

Roll No. ....

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## Paper ID [A0606]

(Please fill this Paper ID in OMR Sheet)

**B.Tech. (Sem.- 4<sup>th</sup>)**  
**SURVEY - II (CE-202)**

Time : 03 Hours

Maximum 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

Q1)

(10 × 2 = 20)

- a) Differentiate between face left and face right observations in theodolite.
- b) Write down the statement of transit's rule for balancing closed traverse.
- c) What is versine of a simple circular curve?
- d) Find out the length of long chord a simple circular curve of radius R and angle of deflection  $\Phi$ .
- e) What are the additive and multiplying constant of tacheometer fitted with anallactic lens?
- f) Write an expression for pull correction in the measurement of base line.
- g) What are curvature and refraction corrections?
- h) Enumerate the essential components of GPS.
- i) Differentiate between raster and vector data in GIS.
- j) Name the Indian remote sensing satellites.

### Section - B

(4 × 5 = 20)

- Q2) How you would measure horizontal angle by method of iteration, explain.
- Q3) What are the different types of curves and where are they used?
- Q4) List all the required corrections in the measurement of base line.
- Q5) How do you determine the constants of a tacheometer? Explain.
- Q6) What are differences between data and information? Enumerate the main characteristics of spatial data.

### Section - C

(2 × 10 = 20)

- Q7) Following are the readings taken on a closed traverse:

Line	W.C.B	Length(m)
AB	45°10'	89.31
BC	72°20'	219.76
CD	161°50'	151.18
DE	228°10'	159.10
EA	300°42'	232.26

Adjust the traverse using Bowditch's rule.

- Q8) What are the common difficulties in setting out simple curves? Describe briefly the methods employed in overcoming them.
- Q9) Write down short notes on the followings:
- Relief displacement in aerial photographs.
  - Applications of GIS.

