

**Total No. of Pages : 02**

**B.Tech.(CE) (2012 to 2017) (Sem.-3)**  
**BUILDING MATERIALS & CONSTRUCTION**  
**Subject Code : BTCE-305**  
**M.Code : 56076**

**Max. Marks : 60**

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students has to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students has to attempt any **TWO** questions.

**1. Answer briefly :**

- a) What are various forms of artificial stones?
- b) State the harmful ingredients in brick earth.
- c) What are the various compounds formed during the setting action of cement?
- d) Define Segregation and bleeding of concrete.
- e) Draw the cross section of an exogenous tree.
- f) Define Stretcher and header.
- g) What are the requirements of a good roof?
- h) Define the term Reverberation.
- i) Define Fire Load and describe how it is determined?
- j) What are the constituents of distemper?

### SECTION-B

2. Enumerate various methods to determine the workability of concrete.
3. Describe the defects caused in timber due to fungi.
4. Draw plans of alternate courses of :
  - a) 1½ brick wall and
  - b) 2 brick thick wall in :
    - i) English bond
    - ii) Double Flemish bond
5. Describe various methods of damp proofing.
6. What are the various defects arising in plastering work? Explain.

### SECTION-C

7. What are the various atmospheric and external agencies which are responsible for the deterioration of stone? What are the precautions to be taken to retard the decaying action of the weathering agencies on the stones?
8. Discuss in length the modern manufacturing process of ordinary cement.
9. Explain the methods of laying the following types of flooring :
  - a) Flag stone flooring
  - b) Brick flooring
  - c) Marble flooring
  - d) Timber flooring

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**