

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V (NEW) EXAMINATION – WINTER 2023****Subject Code:3154011****Date:11-12-2023****Subject Name:Building & Town Planning****Time:10:30 AM TO 01:00 PM****Total Marks:70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

	Marks
Q.1 (a) Plot area of one semi-detached 2 BHK residential unit (for GF only) is 12m x 15m. 12m width is along the front road side. Assume suitable north direction and necessary data considering building bye laws, principles of planning and architecture. Using a suitable scale draw a layout plan of unit in plot with margins.	03
(b) Draw a detailed GF plan of the residential unit with staircase and toilet units for the data given in Q. 1 (a).	07
(c) Draw the detailed sectional elevation for the data given in Q.1 (a) and GF plan drawn as per Q. 1 (b).	04
Q.2 (a) Define with sketch: Vanishing Point, Picture Plane	03
(b) Discuss with sketches: (i) Aspect, (ii) Roominess – principles of the Building Planning.	04
(c) Give a brief note on NBC.	07
OR	
(c) Discuss with sketches: (i) Contrast, (ii) Proportion – principles of the Architecture.	07
Q.3 (a) Briefly discuss key features and disadvantages of RERA.	03
(b) Discuss about the general activities and room requirements for planning of Bank Building for the town of 0.5 Lakh population.	04
(c) Draw line sketch plan showing all necessary units with dimensions and circulation for the public building data of Q. 3 (b).	07
OR	
Q.3 (a) What are the objectives of Town Planning?	03
(b) Discuss about the general activities and space requirements for planning of Vegetable Market for the town of 0.8 Lakh population.	04
(c) Draw line sketch plan showing all necessary units with dimensions and circulation for the Vegetable Market data of OR Q. 3 (b).	07
Q.4 (a) Briefly explain elements of city planning.	03
(b) Describe types of growth of towns according to direction with sketches.	04
(c) Describe with sketches various points to be considered while planning of earthquake resistant buildings.	07

OR

- Q.4** (a) What do you understand by 'Smart City'? **03**
(b) Describe any three types of natural growth of towns with sketches. **04**
(c) Describe various agencies working in housing field. **07**

- Q.5** (a) What do you understand by 'Civic Centers'? **03**
(b) Explain different methods of slum improvements. **04**
(c) Describe survey techniques used in planning and urban design. **07**

OR

- Q.5** (a) What are the elements of 'City Planning'? **03**
(b) Discuss the 'Principles of Urban Conservation'. **04**
(c) Write a short note on: (i) Design for the Pedestrians, (ii) Waterfront development. **07**
