

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BID - SEMESTER-I EXAMINATION – WINTER 2022

Subject Code:2X15103

Date:02-03-2023

Subject Name:Basic Structures-I

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.**

Q1. Explain briefly any five man-made and natural structures. **(10)**

Q2. Name and explain the types of forces acting on and within a structure. **(10)**

Q3. Define equilibrium. Name & explain the types of equilibrium with examples. **(10)**

Q4. Define substructure and superstructure. Draw a suitable figure to explain the same. **(10)**

Q5. Name any five components of a building structure and explain them with a neat diagram. **(10)**

Q6. Explain with a detailed diagram the load distribution mechanism in a structure. **(10)**

Q7. Explain the difference between load bearing structure and framed structure with neat diagrams. **(10)**
