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SARDAR PATEL UNIVERSITY
B. Sc.:Examination, SEMESTER – V : December-2020
COMPUTER SCIENCE
US05CCSC21: Object Oriented Programming Using C++

Date: 24/12/2020, Thursday   Time: 02:00pm to 04:00pm   Total Marks: 70

Q.1   Multiple choice of Question.   [10]

1. A _____ is a collection of objects of similar type.
   A. Data   B. Object   C. Class   D. Function

2. C++ allows declaration of variables at _____?
   A. anywhere in the scope   B. Before it is used in executable statement
   C. Both (A) and (B)   D. None

3. _____ is basic run time entity in object-oriented system.
   A. Data   B. Object   C. Class   D. Function

4. _____ is a user define data type.
   A. Class   B. Variable   C. Operator   D. Function

5. _____ is used to free/destroy the memory occupied by the objects.
   A. Constructor   B. Destructor   C. Delete   D. None of Above

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

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

8. Which function is mostly used to initialize string data-member inside the parameterized constructor?
   A. strstr()   B. strlen   C. strcpy()   D. strrev()

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

10. Which of the following declarations are illegal?
    A. void *ptr   B. char *str1="xyz"   C. char str2 = "abc"   D. const *int p1

Q.2   Fill up the blank and/or True/False.   [08]

1. _____ is known as scope resolution operator.
2. _____ is called the extraction or get from operator.
3. For string manipulation _____ header file is included.
4. Objects created dynamically with their data members initialized during creation are known as _____ Objects.
5. Defining a function with same prototype in base class & derived class is known as function overloading. [True / False]
6. While defining the derived class, base class name is written on LHS side of : symbol. [True / False]
7. A pointer is a variable that stores address of other variable. [True / False]
8. The correct function name for overloading the addition (+) operator is operator(+) [True / False]

[4]   (P.T.O.)

Q.3 Answer the following questions in short (Any 10) : [20]

1. What is object – oriented programming?

2. Define inheritance.

3. Differentiate: variable and constant.

4. List all access specifiers and also write its use.

5. List all operations on Array.

6. Define string and write how to declare string in C++.

7. Define friend function & list its use.

8. Define inheritance & state two advantages of it.

9. Discuss default arguments briefly.

10. List some of the rules for overloading operator.

11. List out five operators to be overloaded in C++.

12. Explain the multiple meanings of the operators << & >> in C++.

Q.4 Answer the following questions in LONG (Any 4) : [32]

1. Explain features (characteristics) of OOP in detail.

2. Explain all loop statements..

3. Explain copy constructor and constant objects with example.

4. Define constructor and write characteristics of constructor. Also explain constructor overloading with example.

5. Discuss inheritance in private mode and protected mode & its effects on accessibility of base-class members.

6. Discuss inline function and virtual function with appropriate example.

7. Explain binary operator overloading using friend function with example.

8. Explain unary operator overloading with example.

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