

# Module 1

## [1] What is software Engineering ?

- The design, the development, and the maintenance of software.

## [2] What is SDLC ?

- Software development life cycle

## [3] What is software Development Methodology ?

Software development methodology refers to structured processes involved when working on a project.

1. Waterfall model (Classical software cycle)
2. Iterative model
3. Agile model
4. Bohem's Spiral model
5. Use-case

## [4] What is agile methodology ?

- No deadline fix
- Having so many interaction and divide data in categories
- Agile manifesto principles
  1. Individuals and interactions
  2. Working software
  3. Customer collaboration
  4. Responding to change

## [5] What is use-Case ?

- A use-case is the specification of a sequence of actions
  - Actors
  - Node coverage

## [6] What is Activity Diagrams ?

- Activity diagram is basically a flowchart to represent the flow from one activity to another activity.

**[7] What is SRS ?**

- Software requirements specification

**[8] What is Programming ?**

- the process of creating a set of instructions that tell a computer how to perform a task.

★ **programming languages**

- Python
- JAVA
- C
- C++
- C#
- PHP
- .NET

**[9] What is oops ?**

- Object oriented programming

**[10] Write Basic Concepts of oops ?**

1. Object
2. Class
3. Encapsulation
4. Inheritance
5. Polymorphism
  - A. Overriding
  - B. Overloading
6. Abstraction

**[11] What is object ?**

- Any living things which has own state and behaviour  
Ex : Pen, Paper Mobile

**[12] What is Class ?**

- Collections Of objects  
Ex : Human body, Classroom

**[13] What is RDBMS ?**

- Relational Database Management System

**[14] What is SQL ?**

- Structured Query Language

**[15] Write SQL Commands**

- SELECT - extracts data from a database
- UPDATE - updates data in a database
- DELETE - deletes data from a database
- INSERT INTO - inserts new data into a database
- CREATE DATABASE - creates a new database
- ALTER DATABASE - modifies a database
- CREATE TABLE - creates a new table