2031
B.A./B.Sc. (General) Third Semester
Computer Application
CA-05: Programming in C++

Time allowed: 3 Hours

Max. Marks: 30

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

x-x-x

UNIT – I

I.   Explain the basic concepts of Object Oriented Programming Concept.   (6)

II. Can we define the member functions outside the class? If yes, then explain with example.   (6)

UNIT - II

III. a) Explain the concept of Constructors and destructors in C++.

   b) What is Friend function Explain the working of friend function between two classes with example.   (2x3)

IV. How the objects are passed as function arguments. Explain its types with example. (6)

UNIT - III

V.   What is Inheritance? Explain multiple inheritance with example.   (6)

VI. Explain Operator Overloading with the help of example. How is it different Function Overloading?   (6)

UNIT - IV

VII. Explain various unformatted functions in C++. Explain the working of each function.   (6)

VIII. Explain various manipulation operators used in C++ for formatting output with suitable example.   (6)

UNIT - V

IX. Describe the following with suitable example :-

   a) Parameterized Constructor

   b) Scope Resolution

   c) Virtual Function

   d) Encapsulation   (4x1½)

x-x-x