

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE - SEMESTER-IV (New) EXAMINATION – WINTER 2015**

**Subject Code:2140607****Date:04/01/2016****Subject Name: Building & Town Planning****Time: 2:30pm to 5:00pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** Draw Plan of residential building in a plot area of 400 M<sup>2</sup> for a family of 4 persons from the following requirements of Kitchen, Drawing room, Bed room, Master Bed room, Study Room, Verandah. Also show position of furniture in Drawing room, Kitchen, Bed room in plan. **07**
- (b)** Enlist principles of planning and explain Elegance and Grouping in detail? **07**
- Q.2 (a)** Write short note on ventilation in a building. **07**
- (b)** Explain Contrast and Proportion as principles of architecture. **07**
- OR**
- (b)** Explain scope and applicability of building bye-laws. **07**
- Q.3 (a)** What is National Building Code (NBC)? How it is helpful in planning and design of buildings? **07**
- (b)** Explain plinth area, carpet area and floor area. **07**
- OR**
- Q.3 (a)** Draw a Layout of shopping mall for a city. Take size of units according to general requirements of public building. **07**
- (b)** Define: 1) cottage, 2) Tenement, 3) Dormitory, 4) Flat, 5) Outhouse, 6) Low rise building, 7) High rise building. **07**
- Q.4 (a)** Explain behavior of structures during earthquake and possible mode and pattern of failure. **07**
- (b)** Differentiate one point, two point and three point perspectives with neat sketch. **07**
- OR**
- Q.4 (a)** Discuss the term ‘Density Zoning’ and ‘Height Zoning’. **07**
- (b)** Discuss four basic pillars of a smart city. **07**
- Q.5 (a)** Explain concept of ‘Smart City’ **07**
- (b)** Draw a plan of neighbourhood unit for a population of 6000 people spreading in 320 acres of land. **07**
- OR**
- Q.5 (a)** Discuss urban road systems in city planning. **07**
- (b)** Write short on: a) Ribbon development, 2) Satellite Town. **07**

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