

Enrolment No./Seat No _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BI- SEMESTER-I EXAMINATION – WINTER 2025

Subject Code:2X15103

Date:27-11-2025

Subject Name: Basic Structures-I

Time:10:30 AM to 12:30 PM

Total Marks:50

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

Q.1 Differentiate between load bearing structure and framed structure. 10

Q.2 Describe any four structural elements used in buildings Also explain their function and support your answer with neat sketches. 05

Q.3 Explain in detail with a neat diagram the components of a building. 10

Q.4 Explain Equilibrium and conditions of equilibrium. 05

Q.5 Explain different types of foundation and there use with neat diagrams. 10

Q.6 Define substructure and superstructure. Draw a suitable figure to explain the same. 10
