GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–III EXAMINATION – SUMMER 2025

Subject Code:3130609   **Date:31-05-2025**
Subject Name:Building and Town Planning
Time:02:30 PM TO 05:00 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)**	Enlist the principles of architectural composition.	**03**
	(b)	Define the terms: (i) FAR (ii) Control Line (iii) Set back (iv) Light Plane	**04**
	(c)	Draw ground floor plan of a residential building on a 16 x 20m plot area as per building bye laws and principle of planning and architecture. Assume suitable direction of north and front road. Also assume necessary data.	**07**
Q.2	**(a)**	Explain objectives of Building bye-laws.	**03**
	(b)	What is BIM? Give advantages of BIM.	**04**
	(c)	Write short note on ODPS.	**07**
		OR	
	(c)	Explain principles of planning.	**07**
Q.3	**(a)**	Explain typical characteristics of perspective drawings.	**03**
	(b)	Differentiate between Isometric view and Perspective view.	**04**
	(c)	Discuss software application in building planning and building drawing for 2D model generation.	**07**
		OR	
Q.3	**(a)**	Explain with sketches, house drainage system of a building.	**03**
	(b)	Differentiate one point, two point and three-point perspective view.	**04**
	(c)	Briefly explain behaviour of structures during earthquake and possible mode and pattern of failure.	**07**
Q.4	**(a)**	Differentiate between regional and civic survey.	**03**
	(b)	Explain any one case study of Smart city.	**04**
	(c)	Discuss in brief growth of town according to direction.	**07**
		OR	
Q.4	**(a)**	Explain importance of Zoning.	**03**
	(b)	Write short note on Multiple nuclei model.	**04**
	(c)	Briefly outline causes, characteristics and effects of slum.	**07**
Q.5	**(a)**	What are the objectives of building services.	**03**
	(b)	Write characteristics of CBD.	**04**
	(c)	What are the principles of neighborhood planning.	**07**
		OR	
Q.5	**(a)**	Enlist various components of neighbourhood.	**03**
	(b)	Write explanatory note on: Satellite town.	**04**
	(c)	What is NBC? How it is helpful in planning and design of buildings?	**07**

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