Tribhuwan University
Institute of Science and Technology
Model

Bachelor Level / eighth-semester / Science — Full marks: 60
Computer Science and Information Technology(CSC468) — Pass marks: 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.

Attempt Any Six Questions. (6 * 10 = 60)

1. Explain the importance and applications of GIS. What will be your sound role in GIS Development for Nepal?

2. What is your definition about Geographic phenomena? Explain the phenomena types relating with boundaries.

3. Differentiate between vector and raster data structure. How do you implement irregular tessellation to form region quad tree. Explain with example.

4. How do you capture data for GIS? Briefly describe the operation of GPS system.

5. What is spatial overlay operator? Explain neighborhood functions that are being implemented in GIS software for analysis.

6. Explain cartographic communication process with its diagram. What are the components that make a map output attractive?

7. Explain how does a clearinghouse works? What problems do you face during the spatial data sharing?

8. Write notes on (any two)

a.) ITRS/ITRF for Geo-Conferencing

b.) Spatial data quality

c.) GIS in Nepal Prospects and Challenges

d.) Buffer Zone Generation

