



Surveying – II (114115)

P. Pages : 2

Time : Three Hours

Max. Marks : 80

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answer sheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Answer **any two** subquestions from each unit.
5. Figures to right indicate full marks.
6. Assume suitable data if necessary.

UNIT - I

1. What are the object and method of geodetic surveying. 8
2. Explain different four correction to be applied to the base line measurement. 8
3. From an eccentric station E, 14.25 m to the west of main station B following angle were measured. 8
 $\angle BEC = 78^\circ 25' 32''$ $\angle CEA = 56^\circ 30' 20''$
The station E & C are on the opposite side of the line AB. Reduce the angle centre B. if AB & BC are 5368.2 m & 4682.3 m respectively.

UNIT - II

4. State and explain four law of weight. 8
5. Explain the procedure of adjustment of a Geodetic quadrilateral by approximate method. 8
6. In carrying a line of level across a river, the following eight reading were taken with a level under identical conditioned. 8
2.322, 2.346, 2.352, 2.306, 2.312, 2.300, 2.306, 2.326.
calculate
i) The probable error of single observation.
ii) The probable error of the mean.

UNIT - III

7. Define Relief displacement. Derive the expression for relief displacement. 8
8. The scale of an aerial photography is 1 cm = 100 m. The photograph size is 20 cm x 20 cm Determine the number of photograph required to cover an area 10 km x 10 km. if the longitudinal lap is 60% and the side lap is 30%. 8
9. a) Differentiate between Map and Vertical photograph.
b) Write a short note on Mirror stereoscope. 8

UNIT - IV

10. What is meant by Sounding ? State various method of locating sounding ? Explain any one method. 8
11. Write a short note on
a) Nautical Sextant 8
b) Fathometer
12. Describe the classification of Tide Gauge. 8

UNIT - V

13. What is total Station ? State the classification base on range of total station. 8
14. Explain type of platform used in remote sensing. 8
15. State applications of remote sensing to civil Engg. 8
