



CBCS SCHEME

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BCS306B

**Third Semester B.E./B.Tech Degree Supplementary Examination,
June/July 2024**

Object Oriented Programming with C++

Time: 3 hrs.

Max. Marks: 100

*Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.*

Module – 1			M	L	C
Q.1	a.	What is object oriented programming? How it differs from procedure oriented programming? Explain the structure of C++ program.	10	L1	CO1
	b.	Define constructor. List any 6 characteristics. Explain the concept with program.	10	L2	CO1
OR					
Q.2	a.	Discuss the importance of class. With suitable example demonstrate the relationship between class and objects.	10	L2	CO1
	b.	Illustrate the process of passing objects of functions with example and explain.	10	L2	CO1
Module – 2					
Q.3	a.	What is pointer to an object? Demonstrate how to declare and use of pointers to an objects in C++.	10	L2	CO2
	b.	Explain the following with example : i) Function overriding ii) The "this" pointer.	10	L2	CO2
OR					
Q.4	a.	Write a C++ program to illustrate function overloading with proper output.	10	L3	CO2
	b.	Explain the concept of ambiguity in function overloading. How it can be resolved.	10	L2	CO2
Module – 3					
Q.5	a.	What is Inheritance? List and explain any 4 types of it.	10	L1	CO3
	b.	With suitable program, explain the concept of operator overloading.	10	L2	CO3
OR					
Q.6	a.	With proper output, write a C++ program to demonstrate usage of 'new' and 'delete' operators.	10	L3	CO4
	b.	Explain the use of "protected" members in inheritance with program.	10	L2	CO4

Module – 4

Q.7	a.	What are virtual functions? With program, explain how virtual attribute is inherited.	10	L2	CO4
	b.	Define 'Pure virtual functions'. Differentiate 'Virtual functions' and 'pure virtual functions' with example.	10	L2	CO4

OR

Q.8	a.	Explain the differences between early binding and late binding.	10	L2	CO4
	b.	Discuss the following : i) Use of templates in C++ ii) Type name and export keyword.	10	L2	CO4

Module – 5

Q.9	a.	Explain the fundamentals of exception handling with suitable program.	10	L2	CO5
	b.	How do you handle 'Derived Class Exceptions' explain with example?	10	L2	CO5

OR

Q.10	a.	Explain the following : i) Formatted IO ii) File streams and string streams.	10	L1	CO6
	b.	Discuss any 4 file handling methods.	10	L2	CO6

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