ASSIGNMENT

Module – 1 (Fundamental)

Q 1. What is SDLC ?

Ans. SDLC stands for Software Development Life Cycle. It is a process for planning, creating, testing and deploying an information system.

Q 2. What is software testing ?

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

Q 3. What is Agile methodology ?

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

This method break the product into small incremental builds.

In this team work simultaneously on various areas like planning, executing and evaluating.

Q 4. What is SRS ?

Ans. A software requirements specification (SRS) is a document that describes the requirements for a software system.

Q 5. What is OOPS ?

Ans. OOPS stands for Object-Oriented Programming. It is a programming paradigm based on objects.

Q 6. Write Basic Concepts of OOPS ?

Ans. Basic Concepts of oops.

1) Object
2) Class
3) Encapsulation
4) Inheritance
5) Polymorphism
6) Abstraction

Q 7. What is object ?

Ans. An object is an instance of a class, which is used to test the behaviour of the software.

Q 8. What is class ?

Ans. A class is a blueprint or a template for creating

objects that encapsulate data and behavior.

Q 9. What is encapsulation ?

Ans. Encapsulation is the practice of hiding the internal details of an object from the outside world.

Q 10. What is inheritance ?

Ans. Inheritance means that one class inherits the characteristics of another class.

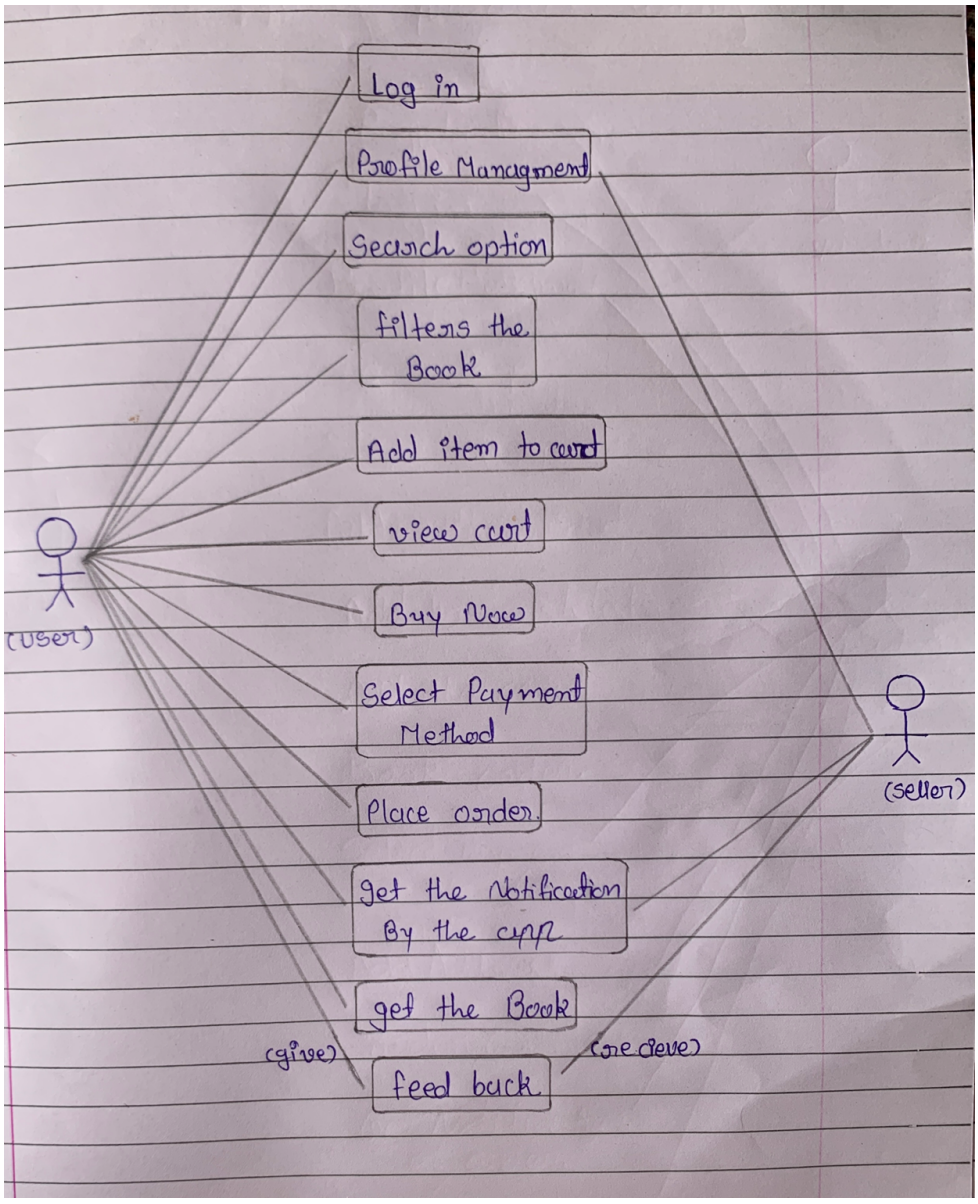
This is also called a “is a” relationship.

Q 11. What is polymorphism?

Ans. The ability to use an operator or function in different ways is called polymorphism.

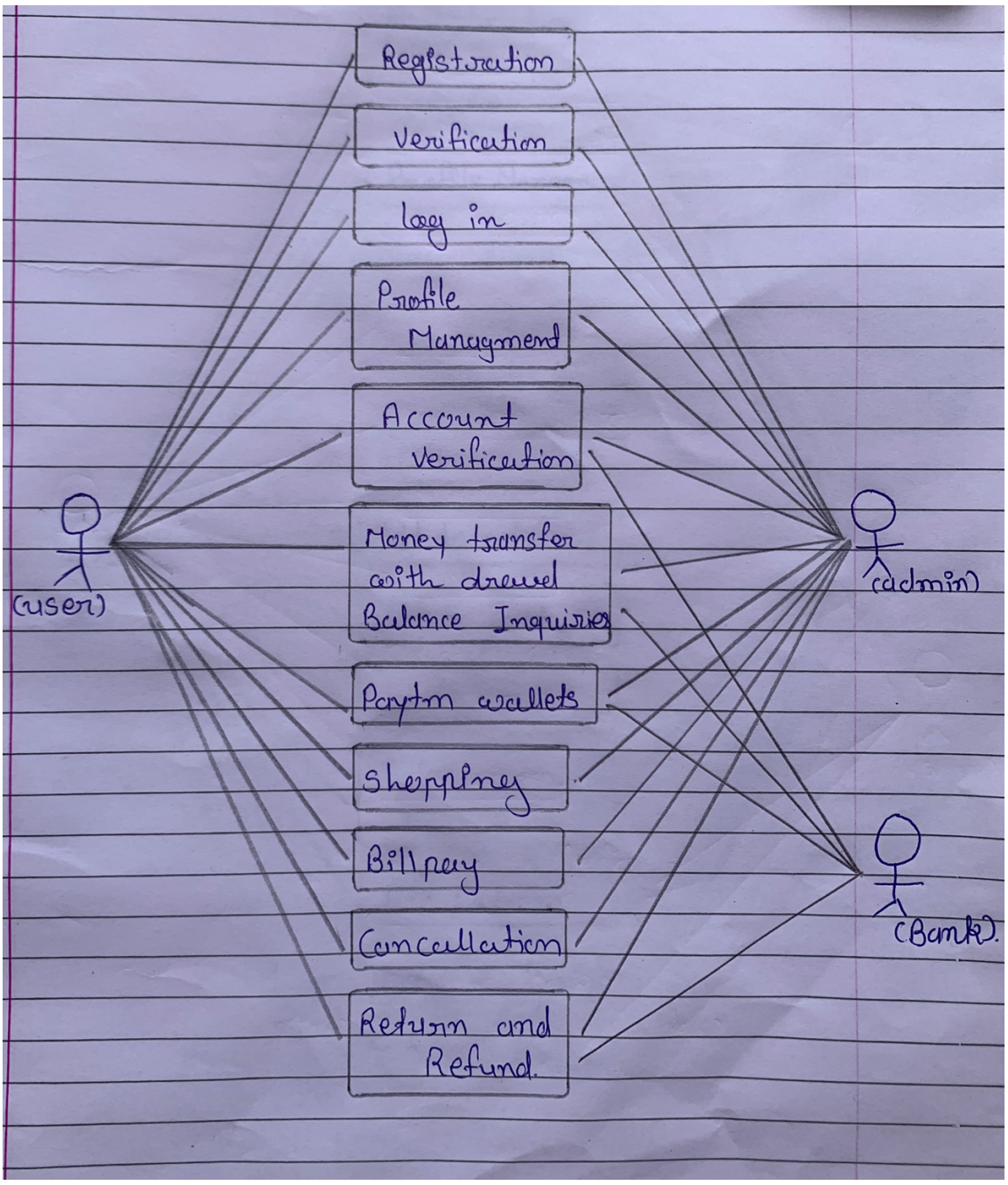
Q 12. Draw Use case on Online book shopping.

Ans.



Q 13. Draw Use case on online bill payment system (paytm).

Ans.



Q 14. Write SDLC phases with basic introduction.

Ans. Six phases of SDLC

1) Requirement Gathering : This is the first phase of SDLC where the development team collects information about project requirements.
2) Analysis : In the analysis phase, the development team analyzes the requirements gathered in the previous phase.

   This analysis represents the “what” phase.

3) Design : In this phase, team creates a design document that outlines how the system will meet the requirements.
4) Implementation : This is the phase where the development team takes the design document and builds the system.
5) Testing : The testing phase is where the development team checks if the system meets the requirements.
6) Maintenance : In this phase team ensures that the system is functioning correctly and fixes any issues.

Q 15. Explain Phases of the waterfall model.

Ans. The classical software lifecycle models the software development as a step by step waterfall between the various development phases.

Requirement gathering, analysis, design, implementation, testing, and maintenance are the development phases of the waterfall model.

Q 16. Write Phases of spiral model.

Ans. There are four phases :

1) Planning - Determination of objectives, alternatives and constraints.
2) Risk Analysis - Analysis of alternatives and identification / resolution of risks.
3) Engineering - Development of the “Next level” product.
4) Customer Evolution – Assessment of the results of engineering.

Q 17. Write agile manifesto principles.

Ans. Agile Manifesto has four principles:

1) Individuals and interactions over processes and tools

2) Working software over comprehensive documentation

3) Customer collaboration over contract negotiation

4) Responding to change over following a plan

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

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

It break the product into small incremental builds. These builds are provided in iterations.

Each iteration typically lasts from about one to three weeks.

Every iterationinvolvescrossfunctional teams working

simultaneously on various areas like planning, requirements analysis, design , coding, unit testing, and acceptance testing.

At the end of the iteration a working product is displayed to the customer and important stakeholders.

Pros :

~ Is a very realistic approach to software development.

~ Functionality can be developed rapidly.

~ Resource requirements are minimum.

~ Suitable for changing requirements.

~ Good model for environments that change steadily.

~ Minimal rules, documentation easily employed.

~ Little or no planning required.

~ Easy to manage.

~ Gives flexibility to developers.

Cons :

~ Not suitable for handling complex dependencies.

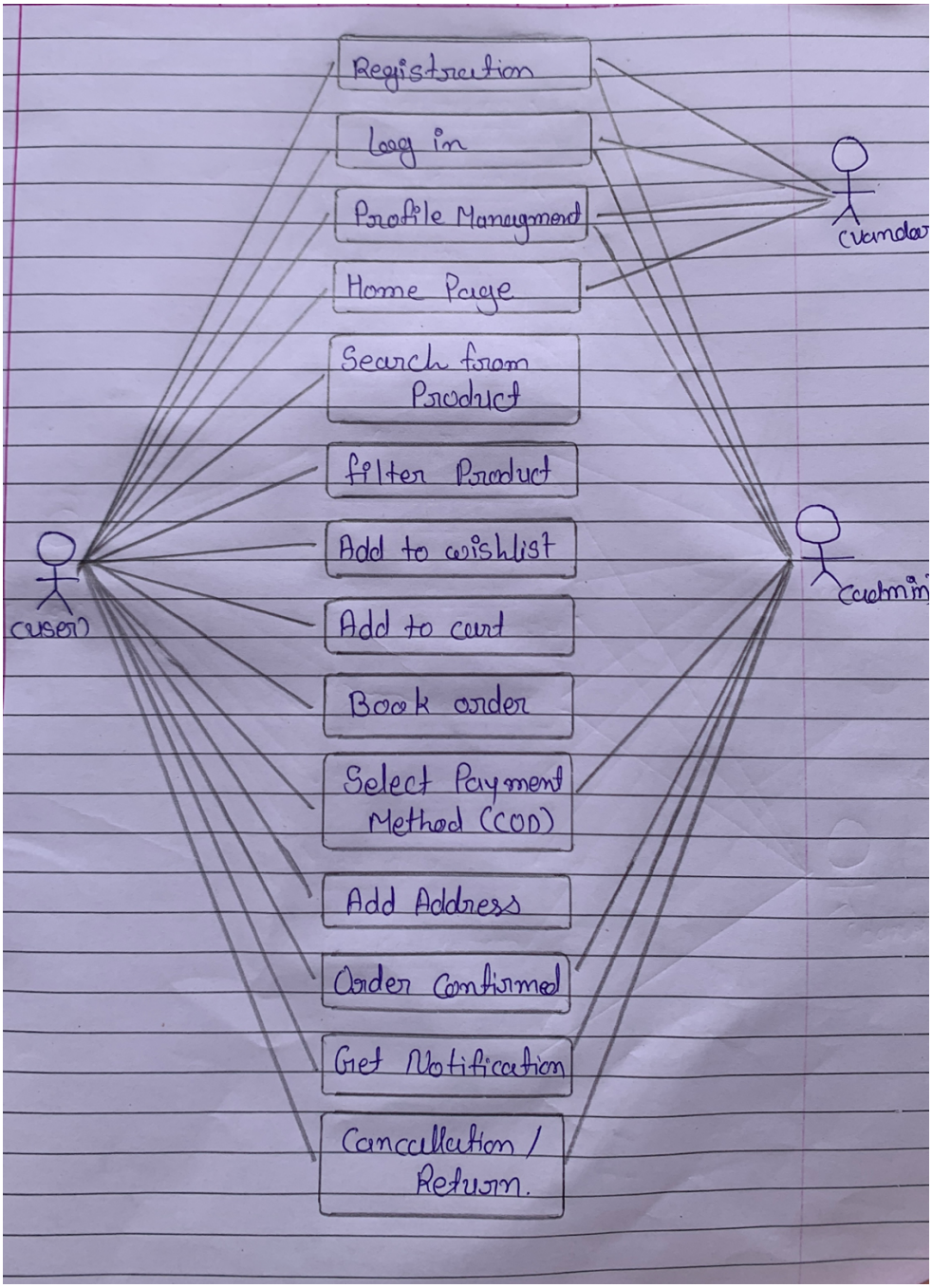
~ More risk of sustainability, maintainability and extensibility.

~ Depends heavily on customer interaction, so if customer is not clear, team can be driven in the wrong direction.

~ There is very high individual dependency.

Q 19. Draw use case on Online shopping product using COD.

Ans.



Q 20. Draw use case on Online shopping product using payment gateway.

Ans.