Branch – **MATHEMATICS WITH COMPUTER APPLICATIONS**

C++ PROGRAMMING

Time : Three Hours   Maximum : 75 Marks

SECTION-A (20 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** marks   (10 x 2 = 20)

1   Differentiate data Hiding and Encapsulation.
2   How will you create the source file of a C++ program?
3   Define: Inline function.
4   What is call by reference?
5   What is a class?
6   What are the ways by which a member function is defined in C ++ ?
7   Define the term "Constructor".
8   What are types conversions?
9   Define : Derived class.
10   Write down any two advantages of inheritance.

SECTION - B (25 Marks)
Answer **ALL** Questions
ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

11 a   Explain about the structure of a C++ program.
OR
    b   What are user defined data types? Describe.

12 a   Write the concept of function overloading with an example.
OR
    b   What are the types of operators in C++? Explain.

13 a   Describe the static member functions.
OR
    b   Explain the nesting of member functions.

14 a   Explain manipulation of strings using operators in C++.
OR
    b   Write down the rules for overloading operators.

15 a   Explain the single inheritance with simple example.
OR
    b   How will you make a private member inheritable? Explain.

SECTION - C (30 Marks)
Answer any **THREE** Questions
ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

16   Discuss the different types of basic data types available in C++ with examples.

17   Explain the various types of if statements in C++ and draw the flow charts.

18   How will you pass objects as function arguments? Explain with a simple program.

19   How are multiple constructors defined in a class? Explain.

20   Compare and contrast multiple and hierarchical inheritance.

Z-Z-Z   END