# VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD <br> B.E. (Civil: CBCS) III-Semester Supplementary Examinations, June-2019 <br> Building Planning and Drawing <br> Time: $\mathbf{3}$ hours 

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

Part-A (10×2 20 Marks $)$

1. Name the factors that affect the site selection of residential building.
2. List out the basic requirements for a residential building.
3. What are the fire resisting materials used for construction?
4. Define a green building?
5. Draw the conventional sign for concrete, stone and timber in cross-section?
6. Draw a standard size of brick, mention dimensions and state the function of frog in brick?
7. Sketch king closer and queen closer?
8. State different types of staircase?
9. State the advantages of cavity wall over solid wall?
10. Draw the elevation for simple load bearing structure?

$$
\text { Part-B }(5 \times 8=40 \text { Marks })
$$

11. a) Write short on building bye-laws for off-sets?
b) What are the components of rain water harvesting system, Explain in brief.
12. a) What are the fire protection measures considered for planning a building?
b) Explain the certification system for green buildings?
13. a) Draw the plan view of fully panelled door and ventilator with dimensions.
b) Draw an isometric view of wall junction for one and a half brick wall of four layers?
14. a) Draw the elevation of fully paneled window?
b) Draw the elevation of fully paneled door?
15. a) Define a plan view?
b) A single room twin type tenement has to be developed as per the line diagram given below Draw a plan taking wall thickness as 300 mm . Provide windows and doors at appropriate places (10)

| Common Hall ${ }^{-}$ |  |  |  |
| :---: | :---: | :---: | :---: |
| Verandahs | $\longrightarrow$ | Kitchen - | Verandahs |
|  | Kitchen $-3 \times 3$ |  |  |
| $\begin{aligned} & \hline \text { Bed } \\ & 4 \mathrm{mX} \mathrm{3m} \end{aligned}$ | $\begin{aligned} & \text { Living } \\ & 4 \mathrm{~m} \mathrm{X} \mathrm{3m} \end{aligned}$ | $\begin{aligned} & \text { Living } \\ & 4 \mathrm{~m} \mathrm{X} 3 \mathrm{~m} \end{aligned}$ | $\begin{aligned} & \text { Bed } \\ & 4 \mathrm{mX} 3 \mathrm{~m} \end{aligned}$ |
|  | entrance | entrance |  |

16. a) What are the merits and demerits of building bye-laws?
b) Explain the components involved in the development of fire in a compartment.
17. Answer any two of the following:
a) Write the difference between English bond and Flemish bond?
b) What are the types of reinforced concrete stair cases?
c) Draw the plan view of simple framed building?
