

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

Term-End Examination

June, 2015

00678

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

Time : 2 hours

Maximum Marks : 50

Note : All questions are compulsory. The 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) The word 'SAR' stands for _____ .

(ii) The word 'IFOV' stands for _____ .

(iii) The word 'ISODATA' stands for _____ .

(iv) NDVI stands for _____ .

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

(i) Landsat is a series of satellites in sun-synchronous polar orbit first launched in 1974. (True/False)

(ii) Mie scattering happens when the particles in the atmosphere are of the same size as the incident wavelength. (True/False)

(iii) Image histograms are the frequency distributions of pixel values in an image. (True/False)

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

Column A

Column B

(i) EVI

(1) Map accuracy

(ii) Thresholding

(2) Band ratio

(iii) Kappa

(3) Enhancement

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

(a) Systematic radiometric errors

(b) Spatial resolution

(c) Spectral signature of soil

(d) Colour composite

(e) Ground truth data and purpose of ground truth data collection

(f) Sun-synchronous orbit

3. (a) Discuss in detail the Indian Remote Sensing satellites for land applications. 10

OR

- (b) Describe in detail the electromagnetic radiation laws. 10

4. (a) Explain image interpretation with particular emphasis on visual image interpretation. 10

OR

- (b) Discuss in detail the image enhancement with appropriate examples and illustrations, wherever required. 10