C++ and Object Oriented Paradigm

2010 December

Technology BCA
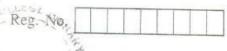
Semester 3

University Exam

Mangalore University

Reg. No.

Credit Based Third Semester B.C.A. Degree Examination,
November/December 2010
(New Syllabus)
C++ AND OBJECT ORIENTED PARADIGM

Time : 3 Hours

Max. Marks : 80

Note : Answer **any ten** questions from Part-A and **one** full question
from **each** Unit of Part-B.

PART – A

1. a) What is the need to include header files in C++ ? Explain.

   b) What are manipulators ? Mention any two.

   c) What are inline functions ? Mention any two advantages.

   d) Distinguish between structure and class in C++ with an example.

   e) State true or false :

   i) In a class we can have more than one constructor with the same name.

   ii) If we declare a const object, it can only be used with const member
   functions.

   f) What is meant by entry controlled and exit controlled loop ?

   g) Define class and object in C++.

   h) Define destructor. Give an example.

   i) Distinguish the base class and the derived class.

   j) What is function prototyping ?

   k) What is the difference between private and public access specifier ?

   l) List the operators which can not be overloaded. (10×2=20)

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PART – B

UNIT – 1

2. a) Explain the features of object oriented programming.

   b) Explain different types of constants used in C++ with an example.

   c) Write a program to test the divisibility by both 4 and 9 of a number between 1 and 100.

                                                                    (5+5+

3. a) Differentiate between switch and if-else structure with an example.

   b) Explain the structure of C++ program with an example.

   c) Discuss the difference between break and continue with suitable example.

   d) Explain :

      i) Ternary operator   ii) Assignment operator

                                                                    (3+5+3+

UNIT – 2

4. a) Explain with an examples, the uses of enumeration data types in C++.

   b) Explain the usage and syntax of for and do... While loops.

   c) With an example explain the concept of overloading of function.

                                                                    (5+6+4

5. a) What are default arguments ? Explain with example.

   b) Write a program to check whether the entered number is palindrome or not.

   c) Explain any two storage classes used in C++.

   d) Explain the concept of 'pass by value' and 'pass by reference' method in C++ by using a suitable function programs.

                                                                    (4+3+4+4)

UNIT – 3

6. a) Explain how to pass arrays to function with a suitable example.

   b) Write a program to show how to use arrays of objects and arrays as the data members within the class.

   c) With an example explain how to overload the constuctor

                                                                    (5+5+5)

7. a) Explain constructors with arguments. How are arguments passed to the constructor ?

   b) Explain static data members and static member functions with a suitable example.

   c) Explain nesting of member functions with a suitable example code.

(5+5+5)

UNIT – 4

8. a) What is operator overloading ? How are operators overloaded using member function ?

   b) What does inheritance mean in C++ ? Describe the syntax of multiple inheritance with a code example.

   c) Explain the following with syntactic rules

   i) Private inheritance

   ii) Public inheritance.

(5+5+5)

9. a) How are the fundamental datatypes converted to class objects ?

   b) What is conversion function ? How is it created ?

   c) Write a note on constructors in derived class.

(5+5+5)

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