

42121

**M. Sc. (Geography) 4th Semester
Examination – May, 2019**

FUNDAMENTALS OF REMOTE SENSING AND GIS

Paper : 16GEOGA01CC/A061

Time : Three hours]

[Maximum Marks : 60

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

*Note : Attempt **five** questions in all, selecting **one** question from each Section. Question No. 1 is **compulsory**. All questions carry equal marks.*

1. Describe the followings in brief:

- (i) Texture Coarse
- (ii) Sun- synchronous orbit
- (iii) Ground based platforms
- (iv) Mie scattering
- (v) IRS, P6

P. T. O.

(vi) Attribute data

(vii) Passive remote sensing

(viii) Spatial data capture

2×8=16

UNIT – I

2. What do you understand by aerial photography ? Give an account of types of photographs and their characteristics. 16

3. What do you understand by visual image interpretation ? Discuss its elements in detail with illustrations. 16

UNIT – II

4. Describe the characteristics of visible and invisible range of EMR spectrum and their utility in remote sensing. 16

5. Write short note on following : $8 \times 2 = 16$

(i) Interaction of EMR with earth surface.

(ii) Atmospheric window and remote sensing.

UNIT – III

6. Give an account of IRS satellites with their characteristics. 16

7. Describe the followings in detail :

- (i) Type of sensors and their characteristics
- (ii) Remote sensing applications in geographical studies.

UNIT – IV

8. Define GIS. Discuss its functions in detail.

9. What do you understand by spatial and non-spatial data ? Discuss their characteristics in the environment.
