

Student Exam No:

GANPAT UNIVERSITY

B. Tech. Semester III (CIVIL ENGINEERING)

Regular Examination : Nov - Dec 2012

2CI 304: Building Planning and Design

Max. Time: 3 Hours

Total Marks: 70

Instructions: - (1) Answer to the two sections must be written in **separate** answer books.

(2) Figures to the right indicate **full** marks.

(3) Assume suitable data if required.

Section - I

1 (A) A residential building is to be planned in a plot of land 10 m x 15 m. The 15m (25)
side is on east side adjoining a 12 m wide road. The maximum FSI is 1.2. The
following accommodation is to be provided.

- (a) Drawing room
- (b) Bed room – 2 Nos (one attached bath)
- (c) Kitchen cum dining
- (d) Bath and W.C.

Built up area as per Building bye law. From your design prepare the following

- (a) Floor plan (b) Elevation of building (c) Suitable section (draw section line on plan)

OR

1 (A) Draw (i) Floor plan (ii) Front elevation (iii) Suitable section (draw section line on (25)
plan) for residential building on plot of 200 m². The following accommodation is
to be provided.

- (a) Drawing room
- (b) Kitchen cum dining room
- (c) Store room, Puja room, stair case
- (d) General bath and W.C.
- (e) Master bed room (1 Nos)
- (f) Verandah.

2 (A) A plan and elevation of pedestal is shown in the below **Figure- 1**. Draw to a (10)
suitable scale the two point perspective view of it. Assume eye level 1.5 mm
above G.L & station point 10 cm from picture plane. Retain all construction lines.

Section - II

- 4 (A) List out Principles of planning of building? Explain Grouping and Roominess in detail. (5)
- (B) What is orientation? Enlist various factors affecting on orientation of building. (6)
Give C.B.R.I recommendation for orientation of buildings.
- 5 (A) Define : (6)
- (1) Common Plot (2) Developer (3) Owner
(4) Parapet (5) Parking Space (6) Loft
- (B) Discuss issue of occupancy certificate. (6)
- OR
- 5 (A) Define : (6)
- (1) Carpet Area (2) Set back line (3) Built up area
(4) Mezzanine floor (5) Balcony (6) Margin
- (B) Write down building bye law for following items (6)
- (i) Stairs (ii) Plinth height (iii) Parapet wall (iv) Wall thickness (v) Slab thickness
- 6 Attempt any Two: (12)
- A Draw neat sketches of following components of building.
- (1) Fully paneled door
(2) Paneled window
(3) Wooden half paneled window
- B What is building bye - law? List out various building bye laws and objectives of building bye law.
- C Write the functions of following components (a) Sill Level (b) Plinth (c) Coping
(d) Damp proof course (e) Lintel (f) Chajjas

“ END OF PAPER ”

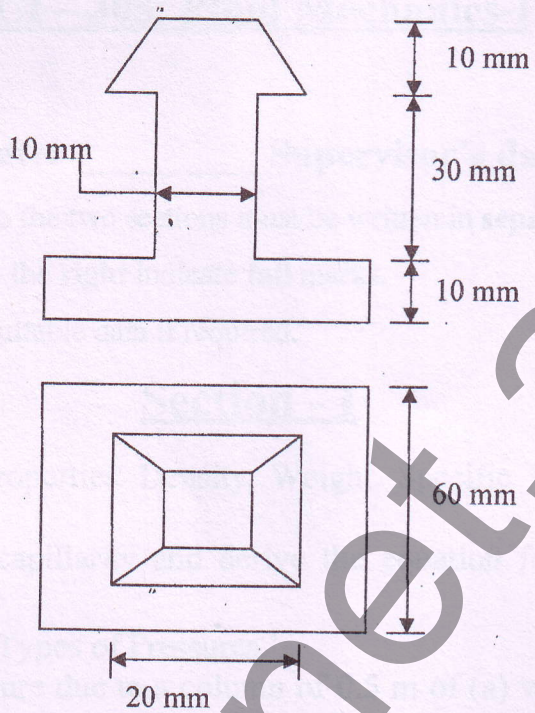


FIGURE: 1