Bachelor Level / Fourth Year / Eight semester / Science   Full Mark: 60
Computer Science and Information Technology-(CSc-459)   Pass Mark: 24
(Geographical Information System)   Time: 3 hours.

Candidates are required to give their answers in their own words as far as practicable.
The figures in the margin indicate full marks.

Attempts any six questions.   [10x6=60]

1. Explain the GIS application and its benefits.

2. Why digital mapping is necessary in GIS? Explain with piratical example.

3. Differentiate between geographic phenomena and data modeling.

4. Explain the spatial database design with example.

5. What d you mean by spatial reference? Explain the quality aspects of spatial data?

6. Explain with example of metadata and clearing house.

7. Explain the system analysis and design of GIS.

8. Write short note on **(any two)**

   (a) Map elements

   (b) Spatial relationship

   (c) Geodatabase

   (d) SDI