

Code No: RT21014

**R13****SET -1****II B. Tech I Semester Supplementary Examinations, May/June - 2017****BUILDING MATERIALS AND CONSTRUCTION**

(Civil Engineering)

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
2. Answer **ALL** the question in **Part-A**  
3. Answer any **THREE** Questions from **Part-B**
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**PART -A**

1. a) List out the characteristics of a good tile. (4M)
- b) Explain decay of timber. (4M)
- c) What are the various uses of lime. (3M)
- d) What is a vault? Explain with sketches. (4M)
- e) Indicate the type of paints used for old wood work and new iron work. (4M)
- f) Prepare a list of various tests for concrete. (3M)

**PART -B**

2. a) Discuss the three important types of rocks and their formation. (8M)
- b) Explain the constituents of lime stone. (8M)
3. a) Describe Ashlar stone masonry and state its use in construction of structures. (8M)
- b) Draw the cross section of a tree and explain the structure of timber. (8M)
4. a) Discuss about alternative materials for wood. (10M)
- b) Explain bulking of sand. (6M)
5. a) Explain the following items in case of staircases (i) Balustrade (ii) Handrail (iii) soffit and (iv) pitch (8M)
- b) Explain coupled roof with sketch. (8M)
6. a) Explain pointing and plastering (8M)
- b) Describe the various components of a building. (8M)
7. Write short notes on (16M)
  - (a) Properties of good building stone.
  - (b) Consistency and workability
  - (c) Tar and bitumen as building material
  - (d) Sieve analysis