

Roll No.

MGIS–03/PGDGIS–03/CGIS–03

Remote Sensing & GPS

Master of Geographical Information System/Post
Graduate Diploma in Geographical Information
System/Certificate in Geographical Information
System (MGIS/PGDGIS/CGIS–11/16/17)

First Year/First Semester, Examination, 2018

Time : 3 Hours

Max. Marks : 80

Note : This paper is of **eighty (80)** 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 nineteen (19) marks each. Learners are required to answer *two* (02) questions only.

1. Explain the platform and sensors available at present for acquisition of satellite imageries.
2. Explain the atmospheric interaction with electromagnetic radiation ?
3. Explain the concepts of GPS.
4. What are the methods that can be used for the multispectral classification of images ? Discuss.

(B-80) P. T. O.

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 *four* (04) questions only.

1. Draw a spectral signature curve for soil, water and vegetation.
2. Define radar sat.
3. What are types of orbit ?
4. Briefly explain band rationing.
5. Describe image with its properties.
6. Explain NDVI.
7. What do you understand by elimination key ?
8. Explain satellite data products.

Section-C**(Objective Type Questions)**

Note : Section 'C' contains ten (10) objective type questions of one (1) mark each. All the questions of this Section are compulsory.

Choose the correct answer :

1. What is metadata ?
 - (a) It is 'data about data'.
 - (b) It is 'metrological data'.
 - (c) It is 'oceanic data'.
 - (d) It is 'contour data'.
2. Fields can be :
 - (a) Discrete only

- (b) Continuous only
 - (c) Discrete or continuous
 - (d) None of the above
3. TIN stands for :
- (a) Traffic Internet Network
 - (b) Triangulated Irregular Network
 - (c) Temporal Interest Network
 - (d) Temperature Interface Node
4. SDI stands for :
- (a) Spatial Data Interface
 - (b) Spatial Data Infrastructure
 - (c) Spatial Data Intention
 - (d) Spatial Data International
5. Remote sensing includes gathering of :
- (a) Images
 - (b) Changes
 - (c) Movements
 - (d) Sounds

Write True/False :

6. The arrangement of terrain features which provides attributes : the shape, size and texture of objects is called spatial variation.

7. Due to perturbation of the orbit, satellite, orbit parameters are frequently updated on measurements carried out the three ground stations.
8. Coherence of two electromagnetic waves takes place if their phase difference is constant in time and space.
9. A map is a collection of stored, analysed data, its stored information is suitably used in making decisions.
10. The normal altitude of GPS satellite is about 36,100 km.