

00005

B.TECH CIVIL ENGINEERING (BTCLEVI)

Term-End Examination

December, 2012

BICE-004 : ADVANCE SURVEYING

Time : 3 Hours

Maximum Marks : 70

Note : Attempt any seven questions. Use of scientific calculator is permitted.

1. What is tacheometric survey ? Explain the principle of stadia method. 10

2. Explain the methods of sounding. 10

3. What are simple circular curves ? Write its elements. How will you set a curve by theodolite ? 10

4. (a) What is an ideal transition curve ? 5
(b) Find the length of a verticle curve if grades are +1.2% & -0.8% and the rate of change of grade per 20m chain is 0.1% 5

5. Describe the following : 10
- (a) Satellite stations
 - (b) Signals and towers.
 - (c) strength of figure.
6. What is total station ? How will you use it in a control survey ? 10
7. What do you understand by precise levelling ? 10
Explain about automatic laser level.
8. What do you understand by aerial photogrammetry and relief displacement ? 10
9. What is the importance of remote sensing ? Write the application of various remote sensing satellites. 10
10. Write short notes on **any two** :
- (a) Difference between triangulation and trilateration 10
 - (b) EDM
 - (c) Stereoscopy.
-