

B.Tech II Year I Semester (R13) Supplementary Examinations June 2015

BUILDING MATERIALS & CONSTRUCTION

(Civil Engineering)

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- Write the precautions to be taken on the blasting process.
 - Write a note on the plantation of teak trees.
 - Write short notes on Plasticity of lime.
 - What are various types of cement?
 - Explain the steps involved in the process of painting on new wood work.
 - Write short notes on Pot tiles.
 - Define the following terms; Head room, landing, nosing, pitch and step.
 - Write various failures of an arch.
 - What are the precautions to be taken in laterite masonry work?
 - Explain the various types of strip footing.

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

- 2 With the help of a sketch, explain the working of Hoffman's kiln for the burning of bricks.
- (OR)
- 3
- Explain different types of shakes in timber.
 - Explain defects due to seasoning.

UNIT - II

- 4 Write short notes on the following:
- Fat lime.
 - Hydraulic lime.
 - Load bearing capacity of lime.

(OR)

- 5 What is meant by proportioning of concrete? What are the various methods of proportioning concrete? Explain any two methods.

UNIT - III

- 6 Describe briefly the classification of tar and the specifications of bitumen as a building material.
- (OR)
- 7 What are "breathing" and "non-breathing" types of paints? What are the considerations in application of these paints to the ceiling under the wet areas and wall surfaces?

UNIT - IV

- 8
- What are moving stairs? Discuss them in detail.
 - What is a step? Mention its different types.
- (OR)
- 9 Explain with sketches, various basic forms of pitched roofs.

UNIT - V

- 10 Differentiate between the following:
- Floating foundation and raft foundation.
 - Combined footing and strap footing.

(OR)

- 11 Write short notes on the following:
- Polygonal rubble masonry.
 - Random rubble masonry.
 - Flint walling.