POST GRADUATE CERTIFICATE IN GEOINFORMATICS (PGCGI)

Term-End Examination

00192   **December, 2014**

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)   SLAR is an abbreviation of _____ .

      (ii) The word NIR is an acronym for

            _____ .

      (iii) The word 'ISODATA' stands for

            _____ .

      (iv) AVHRR is an abbreviation of

            _____ .

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

   (i) Microwave radiometers are examples of passive sensors.

   (ii) Gray scale is a calibrated sequence of gray tones ranging from black to white.

   (iii) Visual Image Interpretation is about manipulation of digital number of an image.

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

	Column A		*Column B*
(i)	NDVI	(1)	Data quality
(ii)	Cubic convolution	(2)	Band ratio technique
(iii)	Range	(3)	Resampling technique

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

(a) Non-systematic errors and their correction

(b) Types of digital images

(c) Spectral signature of vegetation

(d) Error matrix

(e) Landsat mission

(f) Elements of Visual Image Interpretation

MGY-002   2

3. (a) Discuss the energy-atmosphere interaction in detail. *10*

OR

(b) Explain sensor systems with particular emphasis on multi-spectral imaging sensor system. *10*

4. (a) Describe ground truth data and its importance. Elaborate on the types of sampling patterns. *10*

OR

(b) Discuss image classification with emphasis on unsupervised classification in detail. *10*