

No. of Printed Pages : 4

**MGY-002**

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

**Term-End Examination**

**December, 2020**

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

*Time : 2 Hours*

*Maximum Marks : 50*

---

**Note :** (i) *All questions are compulsory.*

(ii) *The marks of each question are indicated  
against it.*

---

---

1. Answer all parts :

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

(i) TIMS stands for .....

(ii) AVHRR is an abbreviation of .....

(iii) IFOV stands for .....

(iv) Clear water body totally absorbs EM  
radiation in ..... region.

(v) PSLV is an acronym for .....

(b) State whether the following statements are True (T) or False (F) :  $3 \times 1 = 3$

(i) Radiant existence is the power of electromagnetic radiation per unit area.

(ii) Atmospheric windows are is that portion of the electromagnetic spectrum at which light can transmit in through the atmosphere without much absorption.

(iii) Active sensors detect reflected for emitted EMR from natural sources.

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

**Column-A**

**Column-B**

(i) Linear imaging self scanning sensor

(a) An advanced multispectral scanning sensor designed to achieve higher image resolution with greater radiometric accuracy

- |  |   |
|--|---|
| (ii) Whiskbroom Scanner                            | (b) Energy reflected from the ground is reached onto the detector by rotating mirrors |
| (iii) Enhanced Thematic Mapper (ETM <sup>+</sup> ) | (c) Multispectral camera system contains four imaging lens with CCD array.            |

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

4×5=20

- (i) Steps in Geometric Correction
- (ii) K-means clustering
- (iii) Kappa Analysis
- (iv) Types of Digital Images
- (v) Spatial Resolution
- (vi) False colour composite
- (vii) Cartosat

3. Attempt any **one** part of the following : 10
- (a) Define Landuse and Land cover. Discuss the steps in producing a Landuse/Land cover Map.

*Or*

- (b) Discuss the elements of visual image interpretation.
4. Attempt any **one** part of the following : 10
- (a) Explain image fusion and discuss an image fusion technique.

*Or*

- (b) How would you identify vegetation and water in remote sensing images ? Write your answer with reference to spectral signature.