

N.B. : 1) Question No.1 is compulsory.

2) Attempt any **four** from the remaining **six** questions.

1. (a) Discuss the term geocoding. What is the process of geocoding and explain it with a suitable example? (10)
- (b) Describe the geographic coordinate system and clarify the importance of datum in GIS. (10)
2. (a) Explain the geographic matrix as used to represent geographic data. (07)
- (b) Explain what is projection? Discuss the various methods of map projections. (08)
3. (a) What is overlay operation? Explain the groups of overlay operations and overlay methods in detail. (07)
- (b) What is pattern analysis? Describe Nearest Neighbor Analysis. (08)
4. (a) Explain the geographic coordinate system and clarify the importance of datum in GIS. (07)
- (b) Briefly explain the key data issues encountered in implementing GIS. (08)
5. (a) Explain the difference between the object based data model and georelational data model. (07)
- (b) List the major application areas of GIS. (08)
6. (a) With the aid of a diagram, describe the configuration of a geospatial data warehouse. (07)
- (b) Explain the concept of data classification and feature coding. (08)
7. Write Short Notes on *any three* :- (15)
 - a) Buffering
 - b) Topology
 - c) Spatial data and attribute data.
 - d) Digitizing Process