

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE - SEMESTER-III (NEW) EXAMINATION – SUMMER 2021**

**Subject Code:3130609****Date:06/10/2021****Subject Name: Building and 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.

		<b>MARKS</b>
<b>Q.1</b>	(a) Enlist the elements of architecture composition and explain any one in detail.	<b>03</b>
	(b) Classify the buildings based on the structural design.	<b>04</b>
	(c) Draw a plan of a two storied residential building on a plot size 16 m x 19 m for a family of 6 persons belongs to MIG, take FSI 1.5, as per principles of planning and architecture by considering building bye laws. Also prepare schedule of opening and area table. Assume North direction and other necessary data.	<b>07</b>
<b>Q.2</b>	(a) Enlist the components of building bylaws.	<b>03</b>
	(b) Explain key features of RERA.	<b>04</b>
	(c) Explain with neat sketch water supply system in residential building.	<b>07</b>
<b>OR</b>		
	(c) Explain with neat sketch house drainage system in residential building.	<b>07</b>
<b>Q.3</b>	(a) Define (i) vanishing point (ii) picture plane (iii) isometric view	<b>03</b>
	(b) Explain satellite town.	<b>04</b>
	(c) Discuss software application in building planning and building drawing of 2D model generation.	<b>07</b>
<b>OR</b>		
<b>Q.3</b>	(a) Enlist the type of surveys conducted for planning.	<b>03</b>
	(b) Explain two point perspectives with sketch.	<b>04</b>
	(c) Discuss the general features of earth quake resistant buildings.	<b>07</b>
<b>Q.4</b>	(a) Define (i) Master plan (ii) Margin (iii) Mezzanine floor.	<b>03</b>
	(b) Differentiate between NBC and local building byelaws.	<b>04</b>
	(c) Explain ODPS software in detail.	<b>07</b>
<b>OR</b>		
<b>Q.4</b>	(a) List out the drawback of ribbon development in planning.	<b>03</b>
	(b) Explain the necessity of civic survey for town planning purpose.	<b>04</b>
	(c) Explain Growth of town in detail.	<b>07</b>
<b>Q.5</b>	(a) Enlist the various types of land uses.	<b>03</b>
	(b) Explain the importance of road network in town planning.	<b>04</b>
	(c) Discuss the stages of preparation of master plan.	<b>07</b>
<b>OR</b>		
<b>Q.5</b>	(a) Define (i) Neighborhood unit (ii) Zoning (iii) CBD.	<b>03</b>
	(b) Explain multiple Nuclei model.	<b>04</b>
	(c) Discuss the various methods of slum clearance.	<b>07</b>