

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 : 4×5=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