

2011/13-

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B.E / B.Tech (Full Time) DEGREE END SEMESTER EXAMINATIONS, NOV / DEC 2013

GEOINFORMATICS ENGINEERING BRANCH

FIFTH SEMESTER

GI 9305 - GEOGRAPHIC INFORMATION SYSTEM I

(REGULATIONS 2008)

Time : 3 Hours

Answer ALL Questions

Max. Marks 100

PART-A (10 x 2 = 20 Marks)

1. Define GIS.
2. What do mean by Map Projection?
3. What is the use of ER Diagram?
4. What is the use of Nominal, Ordinal levels of measurement?
5. List the areas of use of Irregular Tesselations?
6. State Euler equation?
7. List the standard Vector File Formats?
8. What will happen in Raster to Symbol Conversion process?
9. What is Delaunay Triangulation?
10. List the Photogrammetric methods of acquiring Terrain Data?

Part – B (5 x 16 = 80 marks)

- 11 i. Explain in detail about the Technology and Application Component of GIS. (8)
ii. Discuss the different types of Map Projections based on developable surface. (8)
- 12 a) i. What is DBMS and Explain the characteristics and functions of Database Systems (16)

OR

b) i. Discuss in detail about the Levels of Data Abstraction and Data Models (16)
- 13 a)i. Explain about the Geometry of Regular Tesselations. (8)
a)ii. Distinguish between Raster and Vector Data Models. (8)

OR

b)i. Explain about the Rulength coding and Block coding techniques used for raster data compression. (8)
b)ii. Explain in detail about the Data Encoding. (8)
- 14 a) i. Explain about the Georeferencing of Raster Data. (8)
a)ii. Discuss about the Digitizer and it specifications. (8)

OR

b) i. Explain the steps used for the Data Conversion by Scanning, Vectorization and Post Scanning Process. (16)
- 15 a) i. Explain about the Data Structure of TIN. (8)
a)ii. Discuss about the Data Collection of Terrain Data by Field Surveying Methods. (8)

OR

b) i. Explain about the Applications of Digital Terrain Models in Surveying, Mapping, Hydrological and Geomorphologic Applications. (16)