

**B TECH****(SEM-III) THEORY EXAMINATION 2018-19  
BUILDING MATERIALS & CONSTRUCTION***Time: 3 Hours**Total Marks: 70***Note:** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief. 2 x 7 = 14**

- a. What is meant by term P.V.C.N.?
- b. What is terra-cotta?
- c. For exterior works, the turpentine should be taken in minimum quantity. Why?
- d. Differentiate between escalator and lifts.
- e. What are the factors which affects the choice of flooring material?
- f. Define string.
- g. What are the fibrous plaster boards?

**SECTION B****2. Attempt any three of the following: 7 x 3 = 21**

- a. Name the various types stones which are used for building works and give brief the specifications for a good building stones.
- b. What is cement paints? What are the advantages of cement paints and what are precautions to be taken to avoid defects of the cement paints?
- c. Briefly describe the construction of terrazzo flooring.
- d. What are the difference damp-proofing and water proofing? Describe the various methods of damp-proofing.
- e. How will you prevent the cracks and leaks in the building? Also explain the process of repairing the cracks and leaks.

**SECTION C****3. Attempt any one part of the following: 7 x 1 = 7**

- (a) What is pug mill? How does it help in the manufacturing the bricks? Describe the different processes of moulding of bricks.
- (b) Why is seasoning of timber necessary? Why should timbers be preserved? State various methods of preservation of timbers.

**4. Attempt any one part of the following: 7 x 1 = 7**

- (a) What are plastics and how are they classified? List the commonly used thermoplastic plastics and briefly describe polyvinyl chloride.
- (b) Explain the difference between wrought iron, steel and cast iron. What are the distinguishing features of mild steel? Why is it easy to make cast iron castings?

**5. Attempt any one part of the following: 7 x 1 = 7**

- (a) What are the different types of brick masonry? List out the types of bonds in brick work. Write the difference between modular bricks and traditional bricks.
- (b) What are the various components of building with their basic requirements? What are the important factors considered in planning of a residential building?

6. **Attempt any *one* part of the following:** **7 x 1 = 7**
- (a) What are the functions of a ventilator? How is it different from a window? Draw details of a ventilator combined with a window.
  - (b) What are lintels? Explain the classification of lintels with neat sketches.
7. **Attempt any *one* part of the following:** **7 x 1 = 7**
- (a) What are traps? Explain the various types of traps commonly used.
  - (b) Discuss the essential requirements of air conditioning. Explain the difference between comfort air conditioning and industrial air conditioning.

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