## Q1. Explain Class and Object with respect to Object-Oriented Programming. Give a suitable example.

ANS: A class is considered as a blueprint of objects. We can think of the class as a sketch of a house. It contains all the details about the floors, doors, windows, etc. Based on these descriptions we build the house. House is the object.

## Q2. Name the four pillars of OOPs.

ANS :four pillars are Inheritance, Polymorphism, Encapsulation and Abstraction.

## Q3. Explain why the \_ init \_() function is used. Give a suitable example.

ANS: **init** is a special python method that runs whenever a new object is created. These types of functions are used to initialize the attributes of that class, example, if the class is Person, then the attributes will be name, age, etc.

## Q5. What is inheritance? Give an example for each type of inheritance.

ANS:Inheritance is a fundamental concept in object-oriented programming, where one class can inherit properties and methods from another class . Inheritance is a way to create new classes that are built 1.Single Inheritance. 2.Multiple Inheritance. 3.Multilevel Inheritance. 4.Hierarchical Inheritance. 5.Hybrid Inheritance.