

**GANPAT UNIVERSITY**

**B. Tech. Semester: Civil Engineering**

**Regular Examination November – December 2013**

**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 15m. **15**  
Appropriate margin and following accommodation is to be provided

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

Margins should be as per Bye Laws from your design prepare the following:

- a) Floor Plan
- b) Elevation of the building

Full detailing should be provided with Schedule table.

**OR**

Que. – 1 Draw Plan and Elevation for a residential building 200 m<sup>2</sup>. The **15**  
following accommodation should be provided and only 60% built up area should be provided on the ground floor.

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. (*Draw* **10**  
*Section line on a plan*)

- Que. – 3 Draw two point perspective view of plan by assuming station point 10  
down to the picture plane and eye level line should 1.5 am above station  
point. Take a plan of a room 7m X 5m in 1:1 scale. One window on 5m  
side. One window & door on 7m side.

**Section – II**

- Que. – 4 Write short notes on: ( Any two ) 10
1. Set back
  2. Floor space index
  3. Orientation

**OR**

- Que. – 4 A List out principle of building planning. Describe any two briefly. 5

- B What is bye-laws and objective of bye-laws? 5

- Que. – 5 A Define: 6

1. Aspect
2. Roominess
3. Floor area
4. Built-up area
5. Plinth area
6. Circulation

- B List out principle of architectural planning. Explain Unit and Scale. 5

- C Attempt any Three: 6

1. What are the building components?
2. Classification of residential building.
3. What are the normal size of riser and tread in residential and public building?
4. How many storey's can be constructed for a residential building? Plot size 800 m<sup>2</sup>, FSI is 1.5 & built up area of ground floor is 150 m<sup>2</sup>

- Que. – 6 Draw the following ( Any four ) 8

1. Conventional sign: Concrete, Side hung door.
2. Wall foundation for 0.3mt thick wall.
3. Wall or vertical section for two storeys's building.
4. 1<sup>st</sup> and 3<sup>rd</sup> angle projection.
5. Isometric and oblique view of cube.

END OF PAPER