Roll No.   Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (CE) (Sem.–4th)

SURVEY-II

Subject Code : CE-202

Paper ID : [A0606]

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students has to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students has to attempt any TWO questions.

SECTION-A

1. **Answer briefly :**

   (a) Name the fundamental lines of a theodolite.

   (b) What are the advantages and disadvantages of movable hair method?

   (c) A rising gradient of 0.8% meets a falling gradient of 0.4%. Find length of vertical curve if the rate of change of grade is 0.1% per 30 m.

   (d) Name the various corrections to be applied to a measured base line.

   (e) What do you mean by 'Reduction to Centre'?

   (f) What are the requirements of a site selected for measurement of base line in triangulation?

   (g) What are the basic components of GIS?

   (h) Differentiate between active and passive remote sensing.

   (i) Differentiate between raster and vector data in GIS.

   (j) What is spire test?

SECTION-B

2. Explain the re-iteration method to measure horizontal angle and how readings are recorded?

3. Define G.P.S. and discuss its various c

4. Discuss various applications of remote

5. What is meant by degree of curve ? De of curve.

6. Explain the procedure to determine the object can not be measured in trigonom

SECTION

7. A traverse survey was conducted and c

Line	PQ	QR
Length (m)	102.8	98.4
Bearing	143°47'30''	48°06'37''

Find the magnitude and direction of clo

8. AT_1 and BT_2 are two straight lines mee Find the radius and tangent lengths of passing through a point P.

   Angle $T_1IP = 30°$

   Distance $IP = 70$ m

9. A tacheometer was set up at an inter following observations were taken on a

Staff Station	Vertical angle	Inter
P	+ 9°30'	2
Q	+ 6°00'	2

The multiplying constant of instrument is

Find distance of Q from P and RL o calculate gradient of line PQ.

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