2022

1st Semester Examination
REMOTE SENSING AND GIS

Paper : RSG 102

Full Marks : 40 Time : Two Hours

The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.

Paper : 102.1

(Fundamentals of Geographic Information System)

Group - A

Answer any *two* of the following questions : 2×2=4

1. What do you mean by personal geodatabase and file geodatabase?

2. How many GCPs are required for georeferencing with 1st order polynomial transformation and why?

3. What is topology in GIS?

4. What are the advantages of WEB GIS?

P.T.O.

Group - B

Answer any *two* of the following questions :   4×2=8

5. Covert the following matrix into BIL and BIP format.

56	102	78	72
36	99	12	31
49	53	82	66

6. Write a short note on the sources of different datasets in GIS.

7. Briefly mention about the types of digitization errors with suitable sketches.

8. How does rubber sheeting differ from edge matching?

Group - C

Answer any *one* of the following questions :   8×1=8

9. Briefly discuss the components of GIS with suitable examples.   8

10. Differentiate between raster and vector data structure with suitable illustration. What do you mean by automated digitization?   5+3

Paper : 102.2

(Digital Cartography)

Group - A

Answer any *two* of the following questions :   2×2=4

1. Differentiate between choropleth and isopleth mapping.

2. What kind of colour schemes would you use for mapping (polygon) with nominal and ordinal data?

3. Compare between thematic and topographic maps.

4. How can you use symbols for mapping quantitative and qualitative datasets?

Group - B

Answer any *two* of the following questions :   4×2=8

5. What are the advantages of digital cartography over conventional cartographic techniques?

6. Mention the techniques for estimating scale of a map.

7. What do you mean by multivariate and bivariate mapping?

8. Write a short note on map generalization.

P.T.O.

Group - C

Answer any *one* of the following questions :   8×1=8

9. Discuss the levels of measurement of geographic variables with mentioning their examples and suitable mapping techniques.

10. Explain the concept of visual variables and their application in mapping quantitative data.

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