

**II B.Tech II Semester Supplementary Examinations, April/May 2005**  
**BUILDING PLANNING (DESIGN AND DRAWING)**  
**(Civil Engineering)**

**Time: 3 hours**

**Max Marks: 80**

**Answer any FIVE Questions**  
**All Questions carry equal marks**

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1. Explain the objectives of building bye-laws.
2. List the regulations regarding built-up area, number of storeys and marginal distances for plot sizes mentioned below:
  - (a) Less than  $50m^2$
  - (b) Between  $50m^2$  and  $100m^2$
  - (c) Between  $100m^2$  and  $150m^2$
  - (d) Between  $150m^2$  and  $300m^2$ .
3. Discuss in detail the important factors that should be kept in mind while planning a building.
4. Discuss the practical design considerations to be followed in buildings in:
  - (a) Hot dry zones
  - (b) Hot mind zones
  - (c) Cool zones.
5.
  - (a) What is the significance of Unity in composition of buildings?
  - (b) Explain with neat sketches how monotony is relieved in buildings with repeated components.
6.
  - (a) What are the different sizes of doors normally used in residences and in which locations are these used?
  - (b) What are the considerations for locating and designing windows in the various rooms of a residence?
7. Design a library building for a college for the following requirements and draw the line diagram.
  - (a) Librarians room 1No.
  - (b) Stack room 1No.
  - (c) Store room 1No.
  - (d) Issue section 1No.
  - (e) Reference room 1No.
  - (f) Reading room 1No.

- (g) Office room 1No.
  - (h) Entrance Hall 1No.
  - (i) Toilet blocks 2Nos.
8. Note: The following specifications may be taken unless otherwise specified in the individual line plans.

The line plan in the figure below shows the internal dimensions in mm. Draw to a suitable scale the following views:

- (a) Plan
- (b) Sectional Elevation

Select suitable positions and sizes of doors and windows according your choice, if it not given in the line plans. The specifications for the buildings are as follows:

- (a) Foundation depth below ground level.....1.1.m
- (b) Plinth height above ground level.....1.0 m
- (c) Mansonry in foundation and up to plinth – Uncoused rubble masonry in lime mortar.....1:2.
- (d) Mansonry in superstructure -1½ brick in cement mortar 1:6
- (e) Flooring – 25 mm thick mosaic tiles on 100mm thick 1:4:8 concrete bed.
- (f) Doors – Timber doors fully paneled at suitable places and of suitable sizes.
- (g) Windows – Timber fully glazed at suitable places and of suitable sizes.
- (h) Roof: a) for sloped roof – A.C.sheets over timber purlins or mangalore

tiled roof.

- b) for flat R.C.C.roof – 120mm thick R.C.C.slab of 1:2:4 with 80mm thick wearing course.

Assume any other suitable data wherever required and mention the same in the drawing.

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