

25/10/13

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**B.E/ B.Tech (Full Time) DEGREE ARREAR EXAMINATION, NOV/DEC 2013**  
**CIVIL ENGINEERING BRANCH (R2012)**  
**II Semester**  
**CE 8201-CONSTRUCTION MATERIALS**

**Time: Three Hours**

**Max Mark: 100 marks**

**Answer ALL questions**  
**Part-A (10x2=20 marks)**

1. What is igneous rock?
2. Explain the advantages of artificial stones.
3. Efflorescence of bricks-explain.
4. Write any one test on sand.
5. What is setting time of cement?
6. What is segregation?
7. What is PVCN in paints?
8. List market forms of steel.
9. Write the advantages of clay products.
10. What are Geomembranes?

**Part-B (5x16=80 marks)**

11. Explain the characteristics of good building stone. Explain the methods of preservation of building stones at the time of construction stage.
  
- 12 a). Explain and draw the various stages involved in the production of cement by dry process. (8)  
(OR)
- 12 b). List and explain the different tests on coarse aggregate. (8)
  
- 13 a). Explain the following  
(1). Compressive and flexural strength test of concrete (10)  
(2). Self compacting concrete and its advantages (6)  
(OR)
- 13 b). Explain the steps involved in mix design of concrete using IS456-2000. (8)
  
- 14 a). (1). Explain the uses of aluminum and write its composites. (8)  
(2). Ingredients of paints (8)  
(OR)
- 14 b). Explain the following  
(1). Types of wood and its uses (8)  
(2). Bitumen and its types (8)
  
- 15 a). Explain in detail about the manufacturing process of refractories and write the types of ceramics. (8)  
(OR)
- 15 b). Explain the following  
(1). Sealants for joints (8)  
(2). Types of glass (8)