

International Institute of Information Technology Hyderabad
(Deemed to be University)

Spring 2020
CES442 Disaster Management

Assignment 5
Applications Using QGIS —Raster Analysis

Due: 05 April 2020, 11.55 PM

Max. Marks: 50

Tasks:

1. Download Landsat 7 ETM+ data of your state.
2. Make 1 TCC and 3 FCC. Also, enhance all the images.
3. Create 3 layers (e.g., vegetation, roads, rivers, waterbody) in one of the FCC. Name the image, show legends, and North direction etc.
4. Perform *Unsupervised* Classification of the image using *Kmeans* and *Isodata* algorithm (number of classes will be more than or equal to 3).
5. Perform *Supervised* Classification of the image using *Maximum Likelihood* algorithm (minimum number of classes will be 5- signature sets).
6. Save the final file in .img or .jpeg format.

Notes:

- a. Use data that are free from cloud and line strips.
- b. Use data other than that used during tutorial class.
- c. Use Landsat7 C1 level 1 Data only.
- d. Upload QGIS files with signature set files in *zip format*. Name the zip file as: Name_A5_Roll no.

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