

POST GRADUATE CERTIFICATE IN GEOINFORMATICS (PGCGI)

Term-End Examination

December, 2019

MGY-002 : REMOTE SENSING AND IMAGE INTERPRETATION

Time : 2 hours

Maximum Marks : 50

- Note :** (i) All questions are compulsory.
(ii) The marks for each question are indicated against it.
(iii) Question nos. 2 to 4 have internal choices.

Answer all parts :

1. (a) Fill in the blank spaces with appropriate word(s). 4x1=4
- (i) The band corresponding to the atmospheric window between 8 μm and 14 μm is _____.
- (ii) RADAR is an acronym for _____.
- (iii) _____ refers to the colour or relative brightness of an object in a colour image.
- (iv) The process of automatic clustering of natural groups within a remote sensing data is known as _____.
- (b) State if the following statements are True (T) or False (F) : 3x1=3
- (i) NDVI is an important tool to study water bodies from remote sensing satellite imageries.
- (ii) Visual image interpretation is the only method used to extract information from satellite imageries.
- (iii) Along-track sensors scan the multiband image data at right angle to the direction of the aircraft.
- (c) Match the items given in Column A with those given in Column B : 3x1=3
- | Column A | Column B |
|-------------------------|------------------------------|
| (i) Rayleigh scattering | (A) Microwave remote sensing |
| (ii) RADAR | (B) Field survey |
| (iii) Ground truthing | (C) Gas molecules |
2. Write short notes on any four of the following : 4x5=20
- (a) Spatial Enhancement (b) Radiometric Resolution
- (c) Stages in Classification (d) RADARSAT
- (e) Spectral Signature of Water (f) Across-Track Scanners

3. Explain the nature of geometric errors and their corrections. Also discuss the steps involved in geometric correction process. 10

OR

Discuss briefly the various elements of visual image interpretation giving suitable diagrams. 10

4. What is spectral signature ? Describe the spectral signature of vegetation with suitable examples. 10

OR

Write an essay on any five types of satellites. 10
