School of Computing Science and Engineering

Bachelor of Computer Applications
Semester End Examination - Jun 2024

Duration : 180 Minutes
Max Marks : 100

Sem II - E1UA203C- B080203T - E1UA201C - B070202T - Object Oriented Programming using C++

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1)	Identify the error in the following program. #include void main() { int i = 0; i = i + 1; cout « i « " "; /*comment *//i = i + 1; cout << i; }	K1(2)
2)	Compare encapsulation and inheritance.	K2(4)
3)	Develop a C++ program that illustrates the use of constructors and destructors by creating a class representing a book with member variables such as title and author, and constructors to initialize the object and destructors to deallocate memory.	K2(6)
4)	Write a C++ program demonstrating a class with private, protected, and public members.	K3(9)
5)	Analyze how string is different from a character array in C++ ? Explain any five built-in string functions available in C++.	K3(9)
6)	Explain the concept of method overriding with the help of an example.	K5(10)
7)	Create a C++ program illustrating different modes used in file handling	K4(12)
8)	Write a program to define a class to represent a bank account. Include the following members:Data members: i. Name of the depositor. ii. Account number. iii. Type of account. iv. Balance amount in the account. Member functions: i. To assign initial values. ii. To deposit an amount. iii. To withdraw an amount after checking the balance. iv. To display the name and balance.	K5(15)
9)	Explain the purpose of using loop control statements such as break and continue in C++ loops? How can you implement a C++ program that demonstrates the usage of different types of logical operators.	K5(15)
10)	Implement a program to use the operator overloading mechanism to overload + operator so that it can add two complex numbers.	K6(18)