

Contributor: Dr. Shahnawaz, Z_GIS, PLUS, Austria

DEvision Module-2: Geospatial Models and Representations (DEmodels)

LU-1: Acquisition and integration of feature data

Exam Questions:

LU-2: Raster data and imagery

Exam Questions:

1. Write about 300 words about the following:

- What are the differences between Feature and Raster data models? Which data model is more suitable for representing your locality in digital form?
- What is the impact of Spatial Resolution of a raster dataset / imagery on the accuracy of the features it represents?

2. Write about 300 words about the following:

- What do you understand by Open Data Services? Select 2 open spatial data platforms for each type Spatial Data Model, one platform may be regional and one global, and describe the type of spatial data these provided and which areas of earth these cover.

1. Hands-On Exercise:

- ArcGIS Online: Use Satellite Imagery as base map > Zoom to your city
- Make an appropriate layer to mark 10-12 locations of the schools in your city
- Make an appropriate layer to draw the roads / streets connecting these schools to the nearest bus station
- Make an appropriate layer to depict 10-12 open spaces in your city
- Add some attributes in each feature layer. If you don't know many attributes then you may consult Google Maps etc.

2. Hands-On Exercise:

- Change the resolution of a given imagery to 0-5X, 2X, 4X of the original pixel size and observe the changes in the pattern of the features identifiable on the imagery.
- Write 3-5 lines describing each step you implemented for generating each layer, also insert some clips / screen shots of various steps

-

3. Hands-On Exercise:

- Prepare a track route of your locality using ESRI Quick Capture Mobile App and mark various categories of built-Up structures. Verify your results on ArcGIS Online using base Satellite imagery