Roll No.																					
----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

# MGIS-04/PGDGIS-04

# **DIP & Mapping**

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

First Year, Examination, 2017

Time: 3 Hours Max. Marks: 70

Note: This paper is of seventh (70) marks containing three (03) sections A, B and C. Learners are required to attempt the questions contained in these sections according to the detailed instructions given therein.

### Section-A

## (Long Answer Type Questions)

**Note:** Section 'A' contains four (04) long answer type questions of fifteen (15) marks each. Learners are required to answer *two* (02) questions only.

- 1. Explain the basic elements of digital image processing.
- 2. What is filtering in DIP? Explain its all components.
- 3. What is the difference in image restoration and image enhancement? Discuss the image restoration and image enhancement techniques'.
- 4. Discuss in detail about labelling.

A-91 **P. T. O.** 

## [2] MGIS-04/PGDGIS-04

#### Section-B

## (Short Answer Type Questions)

**Note:** Section 'B' contains eight (08) short answer type questions of five (05) marks each. Learners are required to answer *six* (06) questions only.

- 1. What are the types of image resolutions?
- 2. What is radar image?
- 3. What is the significance of ground truthing?
- 4. What is Metadata? Explain the types of Metadata.
- 5. Explain the History of Cartography.
- 6. What is the difference between RADAR and LIDAR?
- 7. What is SRTM DEM?
- 8. What are Remote sensing data types? Explain.

#### Section-C

# (Objective Type Questions)

**Note:** Section 'C' contains ten (10) objective type questions of one (01) mark each. All the questions of this section are compulsory.

Choose the correct answer.

- 1. The transition between continuous values of the image function and its digital equivalent is called \_\_\_\_\_\_.
  - (a) Quantization
  - (b) Sampling
  - (c) Rasterization
  - (d) None of the mentioned

### [3]

2. The smallest discernible change in intensity level is called \_\_\_\_\_\_\_.
(a) Intensity Resolution
(b) Contour
(c) Saturation
(d) Contrast

#### Fill in the blanks:

- 3. 15 century maps were at first printed using ........
- 4. ..... maps symbolize features according to the value of their attributes.
- 5. A ......slope on a map will be closely spaced at the top of the terrain feature and widely spaced at the bottom.

## Write True or False:

- 6. Digital image processing is the use of computer algorithms to perform image processing on digital images.
- 7. An orderly repetition of similar tones and textures will produce a distinctive and recognizable.
- 8. Image Classification and Analysis is not one of the most common image processing functions.
- 9. Thematic and non-spatial database paper maps and tables are flexible.
- 10. Mosaic is a raster dataset composed of two or more merged raster datasets.

### MGIS-04/PGDGIS-04

100