1056
Diploma Course (Add-on)
Computer Based Business Statistics
Paper – I

Time allowed: 3 Hours

Max. Marks: 75

NOTE: *Attempt <u>five</u> questions in all, including Question No. I which is compulsory and selecting one question from each Unit.*

x-x-x

I. Attempt <u>any five</u> of the following:-

   a) What is the difference between RAM and ROM?

   b) What is the difference between impact Printers and non - impact printers?

   c) What is the difference between a variable and a constant?

   d) What are pre-processor directives?

   e) Name any two string function in C.

   f) What is dynamic binding?

   g) What are function templates in C^{++}?

   h) Give difference between a class and a object.   (5x3)

II. What is the purpose of Central Processing Unit (CPU) in a Digital Computer? What are the components of a CPU? What effect did Integrated Circuit (IC) technology has on the CPU? Explain your answer.   (15)

III. Perform the following number system conversions:

   a) $10100.1101_2 = ?_{16}$

   b) $F3A5_{16} = ?_2$

   c) $101111.0111_2 = ?_8$

   d) $15C.38_{16} = ?_2$

   e) $10100.1101_2 = ?_{10}$ (5x3)

IV. Define Operator, Operand and Expression in 'C'? Name and explain different types of operators in C-language with the help of examples.   (15)

V. What is the difference between a C function and a C macro? Illustrate your answer by defining a C function and a C macro to return the minimum of two values.   (15)

P.T.O.

VI. How is an array different from basic data types in C? Using pointers, write a C-function to Sort an array of n integers in ascending order. (15)

VII. Explain four major advantages of Object Oriented Programming with the help of an example each. Define the terms constructor and destructor in C^{++}. Give an example of each. (15)

VIII. Explain the following in the context of C^{++}:

a) Exception handling

b) Inheritance (8,7)

x-x-x