

Topic 2 - Practice Questions and Assignments

SECTION A: Conceptual Questions

1. What is OOP?
2. What is the difference between a class and an object?
3. Why is encapsulation important?
4. What is UML?
5. What does private mean in a class?

SECTION B: Coding Practice

1. Create a class Car with:
 - brand
 - model
 - function display()
2. Create an object of Car and display details.
3. Create a class Rectangle with:
 - length
 - width
 - function area()
4. Create a BankAccount class with private balance.
Add deposit() and getBalance() functions.

MINI ASSIGNMENTS

Assignment 1:

Create a Student class with private data members and public setter/getter functions.

Assignment 2:

Create a Product class and design its UML diagram before coding.

END-OF-TOPIC CHALLENGE

Create a complete program that:

- Uses class
- Creates multiple objects
- Uses encapsulation
- Displays output clearly