

TRIBHUVAN UNIVERSITY
INSTITUTE OF ENGINEERING
Examination Control Division
2076 Bhadra

Exam.	Regular / Back		
Level	BE	Full Marks	80
Programme	BCT, BEX	Pass Marks	32
Year / Part	IV / II	Time	3 hrs.

Subject: - Geographic Information System (*Elective III*)(CT 78507)

- ✓ Candidates are required to give their answers in their own words as far as practicable.
- ✓ Attempt any **Eight** questions.
- ✓ The figures in the margin indicate **Full Marks**.
- ✓ Assume suitable data if necessary.



1. What is GIS? Write down the various components of GIS. [3+7]
2. What is spatial and attribute data ? Compare and contrast vector and raster data. [4+6]
3. What are the major sources of data for GIS? Write down the importance of map elements. [5+5]
4. What is map projection? Write down various types of map projections. [4+6]
5. What is spatial analysis? Write down the application of spatial analysis for decision making with suitable example. [2+8]
6. What is SDI? Write down the importance and components of SDI in Developing countries. [2+2+6]
7. What is spatial data quality? Why it is important? Write down the quality components. [2+2+6]
8. Why visual variables are important during map visualization? [5+5]
9. Write down the application of GIS in Land resource management or disaster risk reduction. [10]
10. Write short notes on: (*Any Two*) [5×2]
 - a) Open street map
 - b) Buffering and its use
 - c) Clipping and its use
