(c) Distempers
- 18.** Explain briefly about the different types of glass with uses.

\*\*\*

\*