**SARDAR PATEL UNIVERSITY**
S.Y.B.C.A. (3rd Semester) (CBCS) Examination, June – 2022
**US03CBCA23 : Object Oriented Programming - I**

Date:14-06-2022          Time:12-00 to02-00 PM          Total Marks : 70

**Q.1   Multiple choice questions:**                                                   [10]

1. _____ is known as scope resolution operator.
   A. &                                    B. <<
   C. >>                                   D. ::

2. The header file _____ should be included that use input/output statements.
   A. iostream                             B. stdio
   C. conio                                D. io

3. _____ access specifier is default in class definition.
   A. private                              B. protected
   C. public                               D. None of Above

4. Object without name is known as _____.
   A. live object                          B. nameless object
   C. constant object                      D. default object

5. _____ function is used to copy one string into another string.
   A. strcopy()                            B. stringcpy()
   C. strcpy()                             D. StrCopy()

6. By default, main( ) in C++ returns _____.
   A. void                                 B. int
   C. char                                 D. char*

7. ___ is a non-member function which can access private & protected members of some other class.
   A. friend function                      B. virtual function
   C. operator function                    D. constructor

8. One base class & multiple derived classes means _____ inheritance.
   A. multiple                             B. hierarchical
   C. multilevel                           D. hybrid

9. The correct function name for overloading the addition (+) operator is
   A. operator+                            B. +operator
   C. operator(+)                          D. operator:+

10. Which one of the following operators cannot be overloaded?
    A. the function call ( )               B. +=
    C. >>                                  D. ?:

**Q.2   [A] Fill In the blanks.**                                                       [08]

1. A _____ is a collection of objects of similar type.
2. _____ is special member function because its name is same as the class name.
3. Creating a new class using one or more existing classes is known as _____.
4. Change the default operation of operator is called _____.

① ( P.T.O )

**[B] TRUE/FALSE**
1. Polymorphism means ability to take more than one form.
2. Destructor is used to free/destroy the memory occupied by the objects.
3. Defining a function with same name but different types or different no. of arguments in same class is known as function overloading.
4. A pointer is a variable that stores address of other variable.

**Q.3 Attempt any *Ten* out of *Twelve*.** [20]
1. Define encapsulation as concept of OOP.
2. List out the features of OOP.
3. Differentiate variable and constant.
4. List all access specifiers and also write its use.
5. Explain cin and cout in C++ with example.
6. Define nameless and constant object.
7. What is inline function? Give an example of it.
8. Define virtual function.
9. What is the difference between private & protected members of the class?
10. List out four operators to be overloaded in C++.
11. What are input and output stream?
12. What is Operator Overloading?

**Q.4 Attempt any *Four* out of *Eight*.** [32]
1. Explain the concept of class & object with example.
2. What is C++? Explain looping and control structure of C++.
3. Explain different types of constructor with example.
4. What is array? Explain 1D and 2D array. Also explain array of object.
5. What is inheritance? Explain types of inheritance with example.
6. Explain the concept of friend function with suitable example.
7. Explain unary operator overloading with example
8. Explain opening file using open(). Also explain read(), write(), seek().

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