

B.E./B.Tech. (Full Time) DEGREE END SEMESTER EXAMINATIONS, APRIL/MAY 2011
Geoinformatic Engineering Branch
SIXTH SEMESTER
GI 9353 GEOGRAPHIC INFORMATION SYSTEM - II
(Regulation 2008)

Time : 3 Hours

Maximum Marks: 100

Answer ALL questions
 PART A – (10 X 2 = 20 marks)

37

1. What is Aggregation?
2. List different types of Reclassification used on Raster Data.
3. Why Co-ordinate transformation required for vector data?
4. Write about Plumb-line Algorithm.
5. Differentiate Conceptual model from Logical Model.
6. List the contents of typical Land Information System.
7. Distinguish Accuracy from Precision.
8. Why Interoperability is required for GIS?
9. What is the need of customization in GIS?
10. Differentiate 3D visualization from 2.5D visualization.

PART B – (5 X 16 = 80 marks)

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| 11(a) | (i)What are the components of a typical mobile mapping system? Explain the advantages of mobile mapping over conventional mapping. | 8 |
| | (ii)Define Web GIS. Explain different architectures used for implementing web GIS with their relative advantages. | 8 |
| 12(a) | Explain different types of Extended Neighbourhood operations used to analyse raster data. | 16 |
| (OR) | | |
| (b) | (i)What is filtering? How filtering helps in GIS analysis of raster data? | 4 |
| | (ii)Describe various Local operations available in GIS for raster data analysis. | 12 |
| 13(a) | Define Overlay analysis. What are the various methods of overlay analysis used on vector data? Describe with neat sketches. | 16 |
| (OR) | | |
| (b) | (i)Describe the concept of Address Geocoding. | 6 |
| | (ii)Differentiate the data structure used for network analysis from conventional data structure used to store layers. | 10 |
| 14(a) | Explain in detail, the methodology, analysis tools required to identify optimal recharge areas in a given study area. | 16 |
| (OR) | | |
| (b) | (i) How Remote Sensing and GIS helps in tax mapping? | 6 |
| | (ii) What is AM/FM? Explain the utility of GIS in managing utility networks. | 10 |
| 15(a) | Explain the components of spatial data quality with a mention of how they are expressed. | 16 |
| (OR) | | |
| (b) | (i)What is meta data? Describe the contents of meta data. | 4 |
| | (ii)Explain various sources of error in GIS data. | 6 |
| | (iii)Classify and describe different spatial data standards. | 6 |