

(3 Hours)

Total Marks: 80

- N.B.:** 1) Question No.1 is **compulsory**.
2) Attempt any **THREE** from the remaining questions.
3) Figures to the right indicate full marks.

- Q1.** (a) Discuss the various elements of the GIS? [5]
(b) Explain with suitable example an integration of GIS with mobile technology. [5]
(c) What is water shade analysis? [5]
(d) Define the term dynamic segmentation. [5]
- Q2.** (a) What is the object-based data model? Explain classes and class relationship. [10]
(b) What is location-based services in geocoding? Explain it with suitable example. [10]
- Q3.** (a) Explain in detail the elements raster data model. [10]
(b) What are the different applications of the GPS? Explain with suitable examples. [10]
- Q4.** (a) Define Landsat and SPOT for satellite images. [10]
(b) Discuss the term hypsometric tinting and perspective view for terrain mapping. [10]
- Q5.** (a) What are the principles thermal remote sensing? How it is different from precision remote sensing. [10]
(b) Explain in detail the coverage data structure and shape file in geo-relational data model. [10]
- Q6.** Short Note (**Solve Any Four**) [20]
a) Topology
b) Flow Accumulation
c) Data Analysis
d) Active Remote Sensing
e) Optical Sensor
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