

Enrollment No./Seat No.:

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**Bachelor of Engineering - SEMESTER - III EXAMINATION - WINTER 2025**

**Subject Code: 3130609**

**Date: 15-12-2025**

**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 (a)</b> Enlist and explain the types of buildings based on occupancy as per NBC.	<b>03</b>
<b>(b)</b> Write a brief note on orientation of building.	<b>04</b>
<b>(c)</b> Draw a Plan for a Semi-detached bungalow with a plot area of 10m x 15m, for a family of 6 person. also include scale, north direction.	<b>07</b>
<b>Q.2 (a)</b> Write a short note on ODPS (Online Development Permission System).	<b>03</b>
<b>(b)</b> Enumerate the principals of planning. Explain any three of them.	<b>04</b>
<b>(c)</b> Draw an Elevation for the Semi-detached bungalow plan drawn in Q.1.(C). Include scale and vertical dimensions.	<b>07</b>
<b>OR</b>	
<b>(c)</b> Draw a section for the Semi-detached bungalow plan drawn in Q.1.(C). Include scale and vertical dimensions.	<b>07</b>
<b>Q.3 (a)</b> Discuss the importance of building by-laws and local regulation in building planning.	<b>03</b>
<b>(b)</b> Write short notes on the key planning considerations for earthquake-resistant buildings.	<b>04</b>
<b>(c)</b> Differentiate among one point, two point and three point perspective drawing.	<b>07</b>
<b>OR</b>	
<b>(a)</b> What is BIM (Building Information Modelling)? State its importance in Building Planning.	<b>03</b>
<b>(b)</b> Explain the influence of RERA ((Real Estate Regulatory Authority) in the field of real estate.	<b>04</b>
<b>(c)</b> Write step by step procedure for drawing a two point perspective view of an object.	<b>07</b>
<b>Q.4 (a)</b> Briefly explain the historical development of town planning in ancient India and name any two planned cities of that period.	<b>03</b>
<b>(b)</b> What is a civic survey and its necessity in town planning?	<b>04</b>
<b>(c)</b> Write a short note on origin of town.	<b>07</b>

**OR**

- (a)** List the fundamental principles of town planning. **03**
- (b)** Mention the uses of GIS in modern town planning and explain their importance. **04**
- (c)** Describe the types of data collected and methods of their presentation and analysis for planning of a town. **07**

- Q.5**
- (a)** What is the importance of road networks in the town planning? **03**
  - (b)** List the main components of a town and briefly describe them. **04**
  - (c)** Discuss the causes and effects of slum formation. Suggest suitable remedial measures to prevent the growth of slums. **07**

**OR**

- (a)** What is neighbourhood planning? State its importance in town development. **03**
- (b)** Write short notes on slum clearance and rehabilitation measures. **04**
- (c)** Discuss how development controls in new town planning help in regulating urban growth and ensuring balanced development. **07**

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