

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.ARCH - SEMESTER-VI EXAMINATION – SUMMER 2022

Subject Code:2X65004

Date:08-06-2022

Subject Name:Structure - V

Time:10:30 AM TO 12:30 PM

Total Marks: 50

Instructions:

1. Attempt Any Five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.
5. Use of IS 456, IS 1893 & IS 13920 is Permitted.

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