

Module - 1 (SDLC)

Q.1 What is software ?

- Software is a kind of program that enable a user to perform some specific task or used to operate a computer.
- It directs all the peripheral devices on the computer system - what to do and how to perform a task.
- PC software plays the role of mediator between the user and computer hardware. Without software, a user can't perform any task on a digital computer.
- Software can be further divide into mainly two parts : Application software and System software.
- Application software:
- Application software also called end-user programs or merely an application.
- The end-user uses applications software for a specific purpose. It programmed for simple as well as

complex tasks.

- Application software can be used by the user to complete specific tasks, such as creating word processors documents, spreadsheets, presentations, graphics, CAD/CAM, sending the email, etc.
- System Software:
- System software provides a platform to run a computer's hardware and computer application to utilize system resources and solve their computation problem.
- It is written in low-level language, so it can easily interact with hardware with the primary level.
- The best known example of system software is the operating system (OS)

Q.2 What are the types of Applications ?

General Applications:

- Word processing software

- Graphics Software
- Spreadsheet Software
- Presentation Software
- Web Browser
- Multimedia Software

Business Applications:

- Customer Relationship Management Application software
- Enterprise Resource Planning Application Software
- Project Management Application Software
- Database
- Educational Software

Q.3 What is Programming ?

- Programming is an exercise or practice that boosts our logical thinking and improves a problem-solving skill,

It teaches us how to accomplish a task with the help of a computer program or software.

- Programming is a task to implement a solution to a problem in the form of computer language.
- We can also define the term programming as it is the process that models or structure the set of instructions that instruct the machine how to perform a task and what to perform.
- It can be done using a variety of programming languages such as:
 - C
 - C++
 - C#
 - Python
 - Java, etc.

Q.4 What is Python ?

- Python is an interpreted , object-oriented,

high-level programming language with dynamic semantics.

- Its high-level built in data structures, combined with dynamic typing and dynamic binding, make it very attractive for Rapid Application Development.
- Python supports modules and packages, which encourages program modularity and code re-use.
- The Python interpreter and the extensive standard library are available in source or binary form without charge for all major platforms, and can be freely distributed.

Features of python:

- Clean syntax plus high-level data types
- Uses white-space to delimit blocks
- Variables do not need declaration

Python Productivity:

- Reduced development time
- Improved program maintenance

- Less training