GUJARAT TECHNOLOGICAL UNIVERSITY
BE- SEMESTER–III (NEW) EXAMINATION – WINTER 2020
Subject Code:3130609   **Date:05/03/2021**
Subject Name: Building and Town Planning
Time:10:30 AM TO 12:30 PM   **Total Marks:56**
Instructions:
1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

			Marks
Q.1	**(a)**	Write a short note on BIM	**03**
	(b)	Define orientation and enlist factors affecting orientation, explain one.	**04**
	(c)	Draw ground floor and first floor line plan for two storied residential building on plot of 360 m2 area for a family of 8 persons. Use principle of building planning and building bye laws. Assume north direction and other necessary data	**07**
Q.2	**(a)**	Define building bye-laws and write down its objectives	**03**
	(b)	Explain following terms. i) Set back ii) Light plan iii) FSI iv) floor area	**04**
	(c)	Explain in detail the principle of planning	**07**
Q.3	**(a)**	Write a short note on ODPS.	**03**
	(b)	Draw and explain: Key plan, site plan and layout plan	**04**
	(c)	State requirements of hospital building and draw line plan of it.	**07**
Q.4	**(a)**	Write down the differences between one-point perspective and two-point perspective	**03**
	(b)	Enlist the general principle in construction of earthquake resistance building and explain any one.	**04**
	(c)	Assuming suitable position and height of the observer and other essential data draw a perspective view of a room 6 M X 4.5 M with the following details:	**07**

      i) Plinth height   = 1.0 m
      ii) Wall thickness   = 0.3 m
      iii) Window sill level   = 0.9 m
      iv) Long wall window size = 2 m X 1.2 m
      v) Door   = 1.2 m. X 2.1 m
      vi) Lintel thickness   = 0.15 m
      vii) Clear floor height   = 3.3 m
      viii) Slab thickness   = 0.15 m
      ix) Parapet height   = 0.9 m

Q.5	**(a)**	Write down the necessity of civic survey.	**03**
	(b)	Explain the use of GIS tools in town planning.	**04**
	(c)	Explain growth of town according to origin in natural growth category with advantages and disadvantages.	**07**

Q.6	(a)	Write note on Indus valley civilization	03
	(b)	Explain growth of town according to direction.	04
	(c)	Write down the principles of town planning in detail.	07
Q.7	(a)	Define zoning and enlist principle of zoning.	03
	(b)	Define masterplan and its objectives.	04
	(c)	Discuss in detail the aspects of zoning.	07
Q.8	(a)	Explain CBD and its characteristics.	03
	(b)	Explain principle of neighborhood planning.	04
	(c)	Explain the causes of slum. Describe the methods of slum clearance.	07

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