No. of Printed Pages: 2

**BICE-009** 

## B.Tech. CIVIL ENGINEERING (BTCLEVI) Term-End Examination June, 2016

**BICE-009 : BUILDING TECHNOLOGY - II** 

| Tin  | ne : 3 hours Maximum Marks  | Maximum Marks : 70 |  |
|--|---|--------------------|--|
| <b>Note:</b> Answer any <b>seven</b> questions. All questions carry equal marks. |   |                    |  |
| 1.   | Describe briefly periodic heat flow and its characteristics.  | 10                 |  |
| 2.   | What are the different types of thermal insulation used in buildings? Write four advantages of thermal insulation. Explain how you will achieve thermal insulation of roofs in a tropical region. | 10                 |  |
| 3.   | Explain various types of joints in steel frames.<br>Also write a brief note on design considerations of tall buildings.   | 10                 |  |
| 4.   | Write a short essay on the fire-resistant construction of structural elements in view of fire-safety in buildings.  | 10                 |  |

| 5.  | What are the different modes of building failures? Explain briefly.   | 10  |
|-----|---|-----|
| 6.  | What are the various types of elevators? Explain briefly the design considerations of elevators.                          | 10  |
| 7.  | Explain any two methods of distribution of water in a multi-storied building, with the help of a neat sketch.             | 10  |
| 8.  | What is the need for ventilation in buildings? Describe briefly the functional requirements of a good ventilation system. | 10  |
| 9.  | What do you understand by the term 'Acoustics and Acoustics of a building'? What are the requirements for good acoustics? | 10  |
| 10. | Write brief notes on any $two$ of the following: $2\times 5$  | =10 |
|     | (a) Measurement of Illumination   |     |
|     | (b) Comfort Zone  |     |
|     | (c) Classification of Fire Zone   |     |