CBCS SCHEME

*	The state of the s	and the state of		The same of the sa						
	The second second									DDI CIZACED DDI CIZDACE
Ž.	-		l .					1		RPITE MANARET CENTRE
п		s.l						1		BPLCK205D/BPLCKD205
ď	- A	Sec. 1	1			1	1	1	1 1	
a,	The state of the s	100				1	1		1 1	
		P. 1974			1	1				

Second Semester B.E./B.Tech. Degree Examination, June/July 2024 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.	List and explain any five characteristics of C++.	10	L1	CO1
	b.	Explain the structure of C++ program with syntax and program.	10	L2	CO1
		OR			
Q.2	a.	Define the following terms with an example : i) Object ii) Classes	10	L1	CO1
		iii) Abstraction iv) Encapsulation v) Polymorphism.			
	b.	Explain Inheritance in details.	5	L2	CO1
	c.	Write a C++ program to find the sum of all the natural numbers from 1 to n.	5	L3	CO1
		Module – 2			
Q.3	a.	List and explain any five expressions and their types.	10	L1	CO2
	b.	Explain Inline functions with a programming example.	10	L2	CO2
		OR	И		
Q.4	a.	Explain Scope Resolution Operator, with an example.	5	L2	CO2
	b.	Explain call by reference with a programming example.	5	L2	CO2
	c.	Write a C++ program to demonstrate function overloading for the following prototypes. add (int a, int b) add (double a, double b).	10	L3	CO2
		Module – 3	<u>. </u>		
Q.5	a.	Explain constructors with syntax and suitable example.	10	L2	CO3
	b.	Describe the syntax of Multiple Inheritance with a programming example.	10	L2	CO3
		OR	,		
Q.6	a.	Explain Single Inheritance with Syntax and programming example.	10	L2	CO3
	b.	Create a class named shape with a function that prints "This is a Shape". Create another class named Polygon inheriting the shape class with same function that prints "Polygon is a Shape". Create two other classes named Rectangle and Triangle having the same function which prints. "Rectangle	10	L3	CO3
		is a Polygon" and "Triangle is a Polygon" Respectively. Again, make another class named square having the same function which prints "Square is a rectangle". Now, try calling the function by the object of each of these classes.			
		1 of 2			

BPLCK205D/BPLCKD205

b. Write a C++ program to create a text file, check file created or not , if created it will write some text into the file and then read the text from the file. OR 8.8 a. Explain the method of read. Write using get () and put () functions in Text files. b. Write a C++ program to write and read time in / from binary file using f-stream. Module - 5 9.9 a. Define Exception. Explain mechanism of exception handling in C++ with syntax and programming example. b. Write a C++ program function which handles array of bounds exception 10 L3 CO using C++. OR OR 1.10 a. Discuss Multiple catch statements with syntax and programming example. 1.2 CO	Q.7		Module – 4			
created it will write some text into the file and then read the text from the file. OR 8 a. Explain the method of read. Write using get () and put () functions in Text files. b. Write a C++ program to write and read time in / from binary file using 10 L3 CO syntax and programming example. Module - 5 19 a. Define Exception. Explain mechanism of exception handling in C++ with syntax and programming example. b. Write a C++ program function which handles array of bounds exception 10 L3 CO using C++. OR 10 a. Discuss Multiple catch statements with syntax and programming example. 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.	2.7	a.	With a neat diagram, explain Stream Class hierarchy in C++.	10	L2	CO4
Solution of the street of the syntax and programming example. Diagram D		b.		10	L3	CO4
OR 1.8 a. Explain the method of read. Write using get () and put () functions in Text files. 1.0 L2 CO files. 1.0 b. Write a C++ program to write and read time in / from binary file using f-stream. 1.0 L3 CO f-stream. 1.0 L2 CO syntax and programming example. 1.0 L2 CO syntax and programming example. 1.0 L3 CO for the control of the control o				l Sa		
a. Explain the method of read. Write using get () and put () functions in Text files. b. Write a C++ program to write and read time in / from binary file using f-stream. Module - 5 9 a. Define Exception. Explain mechanism of exception handling in C++ with syntax and programming example. b. Write a C++ program function which handles array of bounds exception 10 L3 CO using C++. OR 10 a. Discuss Multiple catch statements with syntax and programming example. 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.						
b. Write a C++ program to write and read time in / from binary file using f-stream. Module - 5	0.0	_		10	1.3	CO 1
Module – 5 1.9 a. Define Exception. Explain mechanism of exception handling in C++ with syntax and programming example. b. Write a C++ program function which handles array of bounds exception using C++. OR 1.0 a. Discuss Multiple catch statements with syntax and programming example. 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.	Ų.8	a.		10	LZ	C04
a. Define Exception. Explain mechanism of exception handling in C++ with syntax and programming example. b. Write a C++ program function which handles array of bounds exception using C++. OR 10 L2 CO Discuss Multiple catch statements with syntax and programming example. 10 L2 CO 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.		b.		10	L3	CO4
syntax and programming example. b. Write a C++ program function which handles array of bounds exception 10 L3 CO using C++. OR 10 L2 CO 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.						
using C++. OR Discuss Multiple catch statements with syntax and programming example. 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. *****	Q.9	a.	Define Exception. Explain mechanism of exception handling in C++ with syntax and programming example.	10	L2	CO4
Discuss Multiple catch statements with syntax and programming example. 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.		b.		10	L3	CO4
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.			using C vi.			
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.						
catch block. Write a C++ program to demonstrate usage of try, catch and throw to handle exception.	Q.10	a.	Discuss Multiple catch statements with syntax and programming example.	10	L2	CO4
catch block. Write a C++ program to demonstrate usage of try, catch and throw to handle exception.		b.	Write a function which throws a division by zero exception and catch it in	10	1.3	CO4
			catch block. Write a C++ program to demonstrate usage of try, catch and	10	LIS	COS
			A T			
			A' CA A			
			A SURVINIA A			
			A CONTRACTOR OF THE PARTY OF TH			
		Ana	****			

		7	****			

			* * * *			
			* * * *			
2 of 2			***			
2 of 2			****			
2 of 2			***			
2 of 2			***			
2 of 2						
2 of 2						