2013

M.Sc.

2nd Semester Examination

REMOTE SENSING AND GIS

PAPER—RSG–202

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Use Separate answer book for <u>each Group.</u>

Group–A

(GIS)

[Marks : 20]

Answer any *two* questions.   2×10

1. (a) What is GIS ?

   (b) Discuss key function of GIS.

   (c) In what ways are GIS different from other classes of information systems ?   2+3+5

(Turn Over)

2. (a) Identify different approaches to representing the real world.

(b) What is tessellation? Discuss very briefly about different types of tessellation. 3+(3+4)

3. Explain GSDI concept. Enumerate critically the NSDI and SSDI concept for Societal development in Indian context.

2+8

4. (a) With the aid of diagram, explain the raster method of geospatial data representation.

(b) Explain the vector method of geographic data representation. 5+5

Group–B

(Data Storage)

[Marks : 20]

Answer any *two* questions. 2×10

1. What is resampling? Explain the methods of resampling used in the context of geoprocessing. 3+7

2. (a) What is spatical autocorrelation ?

(b) Why is spatial autocorrelation important in spatial data analysis ?

(c) Define buffer zone.

(d) Explain AND, XOR, OR.   2+2+3+3

3. (a) What do you mean by focal cell in Raster data analysis ?

(b) Explian the physical distance and cost distance.

(c) Discuss the point operation technique to enhance a raster data analysis.   3+3+4

4. Write short note on any *two* of followings :   5×2

(a) DBMS ;

(b) Datum ;

(c) Data Visualisation ;

(d) Metadata ;

(e) TIN.

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