

Total number of printed pages: Programme(Diploma)/5th Sem (Back)/DCSE503

2024

Object Oriented Programming with C++

Full Marks: 100

Time: Three hours

The figures in the margin indicate full marks for the questions.

Answer any five questions.

1.	a)	Define <i>Class</i> and <i>Object</i> in Object-Oriented Programming. Explain Class and Object with an example.	14 + 6
	b)	Write the advantages of Object-Oriented Programming.	
2.	a)	What is the difference between the <i>Structure</i> and <i>Class</i> ?	6 + 14
	b)	Write a Class of <i>Student</i> with the private attributes are the marks of five subjects. Write a member function to calculate the percentage of the marks.	
3.	a)	What is constructor? What are the use of a constructor? State some properties of a constructor.	10+10
	b)	Write a Class in C++ to find the maximum of two number. Where numbers are initialized with a constructor.	
4.	a)	Describe the concept of inheritance in C++. What are its advantages?	10+10
	b)	Write a C++ program to demonstrate single inheritance. Create a base class as Person with attributes <i>Name</i> , <i>Age</i> , <i>PhNo</i> and a derived class Student that inherits from Person.	
5.	a)	What is exception? Why exception handling is better to use?	10+10
	b)	Explain exception handling with <i>try..... catch</i> by using suitable example.	
6.		Write the short note on	4 x 5
		i) Abstraction ii) Inheritance iii) Encapsulation iv) Polymorphism	