Q.1 **what is SDLC?**

A) A Software Development Life Cycle is essentially a series of steps, or phases, that provide a model for the development and lifecycle management of an application or piece of software.

B) It is a cycle mangment for the price of softwer or application.

*** SDLC Phases:-**

1) Requirement Gathering:- (what is the problem ?)
- Customer needs
- Requirement for satke holder, client, costomer,ceo,etc.
- Improvement in current softwer.

2) planning/ Analysis:- (what we want ?)

- Details on computer programming languages and environments, machines, packages, application architecture, distributed architecture layering, memory size, platform, algorithms, data structures, global type definitions, interfaces, and many other engineering details are established.

3) Design:- (how can we get wht want ?)

-Design Architecture Document
-Implementation Plan
-Critical Priority Analysis

-Performance Analysis

-Test Plan

4) Implementation:- (create what we want ?)

- In the implementation phase, the team builds the components either from scratch or by composition.

-Implementation- code

- Critical Error Removad.

5) Testing:- (did we get what we want ?)

- we test the bulid to check for defect.

- we report the defect and get set fixed .

- we retest the bulid unit it fulfil custmore requirement.

6) Deployment:- (project live then it will become a product ?)

- web site(lunch) : - do main name register and hosting.

- mobile app :- 1) android : play stor

2) IOS :- appstor

7) Maintenance:-

- Corrective maintenance: identifying and repairing defect.

-Adaptive maintenance: adapting the existing solution to the new platforms.

-Perfective Maintenance: implementting the new requirements.

Q.**2** **What is software testing?**

A) Testing is the process of evaluating a system or its component(s) with the intent to find that whether it satisfies the specified requirements or not.

B) Software Testing is a process used to identify the correctness, completeness, and quality of developed computer software.

C) testing is executing a system in order to identify any gaps, errors or missing requirements in contrary to the actual desire or requirements.

Q.3) What is agile methodology?

- It is a combination interative and incremnent model.

- it divide the softwere into samall increm entel builds. This bulid are provided in interation that mans thw big peoject are divied into small chanks.

- after the relese we cheak for the feed back of the deployed sofftwaer.

- if any enhaneements is needs in the project then its done its re- released.

*** ADVANTAGE OF AGILE MOTHOD :**

1. Freqent delivery
2. face to face communication with coustmore
3. less time
4. adaptablility

***DISADVANTAGE OF THE AGILE MOTHOD** :

1. less documeation
2. manitence problem.

Q.4) Explain Phases of the waterfall model .

The waterfall is unrealistic for many reasons, especially :-

- Requirements must be “frozen” to early in the life cycle
- Requirements are validated too late.

***Applications(When to use ?)**

:- Requirements are very well documented, clear and fixed. Product definition is stable.

:- Product definition is stable.

:- There are no ambiguous requirements.

:- The project is short.

***Pros (Why Waterfall Model)**

:- Simple and easy to understand and use

:- Clearly defined stages.

:- Well understood milestones.

:- Easy to arrange tasks.

:- Process and results are well documented.

***Cons (Why not Waterfall Model).**

:- No working software is produced until late during the life cycle.

:- High amounts of risk and uncertainty.

:- It is difficult to measure progress within stages.

:- Cannot accommodate changing requirements.