## SARDAR PATEL UNIVERSITY

External Examination (CBCS)

B. Sc. (Computer Science) – 5<sup>th</sup> Semester
US05CCSC21: Object Oriented Programming using C++
23<sup>rd</sup>November, Tuesday, 2021



Time	e: 3.00pm to 5.00pm Total Marks: 70	
Q-1	Select an appropriate option.	10
1.	is basic run time entity in object-oriented system.  (a) Class (b) Object (c) Data (d) Function	
2.	means ability to take more than one form.  (a) Inheritance (b) Polymorphism (c) Data hiding (d) Encapsulation	on
3.	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	Q.T. P. Scient
4.	function is used to copy one string into another string.  (a)strcopy() (b) stringcpy() (c)strcpy() (d) StrCopy()	V. Naga
5.	is a variable of type class.  (a) Static (b) Object (c) Operator (d) Constant	
6.	is used to free/destroy the memory occupied by the objects (a) Constructor (b) Destructor (c) Delete (d) None of these	or service of the ser
7.	By default, main() in C++ returns (a) void (b)int (c) char (d) char*	
8.	In case of multipath inheritance, problem of duplicate data-members is resolved using keyword.  (a) abstract (b) const (c) virtual (d) default	
9.	Which one of the following operators can be overloaded? (a) :: (b) New (c) .* (d) Sizeof	
10.	A pointer is  (a) A keyword used to create variables  (b) A variable that stores address of an instruction  (c) A variable that stores address of other variable  (d) All of the above	

Fill in the blanks / True or False Q-2 08 1. data is hidden and cannot be accessed by external functions. 2. The header file should be included that use input/output statements. 3. operator is the same as "scanf()" function used in C. 4. is a user define data type. strcpy() function is mostly used to initialize string data-member 5. inside the parameterized constructor. (True / False) 6. Creating a new class using one or more existing classes is known as Polymorphism. (True / False) The correct function name for overloading the addition (+) operator is 7. operator+. (True / False) 8. ?: operators cannot be overloaded. (True / False) Q-3 Answer the following questions. (Attempt any TEN) 20 1. Define class & object. 2. Define encapsulation as concept of OOP. 3. List out any four header files in C++. 4. List all operations on array. 5. Explain cin in C++ with example. Define destructor with example. 6. 7. Discuss default arguments briefly. 8. Explain inline function with example. What is the difference between private and protected members of the 9. class? 10. What is operator overloading? What are input and output stream? 11. 12. What is this pointer? Q-4 Answer the following questions. (Attempt any FOUR) 32 1. Explain features of OOP in detail. 2. Explain different data type available in C++. What do you mean by constructors? What is the use of constructors 3. in C++? 4. Define array. Explain passing arrays to functions with example. 5. Define inheritance. List all types of inheritance. Discuss the syntax of defining base-class & derived class. 6. Explain the concept of friend function with suitable example. 7. Explain binary operator overloading with example. 8. Explain unary operator overloading with example.

