



**DELHI TECHNICAL CAMPUS  
GREATER NOIDA**  
*Affiliated to GGSIPU and approved by AICTE & COA*



## **Group Assignment/Mini Project**

### **Instructions:**

- This mini project is designed to cover various aspects of Object-Oriented Paradigm.
- Students should work collaboratively in groups (maximum of 4 students), allocate tasks, and present their findings and solutions in a final report or presentation.
- Submit the assignment on or before (Mentioned date).
- Documentation is must
- PPT Presentation is must

**Subject: Principle of Programming Languages**

**Subject Code: CIE-320**

**Class: B.Tech CSE 6<sup>th</sup>**

**Faculty Name: Dr. Archana Sharma/Ms. Shweta Rai**

**Date of Issue: 07/03/24**

**Date of Submission: 11/03/24**

### **Mini Project Title: Object Oriented Design for the below mentioned projects:**

1. Real Time System
2. Client Server System
3. Object Oriented Database
4. Office Automation System
5. AI Expert System
6. Comparative Study of C++, JAVA, Python, C#
7. E-Commerce Systems
8. Simulation and Modelling
9. Neural Networking and Parallel Programming

**Objective:** The objective of this mini project is to apply the Object-Oriented Paradigm principles in software development.

### **Tasks:**

#### **Phase 1: Problem Statement (CO2) [L2]**

Construct a Problem Statement. Clearly define the abstraction Object, Classes and their association.

#### **Phase 2: Apply the key features of OOP features like polymorphism, Inheritance, Information hiding (CO 2) [L3]**

- Design the document including product perspective. Mention the constraints and assumptions required for the project.
- Construct the class diagram
- Brief about the relationship of Classes using Inheritance/information hiding
- Apply Polymorphism/overloading concepts

**Deliverables:** Project Report (Softcopy and Hardcopy of Project)