

C 59284

Name.....

Reg. No.....

**FIFTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION
JUNE 2009**

CE 04 503—BUILDING TECHNOLOGY—II

(2004 admissions)

Time : Three Hours

Maximum : 100 Marks

Answer any five questions from Question I., 1, 5 marks each.

Answer one question (A or B) from each of Question II to Question V (i.e., 4 questions, 15 marks each).

- I. (a) Differentiate between horizontal circulation and vertical circulation for internal movement inside a building.
- (b) Explain with neat figures the various sunshading devices.
- (c) Differentiate between airborne noise and structure borne noise.
- (d) Explain the role and requirements of a staircase in providing fire protection.
- (e) Write a note on prefabricated construction with reference to tall structures.
- (f) Differentiate between stairs and ramps – Discuss their design aspects and use, ideal location etc.
- (g) Discuss the causes of corrosion of reinforcements in RCC structures.
- (h) Write short note on shear wall (in multistoried buildings).

(8 × 5 = 40 marks)

- II. (a) Method any one method of drawing the sunpath.

Or

- (b) Explain the sol-air temperature concept as applicable for building design purposes.

- III. (a) What are the requirements and conditions of good acoustics in a building? Discuss.

Or

- (b) Describe the fire-resisting properties of concrete, steel and glass used as building materials.

- IV. (a) Discuss the special features and design considerations of passenger elevators, service elevators and goods elevators.

Or

- (b) Discuss the various components of a typical sewage disposal scheme for a residential colony with neat flow diagrams.

- V. (a) Differentiate between engineered building and non-engineered building from point of view of building failures.

Or

- (b) What are the principal causes of failure of RCC framed structures? Explain.

(4 × 15 = 60 marks)