

Roll No.

BCA–08

Object Oriented Programming Through C++

Bachelor of Computer Application

(BCA–16/ BCA–11)

Third Semester, Examination, 2017

Time : 3 Hours

Max. Marks : 60

Note : This paper is of **sixty (60)** marks containing **three (03)** sections A, B, C. Attempt the questions contained in these sections according to the detailed instructions given therein.

Section–A

(Long Answer Type Questions)

Note : Section ‘A’ contains four (04) long answer type questions of fifteen (15) marks each. Learners are required to answer *two* (02) questions only.

1. What is friend function ? When is friend function compulsory ? Also discuss the demerits of using friend functions.
2. Why C++ is called object oriented programming language ? Also discuss how C++ differs with procedural languages.

3. Define copy constructors and destructors. What are the important features of a constructor functions ? Also discuss with example how dynamic initialization of objects is achieved.
4. Explain the virtual functions and their importance. Write any program in C++ to use the Virtual function in the derived class.

Section-B

(Short Answer Type Questions)

Note : Section 'B' contains eight (08) short answer type questions of five (05) marks each. Learners are required to answer *four* (04) questions only.

1. What are the basic data types of C++ ? Also explain streams in C++.
2. What is the difference and similarity between IF...ELSE and SWITCH statement ? Explain.
3. What is the difference between array and pointer ? Give suitable example.
4. What are static data member ? What are their benefit ? Give example.
5. Write a program in C++ to implement the concept of Virtual base class.
6. What is abstract class ? What are their benefits ? Explain.
7. What is file handling ? What do you understand by manipulation of file pointers ?
8. What are the different types of operators in C++ ? What do you understand by precedence of operator ?

Section-C**(Objective Type Questions)**

Note : Section 'C' contains ten (10) objective type questions of one (01) mark each. All the questions of this section are compulsory.

1. Which of the following is an output statement in C++ ?
 - (a) print
 - (b) write
 - (c) cm
 - (d) cout
2. The continue statement :
 - (a) Resumes the program if gets hanged
 - (b) Resumes the program, if break was applied to it
 - (c) Skips the rest of the loop in current iteration and goes to beginning of the block
 - (d) All of the above
3. Multiple inheritance means :
 - (a) one class deriving from multiple base classes
 - (b) one class being parent of many classes
 - (c) one class being parent of one class
 - (d) All of the above
4. A member declared protected is visible :
 - (a) outside the class
 - (b) in the derived class
 - (c) only within the class
 - (d) None of the above

5. A Derived class constructor :
 - (a) invokes the base class constructor
 - (b) does not call the base class constructor
 - (c) redefines the data members of the base class
 - (d) None of the above
6. A derived class :
 - (a) Inherits data members and member functions from the base class
 - (b) Inherits constructors and destructors
 - (c) Refers to a special class in C++ defined with the keyword derived
 - (d) Maintains a read-only copy of the base class
7. `main ()` is a/an :
 - (a) keyword
 - (b) object
 - (c) function
 - (d) None of the above
8. A default catch block catches :
 - (a) all thrown objects
 - (b) no thrown objects
 - (c) any thrown object that has not been caught by an earlier catch block
 - (d) all thrown objects that have been caught by an earlier catch block

9. If you design a class that needs special initialization tasks, you will want to design a(n) :
- (a) housekeeping routine
 - (b) Initialize
 - (c) Constructor
 - (d) Compiler
10. The _____ mode tells C++ to open a file for input.
- (a) add :: ios
 - (b) in :: file
 - (c) ios :: app
 - (d) ios :: in

