## **Tribhuvan University**

## Institute of Science and Technology 2068

Bachelor Level/ First Year/ First Semester/ Science Full Marks: 60

Computer Science and Information Technology (CSc. 102)

(Fundamental of computer programming) Time: 3 hours.

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

## **Attempt all questions:**

- 1. Write an algorithm and flow chart to determine whether a given integer is odd or even and explain it.
- 2. How can you declare the variable in C? Explain with example.
- **3.** Write a program to find the factorial of a given integer.
- 4. Explain switch statement with example.
- **5.** Write a program to find the largest and smallest among the given elements in an array.
- **6.** Explain the user-defined functions and its types with example.
- 7. Write a program to accept two numbers and sort them with using pointer.
- **8.** Explain the passing structure to function with example.
- **9.** Write a program to accept any number and print the sum of that number up to a single digit through recursive function.
- **10.** Explain the pointer to structure with example.

OR

Write short notes on:

- a) Dynamic memory allocation
- b) Opening and Closing file