## **Tribhuwan University** Institute of Science and Technology 2071

Bachelor Level / first-semester / Science

Computer Science and Information Technology(CSC109)

(Introduction to Information Technology) 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.

**Long Questions** 

Attempt any two questions:  $(2 \times 10=20)$ 

- 1. Explain the major components and the characteristics of computers.
- 2. What is computer software? Explain the system software and application software with example.
- 3. Explain the functions of an operating system. How does operating system work? Explain.

## Short Questions:

Attempt any eight questions:  $(8 \times 5 = 40)$ 

- 4. Mention the different categories of digital computers.
- 5. Explain the functions of the memory.
- 6. How EEPROM is different from EPROM and PROM?
- 7. Differentiate between mouse and a trackball.
- 8. Differentiate between impact and non-impact printer.
- 9. What are the major difference between a random access device and a sequential access device?

Full marks: 60

Pass marks: 24

- 10. What is real time operating system?
- 11. Mention the different types of network architecture.
- 12. Define the modem. How does it work?
- 13. Define Internet. How does the Internet work?