

SARDAR PATEL UNIVERSITY
S.Y.BCA (Third Semester) (CBCS) Examination 2019
Thursday, 21st November
02.00 p.m. to 5.00 p.m.
US03CBCA02: Object Oriented Programming and CPP

Maximum Marks: 70

Note: - Answers of all the questions (including multiple choice questions) should be written in the provided answer book only.

Q-1 Multiple Choice Questions. [10]

- 1) _____ is basic run time entity in object-oriented system.
 A. Class B. Object C. Data D. Function.
- 2) A _____ is a collection of objects of similar type.
 A. Class B. Object C. Data D. Function.
- 3) _____ is called as Insertion operator.
 A. & B. << C. >> D. ::
- 4) _____ function is used to copy one string into another string.
 A. strcpy() B. strcat() C. strncpy() D. strlen().
- 5) _____ is used to free/destroy the memory occupied by the objects.
 A. constructor B. destructor C. Operator D. Function
- 6) _____ Access specifier is default in class definition.
 A. private B. public C. protected D. All.
- 7) Which one of the following operators cannot be overloaded?
 A. << B. >> C. :: D. None.
- 8) _____ Constructor contains an object as argument...
 A. Copy B. Parameterizes C. Default D. none
- 9) While defining the derived class, base class name is written on _____ side of : symbol.
 A. LHS B. RHS C. Both D. None
- 10) Defining a function with same prototype in base class & derived class is known as _____.
 A. Inheritance B. Function Overloading
 C. Function Overriding D. Inline Function.

Q-2 Answer the following questions (Any Ten). [20]

- 1 List out the **Features of OOP**.
- 2 List out any four **Header file** in C++.
- 3 Define **Polymorphism** as concept of OOP.
- 4 Explain **cout** and **cin** in C++ with example.
- 5 Define **Destructor** and give its example.
- 6 Define **Classes and Objects**.
- 7 What is **Inline function**? Give an example of it.
- 8 Define **Friend function**.
- 9 What is a **Virtual base-class**?
- 10 What is **Operator Overloading**?
- 11 What are **Input and Output stream**?
- 12 What is the Difference between **Opening a File with Constructor function** and **With Open ()**?

- Q-3 [A] Differentiate between **Object Oriented Programming** and **Procedural Oriented Programming**. [5]
[B] What is C++? Explain **Structure of C++**. [5]

OR

- Q-3 [A] Explain **Features (Characteristics) of OOP** in detail. [5]
[B] Explain different **Operator** available in C++ [5]
- Q-4 [A] How many types of **Constructors** we can create in C++ programs and also write few **Characteristics of Constructor**. [5]
[B] How you can create **Arrays Of Objects?** Give an example and explain it. [5]

OR

- Q-4 [A] Explain declaration and initialization of **String** with example. [5]
[B] Explain Different **Methods of Defining Class Members** with an example. [5]
- Q-5 [A] Explain concept of **Virtual Base Class** with example. [5]
[B] Explain **Different types of Inheritance** explain **Multiple and Multilevel** inheritance with example. [5]

OR

- Q-5 [A] Explain the concept of **Friend Function** with suitable example. [5]
[B] Discuss **Inheritance in Private Mode** & its effects on **Accessibility of base-class members** [5]
- Q-6 [A] Explain **Unary and Binary Operator Overloading** with example. List **Operator** which can not be overloaded. [10]

OR

- Q-6 [A] What is **File Mode?** Describe the various **File Mode Operations** available in **CPP**. Also Describe the various classes available for **File Operations**. [10]

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