Hall Ticket Number:

Code No.: 21012 S

VASAVI COLLEGE OF ENGINEERING *(Autonomous)*, HYDERABAD

B.E. II Year (Civil Engg.) I-Semester Supplementary Examinations, May/June-2017

Building Planning and Drawing

Time: 3 hours Max. Marks: 70

*Note: Answer **ALL** questions in **Part-A** and any **FIVE** from **Part-B***

Part-A (10 X 2=20 Marks)

1. Briefly explain about the important parts of a typical door and window.
2. List out the important criteria used for evaluation of Green buildings.
3. Explain orientation and different factors which affect orientation of a building.
4. Briefly explain why bonds are required in brick masonry and what criteria is adopted for obtaining a good bond.
5. What do you mean by Carpet area, Built-up area and F.A.R.?
6. Mention the fire resisting properties of common building materials.
7. List out four important bye-laws and regulations which should be considered for planning of buildings.
8. What do you mean by balustrade and stringer of a staircase?
9. Explain grouping and flexibility considering the example of a residential building.
10. Describe the functions of traps in house drains.

Part-B (5 X 10=50 Marks)

11. a) Explain the different points to be considered while selecting the site for a building. [7]
    b) What is a site plan and what information can be obtained from it? [3]

12. a) Describe the various types of fire protection systems. [3]
    b) Explain, with the help of diagrams, various systems of plumbing used for house drainage. [7]

13. a) Differentiate between closures and bats. Describe different types of closures and bats. [2]
    b) Draw the section showing one wall, part of roof and floor of a typical single storied house with flat roof. Show the different component parts of the house and explain them. Use proper symbols to show the building materials used. [8]

14. a) How the size, number and position of doors and windows are fixed for a building? [2]
    b) Plan a stair case for a residential building in which the vertical distance between each floor is 3.5m. The size of the stair hall is limited to 4.5m x 3m. Draw the plan and elevation view of the stair case. [8]

15. Draw to proper scale, the plan and elevation for a nursery school which can accommodate about 30 children. The class room should have an area so that the space available will be about 1-1.2m^2 per student. Assume that there will be one teaching staff and one non-teaching staff. [10]

16. a) Explain the different principles of planning and how are they interrelated. [5]
    b) Briefly explain the different components and working of a lift (elevator). [5]

17. Write short notes on any **two** of the following:
    a) Classification of stone masonry [5]
    b) Classification of stair cases [5]
    c) Different rooms and their arrangement in a residential building [5]

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