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Roll No: 2107010101 PRANVEER SINGH INSTITUTE OF TECHNOLOGY, KANPUR  
CT -1

Odd Semester

Session 2023-24

B. Tech V<sup>th</sup> Semester

## Object Oriented System Design (KCS-054)

### Course Outcome

CO Number	
CO1	Define [L1. Remember] the system development process and insights of object-oriented programming to implement in an application.
CO2	Describe [L2. Understand] the role of OOPs concepts and overall modelling concepts (i.e. System, Structural).
CO3	Use [L3. Apply] UML design patterns and basic concepts of C++ to implement the object-oriented concept.
CO4	Analyze [L4. Analysis] object-oriented approach to implement real world problem.

Time: 1.5 Hrs.

### Section A

M. M. 15

(1X3 = 3 Marks)

Q1. Attempt all questions:

- Define Abstraction and Encapsulation.
- Define information hiding and generosity.
- List OOPs Principles.

CO1

CO1

CO1

### Section B

(2X4 = 8 Marks)

Q2. Attempt all questions:

- Define Stereotypes of UML with example.
- Describe Tagged values of UML.
- Define visibility of class attributes and operations.
- Define "IS-A" relationship with example.
- Define Aggregation and Association.
- List various advantages of object-oriented programming.
- Explain Polymorphism and Inheritance with its type.
- Explain Class diagram and its purpose.

Or

Or

Or

Or

CO1

CO1

CO1

CO1

CO1

CO1

CO2

CO2

### Section C

(4X1 = 4 Marks)

- Q3
- Illustrate various "Things" available in UML.

Or

- Illustrate Object diagram and its purpose. Draw a Object diagram for shopping System.

CO3

CO3