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## POST GRADUATE CERTIFICATE IN GEOINFORMATICS (PGCGI)

Term-End Examination
June. 2020

MGY-002: REMOTE SENSING AND IMAGE INTERPRETATION

Time: 2 Hours Maximum Marks: 50

Note: (i) All questions are compulsory.

- (ii) The marks of each question are indicated against it.
- (iii) Question nos. 2 to 4 have internal choices.

## 1. Answer all parts:

- (a) Fill in the blank spaces with appropriate word(s):

  1 each
  - (i) Spectral characteristics of vegetation in visible region of the spectrum is due to .........

- (ii) ...... satellite takes the same time period of earth's rotation to complete one orbit around the earth.
- (iii) In eight-bit monochrome image tones are represented by ...... to ..... values.
- (iv) NDVI stands for .....
- (b) State if the following statements are True

  (T) or False (F):

  1 each
  - (i) Accuracy in image classification is affected because of errors of inclusion and errors of exclusion.
  - (ii) Simple random sampling pattern isthe model in which the sample points are randomly chosen.
  - (iii) INSAT series of satellites are developed for tele-communication and meteorological services.

(c) Match the items given in column A with those given in column B: 1 each

## Column A

## Column B

- (i) Planck's law
- (1) Satellite

- (ii) Apple
- (2) Pixel values
- (iii) Histogram
- (3) Radiation
- 2. Write short notes on any four of the following:

5 each

- (a) Spectral signature
- (b) Types of digital images
- (c) Non-linear contrast stretch
- (d) Geosynchronous orbit
- (e) Scattering
- (f) Oceansat
- 3. Explain the stages involved in image classification process. Add a note on the unrupervised image classification.

Or

Write an essay on digital image processing.

Elaborate the concept of electromagnetic radiation with due emphasis on its properties.

Or

Write an essay on Commercial Remote Sensing Satellites.