

Total No. of Questions – [4]

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G.R. No.	
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Paper code - U117-103 (T2)

October
~~SEPTEMBER~~ 2017 / IN - SEM EXAMINATION (T2)

F. Y. B. TECH. (COMMON) (SEMESTER - I)

COURSE NAME: BASIC CIVIL ENGINEERING (Code U117-103)
(2017 PATTERN)

[Time: 1 Hour]

[Max. Marks: 30]

Instructions to candidates:

- 1) Answer Q.1 OR Q.2, Q.3 OR Q.4.
- 2) Figures to the right indicate full marks.
- 3) Use of scientific calculator is allowed.
- 4) Assume suitable data wherever necessary and state them clearly.

Q. 1) (a) Following readings were taken with a dumpy level and 4m leveling staff on a continuously sloping ground: 0.500, 0.950, 1.250, 3.850, 0.450, 1.650, 2.250, 3.650, 0.750, 1.550, 2.750 and 3.450. The first reading was taken on a BM of RL 100.00 m. Calculate reduced levels of other staff stations by rise and fall method. Apply usual check. [6]

(b) State two uses of each of the following:

(i) Total Station, (ii) GPS, (iii) Ranging Rod. [6]

(c) What is the meaning of Scale & R.F.? Differentiate clearly between Nominal (Engineer's) Scale and R. F. [4]

OR

Q. 2) (a) State the Principles of Surveying & explain them with sketches. [6]

(b) Define contour line and contour interval. Explain two Characteristics of contours with neat sketches. [6]

(c) Explain temporary adjustments of Dumpy level. [4]

Q. 3) (a) Differentiate clearly between carpet area and built up area of a building with proper sketches. [6]

(b) Discuss various considerations of 'Sanitation'. [4]

(c) What are the minimum requirements for total openings in a habitable room? (State any four) [4]

OR

Q.4) (a) Summarize concept of 'green building' & explain its importance. [6]

(b) Explain extensively how 'roominess' plays a significant role in sizing rooms in a building. [4]

(c) What are Building Byelaws? State four objectives of byelaws. [4]
