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BCA/M-17
ADVANCED PROGRAMMING USING C++
Paper: BCA-242

Time: Three Hours   Maximum Marks: 80

Note: Attempt five questions including No. 1 which is compulsory. All questions carry equal marks.

Compulsory Question

1. (i)   Define Class.
   (ii)   What is the use of inheritance?
   (iii)   Write examples of user defined data types.
   (iv)   Define tokens.
   (v)   What do you mean by modular approach in programming?
   (vi)   What is Operator?
   (vii)   What is the use of new operator?
   (viii)   What is a Function?

Unit-I

2. (a)   What do you mean by polymorphism? Explain the concept of dynamic polymorphism with suitable examples.
   (b)   What is a destructor? Explain Virtual Destructor.
3. (a)   What do you mean by abstract class? How can an abstract class be defined?
   (b)   What do you understand by virtual derivation?

Unit-II

4. (a)   What is a conversion function? How is it created? Explain its syntax.
   (b)   What do you mean by automatic type conversion? What is basic type conversion?

5. For which data type the compiler of C++ does not support automatic type conversion? What is the solution to perform these types of conversions? Explain conversion from basic type to class type and class type to basic type.

Unit-III

6. (a) What do you understand by Inheritance? Write a program in C++ to implement hierarchical inheritance.
   (b) What is generic programming? How is it implemented in C++?

6. (a) Distinguish between the class and template with examples.

(b) What is a function template? Explain with the help of syntax and example.

Unit-IV

8. (a) Distinguish between the terms class template and template class with examples.

(b) What is an exception? How many types of exception are there? What types of exception can be handled by C++ compiler? Explain.

9. (a) Describe the various approaches with suitable examples by which we can detect the end of file condition successfully.

(b) What is the difference between text file and a binary file? Explain.