



c14-c-305

4229

**BOARD DIPLOMA EXAMINATION, (C-14)
OCT/NOV—2016
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 one example for each. 1+1+1=3
2. State three uses of refractory bricks. 1+1+1=3
3. State any three important functions of sand. 1+1+1=3
4. State any three properties of a good tile. 1+1+1=3
5. State one property and two uses of quick setting cement. 1+2=3
6. Define mortar. List any four different types of mortars. 1+½×4=3
7. Define the term 'water-cement ratio'. State the two ill effects of increased water-cement ratio. 1+2=3
8. State any six types of paints. ½×6=3

- * 9. State any three objectives of 'seasoning of timber'. 1+1+1=3
10. What is asbestos? State four uses of asbestos. 1+½×4=3

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) List any five characteristics of good building stone. 5
 (b) Mention the suitability of granite, marble, Kadapa slab and Shabad stones. 5
12. Explain briefly the characteristics of a good brick. 10
13. Write the uses of the following tiles : 4+3+3=10
 (a) Porcelain tiles
 (b) Glazed tiles
 (c) Floor tiles
14. Briefly explain about the following tests : 4+3+3=10
 (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. 10
16. Define admixtures. Explain briefly the different types of admixtures used in cement concrete and mention its purpose. 1+9=10
17. What is varnish and its composition? Explain any two types of varnishes. 2+8=10

- * 18. Explain briefly about the different types of glass with uses. 10
