Roll No. …………………..

BCA–08

Object Oriented Programming Through C++

Second Semester, Examination, 2018

Time : 3 Hours   **Max. Marks : 80**

Note : This paper is of **eighty (80)** marks containing **three (03)** Sections A, B and C. Learners are required to 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 nineteen (19) marks each. Learners are required to answer *two* (02) questions only.

1. Distinguish between the following terms :

    (a)   Object and classes

    (b)   Data abstraction and data encapsulation

    (c)   Inheritance and polymorphism

    (d)   Dynamic binding and message passing

2. What is a class ? How does it accomplish data hiding ? What are its objects ? How are they created ? Explain with the help of example.

3. What is inheritance in C++ ? What are the different forms of inheritance ? Describe the syntax of each type with example.

(B-62) P. T. O.

4. What is an exception ? How is an exception handled in C++ ? What are the advantages of using exception handling mechanism in a program ?

Section–B

(Short Answer Type Questions)

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

1. What is the main advantage of passing arguments by reference ?

2. How do we invoke a contractor function ?

3. What is *friend* function ? Explain with example.

4. What is virtual function ? Explain with example.

5. Describe the importance of destructors.

6. What is a file mode ? Describe the various file mode options available.

7. Discuss the role of *set ( )* function.

8. What are the applications of this pointer ?

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 member can never be accessed by inherited class ?

    (a) Private member

    (b) Public member

    (c) Protected member

    (d) All of the above

2. Which syntax among the following shows that the member is private in a class ?

    (a) Private : functionName (parameters)

    (b) Private(functionName (parameters))

    (c) Private functionName (parameters)

    (d) Private:: functionName (parameters)

3. How many private members are allowed in a class ?

    (a) 1

    (b) 5

    (c) 255

    (d) As many as required

4. Private function of a derived class can be accessed by the parent class.   (True/False)

5. The first element of the string is ....

    (a) The name of the string

    (b) The first character in the string

    (c) The length of the string

    (d) The name of the array holding the string

6. Variables   declared   outside   the   block   are called ....

    (a) Global

    (b) Universal

    (c) Stellar

    (d) External

7. The scope resolution operator is :

   (a) Comma

   (b) Semicolon

   (c) Colon

   (d) Two colon

8. C++ is a .... constant.

   (a) Character Literal

   (b) Named Literal

   (c) Numeric Literal

   (d) String Literal

9. The items listed in the function header are called ....

   (a) Actual arguments

   (b) Formal parameters

   (c) Passed parameters

   (d) Sent arguments

10. The feature in object-oriented programming that allows the same operation to be carried out differently, depending on the object, is ....

   (a) Inheritance

   (b) Polymorphism

   (c) Over function

   (d) Overriding

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