



CBCS SCHEME

BPLCK205D/BPLCKD205

Second Semester B.E./B.Tech. Degree Examination, June/July 2023 Introduction to C++ Programming

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.	Explain the basic C++ program syntax with an example.	10	L2	CO1
	b.	What is the need of abstract class in C++? Discuss with an example.	10	L2	CO1
OR					
Q.2	a.	Discuss object and classes in brief.	4	L2	CO1
	b.	Write down the syntax and example to create a class.	6	L3	CO2
	c.	Define the terms: (i) Message passing (ii) Abstraction (iii) Encapsulation (iv) Inheritance (v) Polymorphism	10	L2	CO1
Module – 2					
Q.3	a.	Explain scope resolution operator with an example program.	10	L2	CO1
	b.	What is a token? List the various types of token and explain in brief.	10	L2	CO1
OR					
Q.4	a.	Illustrate the use of inline functions with a program.	10	L2	CO4
	b.	Write a C++ program to swap 2 values by writing a function that uses call by reference technique.	10	L3	CO5
Module – 3					
Q.5	a.	What does inheritance mean in C++? What are the different forms of inheritance? Give an example for each.	10	L2	CO2
	b.	Suppose we have three classes vehicle, four wheeler and car. The class vehicle is the base class, the class four wheeler is derived from it and the class car is derived from the class four wheeler. So, if we invoke the methods in this order, car(), four wheel() and vehicle(), then the output will be I am a car. I have four wheels. I am a vehicle. Write a C++ program to demonstrate multilevel inheritance using this.	10	L3	CO5
OR					
Q.6	a.	What is a constructor? How do we invoke a constructor function?	5	L2	CO2
	b.	Describe the importance of destructors.	5	L2	CO2
	c.	How is polymorphism achieved at (i) compile time (ii) run time, with an example program.	10	L2	CO4
Module – 4					
Q.7	a.	Write a note on I/O streams.	10	L2	CO1
	b.	What are the various types of files? What are the various modes in which a file can be opened with an example program?	10	L2	CO2
OR					
Q.8	a.	Explain the uses of ifstream and ofstream classes for file input and output.	10	L2	CO2
	b.	Write a C++ program to create a text file created or not, if created it will write some text into the file and then read the text from the file.	10	L3	CO3

Module – 5					
Q.9	a.	Define exception. Explain different blocks of exception handling.	10	L2	CO1
	b.	Write a function which throws a division by zero exception and catch it in catch block. Write a C++ program to demonstrate usage of try, catch and throw to handle exception.	10	L4	CO4
OR					
Q.10	a.	Discuss catching class type as exception and rethrowing an exceptions.	10	L4	CO3
	b.	Write a C++ program function which handles array of bounds exception using C++.	10	L3	CO2
