**1. Introduction to Spring Framework 1.What is Spring Framework?**

**• Theory:**

1. **Overview of the Spring Framework and its purpose in Java development:-** Spring is an open-source framework that provides modular architecture. Its main purpose is to develop loosely coupled and testable applications. Spring has different modules that provide different functionalities, such as Dependency Injection (DI), Aspect-Oriented Programming (AOP), Transaction Management, and MVC framework.
2. **Key features of Spring: ♣ Inversion of Control (IoC) ♣ Dependency Injection (DI) ♣ Aspect-Oriented Programming (AOP) ♣ Transaction Management ♣ Spring's flexibility for creating both web and non-web applications:-**

1. Inversion of Control (IoC)

IoC is a design principle that shifts the control of object creation and dependency management to the Spring container.

2. Dependency Injection (DI)

DI is a technique used to inject dependencies into an object rather than creating them inside the class.

3. Aspect-Oriented Programming (AOP)

AOP helps in separating cross-cutting concerns like logging, security, and transaction management from business logic.

4. Transaction Management

Spring provides robust transaction management, both declarative and programmatic.

5. Flexibility for Web and Non-Web Applications

* Spring supports both web and non-web (standalone) applications.
* It provides Spring MVC for building web applications and Spring Boot for rapid development.