Reg. No. | | | | | | | | | |

BCACAC 157

Credit Based Second Semester B.C.A. Degree Examination, May/June 2016
(New Syllabus) (2012-13 Batch Onwards)
OBJECT ORIENTED PROGRAMMING USING C++
(Common to all Batches)

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 **(10×2=20)**

1. a) What are tokens ? Name the C++ tokens.
   b) Explain operator overloading with an example.
   c) What is the use of scope resolution operator ?
   d) List any two situations where inline expansion may not work.
   e) What are the uses of function prototyping in C++.
   f) List any two special features of static data members.
   g) What are objects ? How are they created ?
   h) Define constructor. What is default constructor ?
   i) What is const. object? Give an example.
   j) Define an abstract class. Give an example.
   k) What is an operator function ? Give the syntax of an operator function.
   l) What is container class ?

PART – B

Unit – I

2. a) Explain the structure of C++ program with an example.
   b) Explain different forms of if statements with syntax and example.
   c) What are manipulators ? Illustrate with an example, how do the setw and endl manipulators work. **(5+5+5)**

P.T.O.

3. a) What are identifiers ? What are the rules for naming the identifier that are common to both C and C++ ?
   b) Explain any two special operators in C++.
   c) Explain do-while and for statements with syntax and examples. **(5+4+6)**

Unit – II

4. a) Explain with an example how an object may be used as a function argument.
   b) Explain the different methods for defining the member function of a class with example.
   c) Explain the data types supported by C++. Give example for each. **(5+5+5)**

5. a) With an example explain the concept of an Array of objects.
   b) What is friend function ? What are the merits and demerits of using friend function ?
   c) Explain how objects are passed as arguments to the function with an example. **(5+5+5)**

Unit – III

6. a) Write a program to accept two strings and using operator overloading perform the following :
      i) Concatenation of two strings
      ii) Comparison of two strings alphabetically.
   b) Explain parameterized constructors with example.
   c) Explain how one class type is converted to another class type. **(5+5+5)**

7. a) What is constructor overloading ? Explain with code example ?
   b) With syntax and example, explain how to implement Operator overloading.
   c) What is a destructor ? Explain with an example. **(5+5+5)**

Unit – IV

8. a) Explain multiple and multilevel inheritance with example for each.
   b) What is this pointer ? Explain its importance in C++ with an example.
   c) What is virtual function ? Explain pure virtual functions with an example. **(5+4+6)**

9. a) Write a note on compile time and run time Polymorphism.
   b) Explain visibility of private, protected and public members in different modes of inheritance.
   c) Explain order of execution of constructors in inheritance with an example. **(4+6+5)**