

GANPAT UNIVERSITY**B. Tech. 3rd Semester: Civil Engineering****Regular Examination November – December 2014****2CI 304: Building Planning and Design**

Time: 3 Hours

Total Marks: 70

- Instruction:**
1. Answer to the two sections must be written in separate answer book.
 2. Figures to the right indicate full mark.
 3. Assume suitable date if required.

Section - I

Que. – 1 A residential building is to be planned in a plot of a 12m X 16m. The maximum FSI is 1.2. Following accommodation is to be provided: **15**

1. Drawing room
2. Bed room
3. Kitchen cum Dining
4. Bath and W.C
5. Stair

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

- a. Floor Plan
- b. Elevation of building

Full detailing should be provided with Schedule table.

OR

Que. – 1 Draw Plan and Elevation for a residential building 150 m². The following accommodation is to be provided: **15**

1. Drawing room
2. Bed room
3. Kitchen cum Dining
4. Bath and W.C

Full detailing should be provided with Schedule table.

Que. – 2 Draw a Suitable section for plan in Q 1 which you had drawn. **10**

(Draw Section line on plan.)

Que. – 3 Draw two Point perspective view of a single room building of size 7m **10**

X 5m when station point is 10000 mm from picture plane, height of eye level is 1500 mm. It is necessary to provide one door and two windows (each on either side).

Section – II

Que. – 4 (A) What is building bye - law? Importance and application of building bye laws. 5

(B) Write down the requirements of good stair. Draw layout of stair with its components. 5

OR

Que. – 4 (A) List out the principal of building planning and explain any three. 5

(B) Write down different types of residential building and also draw any two plan of residential building. 5

Que. – 5 (A) Define: 6

1. Plinth Area
2. Character
3. Setback
4. Control line
5. Plan
6. Mezzanine Floor

(B) List out principles of architectural composition. Explain any one in detail. 3

(C) Attempt any Three: 6

1. What is orientation? List out various factors affecting on orientation of building.
2. How many storey's can be constructed for a residential plot 725 m², if F.S.I is 2.2 the covered area at ground floor is 125 m².
3. What are the usual requirements of normal residential building? And it's any two salient features.
4. What are the building components?

Que. – 6 Draw the following question (any Five) 10

1. Conventional symbol: Double leaf double swing door, internal rolling door.
2. Conventional sign: Stone, Partition block
3. Wall foundation for 0.3 mt thickness wall.
4. Conventional symbol: Concrete, Brick.
5. Conventional symbol: Pump, Ceiling fan.
6. Draw plan of Arched Stair and Quarter Landing Stairs

END OF PAPER