

**Tribhuvan University**  
**Institute of Science and Technology**  
**2075**

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. [10x6=60]**

**1. What is GIS? Explain the use of GIS in the newly formed Municipality/Rural municipality under the new federal system in Nepal. How do you suggest they use it for their planning work?**

**2. what do you understand by Spatial Data Model? Differentiate between Coordinate system and Projection system.**

**3. What do you understand about earth features? What are the different data models of representing the earth features. 4. What is projection? How it is different from MAP? Explain Scale Factor.**

**5. What is geocoding? Explain spatial analysis with examples.**

**6. What is Geospatial Metadata? Explain the various components of Metadata.**

**7. What is distortion in projection? What are different types of distortion in projections?**

**8. Write short notes on (any two):**

**(a) Precision vs Accuracy**

**(b) Buffer and Overlaying**

**(c) GPS vs GIS**