

2383

Name:.....

RegNo.....

FIFTH SEMESTER BTECH DEGREE EXAMINATION DECEMBER 2009

CE 04 S03 BUILDING TECHNOLOGY - II

Time : Three Hours

Maximum : 100 Marks

Answer all questions

Assume suitable data wherever required.

- I
- 1) List the important ways thro which body generates & dissipates heat?
  - 2) Define comfort zone.
  - 3) Define daylight.
  - 4) What is reverberation time?
  - 5) Why an expansion joint is needed in a building? What are the guidelines for its location?
  - 6) In which situations escalators become essential than elevators in a building?
  - 7) Outline the brick arrangement of a 90 deg. turn using rat trap bond.
  - 8) Outline any two structural considerations for earthquake safe buildings
- (8 x 5 = 40 marks)
- II
- 9) What is sol-air temperature? In which situation this is more important than air temperature? What are the ways in which buildings would gain heat in a tropical climate?  
( or )
- 10) What are the roles of ventilation in a building? Explain with sketches how the external devices influence air movement inside a building.
- III
- 11) Outline the design guidelines to be followed in the design of a building for daylighting.  
( or )
- 12) Outline the systems and components of fire escape for high-rise buildings.
- IV
- 13) Explain the advantages and disadvantages of pre-fab & slip-form construction methods.  
( or )
- 14) Outline the typical method, components & details of water supply & sewage disposal for a 4 storey apartment building.
- V
- 15) Explain how cost reduction is achieved in filler slab construction. What are the additional advantages of filler slab construction?  
( or )
- 16) Explain the factors to be considered in the design of building shapes to make them earth quake resistant.

(4 x 15 = 60 marks)