

Roll No. 2286572

24065

B. Tech. 3rd Semester (Civil-Engg.)

Examination – December, 2012

BUILDING CONSTRUCTION MATERIALS

Paper : CE-203-F

Time : Three Hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt any *five* questions.

1. (a) Draw typical sketches, showing the following, constructed of stone masonry : $2 \times 5 = 10$

(i) Corbel

(ii) Cornice

(iii) Jambs

(iv) Coping

(v) Threshold

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- (b) Explain Double Flemish Bond in one brick thick wall with sketches showing the following :
Plan for
- (i) 1, 3, 5 courses. 5
- (ii) 2, 4, 6 courses. 5
2. (a) Enumerate different types of partition walls. Explain with sketch(es) any one type of partition wall suitable for domestic buildings. 10
- (b) Explain with the help of sketch(es), combined footings. 10
3. (a) Explain the method of constructing cement concrete flooring. 10
- (b) Describe in short, with sketches, solid core flush door or laminated core flush door. 10
4. (a) Explain various methods used for damp proofing. 10
- (b) Describe the method of damp proofing for basement in an area having high water table. Give a neat sketch. 10
5. (a) Write short notes on :
- (i) Reflection of sound and reflecting surfaces. 5
- (ii) Reverberation. 5

- (b) What do you understand by absorption of sound ?
How does this take place ? Enumerate various
absorptive surfaces. 10

6. (a) What are the desirable qualities of building
stones ? Discuss in brief. 10

- (b) What are the usual tests which may be conducted
to confirm the suitability of bricks ? 10

7. (a) Define the following :

- (i) Calcination
- (ii) Quicklime
- (iii) Setting of lime
- (iv) Slaking

(v) Slaked lime $2 \times 5 = 10$

- (b) Explain the composition of Ordinary Portland
Cement. Explain the functions of each ingredient
of cement. 10

8. (a) What is a plywood ? What are its advantages ? 10

(b) Describe briefly the following :

(i) Cement paint,

(ii) Emulsion paint. $5 \times 2 = 10$