

Enrolment No./Seat No_____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER- I & II EXAMINATION – SUMMER 2026

Subject Code:3110004

Date:06-07-2026

Subject Name:Basic Civil Engineering

Time:10:30 AM TO 01:00 PM

Total Marks:70

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.

	Marks
Q.1 (a) Discuss scope of Civil Engineering.	03
(b) Give classification of aggregates.	04
(c) Describe briefly the uses and application of GPS	07
Q.2 (a) What are the sources of error in levelling?	03
(b) Draw a neat sketch of dog-legged stair.	04
(c) Describe the various sanitary fittings used in house drainage plumbing system.	07
OR	
(c) Enlist and explain various types of loads acting on building.	07
Q.3 (a) Discuss the importance of zoning.	03
(b) Differentiate between prismatic compass and surveyor's compass.	04
(c) What are the elementary principles of building planning? Describe any two in detail.	07
OR	
Q.3 (a) What are the Indian standards for drinking water?	03
(b) Discuss concept of smart city.	04
(c) Write short note on 1) Ribbon development 2) Satellite towns	07
Q.4 (a) Differentiate between Magnetic meridian and True meridian	03
(b) Give full form of: a) MH b) FSL c) BBCC d) RCC	04
(c) Describe various characteristics of BRTS.	07
OR	
Q.4 (a) Enlist Instruments used in chain surveying	03
(b) Write short note on Floor area ratio.	04
(c) Describe water borne diseases with control measures.	07
Q.5 (a) Define: 1) True bearing. 2) Local attraction. 3) Arbitrary meridian.	03
(b) Enlist the various instruments used in chaining? Describe briefly.	04
(c) Write short note on: 1) Road markings. 2) Traffic signals.	07
OR	
Q.5 (a) What are the uses of a contour map?	03
(b) Differentiate between Height of instrument method and rise and fall method.	04
(c) Explain the methods of determination of the correct bearing of lines of traverse if some stations are suspected of local attraction.	07
