

(Please write your Enrollment Number)

End-Term Examination
(CBCS)(SUBJECTIVE TYPE)(Offline)
(B.Tech IT) (4th Sem)
(April -May, 2024)

Enrollment No. 01001042022

Subject Code: BIT-204

Subject: Object Oriented Programming

Maximum Marks :60

Time :3 Hours

Note: Q1. is compulsory. Attempt one question each from the Units I, II, III & IV.

Q1	(5 x 4 =20)	
	<p>(a) In C++, the value of a comma-separated list of expressions is the value of the right-most expression. Following this, what is the output of the following program? Justify your answer.</p> <pre>#include <iostream> using namespace std; int main() { int i, j; j = 10; i = (j++, j+100, 999+j); cout << i; return 0; }</pre>	
	(b) Write a C++ program to find minimum of two numbers using an inline function.	
	(c) Explain the following characteristics of Java: 1) Java is secure 2) Java is portable.	
	(d) Differentiate between abstract class and interface in java through suitable program examples.	

UNIT-I

Q2	a) Write a c++ program to accept any 20 positive numbers and find the sum of even numbers and sum of odd numbers. b) What is typecasting? Demonstrate through a program - explicit and implicit type conversions.	(6,4)
Q3	a) Explain any 5 characteristics of object-oriented programming. b) Write a C++ program to square an integer value using 1) Call by pointers 2) Call by reference.	(5,5)

UNIT-II

Q4	a) Write a C++ operator overloading program where (++) operator increments the value by 20. b) Why is copy constructor used? Write a small C++ program to demonstrate the usage of copy constructor.	(6,4)
Q5	a) Write a C++ program to show the order of constructor calls in Multiple Inheritance utilizing parameterized constructors. b) Write a C++ program to demonstrate the usage of protected access specifier.	(7,3)

UNIT-III

Q6	Write a C++ program that reads a text file and finds the number of characters, words and lines in a file.	(10)
Q7	Explain the role of exception handling in C++ through a neat diagram. Write a C++ program to show multiple catch blocks for a single try block.	(10)

UNIT-IV

Q8	a) Explain with small programs: 1) Packages in Java 2) Multi-threaded programming in Java	(5,5)
Q9	a) Write a Java program to demonstrate multilevel inheritance utilizing super keyword to call superclass constructors.	(10)