

Roll No. ....

**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

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42121

- (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 × 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

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- 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 environment.

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