

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 M² 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**
