

24065

**B.Tech. 3rd Semester (Civil Engg.) F. Scheme**

**Examination, December-2014**

**BUILDING CONSTRUCTION MATERIALS**

**Paper-CE-203-F**

*Time allowed : 3 hours]*

*[Maximum marks : 100*

**Note :** (i) *Question No. 1 is compulsory.*

(ii) *Each question carries equal mark (20 marks).*

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

1. Write short notes on the following :  $2\frac{1}{2} \times 8 = 20$

- (i) Mitred closer
- (ii) Clay brick partition
- (iii) Raft Foundation
- (iv) King post truss
- (v) Horn
- (vi) Efflorescence
- (vii) Knots
- (viii) Terra-cotta

**Section-A**

2. (a) What are the rules to be followed in bonding bricks ?  
10
- (b) Briefly explain the different types of finer dressing of stones.  
10

3. (a) Describe the type of foundations that are provided for partition walls. Give neat sketches. 10
- (b) Briefly explain various methods of providing foundation in waterlogged areas. 10

### Section-B

4. (a) Briefly explain the different types of rafters used in sloping roofs. 10
- (b) What are the essential requirements of a floor? 10
5. Give sketch of the following and state where they are used :  $4 \times 5 = 20$
- (i) Battened door
- (ii) Braced door
- (iii) Gable widow
- (iv) Corner window

### Section-C

6. (a) What are the adverse impacts of dampness in a building? 10
- (b) With the help of neat sketches, explain the methods of waterproofing flat RC roofs. 10
7. (a) Write short notes on the various absorbents. 10
- (b) What is meant by fire-resisting construction? How does the Indian National building code classify building according to fire resistance? 10

**Section-D**

8. (a) What is meant by seasoning of stones ? Why it is necessary ? 10
- (b) List the properties of good building bricks. 10
9. (a) Differentiate between exogenous and endogenous trees. 10
- (b) What are the defects in painting ? Explain their causes and remedial measures. 10