C 1250 (Pages : 2) Name.....

Reg. No.....

FOURTH SEMESTER B.TECH. (ENGINEERING) [14 SCHEME] EXAMINATION, APRIL 2016

CE 14 406—SURVEYING–II

Time : Three Hours Maximum : 100 Marks

Part A

I. Answer any *eight* questions out of ten :

1 Brief about Instruments constants and Anallactic lens and its uses.

2 Brief about different sounding Equipments.

3 Explain about Signals used in Triangulation survey.

4 Explain the methods ob base line measurement.

5 Brief about analytical method of Photogrammetry

6 Explain the procedure for finding azimuth by equal altitude method

7 Classify and explain the remote sensing.

8 Explain about raster and vector.

9 Explain about substance bar and its uses

10 Brief about Probable error and most probable value

(8 × 5 = 40 marks)

Part B

II. Answer *all* questions :

11 Stadia Observations were taken using a tacheometer fitted with Anallactic lens and 4 m staff.

Inst at	Sight to	Bearing	Vert. angle	Stadia reading			Remarks
A	M	30°	10° 11' 40"	0.500	2.000	3.500	Vertical staff
A	N	120°	– 7° 31' 40"	0.600	2.100	3.600	Vertical staff

Calculate the distance MN and Gradient between MN. Take BM reading as 1.500 and its RL as 255.500.

Or

12 Explain in detail about the methods of Sounding.

Turn over

13 From a satellite Station S, 60 m from a triangulation Station C, the horizontal angles observed to other stations are as follows :

A – 0° 00' 00"

B – 71° 54' 32"

C – 296° 12' 02"

The approximate Lengths of AC and BC are 18024 m and 23761 m respectively. Compute angle subtended at C by the line AB Explain the Bessel's Three Point Problem with neat diagram.

Or

14 Find the most probable value of angles A, B and C of a triangle ABC, from the following observation equations :

A = 68° 12' 36"

B = 53° 46' 12"

C = 58° 01' 16"

15 Explain the different co-ordinate systems in astronomical surveying with neat surveying.

Or

16 Explain the methods of aerial surveying.

17 Explain the Principles and applications of GIS.

Or

18 Explain the Basic principles of remote sensing.

(4 × 15 = 60 marks)