

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.

		Marks
Q.1	(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.	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) Enlist principles of architecture.	03
	(b) Describe any two principles of architecture with sketches.	04
	(c) Explain the necessity of Building Bye-laws and National Building Code.	07
Q.3	(a) Briefly explain the General Development Control Regulation.	03
	(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.	04
	(c) Draw line sketch plan showing all necessary units with dimensions and circulation for the public building data of Q. 3 (b).	07
Q.4	(a) What are the aims and objectives of town planning?	03
	(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.	04
	(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).	07
Q.5	(a) Briefly explain elements of city planning.	03
	(b) Discuss the points to be considered while planning of a smart city.	04
	(c) Describe with sketches various points to be considered while planning of earthquake resistant buildings.	07

- 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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