

B.Tech. CIVIL ENGINEERING (BTCLEVI)

Term-End Examination

00283

June, 2018

BICE-005 : BUILDING TECHNOLOGY – I

Time : 3 hours

Maximum Marks : 70

Note : Attempt any **seven** questions. All questions carry equal marks.

1. What are the possible defects in timber ? Describe them with their figures. 10

2. (a) Give the classification of rocks. Discuss them in brief. 5
(b) Discuss the common building stones, with their uses. 5

3. Explain Slump Test for workability of concrete, with a neat sketch. Discuss the factors affecting workability. 10

4. What are the qualities of glass ? Discuss the various varieties of glass and their uses in the building industry. 10

5. (a) Discuss the causes of failure of foundations. 5
 (b) How are new foundations constructed adjacent to an old existing structure? 5
6. (a) Explain the methods which are employed when concrete is to be placed under water. 6
 (b) What is meant by a framed structure? What are its advantages? 4
7. (a) What are the characteristics of an ideal paint?
 (b) Explain the defects which are normally found in the painting work.
 (c) What is the function of solvent in paint?
 $3+5+2=10$
8. Give a list of different types of doors and windows. Explain the construction of flush doors, with neat sketches. 10
9. Write short notes on any **four** of the following: $4 \times 2 \frac{1}{2} = 10$
 (a) Precast Concrete
 (b) Types of Tiles
 (c) Scaffolding
 (d) Raft Foundations
 (e) Bonds in Brick-work
 (f) Curing of Concrete