

162 H 100

**Mid Semester Examination 2023**

Name of the Program: Diploma

Semester: III  
Course Code: DTCS-301

Name of the Course: \_\_\_\_\_

Paper Name: Object Oriented  
programming with c++

Maximum Marks: 50

Time: 1-1/2 Hour

**Note:**

- (i) Answer all the questions by choosing *any one or the sub questions*.
- (ii) Each question carries 10 marks

Q1	(10 marks)	CO1
(a)	What the concepts are of object oriented programming? Explain in detail	
	OR	
(b)	Explain about scope resolution operator and explain about name space?	
Q2	(10 marks)	CO2
(a)	Explain the specification of class, and using objects as function arguments.	
	OR	
(b)	Differentiate between user defined data types and derived data types.	
Q3	(10 marks)	CO3
(a)	Write a C++ program to calculate sum of distance and display the result using friend function?	
	OR	
(b)	What is constructor .Explain various types of constructor with example?	
Q4	(10 marks)	CO4
(a)	"Overloading is a type of polymorphism" Elaborate the given statement with the help of suitable example using concept of function overloading.	
	OR	
(b)	With example, explain friend function and friend class	
Q5	(10 marks)	CO5
(a)	Write a C++ program to sort the given list of numbers in ascending order.	
	OR	
(b)	Explain different forms of inheritance. Illustrate with an example each type with an example.	