

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-I &II (NEW) EXAMINATION – SUMMER-2019****Subject Code: 3110004****Date: 11/06/2019****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.

	Marks
Q.1 (a) Discuss Role of Civil Engineer in society.	03
(b) Explain traffic signals in brief.	04
(c) Enlist various types of civil engineering materials. Discuss types, properties and uses of cement.	07
Q.2 (a) What is FSI? Discuss in brief.	03
(b) Write a short note on low cost housing.	04
(c) Enlist and explain principles of planning.	07
OR	
(c) Discuss objects and advantages of zoning.	07
Q.3 (a) What is building services? Explain in brief.	03
(b) Draw any four symbols used in electrical layout.	04
(c) Enlist and explain various types of loads acting on building.	07
OR	
Q.3 (a) What is nominal dimensions for door and window?	03
(b) What are different types of brick bonds? Explain any one.	04
(c) Explain with neat sketch various components of building & its functions.	07
Q.4 (a) Enlist various instruments used in linear measurement.	03
(b) What is whole circle bearing and quadrantal bearing?	04
(c) Explain methods of levelling.	07
OR	
Q.4 (a) Define: Contour, Meridian, Bearing.	03
(b) Draw a neat sketch of a theodolite showing its various parts.	04
(c) Explain chaining on plane ground.	07
Q.5 (a) Explain smart city and its features.	03
(b) Compare BRTS and Metro.	04
(c) Discuss Heritage structures & its conservations.	07
OR	
Q.5 (a) Explain solid waste management system in brief.	03
(b) Write a short note on rain water harvesting systems.	04
(c) Describe mass transportation systems.	07
