B.TECH. CIVIL ENGINEERING (BTCLEVI)

Term-End Examination

December, 2013

BICEE-016 : TRANSPORTATION PLANNING

Time : 3 hours   *Maximum Marks : 70*

Note :   *(i)*   *Answer **any five** questions.*

      (ii)   *Assume missing data if any.*

      (iii)   *Use of **scientific** calculator is **permitted**.*

1. (a) Explain the inventories in transportation planning process.   **6**

    (b) Write Short Notes on   **8**

         (i) Zoning

         (ii) Cordan line

         (iii) Expansion factor

         (iv) Sampling techniques.

2. (a) Explain with the help of flow chart the process involved in the systems approach in transport planning.   **7**

    (b) Develop the nature of travel demand from the fundamental theories.   **7**

3. (a) Differentiate between average factor method and uniform factor method with suitable examples. 7

   (b) Compare the concepts, model forms and calibration process of different type of Growth factors methods with Gravity mode. 7

4. (a) What is trip generation? Explain the importance of Trip Generation in transportation planning process. 7

   (b) Explain the method of Frater method for estimating trip distribution between two given zones. 7

5. (a) With the help of a diagram explain the basic movements for which the survey data is required. 7

   (b) Explain the survey procedure, sample size, sample selection and expansion factors for home interview survey. 7

6. (a) With the help of neat sketches explain the use of diversion curves in traffic assignment. 7

   (b) Describe the methods used for converting the travel time savings into monetary value. 7

7. (a) Explain the recent development in modal split analysis. 7

   (b) What is the purpose of traffic assignment onto the networks ? 7