Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE - SEMESTER-III (NEW) EXAMINATION - WINTER 2021** 

Subject Code:3130609	Date:23-02-2022
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**Subject Name:Building and Town Planning** 

Time:10:30 AM TO 01:00 PM	Total Marks:70
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## **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.

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			MARKS
Q.1	(a)	Define Building and Explain Any Two Types of Building as per NBC Classification.	03
	<b>(b)</b>	Explain objectives and scope of building bye -laws.	04
	(c)	Draw ground floor plan of detached house on a 17 m $\times$ 20 m plot area for a family of Six persons as per building bye laws and principles of planning and architecture. Assume suitable direction of East and front road. And also assume other necessary data which required for planning purpose. Also mention the schedule of opening.	07
Q.2	(a)	Define: (1) FSI (2) Set-back (3) Building Line	03
	<b>(b)</b>	What is BIM? Discuss the fundamentals of BIM technology.	04
	(c)	List out the principles of building planning and explain in detail.  OR	07
	(c)	List out the Principles of Architectural Composition and explain Character, Balance & symmetry and Unity in Detail.	07
Q.3	(a)	Discuss classification of building based on structural design.	03
	<b>(b)</b>	Which factors will you consider for selecting site for a building?	04
	(c)	Prepare line diagram of a Bank. Take size of units, according to general requirements of public building.	07
		OR	
Q.3	(a)	Define any three: (1) Station Point (2) Cone of vision (3) Vanishing point (4) Picture Plane	03
		Differentiate between one point perspective and two point perspective with a sketch.	04
	(c)	Discuss software application in building planning and building drawing for 2D model generation.	07
<b>Q.4</b>	(a)	What do you mean by 'Land uses' for town planning?	03
	<b>(b)</b>	Give minimum size and other requirements of different types of rooms.	04
	(c)	Discuss the various methods of slum clearance.  OR	07
Q.4	(a)	Briefly explain the town planning in the period of Indus valley civilization.	03
	<b>(b)</b>	Write short note on: RERA	04
	(c)	Discuss four basic pillars of a Smart City.	07
Q.5	(a)	Write short note on CBD (Central business district).	03
	(b)	Discuss various surveys conducted for town planning scheme	04

	(c)	Discuss Ribbon development in brief. Also write advantages and disadvantages of it.	07
		OR	
Q.5	(a)	Enlist classification of Growth of towns.	03
	<b>(b)</b> Write a note on features of Neighborhood unit.		
	<b>(c)</b>	Explain aspects of zoning in brief.	07

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