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(6th Semester)

GEOGRAPHY

TENTH PAPER

(Introduction to Remote Sensing and GIS)

Full Marks : 55

Time : 2½ hours

(PART : A—OBJECTIVE)

(Marks : 20)

The figures in the margin indicate full marks for the questions

SECTION—A

(Marks : 5)

Tick (✓) the correct answer in the brackets provided :

1×5=5

1. In _____, a French photographer and balloonist, GF Tournachon took the first aerial photograph of Paris city from a balloon and that was the beginning of scientific photography from air.

(a) 1840 ()

(b) 1850 ()

(c) 1848 ()

(d) 1858 ()

2. Which of the following is one of the factors that determines the scale of the aerial photograph?

(a) Focal length ()

(b) Relief displacement ()

(c) Air base ()

(d) Isocentre ()

3. Which of the following is not related to the element of image interpretation?

- (a) Shape ()
- (b) Colour ()
- (c) Tone ()
- (d) Height ()

4. Which of the following is a geosynchronous satellite?

- (a) INSAT ()
- (b) SPOT ()
- (c) Landsat ()
- (d) IRS ()

5. Line and polygon feature represents

- (a) pixel ()
- (b) raster ()
- (c) vector ()
- (d) GIS data ()

SECTION—B

(Marks : 15)

Write notes on the following :

3×5=15

- 1.** The use of aerial photographs in Geographical studies
- 2.** Fiducial marks and axis
- 3.** Scale determination techniques of aerial photo
- 4.** Application of remote sensing in resource study
- 5.** Basic components of GIS

(PART : B—DESCRIPTIVE)

(Marks : 35)

The figures in the margin indicate full marks for the questions

Answer *five* questions, selecting **one** from each Unit

UNIT—I

1. What is aerial photography? What are different types of aerial photographs? 3+4=7
2. Trace the history of aerial photography. 7

UNIT—II

3. Define stereoscope. Write briefly the types and uses of stereoscopes. 2+5=7
4. Differentiate between side lap and overlap in an aerial photograph. 7

UNIT—III

5. Define parallax bar. Mention the uses of parallax bar. 4+3=7
6. Discuss the elements of air photo interpretation. 7

UNIT—IV

7. Define remote sensing. Explain various sensors used in remote sensing. 2+5=7
8. Describe the characteristics and applications of geosynchronous and sunsynchronous satellite. 7

UNIT—V

9. Define GIS. What is the relevance of GIS technology in geographical studies? 2+5=7
10. What is digital cartography? What are the advantages and disadvantages of digital cartography? 1+(3+3)=7

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