MGIS-04/PGDGIS-04

DIP & Mapping

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

First Year Examination, 2019 (June)

Time : 3 Hours]   **Max. Marks : 80**

Note :   This paper is of Eighty (80) marks divided into three (03) sections A, B and C. 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 Nineteen (19) marks each. Learners are required to answer any two (02) questions only.

(2×19=38)

1.   What do you understand by modelling techniques in Digital Image Processing? Explain any three models of your choice.

2.   Explain the steps involved in Digital Image Processing in details.

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3. What is data in GIS? Describe various types of spatial and non- spatial datasets with apprropriate examples.

4. What are map and its types? What are its advantages? Compare the modern mapping techniques with the traditional mapping.

SECTION–B
(Short Answer Type Questions)

Note : Section 'B' contains eight (08) short answer type questions of eight (08) marks each. Learners are required to answer any four (04) questions only.   (4×8=32)

1. Write short note on Digital Elevation Model (DEM).

2. What is map and what does it measure?

3. Write a difference between False Colour Composite and True/Natural Colour Composite images.

4. Define spectral profile. Draw a suitable diagram for spectral profile of vegetation.

5. What do you understand by slope and aspect?

6. Explain the term NAVIC.

7. Define pixel and resolutions in details.

8. What is image to image registration and why it is done?

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.   (10×1=10)

1. Generation of Training site is essential for supervised classification.

(a) True   (b) False

2. What is full form of NDVI?

(a) Natural Difference Vegetation Index

(b) Normalized Difference Vegetation Index

(c) National Difference Vegetation Index

(d) Normalized Density Vegetation Index.

3. Which is used as input to create DEM.

(a) Contour   (b) Spot Height

(c) Both (a) & (b)   (d) None of these.

4. Choose the Digitization Errors.

(a) Dangles   (b) Overshoots

(c) Undershoots   (d) All of these.

5. GIS is a tool for analyzing spatial and non -spatial data

(a) True   (b) False.

6. Main Types of metadata are:

    (a) 2   (b) 3

    (c) 4   (d) None of these.

7. Tolerance is a registration error

    (a) True   (b) False.

8. Sensor LISS -III has _____ no. of spectral bands.

    (a) 2   (b) 3

    (c) 4   (d) 5.

9. Names on maps should be easily associated with the features they describe.

    (a) True   (b) False.

10. A geometry consisting of in -line arrangement of sensors for image acquisition

    (a) A photodiode   (b) Sensor strips

    (c) Sensor arrays   (d) CMOS.

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