

00194

B.TECH CIVIL ENGINEERING (BTCLEVI)**Term-End Examination****June, 2014****BICE-004 : ADVANCE SURVEYING***Time : 3 Hours**Maximum Marks : 70*

*Note : Answer **any five** questions. Assume missing data if any.
Use of scientific calculator is **permitted**.*

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1. (a) What are the different methods employed in tacheometric survey ? Explain the method commonly used. 7
 - (b) How do you determine the constants of a tachometric in the field ? Explain. 7
 2. (a) What is the purpose of a shore line survey ? Explain how would you locate the banks of a wide river ? 7
 - (b) What is meant by three point problem in hydrographic surveying ? How is it solved mechanically ? 7
 3. (a) Mention the various methods of setting out a simple curve. Explain the method of offsets from chords produced. 7
 - (b) Two tangents intersect at the chainage 1190 m, the deflection angle being 36° . Calculate all the data necessary setting out a circular curve with radius of 300 m by deflection angle method. The peg interval is 30 m. 7

4. (a) How are the triangulation systems classified? Indicate the use of each system. 7
(b) What are the steps taken to ensure accuracy in : 7
(i) Angular measurements.
(ii) Linear measurements in triangulation.
5. Draw neat sketches and explain the following terms : 14
(a) Declination
(b) Hour angle and right ascension
(c) Azimuth and altitude
(d) Celestial poles
6. (a) Define remote sensing and briefly explain the principle of remote sensing. 7
(b) Write a note on application of remote sensing. 7
7. Write short notes on **any two** of the following :
(a) Use of Automatic Laser Level 2x7=14
(b) Electronic Distance Measurement (EDM)
(c) Photo Mosaics
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