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VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD
B.E. II Year (Civil) I – Semester (Main) Examinations, December – 2015

Building Planning and Drawing

Time: 3 hours

Max. Marks: 70

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

Part-A (10 X 2=20 Marks)

1. What are the factors to be considered in fixing Floor Area Ratio, in particular in a city?
2. Briefly explain Aspect and Privacy and how are they interrelated.
3. Describe the information which can be obtained from plan, elevation and section of a building.
4. Explain set back line and control line and why are they required.
5. Compare English bond and Flemish bond with respect to their strength and appearance.
6. List the various types of fire protection systems.
7. What are building bye-laws and why are they required?
8. Discuss about the provision of doors and windows in a building with respect to their location, number and size.
9. Briefly describe the different types of stone masonry.
10. Describe a green building indicating how it is different from normal buildings.

Part-B (5 X 10=50 Marks)

11. a) Explain orientation of a building and different factors which affect the orientation. Give some suggestions for the optimum orientation for a residential building in a tropical-country like India. [5]
 b) Explain the different principles of planning of a building. [5]
12. a) Briefly describe the systems of plumbing for building drainage. Explain the merits and demerits of each system. [5]
 b) Explain the fire resisting behavior of steel and concrete. How are structural elements graded for fire resistance as per Indian Standards? [5]
13. a) Explain the importance of bonds in brick masonry. [2]
 b) Draw the plan view (of alternate rows) and elevation view (of at least four layers) of one and half brick thick walls constructed using English bond and Flemish bond. [8]
14. a) Briefly explain about the different types of staircases. [2]
 b) Draw a neat sketch of a timber door with shutter, label various parts and draw the details of various joints. [8]
15. Draw to suitable scale, plan and elevation of a typical two bed room house for a doctor who wish to have a consulting room also in the house. Take in to consideration the principles of planning and use proper symbols and signs. [10]
16. a) Explain in detail the principles to follow in planning, design and construction of a green building. [5]
 b) Briefly explain the different component parts and working of an escalator. [5]
17. Write short notes on any two of the following:
 - a) Conventional signs for representation of electrical and plumbing services [5]
 - b) Different component parts of a staircase [5]
 - c) Different rooms and their arrangement in a residential building [5]