

1. Explain the Digital Image Processing in details with all its elements using suitable examples.
2. Discuss in details about the different spatial and non-spatial layer generation techniques by using any open source software. Also choose any project/application of your choice representing how these layers enhances in decision making.
3. What type of data can be used for generating surface? Briefly discuss the DEM and DTM approaches that can be used to generate and compare map surfaces.
4. What is cartography? What do you understand by projection and datum? Discuss about the significance and different uses of maps.

5. Define in details about the different types of resolutions with suitable examples.

**Section - B**  
**(Short-Answer-Type Questions)**

Note - Section 'B' contains Eight (08) short-answer-type questions of Seven (07) marks each. Learners are required to answer any Five (05) questions only.  
(5 × 7 = 35)

1. What do you understand by mapping accuracy ?
2. List and explain the factors responsible for geometric distortion.
3. Write short note about metadata and raster data.

4. Explain the RGB and FCC formats with suitable examples.
5. What do you understand by the image filtering? Define Low-pass filter.
6. Write the difference between DEM and TIN.
7. What are the different types of image formats? Explain at least three types of formats.
8. Define the importance of vector data over the raster data. Describe various types of vector data with suitable examples.

## **MGIS-04/PGDGIS-04**

### **DIP & Mapping**

#### **Master of Geographical Information System/ Post Graduate Diploma in Geographical Information System (MGIS/PGDGIS-11-16-17)**

**First Semester, Examination - 2019**

**Time : 3 Hours**

**Max. Marks : 80**

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Note - This Paper is of Eighty (80) marks divided into two (02) Sections A and B. Attempt the Questions contained in these sections according to the detailed instructions given therein.

#### **Section - A**

#### **(Long-Answer-Type Questions)**

Note - Section 'A' contains Five (05) long-answer-type questions of Fifteen (15) marks each. Learners are required to answer any Three (03) questions only.

(3 × 15 = 45)