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MGY-002

POST GRADUATE CERTIFICATE IN GEOINFORMATICS (PGCGI)

Term-End Examination December, 2021

MGY-002 : REMOTE SENSING AND IMAGE INTERPRETATION

Time: 2 Hours Maximum Marks: 50

Note: (i) All questions are compulsory.

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

1. Answer all parts:

- (a) Fill in the blanks with appropriate word(s): $4\times1=4$
 - (i) PCA is an acronym for

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- (ii) Microwave passive sensors are called
- (iii) is the process of correction of raw remotely sensed data for errors of skew, rotation and perspective.
- (iv) MMU stands for
- (b) State if the following statements are True (T) or False (F): $3\times1=3$
 - (i) Reflective region is the band corresponding to the atmospheric window between 8 μm and 14 μm.
 - (ii) The smallest change in intensity level that can be detected by a sensing system known as spectral resolutions.
 - (iii) Irregular geometric shapes are indicators of human presence and use.

(c)	Match the items given in Column	A with
	those given in Column B:	3×1=3

Column-A

Column-B

- (i) Resampling
- (a) Navigation

satellites

(ii) GPS

- (b) Training area
- (iii) Supervised
- (c) Interpolation

classification

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

 $4 \times 5 = 20$

- (i) Kappa coefficient
- (ii) Albedo and spectral reflectance
- (iii) Landsat
- (iv) Image interpretation keys
- (v) Digital image and its types
- (vi) Steps in unsupervised classification
- 3. (a) What is image resolution? Explain different types of image resolution.

Or

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- (b) What is visual image interpretation?

 Describe the elements of visual image interpretation.

 10
- 4. (a) What is image transformation? Explain arithmetic operations of image transformation technique using NDVI. 10

Or

(b) Define electromagnetic radiation. Discuss its properties in detail.10