

<b>4E4115</b>	Roll No. _____	Total No. of Pages : <span style="border: 1px solid black; padding: 2px;">3</span>
	<div style="border: 1px solid black; display: inline-block; padding: 5px;"><b>4E4115</b></div> <b>B.Tech. IV Semester (Main/Back) Examination, June/July - 2015</b> <b>Civil Engg.</b> <b>4CE5A Building Planning</b>	

Time : 3 Hours

Maximum Marks : 80  
Min. Passing Marks : 26

**Instructions to Candidates:**

Attempt any **five** questions, selecting **one question** from **each unit**. All questions carry **equal** marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.

Use of following supporting material is permitted during examination.

- i. Half size Drawing sheet.

**Unit - I**

1. a) Discuss the criteria for site selection for a building. How functions of a building affects site selection. (10)
- b) Discuss the matters to be shown in site plan. (6)

**OR**

1. a) What is sun path diagram? Discuss any one method of drawing sun path diagram. (8)
- b) Discuss different types of sun shading devices support your answer with sketches. (8)

**Unit - II**

2. a) Discuss criteria for thermal comfort. Explain uses of Bioclimatic chart. (8)
- b) Discuss various factors affecting orientation of building. (8)

**OR**

2. a) What are different climatic zones in India? Discuss their characteristics. (8)
- b) What do you understand by Building Bye-Laws? Discuss regulations regarding
- open spaces.
  - height and size of rooms, kitchen, WC and Bath. (8)

**Unit - III**

3. What do you mean by principles of planning? Discuss factors affecting principles of planning. (16)

**OR**

3. Discuss factors to be considered in "vastu". Design a residential building on a plot of 15m×25m as per vastu. (16)

**Unit - IV**

4. Design and draw a bank building on a plot of 70m×100m. Assume requirements of accomodation suitably. (16)

**OR**

4. Design and draw a primary school of 400 student capacity on a plot of 100m×150m. Road is on the East side of the plot. (16)

**Unit - V**

5. a) Discuss the requirements of good lighting system in a building. (8)

- b) Discuss functional requirements of a good ventilating system. Explain the effect of wind velocity in a room when windows are provided in opposite walls. (8)

OR

5. Discuss acoustical design of a cinema Hall. Support your answer with sketches. (16)

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