

Roll No.

MGIS–07

Advance GIS & RS

Master of Geographical Information System

(MGIS–11/16)

Second Year, Examination, 2017

Time : 3 Hours

Max. Marks : 60

Note : This paper is of **sixty (60)** 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. What is the advantage of doing orthorectification ? How many control points are required to perform orthorectification of an image using 3rd order polynomial ?
2. What is image enhancement ? Describe the types of image enhancement.
3. What is spatial analysis ? Describe the types of spatial analysis.
4. What is the difference between hyperspectral and multispectral image ?

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 *four* (04) questions only.

1. What is the advantage of supervised classification ?
2. What is advantage of microwave remote sensing ?
3. Write a short note on DSM.
4. Write a short note on IRNSS or GPS.
5. Write a short note on NSDI.
6. What is CIDAR ?
7. What is low-pass filter ?
8. For what purpose NDVI method is used ?

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 only one correct option.

1. Sliver polygons are :
 - (a) Gap between polygons
 - (b) Overlapping polygons
 - (c) Both of the above options are correct
 - (d) None of the above
2. Which of the following methods may be used to input paper maps into a GIS ?
 - (a) Scanning
 - (b) Tracing
 - (c) Keyboard entry
 - (d) None of the above

3. Which of the following is not an important component of GIS ?
 - (a) GIS software
 - (b) Spatial data
 - (c) Internet
 - (d) None of the above
4. OGC stands for :
 - (a) Open Geospatial Consortium
 - (b) Open Geographical Consortium
 - (c) Offline Geographical Consortium
 - (d) None of the above
5. Which of the following is an open source GIS software ?
 - (a) ArcGIS
 - (b) IGIS
 - (c) QGIS
 - (d) None of the above
6. Which of the following is microwave satellite ?
 - (a) Cartosat-3
 - (b) Landsat-8
 - (c) RISAT-1
 - (d) Oceansat-2
7. LIDAR works in which of the following EMR ranges ?
 - (a) Optical range
 - (b) IR range
 - (c) Radio
 - (d) None of the above

8. Hyperspectral sensor can have
- (a) 1 band
 - (b) 2 band
 - (c) 200 bands
 - (d) None of the above
9. In 1 : 100000 scale map, 1 cm on map corresponds to how many kilometers on the ground ?
- (a) 1 km
 - (b) 0.1 km
 - (c) 10 km
 - (d) 100 km
10. Clip operation is :
- (a) Feature extraction operation
 - (b) Feature merging operation
 - (c) Intersection operation
 - (d) None of the above