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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (CE) (Sem.–4th)

SURVEY-II

Subject Code : CE-202

Paper ID : [A0606]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY.
2. Attempt any FOUR questions from SECTION-B.
3. Attempt any TWO questions from SECTION-C.

SECTION-A (10 × 2 = 20 Marks)

1. Write short notes on :

   (a) Explain Collimation adjustment.

   (b) What is meant by satellite station?

   (c) Write the expression for Bowdittch's Rule.

   (d) Differentiate between temporary and permanent adjustments.

   (e) Write the principle of theodolite traversing.

   (f) Why Base line is used in Geodetic Surveying?

   (g) Explain the principle of tacheometric survey.

   (h) How the stations are fixed in Geodetic surveying?

   (i) Explain axis signal correction.

   (j) Why traverse computations are necessary?

SECTION-B (4 × 5 = 20 Marks)

2. What are the different methods of setting out curves.
3. What are latitudes and departures? How will you balance a closed traverse? What are the checks for closed and unclosed traverses?
4. What are the essential components of GIS? State its applications in Civil Engineering?
5. Explain the working principle of GPS.
6. What are platforms? Explain briefly different types of platforms used in remote sensing?

SECTION-C (2 × 10 = 20 Marks)

7. The vertical angles to vanes fixed at 0.7m and 3.4m above the foot of the staff held, vertically at a point were –0°40' and +2°12' respectively. Find the horizontal distance and RL of the point if the level of instrument axis is 129.450m above datum ?
8. Explain the different correction to base line measurements.
9. Explain any four permanent adjustments of a theodolite.