Software Testing Assignment
(MODULE 1)

(Q.1) What is SDLC?

A software development life cycle is essentially a series of steps or phases that Provide a model for the development and life cycle management of an application or piece of software.

(Q.2) What is software testing?

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

(Q.3) What is agile methodology?

(1) It is a combination iterative and increment model.

(2) It divides the software into small incremental builds this build are provided in iterations, that means the big projects are divided into small chunks.

(3) Each iteration last about one to three weeks.

(4) Each iteration involves all the team members working simultaneously on area like planning, coding, requirement analysis, design, unit testing and acceptance testing.

(5) At the end of the iteration the working product is displayed to the customer or the important stake holder and it is released in the market.

(6) After the release we check for the feedback of the deployed software.

(7) If any enhancement is needed in the project then its done and its re-released.

(Q.4) What is SRS?

A software requirements specification (SRS) is a document that describes what the software will do and how it will be expected to perform.

(Q.5) What is OOPS?

Object oriented programming is way of writing the programs in organised way. Object are lie a black box where data are hidden.

(Q.6) write basic concepts of OOPS.

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

(Q.7) What is object?

object gives the permission to acess functionality of class.

(Q.8) What is class?

Class is a collection of data members and member function.

(Q.9) what is encapsulation?

The process wrapping the data in a single unit to secure. The data from outside World.

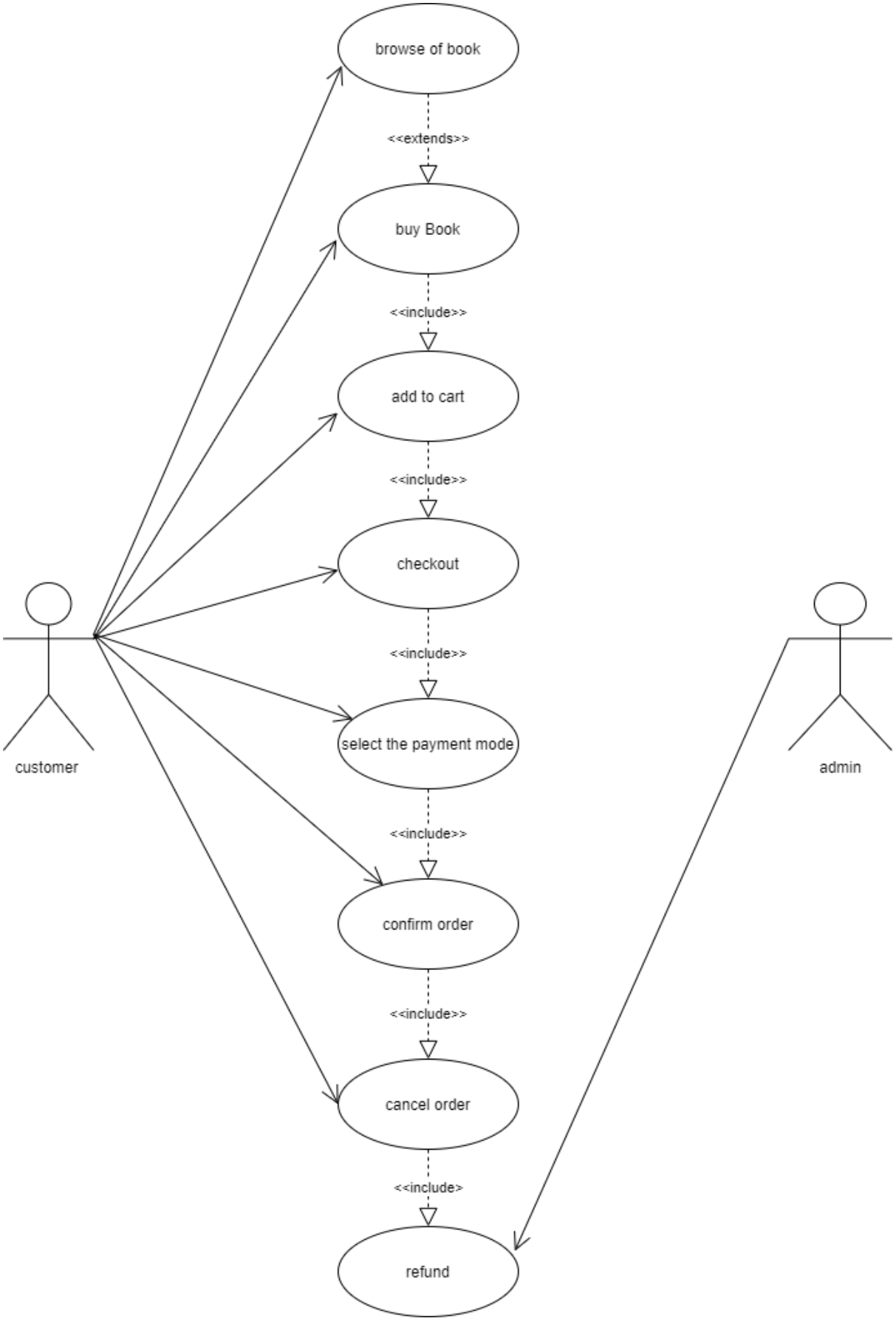
(Q.10) what is inheritance.

making a class from an existing class. Deriving attribute of some other class.

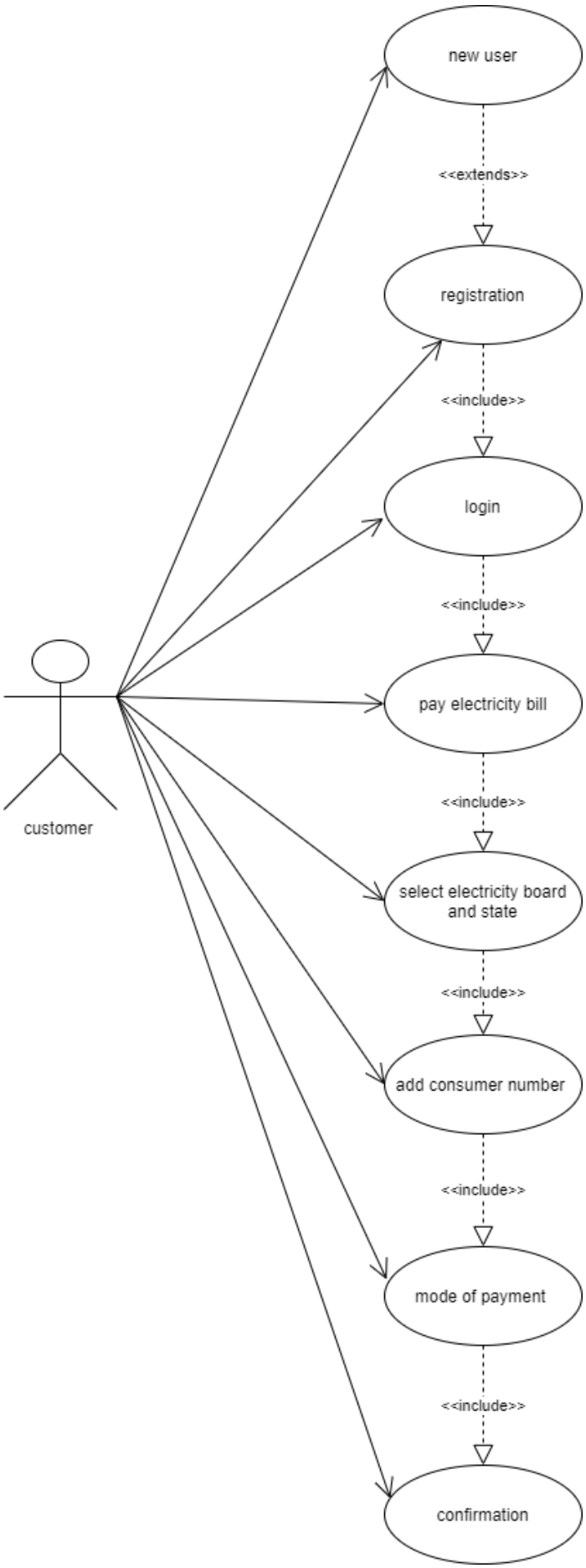
(Q.11) what is polymorphism.

One name multiple form.

(Q.12) Draw Use case on Online book shopping



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


new user
<<extends>>
registration
<<include>>
login
<<include>>
pay electricity bill
<<include>>
select electricity board and state
<<include>>
add consumer number
<<include>>
mode of payment
<<include>>
confirmation
customer

(Q.14) write SDLC phases with basic introduction.

(1) requirements collection/gathering- establish customer needs

(2) analysis -model and specify the requirements "what"

(3) design -model and specify a solution "why"

(4) implementation -construct a solution in software.

(5) testing - validate the solution against the requirements.

(6) maintenance -repair defects and adapt the solution to the new Requirements.

(Q.15) Explain Phases of the waterfall model.

(1) The classical software life cycle models the software development as a step by Step "waterfall" between the various development phases.

(2) the waterfall is unrealistic for many reasons especially.

(3) Requirements must be frozen to early in the life cycle.

(4) Requirements are validated too late.

(Q.16) Write phases of spiral model.

The spiral model has four phases: Planning, risk analysis, engineering and Customer Evaluation.

(1) **Planning**: Determination of objectives, alternatives and constraints.

(2) **Risk Analysis:** Analysis alternatives and identification resolution of risks.

(3) **Engineering:** Development of the next level product first prototype.

(4) **customer evaluation:** Assessment of the results of engineering.

(**Q.17) Write agile manifesto principles.**

(1) customer satisfaction through early and continuous software delivery:

Customer are happier when they receive working software at regular Intervals, rather than waiting extended periods of time between release.

(2) Accommodate changing requirements throughout the development process:

The ability to avoid delay when a requirement of feature request changes.

(3) Frequent delivery of working software scrum accommodates this principle Since:

The team operates in software sprints or iterations that ensure regular delivery of working software.

(4) Collaboration between the business stake holders and developers Throughout the project:

Better decision are made when the business and technical team are aligned.

(5) Support, trust and motivate the people involved:

Motivated teams are more likely to deliver their best work than unhappy Teams.

(6) Enable face to face interactions communication is more:

Successful when development teams are co-located

(7) Working software is the primary measure of progress:

Delivering functional software to the customer is the ultimate factor that Measures progress.

(8) Agile process to support a consistent development pace:

Teams establish a repeatable and maintain speed at which they can deliver Working software and the repeat it with each release.

(9) Attention to technical detail and design enhance agility.

The right skills and good design ensure the team can maintain the pace. Constantly improve the product and sustain change.

(10) **Simplicity:**

Develop just enough to get the job done for right now.

(11) Self-organized teams encourage grant architecture, requirements and Design:

Skilled and motivated team members who have decision making power, Take ownership communicate regularly with other team members and Share ideas that deliver quality.

(12) Regular reflections on how to became more effective:

Self-improvement, process improvement advancing skill and technicalness Help team members work more efficiently.

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

(1) Pros of agile methodology:

* Frequent delivery
* Face to face communication with the customer.
* Less time
* Adaptability

(2) cons of agile methodology.

* Less documentation
* Maintenance problem

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


search product
<<extend>>
add to cart
<<include>>
add personal details
<<include>>
select payment mode
COD
<<include>>
confirm order
<<include>>
place order
<<include>>
return product
customer
admin

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