Unit-2: Software Requirement Elicitation and Analysis

Multiple Choice Questions [1 Mark]

2.1. Software requirement

1. The hardest part of software development is:
   a) Requirement gathering
   b) Software design
   c) Software implementation
   d) None of the above

2. Requirements are described as:
   a) How of a system
   b) What of a system
   c) When of a system
   d) All of the above

3. A generic term is used for the people who are affected directly or indirectly by the system is known as _____.
   a) Users
   b) Customers
   c) Stakeholders
   d) Developer

4. Which is not a stakeholder?
   a) User
   b) Customer
   c) Developer
   d) Operating system

5. Functional requirements describe:
   a) "who" the software will perform.
   b) "when" the software will do.
   c) "what" the software will do.
   d) None of the above

6. From the following things, which functional requirements should be included?

I. Details of operations conducted in every screen.
II. It should have descriptions of system reports or other outputs.
III. Complete information about the workflows performed by the system.
IV. It should clearly define who will be allowed to create/modify/delete the data in the system.

a) I, II, III, IV
b) I, II, III
c) I, III, IV
d) III, IV

7. "Functional requirements also specify what the software will not do."

a) True
b) False

8. Functional requirements are also known as:

a) Requirement gathering
b) Quality attributes
c) Product features
d) All of the above

9. Which one of the following is a functional requirement?

a) Maintainability
b) Portability
c) Robustness
d) None of the mentioned

10. The non-functional requirement signifies that

a) what the software will do.
b) how well the software does, what it has to be.
c) which features are to be included in system?
d) None of the above

11. Which of the following is not a non-functional requirement?

a) Functionality
b) Reliability
c) Correctness
d) Portability

12.	What are the benefits to identify unknown requirements?
	a) They may add value to the system. b) Increase the chances of acceptability of the system. c) Increase the chances of sustainability of the system. d) All of the above

2.2. Requirements elicitation techniques: FAST, prototyping

13.	Requirements elicitation means:
	a) Requirements capturing b) Requirements prioritization c) Requirements management d) Requirements traceability
14.	The best reason to select a requirements elicitation technique is:
	a) It is the only technique we know. b) It is our favourite technique. c) We believe that a particular technique is suitable for our project. d) None of the above
15.	FAST stands for:
	a) Frequent application specification technique b) Facilitated application specification technique c) Facilitated approximate specification technique d) Facilitated application specification technology
16.	The role of a facilitator is to:
	a) Handle conflicts b) Ensure smooth conduct of meeting c) Prepare detailed report d) All of the above
17.	Which one of the following is true?
	a) FAST is not a popular technique b) FAST session is conducted at customer's site c) FAST is more formal than brainstorming session d) FAST is a low-cost activity
18.	What is the main objective of FAST technique?

a) To complete the work in a speedy way.
b) To complete requirement gathering.
c) To start implementation.
d) To close the gap between developers and customer.

19. Which are the required guidelines for conducting FAST session?

i. It must be conducted at neutral site.
ii. The framed rules for participation, must be circulated to all the members in advance.
iii. All members must be felt comfortable to encourage free flow of ideas.
iv. The facilitator (organizer) gives the overview of the project.
v. A display mechanism like.... Projector, Wall Stickers, Flip Charts, Whiteboards, etc. should be available in the committee room, where the meeting is conducted.
vi. All members should be directed to give their views. Unnecessary delay should be avoided.

a) Only (i) and (ii)
b) Only (iii) and (v)
c) Only (ii) and (iv)
d) All (i) to (vi)

20. Which of the following is not required by each member to make preparation for FAST session?

a) A list of objects
b) A list of services
c) A list of meeting
d) Performance criteria

21. Which are the activities of FAST session?

I. A small group is constituted to prepare a consolidated list after removing redundant entries.
II. Not a single group is created to draft mini-specifications.
III. Each sub-team presents mini-specifications to all FAST attendees.
IV. All issues can be resolved during the meeting.
V. A validation standard is also decided for every requirement.
VI. The final draft is prepared considering all inputs of FAST meeting.

a) I, II, IV, VI
b) I, III, V, VI
c) I, III, IV, V
d) I, III, IV, VI

22. _____ helps us to prepare the IRD in limited time frame under the leadership.

a) FAST
b) SRS
c) Functional requirements
d) Use case

23. Prototyping is:

a) less costly.
b) a process that may increase the cost of the system.
c) a complex version of the system.
d) a process of developing source code.

24. The developers should develop the _____ as early as possible to speed up the software development process.

a) IRS
b) SRS
c) Functional requirements
d) Prototype

2.3. Initial requirement document

25. IRD stands for:

a) Initial Request Document
b) Initial Required Document
c) Initial Requirements Document
d) Interactive Requirements Document

26. What is IRD?

a) IRD is the document for the customer's project which is given to them.
b) IRD is the document which is used to list the initial set of requirements gathered through various stakeholders.
c) IRD is the document which is used to list the meetings which is held between customers and developers.
d) None of the above

2.4. Use Case Approach: Creating Use Case Diagram for Requirement, Use Case Description, Scenario Diagrams, Scenario Matrix

27. Which approach is the popular object-oriented technique for representing requirements?

a) Flow chart
b) Data flow diagram
c) Questionnaire
d) Use case approach

28. A use case addresses:

a) Functional requirements
b) Non-functional requirements
c) Both (a) and (b)
d) None of the above

29. A use case diagram consists of:

a) Classes and use cases
b) Actors and classes
c) Actors and objects
d) Actors and use cases

30. Actors include anything that is:

a) External to the system
b) Internal to the system
c) Functionality of the system
d) Both (a) and (b)

31. Which one of the following is not an actor?

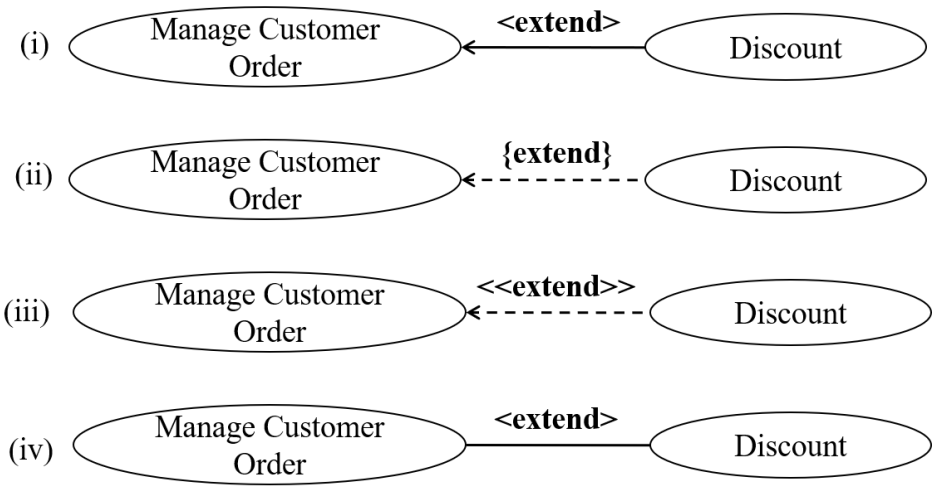
a) External system
b) Customers
c) Users
d) Keyboard

32. In a use case diagram, actors are represented by:

a) Triangles
b) Stick figures
c) An oval
d) Squares

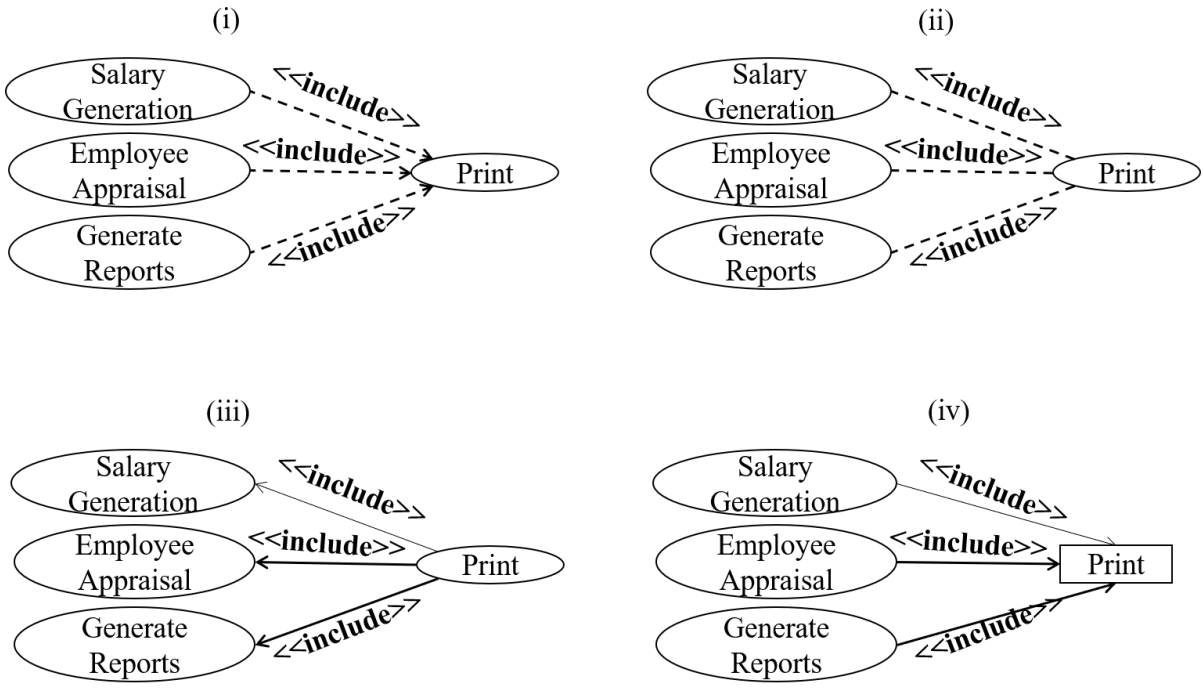
33.	Every use case may have: a) No actor b) At least one actor c) At most one actor d) None of the above
34.	In a use case diagram, a use case is represented by: a) A square b) A rectangle c) A triangle d) An oval
35.	The relationship between an actor and a use case is shown by: a) A line b) A dash lines c) An arrow d) A dash line arrow
36.	In use case diagrams, which type of relationship is used to execute an optional system behavior? a) Extend b) Include c) Either (a) or (b) d) Neither (a) or (b)
37.	In use case diagrams, by using which type of relationship, the redundant and repeated functionalities among different use cases can be modelled into a single use case? a) Extend b) Include c) Either (a) or (b) d) Neither (a) or (b)

38. Identify the correct example of relationship for use case diagram:



a) I
b) ii
c) iii
d) iv

39. Identify the correct example of relationship for use case diagram:



a) Diagram (i)
b) Diagram (ii)
c) Diagram (iii)
d) Diagram (iv)

40. Which of the following is/are the valid relationship(s) in use case diagrams?

A. Extend

B. Include

C. Generalization

a) Only A not B and C

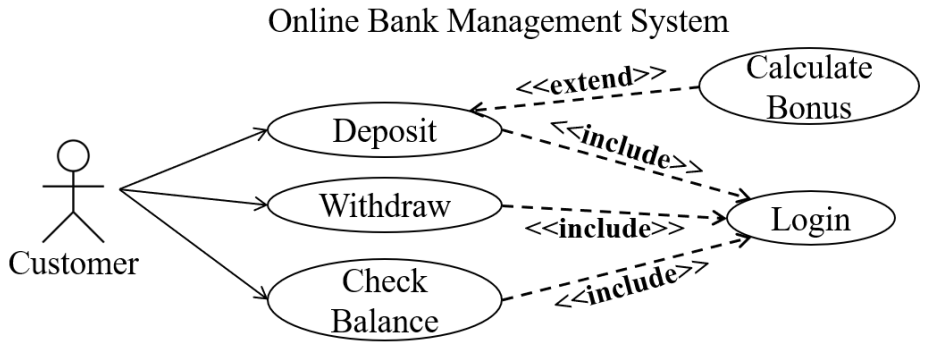
b) Only B not A and C

c) Only A and B not C

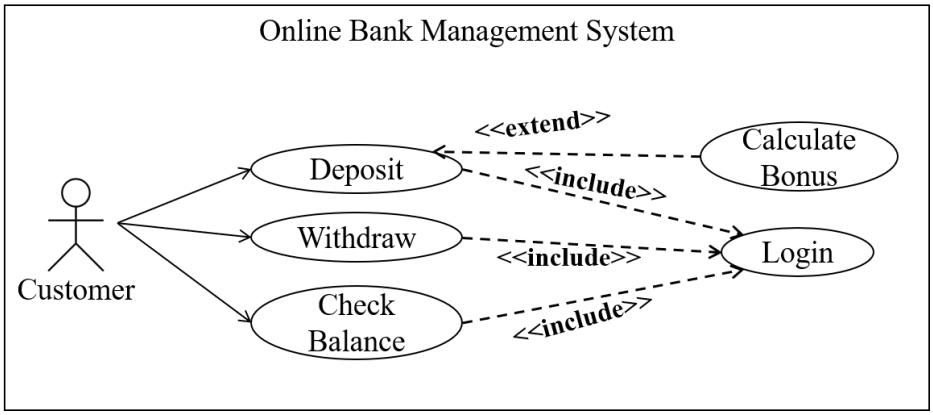
d) All A, B, C

41. Identify the correct use case diagram:

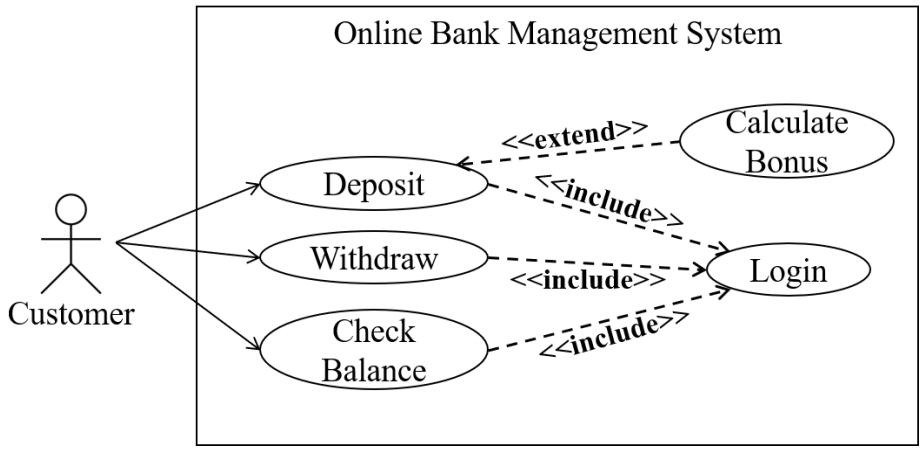
a)



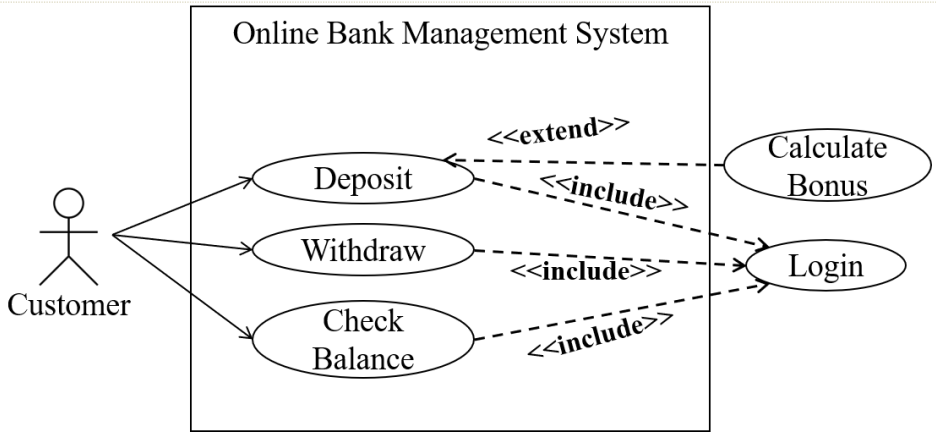
b)



c)



d)



42. For the large systems, many use case diagrams may be represented for the various portions of the system.

a) True
b) False

43. Which is not a component of a use case diagram?

a) Actor
b) Use case
c) Relationship between actor and use case
d) Test case

44. Use cases and use case diagrams are used to define:

a) Behaviour of a system
b) Complexity of a system
c) Criticality of a system
d) Stability of a system

45. The popular template for writing use case description is given by:

a) B. Boeham
b) J. Rumbaugh
c) I. Jacobson
d) V. Basili

46. Which are not included in a use case template?

a) Actors
b) Flow of events
c) Preconditions and postconditions
d) Test cases

47.	A use case scenario is:
	a) An instance of an actor b) An instance of a use case c) An instance of a class d) A path through a process
2.5. Characteristics of Good Requirement	
48.	A requirement should be:
	a) Correct b) Unambiguous c) Verifiable d) All of the above
49.	Consider the following requirements and identify which characteristic should be consider for these requirements: Requirement 1: For new password, alphanumeric of length in the range of 4 to 15 characters. Blank spaces are not allowed. Requirement 2: For confirm password, alphanumeric of length in the range of 4 to 15 characters. Blank spaces are not allowed.
	a) Consistent b) Verifiable c) Feasible d) Unambiguous
50.	A requirement shall be _____ if and only if it is implementable within given time, resources, money and technology.
	a) Verifiable b) clear c) feasible d) necessary
51.	Which types of ambiguous words should be avoided in framing the requirements of the system?
	a) Robust, Safe and Accurate b) Flexible and Reliable c) Safely and Quickly d) All of the above

52.	Requirements should be written in….
	a) Simple, short and clear sentences. b) Simple and large sentences. c) Simple with some high standard words. d) None of the above
53.	Which one is not a characteristic of a good requirement?
	a) Complete b) Detailed c) Unambiguous d) Verifiable

2.6. Software Requirement Specification Document

54.	SRS stands for:
	a) System Requirement Specification Document b) System Requirement Software Document c) Software Requirement Specification Document d) Software Requirement Specialized Document
55.	Which document act as a legal document between a customer and a developer?
	a) IRD b) SRS c) Affidavit certificate from lawyer d) Advance payment receipt
56.	Which is/are the issue(s) that shall be addressed by the SRS writer?
	a) Functionally b) Performance c) Quality attributes d) All of the above
57.	With which external entities does the system interact?
	a) Number of users b) Response and recovery time c) Processing timing d) All of the above

58.	The IEEE recommended practice for SRS is: a) IEEE std. 829-1998 b) IEEE std. 830-1998 c) IEEE std. 1026-1998 d) IEEE std. 830-1999
59.	The IEEE std. 830-1998 was approved on: a) June 25, 1998 b) July 30, 1998 c) August 25, 1998 d) June 25, 1999
60.	Which tasks should be mention in the scope of the project documentation? I. Assign a name to the software under development. II. Name of developers III. List of functions which the software will do. IV. List of functions which the software will not do. V. Explanation about the software applications along with the possible benefits and objectives. a) I, II, III b) I, II, III, IV c) I, II, IV, V d) I, III, IV, V
61.	Which of the following is not the basic user characteristics required to use any system application? a) Qualification b) Technical knowledge c) Hardware limitations d) Experience