

Roll No.

24065

**B. Tech. 3rd Semester (Civil)
Examination – December, 2018**

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 *five* questions in total. Question No **1** is *compulsory*. Attempt *one* question from each Section. All questions carry equal marks.

1. Write short note on the following : **4 × 5 = 20**

- (a) Dressing of stones
- (b) Advantages of cavity walls
- (c) Types of roofs
- (d) Causes of dampness
- (e) Composite wall

SECTION – A

2. (a) Write a short note on Flemish bond. Draw two brick thick Flemish band. 7
- (b) Write a note on various defects in brick masonry. 7
- (c) Describe the construction of a brick partition wall. 6
3. (a) Explain the different types of pile foundations in brief. 7
- (b) Write a short note on green building concept. 7
- (c) Explain the geophysical methods of sub- surface investigations. 6

SECTION – B

4. Explain with sketches, the following types of doors :
- (a) Battened, ledged, braced and framed doors
- (b) revolving doors
- (c) Louvered doors
- (d) Collapsible doors 20
5. (a) Differentiate between king post and queen post truss. 6
- (b) Explain step by step method of construction of mosaic flooring. 7
- (c) Differentiate between ground floor and upper floor. 7

SECTION – C

6. (a) Name and explain different methods used for water proofing in roofs. 10
- (b) Write a short note on steps taken to prevent dampness. 10
7. (a) Explain the different types of sound absorbents. 7
- (b) What are the causes of excessive reverberation and formation of echoes ? 7
- (c) How do you insulate ceiling of a hall against external sound ? 7

SECTION – D

8. Write short notes on : 4 × 5 = 20
- (i) Types of cement
- (ii) Bricks prepared from flyash
- (iii) Classification of lime
- (iv) Types of terra-cotta
9. (a) What are the various methods for seasoning of timber ? 10
- (b) Explain characteristics and types of varnishes. Write its main constituents also. 10