

**POST GRADUATE CERTIFICATE IN
GEOINFORMATICS (PGCGI)**

Term-End Examination

00345

June, 2018

**MGY-002 : REMOTE SENSING AND IMAGE
INTERPRETATION**

Time : 2 hours

Maximum Marks : 50

Note : All questions are compulsory. Marks for each question are indicated against it.

1. Answer **all** parts :

(a) Fill in the blank spaces with appropriate word(s) : 4×1=4

(i) LISS stands for _____.

(ii) CMY is an abbreviation of _____.

(iii) SFCC stands for _____.

(iv) RADAR is an acronym for _____.

(b) State whether the following statements are *True (T)* or *False (F)* : 3×1=3

(i) Radar is an object-detection system which uses electromagnetic radiowaves to determine range, altitude, direction or speed.

(ii) Atmospheric window is the wavelength band at which electromagnetic radiation from space can penetrate the Earth's atmosphere.

(iii) NDVI is a remote sensing way of measuring whether vegetation is alive or dead.

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

Column A

Column B

- | | |
|-----------------------------------|-----------------------------|
| (i) Visible and NIR Spectral band | (1) Reflective region |
| (ii) Microwave | (2) Emissive region |
| (iii) Thermal band | (3) 0.1 to 30 cm wavelength |

2. Write short notes on any **four** of the following : 4×5=20

- (a) Types of Satellites
- (b) Properties of EMR
- (c) Types of Digital Images
- (d) ISODATA Clustering
- (e) Types of Sampling Patterns
- (f) Error Matrix

3. Attempt any **one** part of the following : 10

- (a) Explain sensor systems with particular emphasis on multi-spectral imaging sensor system.
- (b) What is spectral signature ? Elaborate spectral signature of vegetation and soil.

4. Attempt any **one** part of the following : 10

- (a) What is image enhancement ? Discuss the different image enhancement techniques.
 - (b) Explain the elements of visual image interpretation.
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