

B.Tech. CIVIL ENGINEERING (BTCLEVI)

Term-End Examination

00464

June, 2017

BICE-009 : BUILDING TECHNOLOGY – II

Time : 3 hours

Maximum Marks : 70

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

1. Write short notes on any **two** of the following : 10
 - (a) Daylighting
 - (b) Acoustical Defects
 - (c) Comfort Zone
2. Discuss the thermo-physical properties of building materials. Explain thermal gradient and heat flow through buildings. 10
3. Discuss various fire proof construction methods used for building construction. 10
4. What are the causes of building failures ? How can these failures be avoided ? 10

5. Why is ventilation required ? Discuss (a) natural and mechanical ventilation, and (b) calculation of air-conditioning load. 10
 6. Describe the Lumen method and Point-by-Point method for the design of artificial lighting. 10
 7. Discuss various methods of sound insulation used in the construction of walls, floors and roofs. 10
 8. What are the different types of climates ? Why is the knowledge of climate important in building technology ? 10
 9. Describe the different types of joints used in steel and concrete frames. Also provide neat sketches to support your answer. 10
 10. Discuss the properties of insulating materials commonly used in building construction. 10
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