

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

SECTION B

2. Attempt any three of the following: 7 x 3 = 21
- Name the various types stones which are used for building works and give brief the specifications for a good building stones.
 - 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?
 - Briefly describe the construction of terrazzo flooring.
 - What are the difference damp-proofing and water proofing? Describe the various methods of damp-proofing.
 - 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
- What is pug mill? How does it help in the manufacturing the bricks? Describe the different processes of moulding of bricks.
 - 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
- What are plastics and how are they classified? List the commonly used thermoplastic plastics and briefly describe polyvinyl chloride.
 - 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
- 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.
 - 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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