## C. U. SHAH UNIVERSITY Winter Examination-2022

## Subject Name : Object Oriented Programming

Semester: 2       Date: 20/09/2022       Time: 11:00 To 02:00       Marks: 70         Instructions:       (1) Use of Programmable calculator & any other electronic instrument is prohibited.       (2) Instructions written on main answer book are strictly to be obeyed.       (3) Draw neat diagrams and figures (if necessary) at right places.       (4) Assume suitable data if needed.         Q-1       Attempt the following questions:       (14)         a)       Which feature of OOP indicates code reusability?       1         [A] Abstraction       [B] Polymorphism       [C] Encapsulation       [D] Inheritance         b)       The feature by which one object can interact with another object is       1         [A] Message reading       [B] Data Binding       [C] Message Passing       [D] Data transfer
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[A] Message reading [B] Data Binding
c) Which keyword is used to declare virtual functions?
[A] virtually [B] virtual [C] virt [D] anonymous d) Encapsulation and abstraction differ as
<ul> <li>d) Encapsulation and abstraction differ as1</li> <li>[A] Binding and Hiding respectively [B] Hiding and hiding respectively</li> </ul>
[C] Hiding and Binding respectively [D] Can be used any way
e) Which of the following does not have body?
[A] An Abstract Method [B] A Class
[C] An Interface [D] None of the above
<ul> <li>f) How many types of polymorphism in the C++ programming language?</li> <li>[A] 3 [B] 2 [C] 5 [D] 4</li> </ul>
<b>g</b> ) Which of the following feature is also known as run-time binding or late 1
binding?
[A] Dynamic Typing [B] Dynamic Loading
[C] Dynamic Binding [D] Data Hiding
<b>h</b> ) Which operator overloads using the friend function?
<ul> <li>[A] -&gt; [B] () [C] = [D] *</li> <li>i) Which member of the superclass is never accessible to the subclass? 1</li> </ul>
[A] Private Members [B] Protected Members
[C] Public Members [D] All of the above
j) Which class cannot create its instance?
[A] Parent Class [B] Abstract Class
[C] Nested Class [D] Anonymous Class
<b>k</b> ) A single program of OOPS contains classes? 1
[A] Only 1[B] Only 999[C] Any Number[D] Only 100I)Which of the following class is known as the generic class?1



[A] Abstract Class [B] Efficient Code [C] Final Class [D] Template Class **m**) What is the output of following c++ code? 1 #include <iostream> using namespace std; int main() { int a = 5; float b; cout << sizeof(++a + b);</pre> cout << a; return 0; } [A] 2 5 [B] 4 5 [C] 4 6 [D] 2 6 **n**) What is the output of following c++ code? 1 #include <iostream> using namespace std; void square (int \*x, int \*y) { \*x = (\*x) \* --(\*y);} int main () { int number = 30;square(&number, &number); cout << number;</pre> return 0; } [A] 30 [B] Error [C] 870 [D] Segmentation fault

## Attempt any four questions from Q-2 to Q-8

Q-2		Attempt all questions	(14)
-	А	Difference between OOP and POP (Write any 7).	7
	В	What is reference variable? Explain with example.	7
Q-3		Attempt all questions	(14)
	А	Write a C++ program which finds area of circle using inline function.	7
	В	Write a C++ program to find bigger number among two numbers using friend	7
		function.	
Q-4		Attempt all questions	(14)
	А	What is constructor? Explain different types of constructor with examples.	7
	В	Write a C++ program to find sum of 1 to 100 using operator overloading.	7
Q-5		Attempt all questions	(14)
	А	Write a C++ program which count number of objects created for class.	7
	В	What is operator overloading? Write rules for operator overloading.	7
Q-6		Attempt all questions	(14)
	А	What is inheritance? List out various types of inheritance and explain any one	7
		with example.	
	В	Write a C++ program using pointer and virtual function to find area of	7



		rectangle and triangle.	
Q-7		Attempt all questions	(14)
	А	Write a C++ program to copy the source file into the destination file character	7
		by character using command line arguments.	
	В	Explain function template with suitable example.	7
Q-8		Attempt all questions	(14)
	Α	List out operators in C++ explain any two in detail.	7
	В	List out types of loops available in C++ explain any one in detail.	7

