Module–1(Fundamental)

Que.1 What is software testing?

Ans. Software testing is the process of evaluating a system or its components with the intent to find weather its satisfies requirements or not.OR Software testing is the process to identify correctness, completeness and quality of developed computer software.

Que.2 What is SDLC?

Ans. SDLC is essentially series of steps, or phases that provide model for development and life cycle management of application or piece of software.

Que.3 What is agile methodology?

Ans. It is combination of iterative & incremental model.

It devides software into small incremental, called builds, this build are provided in iterations. Each iteration least about one to four weeks.

Each iterations involves all team members simultaneously on areas like planning, Requirement collection, design, coding , unit testing & acceptance testing.

At the end of all iterations product is shown to end users or imp stakeholders & it releases into market. After release customer feedback is important. If any enhancement is required that it 's done & rereleased.

Que.4 What is SRS?

Ans. SRS is the complete description of behaviour of the system to be developed.

Que.5 What is oops?

Ans. Object oriented programming is way writing program in organized way**.**

Que.6 Write Basic Concepts of oops

Ans. There is 6 basic concept of oops

1.Object

2.Class

3.Encapsulation

4.Inheritance

5.Polymorphism

6.Abstraction

Que.7 What is object?

Ans. Object gives permission to access the functionality of class**.**

Ex. Dogs have state (name, color, breed, hungry) and behavior (barking, fetching, wagging tail). **Chair, Bike, Marker, Pen, Table, Car, Book, Apple, Bag,** etc. It can be physical or logical (tangible and intangible).

Que.8 What is class?

Ans. Class is collection of data members & member function.

Que.9 What is encapsulation?

Ans. The process of warping data into single unit & protect from outside world.

Ex. The capsule, it is wrapped with different medicines. In a capsule, all medicine is encapsulated inside capsule

Que.10 What is inheritance?

Ans. Inheritance is making class from other class & attribute of some other class.

Ex. The real-life example of inheritance is child and parents, all the properties of a father are inherited by his son.

Que.11 What is polymorphism?

Ans. One name multiple forms

Ex. The boy can be student,a player & writer.so that this boy can exist in different ways in different situation.

Que.12 Write SDLC phases with basic introduction

1. Requirement collection/Gathering
- Establish customer needs(what is the problem)
2. Analysis
- Model & specify requirement – "What"(What is the solution of the problem")
3. Design
- Model & Specify solution – "Why"
4. Implementation
- Construct solution in the software
5. Testing
- Validate solution against requirements.
6. Maintenance
- Repair the defects & adapt the solution to the new requirements**.**

Que.13 Explain Phases of the waterfall model

Ans. The classical software life cycle models the software development as a step by step ("Waterfall") between the various development phases.

The waterfall is unrealistic for many reasons, especially:
- Requirements must be "frozen" to early in the life cycle
- Requirements are validated too late

Que.14 Write phases of spiral model

1) Planning : Determination of objectives , alternatives & constrains.
2) Risk Analysis : Analysis of alternatives & identification/Resolution of risk.
3) Engineering : Development of the next level product.
4) Customer Evaluation : Assessment of the result of the engineering.

Que.15 Write agile manifesto principles

1) Customer satisfaction through early & continuous software delivery:-customers are happier when they receive working software at regular intervals, rather than waiting extended periods of time between releases.
2) Accommodate changing request through the development process:- The ability to avoid delays when requirement or further request changes.
3) Frequent delivery of working software:- Scrum accommodates this principle since the team operates in a software sprint or iteration that ensure regular delivery of working software.
4) Collaboration between the business stake holders &developers through the project:-better discussion are made when the business & the technical team are aligned.
5) Support, trust & motivate the people involved:-motivated teams are more likely to deliver their best work than unhappy team.
6) Enabled face to face interaction:-communication is more successful when development team are co-located.
7) Working software is the primary measure of the process:-Delivering functional software to the customer is the ultimate factor that measure progress.
8) Agile processes to support consistent development pace:- Teams established repeatable & main-table speed at which they can deliver working software & they repeat it with each other.
9) Attention to technical detail & design, enhanced agility:-The right skill & good design ensure the team can maintain the pace constantly to improve the product & sustain changes.
10) Simplicity:-Develop just enough to get the job done for right now.
11) Self organizing teams encourage great architecture, requirement & design:-Skilled & motivated team member who have decision making power, take ownership, communication frequently with other team member & share ideas that deliver quality product.
12) Regular reflections on how to become more effective:-Self-improvement, process improvement, advancing skills & techniques, help team members work more efficiently.

Que.16 Explain working methodology of agile model and also write pros and cons.

Ans. Pros of agile

- Frequent Delivery
- Face to face communication with the customer.
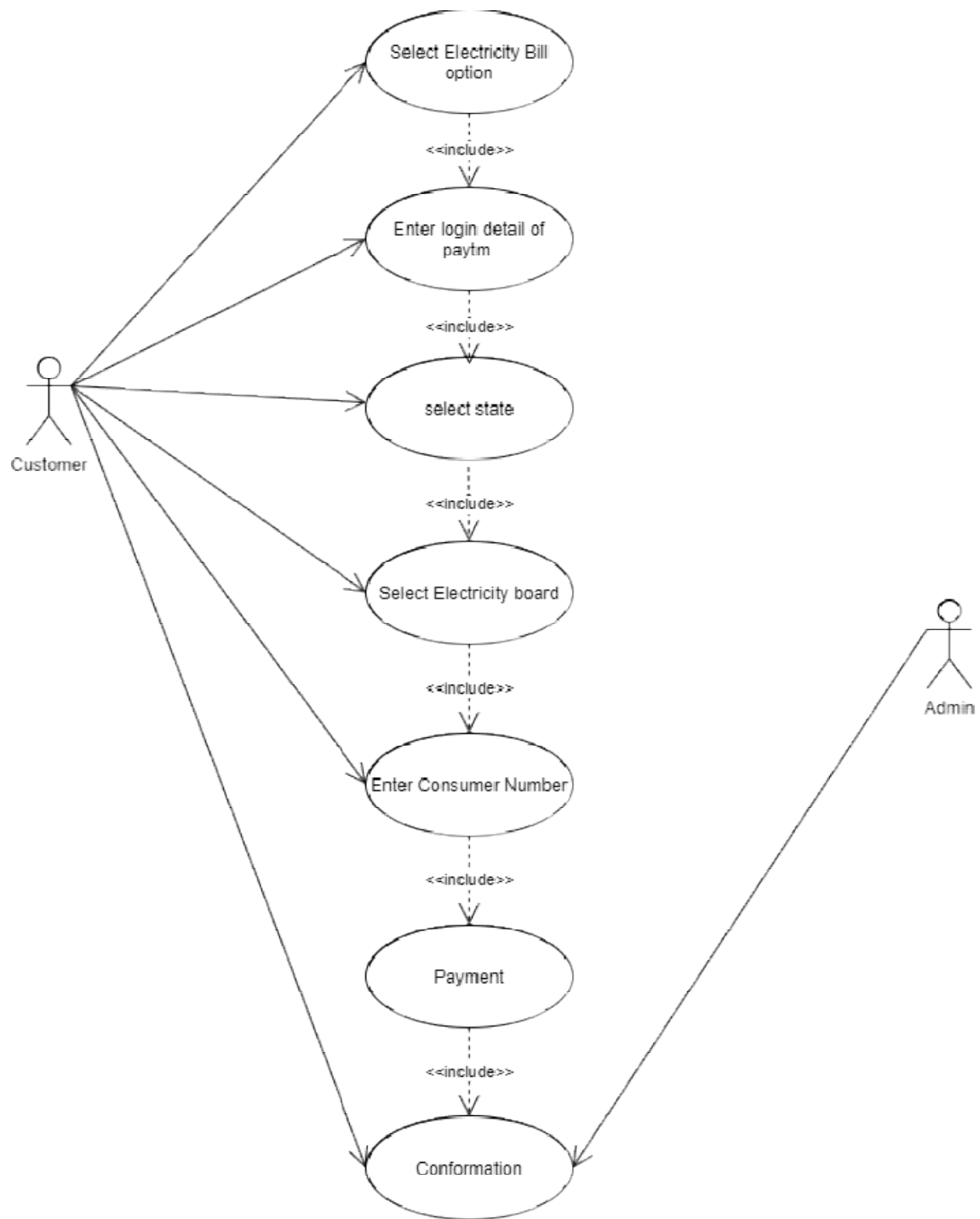- Less time
- Adaptability

Cons of agile

- Less documentation
- Maintenance problem.

Que.17 Draw Usecase on Online book shopping

Que.18 Draw Usecase on online bill payment system (paytm)

Que.19 Draw usecase on Online shopping product using COD

Que.20 Draw usecase on Online shopping product using payment gateway