Seat No.:		.: Enrolment No	Enrolment No	
GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-III (OLD) - EXAMINATION – SUMMER 2017 Subject Code: 130603 Date: 05/06 Subject Name: Building and Town Planning Time: 10:30 AM to 01:30 PM Instructions:  1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks.				
Q.1	(a)	You are required to prepare the design for small independent residential unit on sub plot no. 22. Admeasuring 22.0 m X 28.0 m. with its shorter side abutting to 9.0 m. wide society road. The total cost of construction should not exceed Rs. 15,00,000/ At present cost of construction may be taken as Rs. 10000/- per m². The accommodations required by client are given as follows: On ground floor Drawing room, Kitchen cum dining room with attached store room, Masters bed room with attached toilet, Children's bed room with attached toilet, Internal stairs having assess from drawing room, Usual facilities like common bathroom, w.c., passages, verandah etc On First floor there is only staircase cabin. Plot details are as follows:  On due north side = 9.0 m. wide road On due south side = Subplot no. 15 On due east side = Subplot no. 21 On due west side = Subplot no. 23 Permissible built-up area = 40 % and FSI permissible = 1.0  Your Tasks:  Perform and show all design steps like area calculations, area allocations, trial grouping, room size determination and staircase design. Prepare detailed LINE plan with all relevant details.	07	
	<b>(b)</b>	Draw detailed plan as per design developed in Q.1(A)	07	
Q.2	(a)	Draw elevation for plan developed in Q.1 (B)	07	
	(b)	Draw detailed sectional elevation for plan developed in Q.1(B), as per building by elaws requirements. $\mathbf{OR}$	07	
	<b>(b)</b>	Discuss the importance of principles of planning. Explain circulation and privacy as planning principle.	07	

Q.3 (a) Explain Objectives, Scope and Applicability of Building Bye Laws and

Briefly explain the guidelines for design of non engineered earthquake resistant

OR

Development control regulations.

brick masonry structures.

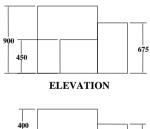
Q.3 (b)

{ **P.T.O.**}

**07** 

**07** 

(a) Briefly define and/or explain following (Any Two): Q.3 07 1. Control line and building line 2. Bye laws for maximum height of building with reference to road width 3. Bye laws for margin for high rise building with podium 4. Bye laws for maximum permissible Built up area with reference to plot size 5. Floor space index (b) Briefly outline the norms that are to be applied for design a hospital building &. 07 Based on these develop line plan for hospital with 100 bed. 0.4 Write detailed note on: Origin and growth of towns OR Town Planning in 07 Ancient India. Define the term 'Town planning'. Explain aims and objectives of town **(b)** 07 planning. OR Why are surveys carried out before town planning? Give the classification of **Q.4 07** surveys and explain the methods adopted for collection of data in surveys? Discuss zoning with reference to its objectives, principles, types 07 **(b)** and advantages. Q.5 (a) State objectives and requirements of 'Master plan' for developments. Name 07 different types of data to be collected to prepare the master plan. Draw two point perspective drawing for the composition shown in figure no.1. **07** (select most effective position of picture plane, angle made by object, height and distance of station point) OR **Q.5** Write brief note on followings(Any two): **07** (a) 1. Neighborhood planning. 2. Slums: Clearance & improvements. 3. CBD Central Bussiness District 4. Public utility services. (b) Draw one point perspective drawing for the composition shown in figure no.1 07



(select most appropriate position and height of center of vision)

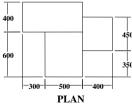


Figure No: 1

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