POST GRADUATE CERTIFICATE IN GEOINFORMATICS (PGCGI)

Term-End Examination December, 2024

MGY-002 : REMOTE SENSING AND IMAGE INTERPRETATION

Time: 2 Hours Maximum Marks: 50

Note: All questions are compulsory. Question Nos. 2 to 4 have internal choices. Marks for each question are indicated against it.

1. Answer all parts:

- (a) Fill in the blanks with appropriate word(s): $4\times1=4$
 - (i) The first earth resource satellite known as was launched in the year 1972.
 - (ii) RADAR is an acronym for

- (iii) refers to the colour or relative brightness of an object in a colour image.
- (iv) NDVI is an abbreviation of
- (b) State whether the following statements are True (T) or False (F): $3\times1=3$
 - (i) Transmission is the passing of radiation through a substance without significant attenuation.
 - (ii) The smallest change in intensity level that can be detected by a sensing system is called spectral resolution.
 - (iii) If an image is too dark, histogram will show higher concentration in the right side and if the image is too bright its histogram will show higher concentration in the left side.
- (c) Match the items given in Column A with those given in Column B: 3×1=3

Column B Column A (i) Band ratio (1) Photons Radiant flux (2)Radar (ii) wavelength (iii) C-band (3)Arithmetic operation

2. Write short notes on any *four* of the following:

 $4 \times 5 = 20$

- (a) Minimum mapping unit
- (b) Microwave imaging system
- (c) SPOT satellites
- (d) Digital number
- (e) Rayleigh scattering
- (f) Image corrections
- 3. (a) What is spectral signature? Discuss the spectral characteristics of vegetation. 10

Or

- (b) Discuss in detail various types of satellites.
- 4. (a) Define visual interpretation. Discuss the tasks and prerequisites for image interpretation.

Or

(b) What is image classification? Discuss unsupervised classification in detail.