

Paper-III

C++ with Introduction to Object Oriented Programming

SECTION-A

1. (a) Explain the various basic data types. 10
- (b) Explain the hierarchy of operators in C++ along with examples. 10

2. (a) Differentiate between structure and union. 8
- (b) How do we declare structure and union in C++ ? 6
- (c) How do we access an individual member of structure and union in C++ ? 6
3. Write and explain the syntax of all control structures used in C++ with examples. 20
4. (a) Write Program in C++ to implement Binary Searching. 10
- (b) Write Program in C++ to implement Matrix Multiplication. 10
5. (a) Explain the various string functions in C++. 10
- (b) Explain the various manipulators in C++. 10

SECTION-B

6. (a) Differentiate between procedural and object oriented programming. 14
- (b) Differentiate between abstraction and encapsulation. 6
7. Differentiate constructors and destructors. How they are declared in C++ ? Explain their use by any C++ program. 20
8. Define Polymorphism and its types. How can we implement the concept of Compile Time Polymorphism in C++ ? Explain the concept with the help of any program. 20
9. (a) What is the significance of 'this' pointer in C++ ? 10
- (b) Explain the concept of friend function in C++. 10
10. Explain the various types of inheritance. Give examples of each and every type of inheritance in C++. 20

