

Total No. of Questions : 12]

SEAT No. :

P857

[4458]- 809

[Total No. of Pages : 2

B.E. (Information Technology)
GEO INFORMATICS SYSTEM
(2008 Pattern) (Elective - IV) (Semester - II)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:

- 1) Answers to the two sections should be written in separate books.*
- 2) Neat diagrams must be drawn wherever necessary.*
- 3) Figures to the right indicate full marks.*

SECTION - I

- Q1)** a) Explain in detail preprocessing of digital image? [8]
b) What are the basic characters of Digital Image? List the advantages and disadvantages of digital image? [8]

OR

- Q2)** a) Explain Image Enhancement and transformation with suitable example? [8]
b) Enlist the details that are annotated on the satellite imagery? Explain the sub processes involved in image interpretation? [8]

- Q3)** a) Give the brief overview of Remote Sensing? Explain electromagnetic remote sensing process with diagram? [9]
b) Classify and explain IRS series of satellites? [9]

OR

- Q4)** a) Explain what factors have motivated the users to use RADAR? What are the factors affecting microwave? [9]
b) What are different sensor parameter? Describe with example? [9]

- Q5)** a) Explain the process of linkage of GIS to Remote Sensing? [8]
b) Explain in detail the representation of data in raster and vector model with example? [8]

OR

P.T.O.

- Q6)** a) Explain different types of scale representation? [8]
b) Describe the workflow process of GIS? [8]

SECTION - II

- Q7)** a) Explain the challenges involved in maintain the reliability of GIS data?[8]
b) Explain in detail the transformation technique for restoring geometrically distorted images? [8]

OR

- Q8)** a) Explain in detail all quality factors of GIS data? [8]
b) Write Short Note on (Any two): [8]
i) RMS Error.
ii) Location Error.
iii) Topological Error.

- Q9)** a) What is raster and vector data representation? Explain with suitable example? [9]
b) What are the different techniques of Graphic representation of spatial data? [9]

OR

- Q10)** a) Explain the role of database in GIS? How geospatial data can be manipulated in database? Take suitable example? [9]
b) Explain vector GIS model in detail? Compare it with raster model? [9]

- Q11)** a) Write short note on (Any two): [8]
i) FOV and IFOV.
ii) GIS database integration.
iii) Forward Mapping.
b) Describe the software scenario in GIS focusing on functionalities, product and development? [8]

OR

- Q12)** a) Write short note on (any two) : [8]
i) TIN.
ii) Discrete georeferencing.
iii) Horwood's short law on data.
b) Explain how GIS can help to face a challenge of urbanization in metro city? [8]

↕ ↕ ↕ ↕