

Roll No. \_\_\_\_\_

4E4115

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B. Tech. IV-Sem. (Main / Back) Exam; April-May 2017

Civil Engg.

4CE5A Building Planning

Maximum Marks : 80

Min. Passing Marks : 26

Time : 3 Hours

**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. (Mentioned in form No. 205)

1. Table 9-S.P.-41 (S&T) – 19872. 1/2 Size drawing sheet

rtuonline.com UNIT - I

✓ (a) What is **Building** ? Explain different types of building in short.

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(b) What is the Site plan ? What are its details ?

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OR

1 (a) Explain Sun path diagram. Also explain the different methods to draw Sun path diagram.

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(b) How will you design louvers ?

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## UNIT - II

- 2 (a) Explain biclimatic chart. 6
- (b) What do you mean by orientation of a building ? Discuss various factors affecting it. 10

OR

- 2 (a) What do you mean by building Bye-laws ? Discuss its objectives. 6
- (b) Discuss regulations regarding :
- (i) Floor area ratio.
  - (ii) Sizes and height of rooms.
  - (iii) Sanitation provisions.

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## UNIT - III

- 3 (a) What do you mean by planning of a building ? Explain general scope of a building with examples. 8
- (b) Discuss prospect, circulation, elegance and privacy with respect to planning of a building. 8

OR

- 3 (a) What do you mean of Vastu ? Discuss design of a residential building as per Vastu. 8
- (b) What do you mean of planning of flats and industries ? Discuss any four factors affecting planning. 8

## UNIT - IV

- 4 Draw and design a residential building having following arrangements :
- (a) One Bed room size  $12' \times 10'$
  - (b) Two Bed rooms size  $10' \times 16'$
  - (c) Dinning room - assume size.
  - (d) Kitchen and
  - (e) Verandah of 10' width.

Draw a plan and front elevation and mention schedule of rooms, doors, window and ventilators.

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OR

- 4 Design and draw a primary school of capacity 350 students. Estimate the size of plot, draw plan and front elevation. Show the furniture detail of a classroom with dimension detail.

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## UNIT - V

- 5 (a) Write down various guide lines to be kept in mind for deciding the location of doors in a building.
- (b) Discuss fire fighting provisions in a building.

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OR

- 5 (a) Explain lighting and ventilation requirements in a building.
- (b) Explain the mean of Noise. Discuss the affects of noise and also explain the method of noise control.

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