Q. What is SDLC?

- A. SDLC is a structure imposed on the development of a software product
- that defines the process for planning, implementation, testing, documentation, deployment, and ongoing maintenance and support.
- There are a number of different development models.

Q. What is software testing?

- A. Software Testing is a process used to identify the correctness, completeness, and quality of developed computer software.
- Q. What is agile methodology?
- A. 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.

Q. What is SRS?

A. A software requirements specification (SRS) is a complete description of the behavior of the system to be developed.

Q. What is oops? A. Objects communicate to other objects by sending messages.

Q. Write Basic Concepts of oops

```
A. Object
Class
Encapsulation
Inheritance
Polymorphism
Overriding
Overloading
```

Q. What is object?

Abstraction

```
A. Tangible Things(as a car, printer, ...)
Roles(as employee, boss, ...)
Incidents(as flight, overflow, ...)
Interactions(as contract, sale, ...)
Specifications(as colour, shape, ...)
```

Q. What is class?

A. When you define a class, you define a blueprint for an object.

Q. What is encapsulation?

A. Encapsulation is the practice of including in an object everything it needs hidden from other objects. The internal state is usually not accessible by other objects.

Q. What is inheritance?

A. Inheritance means that one class inherits the characteristics of another class. This is also called a "is a" relationship.

Q. What is polymorphism?

A. Polymorphism means "having many forms".

Q. Write SDLC phases with basic introduction

- 1) Requirement Gathering: Requirements definitions usually consist of natural
- language, supplemented by (e.g., UML) diagrams
- and tables.
- 2) Analysis Phase: The analysis phase defines the requirements of the system,
- independent of how these requirements will be accomplished.
- 3) Design Phase: Design Architecture Document
- 4) Implementation Phase: In the implementation phase, the team builds the components either
- from scratch or by composition.
- 5) Testing Phase: Simply stated, quality is very important. Many companies have not
- learned that quality is important and deliver more claimed
- functionality but at a lower quality level.
- 6) Maintenance Phase: Software maintenance is one of the activities in software
- engineering, and is the process of enhancing and optimizing
- deployed software (software release), as well as fixing defects.

Q. Explain Phases of the waterfall model

- A. 1)Requirement Gathering
 - 2)Analysis
 - 3)Design
 - 4)Implementation
 - 5)Testing
 - 6)Maintenance

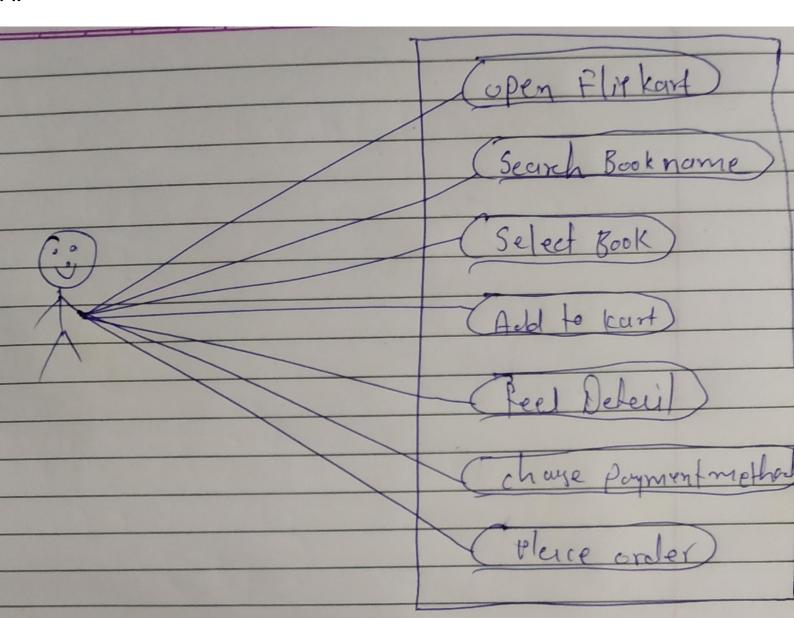
Q. Write phases of spiral model

- A. 1) Planning
 - 2) Risk Analysis
 - 3) Engineering
 - 4) Customer Evaluation

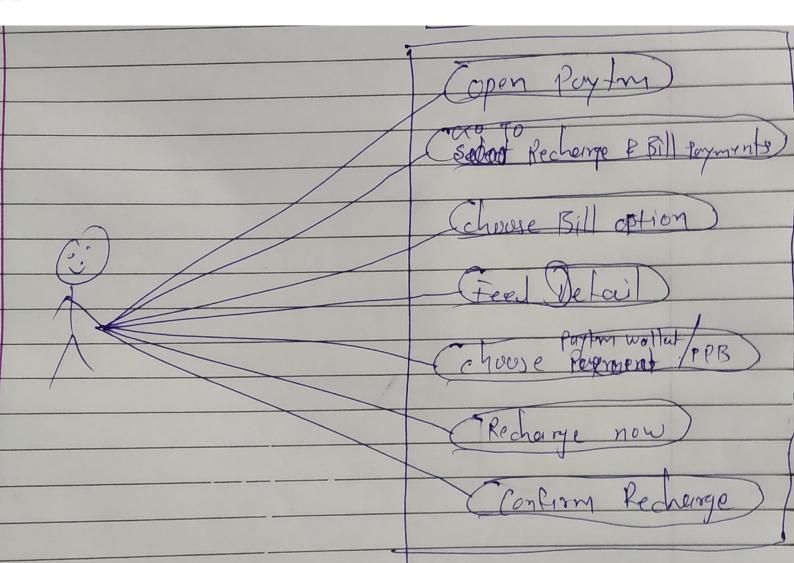
Q. Explain working methodology of agile model and also write pros and cons.

- A. Agile model believes that every project needs to be handled differently
- and the existing methods need to be tailored to best suit the project requirements. In agile the tasks are divided to time boxes (small time frames) to deliver specific features for a release.
- Pros: * Is a very realistic approach to software development
 - * Promotes teamwork and cross training.
- Cons: * Not suitable for handling complex dependencies.
 - * More risk of sustainability, maintainability and extensibility

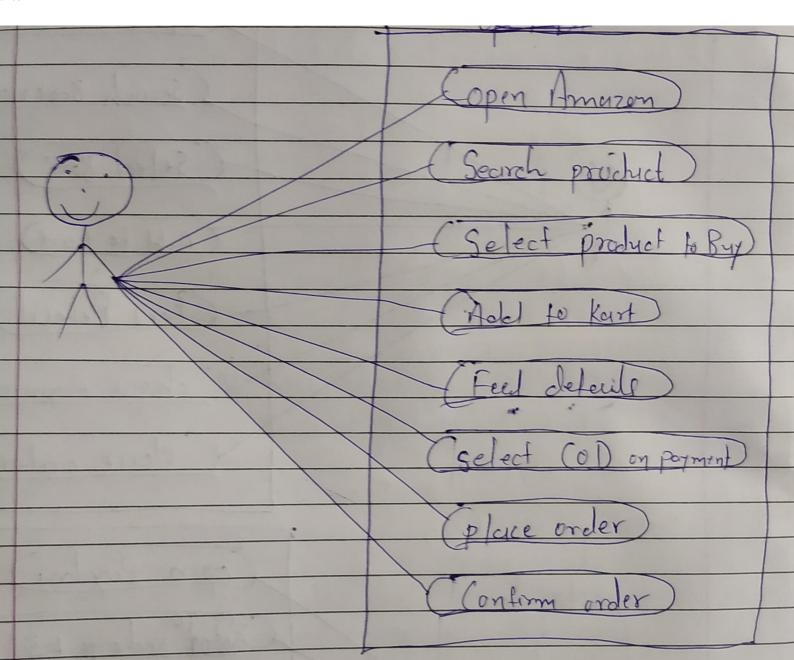
Q. Draw Usecase on Online book shopping



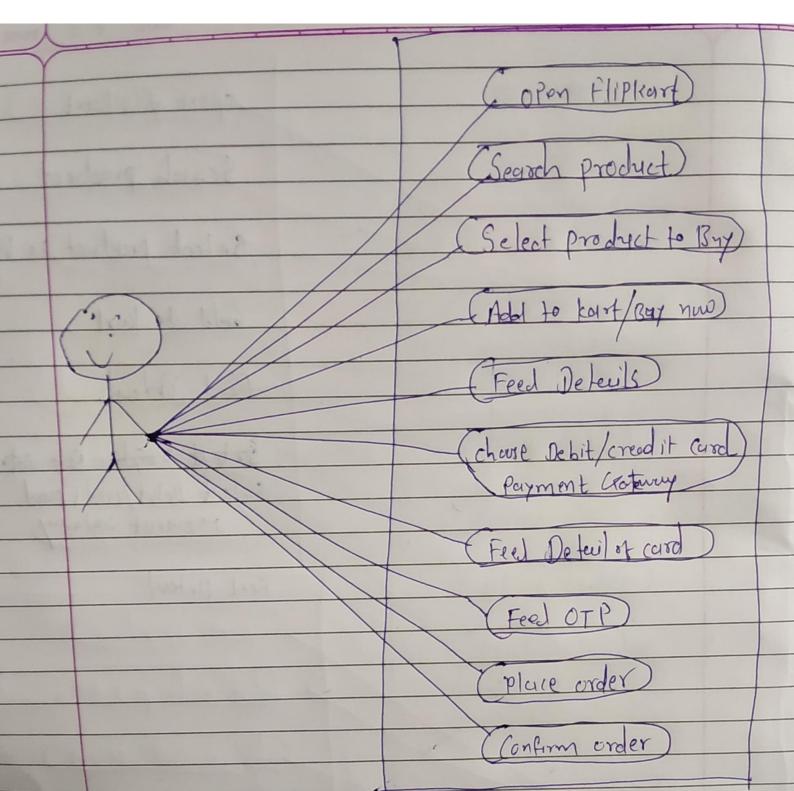
Q. Draw Usecase on online bill payment system (paytm)



Q. Draw usecase on Online shopping product using COD.



Q. Draw usecase on Online shopping product using payment gateway.



Q. Write agile manifesto principles

- A. 1) Individual Interacting
 - 2)Working Software
 - 3)Customer Collaboration
 - 4) Responding to changes.