

MA/ M.SC. GEOGRAPHY
SECOND SEMESTER
ADVANCED CARTOGRAPHY
MGE – 205 [REPEAT]
[USE OMR FOR OBJECTIVE PART]

SET
A

Duration: 1:30 hrs.

Full Marks: 35

Time: 15 mins.

(Objective)

Marks: 10

Choose the correct answer from the following:

1 × 10 = 10

1. What is the radius of the Earth?
a. 7361 km
b. 6371 km
c. 8361 km
d. 6731km
2. Choropleth maps are shown by using _____
a. Shading
b. Different colours
c. Symbols, letters and numerals
d. Dots
3. 89°48'10" S and 98°48'10" W are _____
a. Longitude and latitude
b. Longitudes
c. Latitude and longitude
d. Latitudes
4. R.F. = 1/50,000, here 50,000 is the representation of _____
a. Ground distance
b. Map distance
c. Both a and b
d. None of the above
5. The curvature of the Earth surface is measured in _____ surveying.
a. Chain surveying
b. Plane surveying
c. Plane table surveying
d. Geodetic surveying
6. Which of the following is not a form of digital cartography?
a. GIS mapping
b. 3D modelling
c. Hand-drawn maps
d. Orbiting Satellite Imagery
7. What does radiometric resolution in remote sensing refer to?
a. The distance between objects that can be separated by the sensor
b. The ability of a sensor to distinguish between small differences in signal strength
c. The area covered by a single pixel in an image
d. The number of spectral bands for a sensor
8. Which of the following satellites operates in the visible and infrared spectrum for remote sensing?
a. Global Positioning System (GPS)
b. Communication satellite
c. Landsat
d. Hubble Space Telescope

9. What will a Multispectral Scanner in Remote Sensing capture?
- a. Objects in multiple dimensions
 - b. Images in multiple colors
 - c. Both objects in multiple dimensions and images in multiple colors
 - d. The heat of objects
10. What are Shapefiles mostly used for in GIS?
- a. For 3D modelling
 - b. Storing geographic features
 - c. Calculating distances
 - d. Editing images

-- --- --

(Descriptive)

Time : 1 hr. 15 mins.

Marks : 25

[Answer question no.1 & any two (2) from the rest]

1. What is a map? Briefly explain the different types of maps. 2+3=5

2. What is Map Projection? What are the types of Map Projection System? 2+8=10

3. Considering the historical development of Digital Cartography, how have the tools and systems evolved over the years, particularly the role of Computer Aided Design (CAD) in modern cartographic applications? Discuss with an analysis of their impact on geospatial data representation. 5+5=10

4. Describe the principle of remote sensing and its spectacle in electromagnetic radiation. Explain the importance of different remote sensing platforms, sensors and their orbiting satellites data. 4+2+2+2
=10

5. Define Geographic Information System (GIS). Discuss the different components, data types and their structures used in GIS. 2+3+2+3
=10

= = *** = =