

C++ with Introduction to Object Oriented Programming

Paper : BCA-303

Time : 3 Hours

M.M. : 100

Note— Attempt any **FIVE** questions, selecting at least **TW** questions from each section. All questions carry equal marks i.e. 20 marks for each question.

SECTION-A

1. (a) Explain the logical & bit wise operators in C++ with examples.
(b) Write short note on the following with examples :
 - (i) Type casting
 - (ii) Enumerated data type
2. (a) Explain the concept of struct and union data type.
(b) Write a program to swap two integer variables that makes use of a function having reference variables as arguments.
3. (a) Explain while, do-while and for statement in C++.

- (b) What is the difference between break and continue statement ? Explain their use in C++ by writing any program.
4. (a) Explain the concept of manipulators in C++.
- (b) Explain various C++ stream with examples.
5. (a) Explain various operations that can be done on arrays.
- (b) Explain library functions used in C++ for manipulation of strings.

SECTION-B

6. (a) How does object oriented approach to programming differ from traditional approach ? Write the differences between these two approaches of programming.
- (b) What is the difference between structure and class and object ? Explain with an example.
7. (a) What is the difference between class and object ? Explain with an example.
- (b) Explain the concept of constructor and destructor in C++. How do they differ from each other ? Explain with an example.
8. (a) What is the difference between function overloading and operator overloading ? Explain with an example.
- (b) What is inheritance ? Explain various types of inheritance used in C++.
9. (a) What is 'this' pointer ? Explain its use in C++ with example.
- (b) Define friend function. How it differs from member function in a class ? Explain by writing any program in C++.
10. (a) Write a program in C++ to overload unary operators.
- (b) Write a program in C++ to implement Binary Searching.