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B.Tech. 3rd Semester (Civil Engg.) Branch–XI Examination, December–2013

BUILDING CONSTRUCTION MATERIALS

Paper– CE-203-F

Time allowed : 3 hours]   _[Maximum marks : 100_

Note : **Question no. 1 is compulsory.**

       Each question carries equal marks (20 marks)

       Students have to attempt **five** questions in total at least **one** question from each section.

1.   Explain the following terms: 10×2=20

    (i)   Dressing of stone

    (ii)   Requirements of partition wall

    (iii)   Bearing piles

    (iv)   Principle Rafter

    (v)   Sketch of Braced door

    (vi)   Principle of Water proofing

    (vii)   Fire fighting arrangement in a building

    (viii)   Perforated brick

    (ix)   Hydraulic lime

    (x)   Varnish

Section-A

2. (a) Differentiate between English and Flemish Bond with neat sketch. 10

   (b) What is meant by cavity wall ? What are the advantages and disadvantages of using them ? 10

3. (a) Explain the different types of rubble masonry.

      10

   (b) What is the difference between shallow foundation and deep foundation ? Explain. 10

Section-B

4. (a) Briefly explain the different types of rafter used in sloping roofs. 10

   (b) Briefly explain the consideration in selecting flooring material for ground floor. 10

5. (a) Discuss the location of doors, windows and ventilators building. 10

   (b) Classify the different types of windows with neat sketch. 10

Section-C

6. (a) What are the requirements of an ideal material for damp proofing ? 10

   (b) Explain the different methods adopted for making a basement waterproof. 10

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7. Distinguish between sound absorption and sound insulation. How do you insulate concrete floors ? 20

Section-D

8. (a) What is meant by seasoning of stones ? Why it is necessary ? 10

    (b) What do you understand by frog in a brick ? What purpose does it serve ? 10

9. (a) Explain in detail the process of manufacturing of ordinary portland cement. 10

    (b) Explain the properties of a good timber. 10