AIS Learning
B.Sc. Physical Sciences - Computer Sciences

Practice Tutorial
Lesson 01: Object-Oriented Programming (OOP) Concepts

1. Definition of OOP:
    a. What is Object-Oriented Programming (OOP)?
    b. Explain the main principles of OOP.

2. Classes and Objects:
    a. Define a class.
    b. What is an object in the context of OOP?

3. Encapsulation:
    a. Explain the concept of encapsulation.
    b. How does encapsulation contribute to data hiding?

4.Inheritance:
    a. Define inheritance in OOP.
    b. Explain the difference between a superclass and a subclass.

5. Polymorphism:
    a. What is polymorphism?
    b. Provide an example of compile-time polymorphism.

6. Abstraction:
    a. Define abstraction.
    b. How does abstraction simplify complex systems in programming?

7. Constructor and Destructor:
    a. What is the purpose of a constructor in a class?
    b. When is the destructor called in an object's lifecycle?

8. Method Overloading:
    a. Define method overloading.

b. Provide an example of method overloading in a class.

9. Interface in OOP:
    a. What is an interface in OOP?
    b. How does an interface differ from a class?

10. Association in OOP:
    a. Define association between classes.
    b. Provide an example of a scenario where two classes are associated.

Try those questions by yourself, and submit your answers to us.
We can evaluate it for you!!!!
Happy Learning!!!!

-Evaluation Team AIS Learning