

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- SEMESTER-I & II(NEW)EXAMINATION – SUMMER 2022****Subject Code:3110004****Date:08-08-2022****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) What is a role of civil engineer in the society? **03**
 (b) Explain the important pillars of smart city. **04**
 (c) The following bearings were taken on a closed traverse PQRS find out internal angles and correct them if necessary **07**

Line	FB	BB
PQ	40°00'	220°00'
QR	80°25'	260°25'
RS	145°50'	325°50'
SP	270°50'	90°50'

- Q.2** (a) Why the town planning is essential and necessary? **03**
 (b) Explain the primary divisions of surveying. **04**
 (c) Explain the classification of buildings in detail. **07**
OR
 (c) Explain the classification of surveying in detail. **07**

- Q.3** (a) Explain the types of meridians. **03**
 (b) What points are to be kept in mind while selecting the site for a residential building? **04**
 (c) Explain in detail features of smart city **07**

OR

- Q.3** (a) Enlist and explain types of bearing with neat sketch. **03**
 (b) Discuss the types of traffic signs and draw traffic sign for speed limit, no-parking and cross road. **04**
 (c) Explain the principles of building planning. **07**

- Q.4** (a) Write the advantages and disadvantages of riverfront development. **03**
 (b) Write a short note on growth of towns. **04**
 (c) Explain the impact of industrial development on the economy of the country. **07**

OR

- Q.4** (a) What is solid waste management? Discuss in brief the classification of solid waste. **03**
 (b) Discuss the concept of smart city. **04**
 (c) Enlist types of bonds in masonry. Draw a neat sketch of english bond and explain it **07**

- Q.5** (a) Discuss the main reasons for the slum formation. **03**

- (b) Discuss in brief the scope of civil engineering according to field of work. **04**
- (c) Explain with neat sketch key plan, site plan, and layout plan. **07**

OR

- Q.5**
- (a) What is the concept of BRTS? Discuss its advantages and disadvantages. **03**
 - (b) Define zoning. Write objectives and principles of zoning. **04**
 - (c) What are the properties of good bricks? Discuss the classification of bricks. **07**
