



c09-c-305

3221

**BOARD DIPLOMA EXAMINATION, (C-09)
MARCH/APRIL—2018
DCE—THIRD SEMESTER EXAMINATION
SURVEYING—II**

Time : 3 hours]

[*Total Marks* : 80

PART—A

3×10=30

- Instructions** : (1) Answer **all** questions.
(2) Each question carries **three** marks.
(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. Define latitude and departure of a survey line.
- * 2. What do you mean by omitted measurements in theodolite survey?
3. State any three instrumental errors in theodolite survey.
4. List out different methods of trigonometric levelling cases.
5. What are different methods of tacheometric surveying?
6. What do you mean by stadia tacheometry?
7. Define simple circular curve.
8. List different angular methods of curve setting.
9. List various types of EDM instrument.
10. Write a short note on GPS.

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PART—B

10×5=50

- Instructions :** (1) Answer *any five* questions.
(2) Each question carries **ten** marks.
(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

- 11.** Explain the measurement of horizontal angle by the method of repetition.
- 12.** Explain with help of neat sketch, the fast needle method of traversing.
- 13.** Write the procedure to find the distance and elevation of an object whose base is inaccessible and the two instrument stations being in the same vertical plane.
- 14.** The vertical angles corresponding to staff reading of 1 m and 3.5 m above the foot of the staff held vertically over a station A were $2^{\circ}42'$ and $6^{\circ}12'$. If the RL of trunnion axis is 125.25, calculate the RL of the staff.
- 15.** How will you set out a circular curve with a chain and a theodolite by method of tangential angles?
- 16.** A left-handed circular curve of radius 400 m is to be inserted between two straights meeting at chainage 2320 m at an angle of 140° to one another. Prepare suitable data for setting the curve by offsets from chords produced. Assume a peg interval of 30 m.
- 17.** (a) Write any five uses of GPS in civil engg.
(b) List any five uses of photogrammetry.
- 18.** (a) Explain briefly the raster and vector data representation in GIS.
(b) State any five applications of GIS in transport planning.
