CE 331A: GEOINFORMATICS

LABORATORY EXERCISE 7-: GNSS FOR LARGE SCALE MAPPING (TRIMBLE JUNO 3B)

Objectives:

1. To understand the specifications and handling of Trimble Juno 3B GNSS handheld receiver.
2. To map the features using Trimble Juno 3B.
3. To learn the usage of QGIS software.

Large scale mapping using Trimble Juno 3B

1. This is an individual exercise.
2. Using this handheld GNSS receiver you need to prepare a map of an area assigned to your group. To do so, you need to collect all the features at that location.
3. Features which you collect should be of three types: point (e.g. tree, pole), polyline (e.g. road, footpath) and polygon (e.g. fountain boundary).
4. Once feature mapping is done, return to lab and export the data to shapefile format (.shp). By using these shapefiles you need to prepare a map (using QGIS software).
5. Finally export those shapefiles to KML/KMZ format. Open these KML/KMZ files in Google Earth (GE) i.e., you are overlaying collected data on to the GE.
   Note: Comment on the accuracy of the collected data over GE.
6. Submit and report the following:
   a. Specifications of the handheld GNSS receiver used and comment on its accuracy.
   b. Map by each individual in A3 soft copy and A4 (colour) hard copy. Choose colour and symbol for the features as per SoI standards.
   c. Submit shapefiles and KML/KMZ files (by each individual).
   d. Comment on the accuracy of the collected data over GE.

Note: Every map should be prepared as per the map layout given in the document 'Format for Lab Report submission' (available at course FTP).

Allotted Mapping Areas