

B.Tech II Year I Semester (R13) Regular & Supplementary Examinations December 2015

**BUILDING MATERIALS & CONSTRUCTION**

(Civil Engineering)

Time: 3 hours

Max. Marks: 70

**PART – A**  
(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- Write on the geological classification of rocks with examples.
  - Enumerate the defects developed after felling the tree.
  - State the constituents of limestone.
  - What is the hydration of cement?
  - Write short notes on Mangalore tiles.
  - Write the uses of aluminium.
  - Enumerate the technical terms associated with design and construction of stairs.
  - Write on Lean – to – roof.
  - What is mat footing?
  - Differentiate English and Flemish bond.

**PART – B**  
(Answer all five units, 5 X 10 = 50 Marks)

**UNIT – I**

- 2 (a) Write the comparison between clamp and kiln burning of bricks.  
(b) Describe the cross section of a tree.

**OR**

- 3 (a) Describe the Hoffman's kiln for manufacturing of bricks.  
(b) Write on the properties and uses of plastics.

**UNIT – II**

- 4 (a) Describe the continuous flame type kiln for manufacturing of lime.  
(b) Explain the properties of: (i) Quick setting cement. (ii) Pozzolana cement.

**OR**

- 5 (a) Explain the slump test for measurement of workability of concrete.  
(b) Explain the ingredients of cement concrete and their functions.

**UNIT – III**

- 6 (a) Write short notes on Pot tiles, Pan tiles and Sialkot tiles.  
(b) Write on the causes and effects of dampness.

**OR**

- 7 (a) Describe the constituents of the paints.  
(b) Write short notes on: (i) Double scaffolding. (ii) Cantilever scaffolding.

**UNIT – IV**

- 8 (a) Write short notes on: (i) Doglegged stairs. (ii) Open newel half turn stairs.  
(b) With neat sketch describe queen post truss.

**OR**

- 9 (a) Explain the types of pointed arches.  
(b) With neat sketch describe King post truss.

**UNIT – V**

- 10 (a) Describe the random rubble masonry.  
(b) Describe the combined strap footing.

**OR**

- 11 (a) Explain about the construction of a cavity wall.  
(b) Describe the glass partition walls.