

REV-01
MEV/04/09

2024/06

M.SC. ENVIRONMENTAL SC.
SECOND SEMESTER
FUNDAMENTALS OF GEOINFORMATICS
MEV – 205
[USE OMR FOR OBJECTIVE PART]

**SET
A**

Duration: 1:30 hrs.

Full Marks: 35

Time: 15 min.

(Objective)

Marks: 10

1×20=20

Choose the correct answer from the following:

1. What is the visibility range of human eyes?
a. 200-400mm b. 400-700mm
c. 400-800mm d. above 700mm
2. Which of the following factor affects reflectance of vegetation?
a. leaf thickness b. plant age
c. plant health d. All of above
3. Iron dominated soils have strong absorption in ____
a. Red b. Violet
c. NIR d. MIR
4. LIDAR is a type of _____ sensor
a. imagine passive b. imagine active
c. non-imagine passive d. non-imagine active
5. Which of the following is an example of Across Track Multispectral Scanner?
a. MSS b. TM
c. AVHRR d. All of above
6. Which Indian scanner uses push broom scanning process?
a. LISS b. WiFS
c. Both of above d. None of above
7. Which type of photogrammetry is also known as softcopy photogrammetry?
a. analytical photogrammetry b. analog photogrammetry
c. digital photogrammetry d. All of above
8. In which of the following aerial photographs the horizon appears?
a. Vertical b. Near-vertical
c. Low-oblique d. High-oblique
9. SPOT series of satellite is launched by _____
a. USA b. France
c. EU d. Russia

10. Which type of sensors are used in LANDSAT series?
- a. MSS
 - b. TM
 - c. ETM
 - d. All of above

(Descriptive)

Time : 1 hrs. 15 mins.

Marks : 25

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

1. What is remote sensing? What are its types? discuss the working principle of remote sensing? 2+2+6
= 10

2. What is spectral reflectance curve? Discuss the salient features of spectral reflectance of vegetation, soil and water. 2+8=10

3. Write short note on *(any two)* 5+5=10
 - a. Types of aerial photograph
 - b. Keys of visual image interpretation
 - c. Data and Data Models in GIS
 - d. Components of GIS

4. What is GPS? How does it work? Discuss the segments of GPS? 2+2+6
=10

5. What is database management system? What are different components of database? Discuss different types of database models? 2+2+6
=10

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