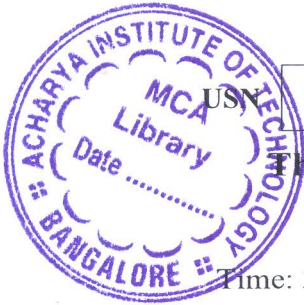


CBCS SCHEME



BCS306B

Third Semester B.E./B.Tech. Degree 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? Compare object oriented programming with procedure oriented programming concept.	10	L1 L2	CO1
	b.	Explain the following with an example: i) Scope resolution operator ii) Friend function	10	L2	CO1
OR					
Q.2	a.	Explain with an example: i) Friend Class ii) Static class members	10	L2	CO1
	b.	What are constructors? Explain different types of constructors with an example.	10	L1 L2	CO1
Module – 2					
Q.3	a.	Define Class and Object. Develop C++ program to find the largest of three numbers.	08	L3	CO2
	b.	Explain with example, copy constructors.	06	L2	CO2
	c.	Demonstrate with an example of pointers to an objects.	06	L2	CO2
OR					
Q.4	a.	Implement C++ program to sort the elements in ascending and descending order.	08	L3	CO2
	b.	Explain with example program for Function overloading.	06	L2	CO2
	c.	Demonstrate the concept of this pointer with an example program.	06	L2	CO2
Module – 3					
Q.5	a.	What is Operator overloading? Explain the overloading of unary operator with an example program.	08	L2	CO3
	b.	What is inheritance? Illustrate the different types of inheritance and syntax of defining derived classes.	08	L2	CO3
	c.	Write short notes on Granting Access.	04	L2	CO3
OR					
Q.6	a.	Explain the concept of New and delete functions in overloading with an example.	08	L2	CO3
	b.	Demonstrate the concept of inheriting multiple Base classes with example.	08	L2	CO3
	c.	Short notes on Destructors with an example.	04	L2	CO3
Module – 4					
Q.7	a.	What is polymorphism? How Early and Late Binding in polymorphism with an example program.	10	L2	CO4
	b.	Explain how virtual functions are hierarchical with suitable example program.	10	L2	CO4
OR					
Q.8	a.	Explain Generic functions with an example program.	10	L2	CO4
	b.	Demonstrate concept of power of templates with an example program.	10	L2	CO4

Module – 5					
Q.9	a.	Implement a C++ program to create a text file, check file created or not. If created it will write some text into a file and then read the text from the file.	08	L3	CO5
	b.	Develop a function which through a division by zero exception and catch it in catch block, write a C++ program to demonstrate usage of try, catch and through to handle exception.	08	L3	CO5
	c.	Write short notes on formatted I/O functions.	04	L2	CO5
OR					
Q.10	a.	Implement a C++ program to write and read time in/from binary file using fstream.	08	L3	CO5
	b.	Develop a C++ program that handles array out of bounds exception using C++.	08	L3	CO5
	c.	Write short notes on Derived Class exception.	04	L2	CO5
