Name:

Enrolment No:

BML MUNJAL UNIVERSITY
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End-Term Examination – Feb 2022

Course: CSE1008 - OBJECT ORIENTED PROGRAMMING USING C++

Programme: B.Tech. CSE **Semester: I (ODD: 2021-22)**

Duration: 1 hrs. **Max. Marks: 40**

Instructions:

- All Questions are compulsory.

	Section A – Choose the correct option (Q 1 – Q 16) – 24 Marks	Marks	CO & BL
1	Which concept allows you to reuse the written code? a. Encapsulation b. Abstraction c. Inheritance d. Polymorphism	[1.5]	CO1 & L1

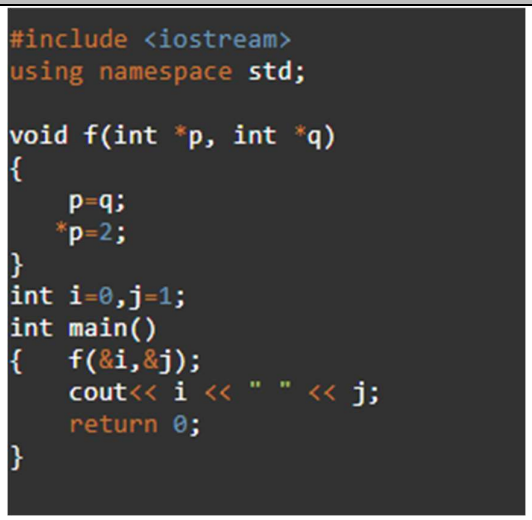
2	Which of the following explains Polymorphism?
	a. int func(int, int); float func1(float, float);
	b. int func(int); int func(int);
	c. int func(float); float func(int, int, char);
	d. d) int func(); int new_func();
		[1.5]	CO1, CO2 & L1

3	How access specifiers in Class helps in Abstraction? a. They does not helps in any way b. They allows us to show only required things to outer world c. They help in keeping things together d. d) Abstraction concept is not used in classes	[1.5]	CO1, CO2 & L2
4	Which of the following is correct? a. Base class pointer object cannot point to a derived class object b. Derived class pointer object cannot point to a base class object c. A derived class cannot have pointer objects d. d) A base class cannot have pointer objects	[1.5]	CO1, CO2 & L1
5	Out of the following, which is not a member of the class? a. Static function b. Friend function c. Constant function d. d) Virtual function	[1.5]	CO1, CO2 & L2
6	Which of the following is used to make an abstract class? a. By using virtual keyword in front of a class declaration b. By using an abstract keyword in front of a class declaration c. By declaring a virtual function in a class d. By declaring a pure virtual function in a class	[1.5]	CO1, CO2 & L1
7	Which of the following is correct? a. A class is an instance of its objects b. An object is an instance of its class	[1.5]	CO1, CO2 & L2

	c. A class is an instance of the data type that the class have d. An object is an instance of the data type of the class		
8	The best description of polymorphism is---------- a. It is the ability for undefined message/data to be processed in at least one way b. It is the ability for a message/data to be processed in more than one form c. It is the ability for many messages/data to be processed in many ways d. D. none of these	**[1.5]**	**CO2, CO3 & L2**
9	Which among the following can restrict class members to get inherited? a. Private b. Protected c. Public d. D. All three	**[1.5]**	**CO3 & L1**
10	Which of the following is true? a. All objects of a class share all data members of class b. Objects of a class do not share non-static members. Every object has its own copy c. Objects of a class do not share codes of non-static d. D. None of these	**[1.5]**	**CO2, CO3 & L2**
11	What is the default mode of the opening using the ofstream class? a. ios::out b. ios::in c. ios::app d. ios::trunc	**[1.5]**	**CO2, CO3 & L1**
12	Which of the following is correct way of opening a FILE? a. filename : open(“demo.txt” , ios::out); b. filename -> open(“demo.txt” , ios::out); c. filename :: open(“demo.txt” , ios::out); d. filename . open(“demo.txt” , ios::out);	**[1.5]**	**CO2, CO3 & L1**
13	Why we use eof ? a. To read next character b. To check the next character is space c. To check whether we have reached end of file d. To check whether we have reached end of line	**[1.5]**	**CO2, CO3 & L1**

14	For the following scenario:
	int b=50,a[10];
	int *ptr_b;
	ptr_b=&b;
	ptr_a=a;
	Choose the incorrect answer with regard to the scenario given above:
	a. With the help of a dereference operator we can directly access the data variable content.
	b. Dereferencing a pointer allows us to get the content of the memory location that the pointer points to.
	c. Using the dereferencing operator, we cannot change the contents of the memory location.
	d. An integer can be added to or subtracted from the pointer variable ptr_a.
		[1.5]	**CO2, CO3, CO4 & L3**

15	Identify the incorrect statement:	**[1.5]**	**CO3, CO4 & L3**

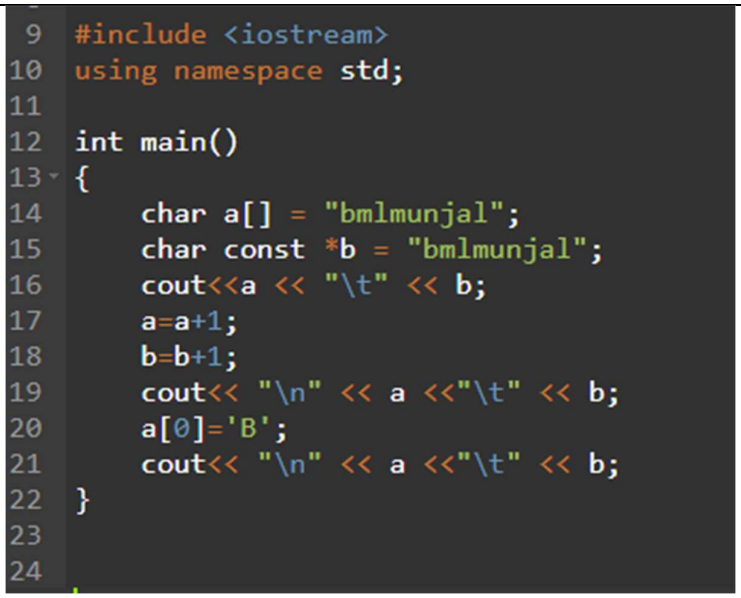
	a. We can perform pointer arithmetic on variables which are stored in contiguous memory locations. b. The memory addresses of arrays cannot be changed whereas the content of the pointer variable, such as the memory addresses that it refers to can be changed. c. C. Suppose we declare an array of size 20. The compiler issues no warnings if we attempt to access 21st location. d. A pointer of type void * can be assigned directly to a pointer of another type.		
16	Which of the following cannot be declared as virtual? a. Constructor b. Destructor c. Data Members d. Both a and c	**[1.5]**	**CO1, CO3 & L1**
	Section B – Predict the output and select the correct answer (Q 18 – Q 21) – 10 Marks	**Marks**	**CO & BL**
18	 a. 2,2 b. 2,1 c. 0,1 d. 0,2	**2.5**	**CO2, CO4 & L3**

19	#include<iostream>
	using namespace std;
	int main()
	{
	double a = 21.09399;
	float b = 10.20;
	int c ,d;
	c = (int) a;
	d = (int) b;
	cout << c <<'\t'<< d;
	return 0;
	}
	
	a. 20 10
	b. 10 21
	c. 21 10
	d. None of the mentioned
		2.5	**CO3, CO4 & L3**

20	#include<iostream>
	using namespace std;
	class abc
	{
	public:
	int i;
	abc(int i)
	{
	i = i;
	}
	};
	int main()
	{
	abc m(5);
	cout << m.i;
	return 0;
	}
	
	a. 5
	b. Garbage
	c. Error at the statement i=i;
	d. Compile error: 'i' declared twice.
		2.5	**CO3, CO4 & L3**

21	#include<iostream>
	using namespace std;
	int main()
	{
	class student
	{
	int rno = 10;
	} v;
	cout << v.rno;
	return 0;
	}
	
	a. 10
	b. Error: 'int main()::student::rno' is private within this context
	c. Error: 'rno' is private within this context
	d. No error
		2.5	**CO3, CO4 & L3**

	Section C – (Q 22 – Q 23) – 6 Marks	**Marks**	**CO & BL**
22	Identify the line number that should be changed to execute the following code:	**3**	**CO4 & L4**

	 a. Line 15 b. Line 17 c. Line 18 d. Line 20		

23	Statement I: There is no index out of bounds checking in C++.
	Statement II: The following program successfully compiles
	`#include <iostream>`
	`using namespace std;`
	`int main()`
	`{`
	`int arr[2];`
	`cout << arr[3] << " ";`
	`cout << arr[-2] << " ";`
	`return 0;`
	`}`
	Choose the correct option:
	a. Statement I is true, Statement II is true and statement II is the correct explanation of statement I.
	b. Statement is true, Statement II is true and statement II is not the correct explanation of statement I.
	c. Statement I is true, Statement II is false.
	d. Statement II is true, Statement I is false
		3	**CO4 & L4**