

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B ARCH - SEMESTER- VI - EXAMINATION – WINTER 2021

Subject Code: 2X65004

Date: 10/12/2021

Subject Name: Structure - V

Time: 02:30 PM to 04:30 PM

Total Marks: 50

Instructions:

1. Attempt any five out of seven questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of IS 456, IS 1893 & IS 13920 is Permitted.

		Marks
Q.1	(a) How to Select a suitable Type of Foundation?	05
	(b) Explain the various Components of Retaining wall.	05
Q.2	(a) Write down the load combination consider as per IS 1893.	05
	(b) What do you understand by Earthquake Resisting Design?	05
Q.3	(a) Draw structural layout of the Figure 1 Plan and show the details Notation of column Number, beam Number and slabs with Spanning Direction.	10
Q.4	(a) Enlist the various types of Loads acting on Structure. Enlist the various load cases as per Indian standard	05
	(b) Explain the Strength, Stiffness and Ductility	05
Q.5	(a) What is Retaining wall? Enlist the various Types of Retaining wall	05
	(b) Explain the function of Foundation.	05
Q.6	(a) What is the function of main Longitudinal bars and Stirrups in a beam?	05
	(b) Explain Ductile detailing of a Column as per IS 13920 -2016.	05
Q.7	(a) Differentiate between Un Reinforcement and Reinforcement Masonry Structure.	05
	(b) What is Soil Liquefaction? Explain theory of Liquefaction in details.	05

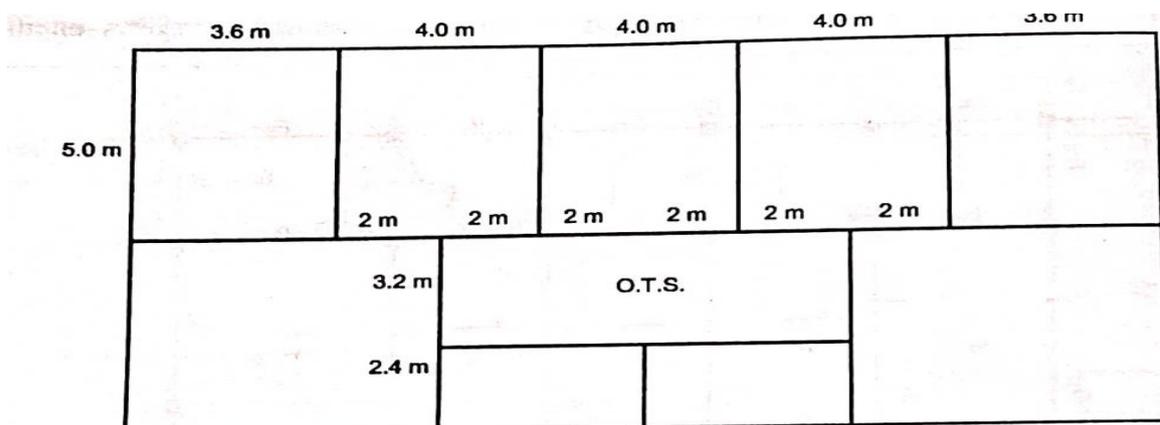


Figure 1
