

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE- SEMESTER-V (NEW) EXAMINATION – WINTER 2020****Subject Code:3154011****Date:01/02/2021****Subject Name:Building & Town Planning****Time:10:30 AM TO 12:30 PM****Total Marks: 56****Instructions:**

1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		<b>Marks</b>
<b>Q.1</b>	(a) Plot area of one detached 3 BHK residential unit (for GF only) is 15m x 17m. 15m 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.	<b>03</b>
	(b) Draw a detailed GF plan of the residential unit with staircase and toilet units for the data given in Q. 1 (a).	<b>07</b>
	(c) Draw the detailed sectional elevation for the data given in Q.1 (a) and GF plan drawn as per Q. 1 (b).	<b>04</b>
<b>Q.2</b>	(a) Enlist principles of architecture.	<b>03</b>
	(b) Describe any two principles of architecture with sketches.	<b>04</b>
	(c) Explain the necessity of Building Bye-laws and National Building Code.	<b>07</b>
<b>Q.3</b>	(a) Briefly explain the General Development Control Regulation.	<b>03</b>
	(b) Discuss about the general activities and room requirements for planning of High school Building for the town of 1 Lakh population for the standards 9 to 12 of science stream.	<b>04</b>
	(c) Draw line sketch plan showing all necessary units with dimensions and circulation for the public building data of Q. 3 (b).	<b>07</b>
<b>Q.4</b>	(a) What are the aims and objectives of town planning?	<b>03</b>
	(b) Discuss about the general activities and room requirements for planning of Degree Engineering College Campus Building for the total 800 students in Civil, Mechanical and Electrical Engineering branches.	<b>04</b>
	(c) Draw line sketch plan showing all necessary units with dimensions and circulation for the Engineering College Campus Building data of OR Q. 3 (b).	<b>07</b>
<b>Q.5</b>	(a) Briefly explain elements of city planning.	<b>03</b>
	(b) Discuss the points to be considered while planning of a smart city.	<b>04</b>
	(c) Describe with sketches various points to be considered while planning of earthquake resistant buildings.	<b>07</b>

- Q.6** (a) Briefly describe Civic Centers. **03**  
(b) Describe with sketches various forms of town based on natural growth. **04**  
(c) Describe: (i) Green belt, (ii) CBD zoning. **07**
- Q.7** (a) What are the causes of slum formation? **03**  
(b) Explain different methods of slum improvements. **04**  
(c) Describe objectives and principles of zoning in town planning **07**
- Q.8** (a) Critically differentiate between Master plan and development plan. **03**  
(b) What do you mean by urban pattern? Discuss any four. **04**  
(c) Write a short note on: (i) Urban scale and spaces, (ii) Aesthetics of Town Planning. **07**

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