**1 What is software testing?**

* software testing is process used to identify the correctness, completeness and quality of developed computer software.

**2 What is SDLC?**

* SDLC is a step by step imposed on the software product that define the process for planning ,analysis, design, implementation, testing and maintenance.

**3 What is Agile methodology?**

* Agile SDLC model is a combination of iterative and incremental process models with focus on process adaptability and customer satisfaction by rapid delivery of working software product.

**4 what is SRS?**

* A software requirement specification is a complet description the behaviour of the system to be developed.

**5 What is oops?**

* Object oriented programming has a web of interacting objects, each housekeeping its own state.

**6 Write basic concept of oops**

* Object
* Class
* Encapsulation
* Inheritance
* Polymorphism
* Abstraction

1. **What is object?**

* Object is a instance of an class

1. **what is class ?**

* Class is collection of data member [variable] and member function [method or process] with its behaviour.

1. **What is object ?**

* Object is instance of an class.

**10 What is encapsulation ?**

* Wapping up data into single unit .

**11 What is abstraction ?**

* Only essential part should be display rest of the part with be hide.

**12 What is polymorphism?**

* Ability to take one name having different or many form.

**13 What is inheritance ?**

* Properties of parent class extends into child class.

**14 Write SDLC phase with basic information.**

* Requirements gathering
* Analysis
* Design
* Implementation
* Testing
* Maintenance
* Requirement gathering : established customer needs.
* Three type of problem can arise :

1 lack of clarity :It is hard to write documents that the are both precise and easy to read.

2 Requirement confusion: functional and non-functional requirement tend to be interwined.

3. Requirement amalgamation : several different requirement may be expressed together.

* Types of requirement

1 functional requirement

2 Non -functional requirement

* Analysis phase: The analysis phase defines the requirement of the system, independent of how these requirements will be accomplished.

This phase define the problem that customer is trying to solve.

* Design phase:

1 Design architecture document

2 Implementation plan

3 critical priority analysis

4 performance analysis

5 Tess plan

* Implementation phase : Given the architecture document from design phase and the requirement document from analysis phase ,the team should build exactly what has been requested, though there is still room for innovation and flexibility.
* Testing phase : Simply stated quality is very important. Many companies have not learned that the quality is important and deliver more claimed functionality but at a lower quality level.
* Maintenance: Updating all analysis, design and user document

1. Corrective maintenance: identifying and repairing
2. Adaptive maintenance : adapting the existing solution to the new platform.
3. Perfective maintenance : implementing the new

**15 Explain phase of waterfall model.**

* Requirements collection
* Analysis
* Design
* Implementation
* Testing
* Maintenance

**16 Write phases of spiral model**

* Planning
* Risk analysis
* Engineering
* Customer evaluation

**17 Write Agil manifesto principle**

* Individual interact on
* Working software
* Customer collaboration
* Responding to change

**18 Explain working methodology of agile model and also write pros and cons**

* Agile model is a combination of iterative and incremental process models with focus or process adaptability and customer satisfaction by rapid delivery of working software product
* Pros:

-Realistic approach as resource requirements are minimum.

-Promotes teamwork and cross training .

-functionality can be developed rapidly and demonstrated.

-suitable for changing requirement

-Good model for steady changes.

-Minimum rules so easy documentation as needs very little or no planning.

-Enable concurrent development.

* Cons:

-not suitable for handling complex dependencies.

-more risk of sustainability, maintainability and extensibility.

-High individual dependency and since there is minimum documentation generated.

-An overall plan,an agile leader and agile PM practice is a must without which it will not work.

-Transfer of technology to new team members may be quite challenging due to lack of documentation use -case.





