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Code No: CE1505

GEC-R14

II B. Tech I Semester Supplementary Examinations, May 2016

SURVEYING
(Civil Engineering)

Time: 3 Hours

Max. Marks: 60

Note: All Questions from **PART-A** are to be answered at one place.

Answer any **FOUR** questions from **PART-B**. All Questions carry equal Marks.

PART-A

6 × 2 = 12M

1. Define Check lines and Offsets.
2. Distinguish between Whole Circle Bearing and Reduced Bearing.
3. What is the effect of Curvature and Refraction in levelling?
4. Define Line of Collimation and Changing Face.
5. List out any four functions of Total Station.
6. Define Normal Chord and Sub Chord.

PART-B

4 × 12 = 48M

1. Discuss the methods of overcoming difficulties if there are obstacles in chaining and ranging both. (12M)
2. a) List out errors in Compass survey. (6M)
b) A closed compass traverse ABCD was conducted round a lake and the following bearings were obtained. Determine the stations effected from local attraction and obtain correct bearings. The bearings of the sides of a closed traverse ABCD are as shown below: (6M)

Side	F.B	B.B
AB	124°30'	304°30'
BC	68°15'	246°0'
CD	310°30'	135°15'
DA	200°15'	17°15'

3. a) Briefly explain the Profile leveling. (6M)
b) What do you mean by Contour interval? Explain about the factors to be considered for selecting the contour interval. (6M)
4. a) Describe the procedure of measurement of Direct angle. (6M)

- b) Describe the procedure of measurement of Vertical angle. (6M)
5. a) What are the advantages of Tacheometric surveying. (4M)
- b) What are the different methods employed in Tacheometry survey? Explain the method commonly used. (8M)
6. a) Explain about setting of curve by perpendicular offsets from the tangents method. (6M)
- b) What is a Compound Curve? Give all the elements of a curve with the help of neat sketch. (6M)
