

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-IV(New) • EXAMINATION – WINTER 2016

Subject Code:2140607

Date:24/11/2016

Subject Name:Building & 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.

		MARKS
Q.1	Short Questions	14
1	Orientation of building means aligning room spaces with respect to (a) Adjoining properties (b) Wind direction (c) Path of sun orbit (d) North, East, West and South	
2	Opening and walls in upper floors should be exactly above opening and wall respective at lower floors in (a) Load bearing structure (b) RCC framed Structure (c) Steel framed Structure (d) All the above	
3	Minimum Distance of any opening from corner of wall is (a) Zero (b) 0.6 m (c) 1.5 m (d) 0.1 m	
4	Maximum size of the tread of step for residential building is (a) 15 cm (b) 20 cm (c) 25 cm (d) 40 cm	
5	In a residential building store room is preferred to be near to (a) Kitchen (b) Verandah (c) Garage (d) Bathroom	
6	In a greek town planning, the public space was known as (a) Agora (b) Pyramid (c) Chruch (d) None of above	
7	Aspects of zoning are (a) Use zoning (b) Height zoning (c) Density zoning (d) All above	
8	What is Set back?	
9	What is vanishing point?	
10	What is land use planning?	
11	Define slum.	
12	What is smart city?	
13	Enlist various types of fire safety equipments used in building.	
14	What is porch?	
Q.2	(a) Briefly define following. (a) Control line (b) Building line (c) Consolidated open space	03
	(b) Explain the importance of building bye laws.	04
	(c) Explain with neat sketch various components of building.	07
	OR	
	(c) Explain in brief various principles of architecture composition.	07
Q.3	(a) Explain the bye-laws provision for front side and rear side open space.	03
	(b) Briefly explain behavior of structure during earthquake and possible move and pattern of failures.	04
	(c) Draw ground floor plan of a single storied residential building	07

on a 14 m X 20 m plot area for a family of six persons as per building bye laws and principles of planning and architecture. Assume suitable north direction and front road.

OR

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| Q.3 | (a) Explain in brief precautions you will take at the time of planning the building to make it earthquake resistant. | 03 |
| | (b) Explain in brief one point perspective. | 04 |
| | (c) Discuss the needs of a hospital building as per planning point of view and suggest approximate size of various units. | 07 |

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| Q.4 | (a) What is a master plan of a town? Why it is required to be prepared? | 03 |
| | (b) Write short note on classification of urban roads. | 04 |
| | (c) Discuss the various methods adopted to collect data for the town planning. | 07 |

OR

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| Q.4 | (a) Write short note on public utility services. | 03 |
| | (b) Enlist various land use models and explain any one in detail. | 04 |
| | (c) Discuss various principles of neighbourhood planning. | 07 |

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| Q.5 | (a) Differentiate between regional survey and civic survey | 03 |
| | (b) Discuss in brief growth of town according to direction. | 04 |
| | (c) Write short notes on: | 07 |
| | 1. Formation of slum 2. Difficulties in slum clearance | |

OR

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| Q.5 | (a) Discuss in brief history of town planning. | 03 |
| | (b) Discuss in brief characteristics of smart city. | 04 |
| | (c) What is zoning? Explain in detail the objects and advantages of zoning. | 07 |
