Software Engineering Assignment

MODULE: 1 (SDLC)

- **What is software? What is software engineering?**

Ans: - Software refers to a set of instructions or programs that are designed to perform specific tasks on a computer or other electronic devices. It consists of both the programs themselves and the associated data that is necessary for their functioning. Software engineering, on the other hand, is the discipline or field of study that focuses on designing, developing, testing, and maintaining software systems.

- **Explain types of software?**

Ans: - 1. Application Software.

Application software is software designed to handle specific tasks for users. It directs the computer to execute commands given by the user and may be said to include any program that processes data for a user.

2. System Software.

system software is software designed to provide a platform for other software. Software is a set of programs that are used to perform a specific task. Similarly, system software is a set of programs that handles all the basic internal working of a computer. Moreover, it executes and controls all the working of different peripheral devices and other basic tasks and software. Examples of system software are operating systems like Microsoft Windows, Android, Linux, etc. Application software on the other hand is

specific task-based software that is designed for a particular purpose only such as PowerPoint, Microsoft Word, etc. Here, we will learn in detail about the system software.

- What is SDLC? Explain each phase of SDLC?

Ans: - SDLC stands for Software Development Life Cycle. It is a process for planning,creating,testing,and deploying software. There are different models of SDLC, such as waterfall, agile, spiral, etc. Each model has its own phases and activities, which are:

• Planning: defining the scope, objectives, and feasibility of the project.

• Requirements: gathering and analyzing the needs and expectations of the stakeholders.

• Design: creating the architecture and specifications of the system.

• Development: coding and implementing the system according to the design.

• Testing: verifying and validating the system for quality and functionality.

• Deployment: delivering and installing the system to the end-users.

• Maintenance: providing support and updates to the system.