

Roll No.

1939

Printed Pages : 2

BCA / M-19
ADVANCED PROGRAMMING USING C++
Paper-BCA-242

Time allowed : 3 hours [Maximum marks : 80]

Note : Attempt five questions in all, selecting one question from each unit. Question. No. 1 is compulsory. All questions carry equal marks.

1. (a) What is the difference between overloading and overriding?
(b) What is a virtual destructor?
(c) What is the difference between text and binary files?
(d) Discuss the conditions that the casting operator should satisfy to convert from class type to built-in type.

Unit-I

2. What is run-time polymorphism? What is the need of it? Explain using suitable examples.
3. What is an abstract class? What do you understand by pure virtual function? Discuss the syntax and semantics.

Unit-II

4. Draw a table showing the rules of different types of derivation in inheritance in C++.
5. What is type conversion? Write the code to convert the int array into a matrix object type in C++.

1939

[Turn over

(2)

Unit-III

What is multiple inheritance? What is the use of it? Illustrate using suitable example.

What is a function template? What is the advantage of it? Discuss using suitable example.

Unit-IV

What is an exception? How is an exception handled in C++? Write a program to demonstrate the concept of rethrowing an exception.

- (a) Write a brief note on the stream and corresponding methods for file handling in C++.
- (b) A class template is known as parameterized class. Comment.