

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER– I & II (NEW) EXAMINATION – WINTER 2019****Subject Code: 3110004****Date: 08/01/2020****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 the impact of infrastructural development on economy of country. | 03 |
| | (b) Enlist various types of cement and discuss the properties of any two. | 04 |
| | (c) Define Remote Sensing. Give the applications of remote sensing. | 07 |
| Q.2 | (a) Define the following terms: a) Datum b) Change Point c) Contour Interval | 03 |
| | (b) Explain site plan and key plan. | 04 |
| | (c) Enlist various building services and objectives of building services. | 07 |
| OR | | |
| | (c) Draw a detailed sketch of a cross section of a wall showing the components of the building. | 07 |
| Q.3 | (a) Give necessity of town planning. | 03 |
| | (b) Differentiate between plane survey and geodetic survey. | 04 |
| | (c) Enumerate various principles of planning and explain any two in detail. | 07 |
| OR | | |
| Q.3 | (a) Draw traffic signals for (i) speed limit (ii) No parking | 03 |
| | (b) What are the benefits of Green building | 04 |
| | (c) Briefly outline causes characteristics and effects of slum. | 07 |
| Q.4 | (a) Enlist Instruments used in chain surveying | 03 |
| | (b) Write short note on FSI | 04 |
| | (c) Describe water borne diseases with control measures. | 07 |
| OR | | |
| Q.4 | (a) Give difference between Surveyors and prismatic compass. | 03 |
| | (b) Give full form of: a) DPC b) MH c) FSL d) BBCC | 04 |
| | (c) Explain various aids and devices used to control and regulate traffic. | 07 |
| Q.5 | (a) Differentiate between W.C.B and Q.B system. | 03 |
| | (b) Explain with sketch the use of Line ranger. | 04 |
| | (c) Write short note on BRTS | 07 |
| OR | | |
| Q.5 | (a) Describe with sketches characteristics of contours. | 03 |
| | (b) Write short note on origin of towns. | 04 |
| | (c) Given below are the bearings of lines of a closed traverse ABCD. Calculate the interior angles. | 07 |

Line	F.B
AB	N45°E
BC	N75°E
CD	S35°W
DA	N65°W