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BCA-08

Object-Oriented Programming ThroughC++

Bachelor of Computer Application (BCA-11/16/17)

3rd Semester Examination 2019

Time : 3 Hours **Maximum Marks : 80**

Note: This paper is of eighty (80) marks containing three (03) sections A, B and C. Attempt the questions contained in these sections according to the detailed instructions given therein.

Section – A

(Large 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. What is object-oriented programming? How it is different from procedure-oriented programming? What are the unique advantages of an object oriented programming?

2. What is operator overloading? Why it is necessary to overload and operator? What is an operator function? Describe the syntax of an operator function with example.

3. What does polymorphism mean in C++ language? How is polymorphism achieved at:
   a. Compile time
   b. Run time. Explain with example.
4. Write a program to read a matrix of size m*n from the keyboard and display the same on the screen using functions.

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. Describe major parts of a C++ program.
2. What are the advantages of function prototype in C++?
3. What is constructor? Is it mandatory to use constructor in a class?
4. How is a member function of a class defined?
5. What is virtual base class? Explain with example.
6. Differenitate between friend and virtual function.
7. What is an abstract class? Create an abstract class.
8. What are the steps involved in using a file in a C++ program?

Section – C

(Short Answer Type Questions)

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

1. The last statement in a funtion is often a (n)_____
   (a) Return
   (b) Goodbye
   (c) Finish
   (d) None of the above
2. The two statements that can be used to change the flow of the control are
   (a) If and switch
   (b) If and while
   (c) Switch and do-while
   (d) End funection

3. Which of the following is the insertion operator?
   (a) <<
   (b) >>
   (c) //
   (d) /*

4. To use a template class member function, use the ____ with the instantiation.
   (a) Scope resolution operator
   (b) Dot Operator
   (c) Class Definition
   (d) Keyword template

5. An Auxilliary function_____
   (a) Return information about the data member.
   (b) Changes the states of the data member.
   (c) Perform an action or service.
   (d) Create or destroy objects.
6. To create and execute a C++ program, you need to have access to
   (a) C++ compiler
   (b) C++ translator
   (c) Both (a) & (b)
   (d) None of the above
7. The get () function returns
   (a) Character
   (b) Void
   (c) Reference to the object that invoked it
   (d) Copy of the object that invoked it
8. The most efficient data type for a variable that the number 20000 is the ____ data type
   (a) Integer
   (b) Long interger
   (c) Short interger
   (d) Double
9. A Default constructor_____
   (a) Takes no argument
   (b) Has default values for all its arguments
   (c) Both (a) and (b)
   (d) None of the above
10. Storing a class definition in a separate file is an example of
   (a) Polymorphism
   (b) Inheritance
   (c) Implementation hiding
   (d) Name mangling

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