Total No. of Questions :8]　　　　*[Total No. of Printed Pages :2*

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CE-112
B.E. I & II Semester
Examination, June 2017
Choice Based Credit System (CBCS)
Introduction to Surveying

Time : Three Hours

Maximum Marks : 60

Note : i)　Attempt any five questions.

　　　ii)　All questions carries equal marks.

1. a)　Discuss in brief the principles of Surveying.

　　b)　Differentiate clearly between plane and geodetic surveying.

2. A 20m chain used for survey was found to be 20.10m at the beginning and 20.30m at the end of the work. The area of the plan drawn to scale of 1cm = 8m was measured with the help of a planimeter and was found to be 32.56sq.cm. find the true area of the field.　www.rgpvonline.com

3. Examine the following notes on a compass survey for local attraction. Determine correct bearings. Also determine the included angles at A, B, C, D and E.

Station	FB	BB
A	S10°0'W	N85°0'E
B	S77°0'E	N10°0'E
C	N05°0'	N75°0'W
D	N54°0'W	S02°0'
E	S88°0'W	S50°0'

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4. Explain radiation and intersection method of plane tabling.

5. The following consecutive readings were taken along AB with a 4m leveling staff on continuously slowing ground at intervals of 20m : 0.34m on A, 1.450, 2.630, 3.875, 0.655, 1.745, 2.965, 3.945, 1.125, 2.475, 3.865 on B. The elevation A was 60.350.Enter the above readings in a level book form and work out RLs by rise and fall method. Also find the gradient of the line AB.

6. Explain the characteristics of contours. Explain the methods of locating contours.

7. Explain the different between Tangential and Stadia tacheometry. How will you determine the Stadia constants?

8. A tacheometer is setup at an intermediate point at on a traverse course PQ. The following observations are made on the vertically held staff.

Staff station	Vertical Angle	Staff intercept	Axial hair reading
P	8°36'	2.350	2.105
Q	6°6'	2.055	1.895

The instrument is fitted with an analytic lens and the constant is 100- compute the length of PQ and R-C of Q that of P being 321.5m.

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