

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.Arch - SEMESTER- VI EXAMINATION – SUMMER 2024

Subject Code: 2X65004

Date:24-05-2024

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) Write the difference between Shallow and Deep Foundation?	05
	(b) Explain the philosophy of earthquake or seismic load?	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? Draw the neat sketch and show all the forces acting on it?	10
Q.4	(a) What is earthquake resistance structure and enlist all the structural system used for earthquake resistance?	10
Q.5	(a) Write down the load combination consider as per IS 1893?	05
	(b) Explain the purpose of foundation?	05
Q.6	(a) Explain Ductile detailing of a Column as per IS 13920 -2016 with figure?	10
Q.7	(a) Mention the design steps foe wind load analysis as per IS 875?	05
	(b) What is Soil Liquefaction? Explain theory of Liquefaction in details?	05
