

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.**

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

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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GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER-III (NEW) EXAMINATION – WINTER 2024

Subject Code: 3130609

Date: 29-11-2024

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.

	Marks
Q.1 (a) What is orientation? Discuss the factors affecting orientation.	03
(b) Define the terms: (i) Carpet area (ii) Floor area (iii) Floor area ratio (iv) Set back	04
(c) Draw ground floor plan of a residential building on an 18 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 scope of Building bye-laws.	03
(b) Define BIM? What is its importance.	04
(c) Explain principles of building planning.	07
OR	
(c) Write short note on Online development permission system.	07
Q.3 (a) Explain the principle of perspective projection.	03
(b) Explain procedure for drawing one point perspective.	04
(c) Briefly outline the factor influencing the selection of site for various types of public buildings.	07
OR	
Q.3 (a) Draw a line diagram of a primary health Centre for a village.	03
(b) Differentiate between Isometric view and Perspective view.	04
(c) What are the points to be kept in mind while planning of earthquake resistant buildings?	07
Q.4 (a) Differentiate between Social survey and Vital survey.	03
(b) Explain any one case study of Smart city.	04
(c) Write descriptive and detail note on: Origin and growth of towns.	07
OR	
Q.4 (a) What is importance of landscaping in town?	03
(b) Write characteristics of CBD.	04
(c) Discuss slum clearance and its methods.	07

- Q.5** (a) Describe the role of civil engineer in construction industry. **03**
(b) Give classification of urban roads. **04**
(c) What are the principles of neighborhood planning? **07**

OR

- Q.5** (a) What are the features of neighborhood unit? **03**
(b) Write explanatory note on: Indus valley civilization **04**
(c) List various fittings and fixtures used in water distribution system in a building. **07**
What are their requirements?

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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-III (NEW) EXAMINATION – WINTER 2023

Subject Code:3130609

Date:18-01-2024

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.

		Marks
Q.1	(a) Enlist principles of planning and discuss its influence on final design.	03
	(b) Define the terms: (i) Mezzanine floor (ii) Floor area ratio (iii) Set back (iv) Light Plane	04
	(c) Draw ground floor and first floor plan of a two storeyed residential building on a 15 x 20m plot area for a family of six persons as per building bye laws and principle of planning. Assume suitable direction of north and front road. Also assume necessary data.	07
Q.2	(a) What is BIM? What is its importance.	03
	(b) What is NBC? How it is helpful in planning and design of buildings?	04
	(c) Write short note on ODPS.	07
OR		
	(c) Enlist and explain the principles of architectural composition.	07
Q.3	(a) Define with neat sketches picture plane, vanishing point, and Station point	03
	(b) Which factors will you consider for selecting site for a building?	04
	(c) How building is made earthquake resistant using construction technique?	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) Discuss software application in building planning and building drawing for 2D model generation.	07
Q.4	(a) Differentiate between Social survey and vital survey.	03
	(b) What is the importance of Landscaping in town?	04
	(c) Define the term Town planning? Explain objectives and principles of town planning.	07
OR		
Q.4	(a) Explain various aspects of Zoning.	03
	(b) Explain any one case study of Smart city.	04
	(c) Discuss slum clearance and its methods.	07
Q.5	(a) Give classification of urban roads.	03
	(b) Write characteristics of CBD.	04
	(c) Write descriptive and detailed note on: origin and growth of towns.	07
OR		
Q.5	(a) What is necessity or purposes of survey?	03
	(b) Write explanatory note on: Ribbon development.	04
	(c) Write short note on neighborhood planning.	07

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER– III(NEW) EXAMINATION – WINTER 2022****Subject Code:3130609****Date:24-02-2023****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) Compare principles of planning with principles of architecture in terms of final design of building.	03
	(b) What is difference between National Building Code and Local Building Bye-laws?	04
	(c) Draw ground floor and first floor plan of a two storeyed residential building on a 15 x 20m plot area for a family of six persons as per building bye laws and principle of planning. Also draw front elevation of the building. Assume suitable direction of north and front road. Also assume necessary data.	07
Q.2	(a) Explain Elements of BIM.	03
	(b) Explain the terms: (i) FSI (ii) RERA (iii) Set-back	04
	(c) Write short note on “Software for ODPS”.	07
	OR	
	(c) Explain key features of RERA Act.	07
Q.3	(a) Explain with sketches, house drainage system of a building.	03
	(b) Discuss working drawings.	04
	(c) Differentiate 2D model generation and 3D model generation in building planning and drawing.	07
	OR	
Q.3	(a) Define with neat sketches picture plane, vanishing point and ground line.	03
	(b) Differentiate one point, two point and three point perspective view.	04
	(c) How building is made earthquake resistant using construction technique?	07
Q.4	(a) Explain social survey and territorial survey.	03
	(b) Explain any one case study of Smart city.	04
	(c) Write a short note on Development plan or Master plan.	07
	OR	
Q.4	(a) Explain various aspects of Zoning.	03
	(b) Define town center and explain Business centers and Light Shopping Centers.	04
	(c) Define Slum and explain its causes.	07
Q.5	(a) Write a short note on public utility services.	03
	(b) Discuss various surveys conducted for town planning scheme.	04
	(c) Write a short note on: Types of growth of towns.	07

OR

- Q.5** (a) What are the historical aspects of town planning in the world? **03**
(b) Write short note on characteristics of CBD. **04**
(c) What is neighborhood planning? Explain principles of neighborhood planning. **07**
