

[Time: 2.30 Hours]

[Marks: 75]

- N.B.:** 1) All questions are compulsory.
2) Figures to the right indicate full marks.
3) Use of map stencil is allowed.
4) Draw sketches, diagrams and maps wherever necessary.

1. A Elaborate role of Electromagnetic Spectrum and its application in Remote Sensing system. (15 Marks)

OR

B Define Remote Sensing. Explain the process of Remote Sensing in detail. (15 Marks)

2. A Write a detailed note on: elements of visual image interpretation. (15 Marks)

OR

B Explain different types of satellite orbits and their characteristics. (15 Marks)

3. A Elaborate different spatial data models used in GIS. (15 Marks)

OR

B Discuss different applications of GIS. (15 Marks)

4. A Explain arithmetic, relational and logical operations in GIS. (15 Marks)

OR

B Elaborate working of Global Positioning System with reference to positioning. (15 Marks)

5. Write short notes on ANY THREE of the following. (15 Marks)

- a) Active and Passive remote sensing system
- b) Pushbroom and Whiskbroom scanning systems
- c) Triangulated Irregular Network (TIN)
- d) Indian GPS system
