MGY-002

POST GRADUATE CERTIFICATE IN GEOINFORMATICS (PGCGI)

Term-End Examination

December, 2015

00904

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 of the following :

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

      (i)   SAR is an abbreviation of _____ .

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

      (iii)   The word 'INSAT ' is an acronym for _____ .

      (iv)   TM is an abbreviation of _____ .

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

   (i) Ground truthing is not required for remote sensing based studies.

   (ii) Digital image processing is about manipulation of digital numbers of an image.

   (iii) Rayleigh scattering takes place due to particles with dimensions much smaller than the wavelength of the radiation.

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

Column A		*Column B*	
(i)	Nearest Neighbour	(1)	Vegetation Index
(ii)	NDVI	(2)	Resampling Technique
(iii)	IRS-P4	(3)	OceanSat -1

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

  (a) Image Histogram

  (b) Error Matrix

  (c) ISODATA Clustering

  (d) Spatial Resolution

  (e) Across-track Scanners

  (f) Remote Sensing System

  (g) Image Interpretation Keys with examples

3. Discuss in detail IRS series of Satellites. *10*

OR

What is spectral signature ? Elaborate spectral signature of common earth surface features, giving suitable illustrations. *10*

4. Describe the ground truth data with emphasis on the sampling pattern. *10*

OR

Define geometric correction and elaborate steps in the geometric correction process. *10*