## First Assignment

Subject: Introduction to Computer Programming (CS-111)

Sem: First Sem BS(ICAS)

Max. Marks: 05M

Note: All questions carry 5M each.

- 1.a) What is a Computer? Briefly describe key characteristics of a Computer.
- 1.b) With a neat sketch, explain the system unit.
- 1.c) Write the functions of Control Unit.

[2+2+1=5M]

- 2.a) Explain the different symbols used in flowchart.
- 2.b) Write a flowchart to find factorial of a given number.
- 2.c)Write an algorithm and flowchart to find whether a given number is palindrome or not. [2+1+2=5M]
- 3.a) Briefly explain the characteristics of an algorithms.
- 3.b) Write an algorithm and flowchart to find roots of quadratic equation.
- 3.c) Explain the Basic structure of C/C++ program with an example. [1+2+2=5M]
- 4.a) What are constants? Briefly explain the basic types of C/C++ constants.
- 4.b) Briefly explain the basic type of C/C++ with an example.
- 4.c) Briefly explain the following with an example.

[2+1+2=5M]

- (i) Relational operators
- (ii) Logical operators
- 5.a) Write a program to read three values from the keyboard and printout the largest and smallest of them without using if statement.
- 5.b) Briefly explain general form or syntax, flowchart and an example of the following. [2+(1.5+1.5)=5M]
  - (i) The if...else statement (ii) The switch statement