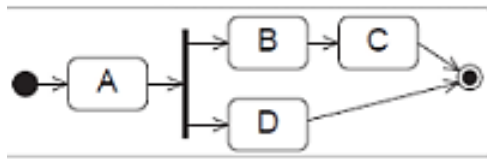


Name: Department: Section No:

Q1: For a library management system, classify each of the following requirements as (a) *Security*, (b) *Maintainability*, (c) *Performance*, or (d) *Usability*. [6 Marks]

- The system should be accessible to users with varying levels of computer literacy.
- Search queries for library materials should yield results within seconds to minimize wait times for members.
- The system should have robust measures to protect sensitive member information, such as addresses and borrowing history, from unauthorized access.
- The system's code should support efficient future updates of library holdings and functionalities.
- You are given the following activity diagram, which of the following action sequences are possible during one execution of the activity diagram?



(A) $A \rightarrow B \rightarrow C$
 (C) $A \rightarrow D$

(B) $A \rightarrow B \rightarrow D$
 (D) $A \rightarrow B \rightarrow D \rightarrow C$

Q2: State the main activities of requirements elicitation and analysis process? [4 Marks]

Name: Department: Section No:

Q1: Choose the correct answer

[6 Marks]

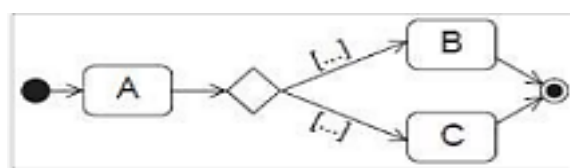
- The prototyping model of software development is

(A) A reasonable approach when requirements are well defined.	(B) A useful approach when a customer cannot define requirements clearly
(C) The best approach to use for projects with large development teams.	(D) None of choices
- An Extend is a relationship between two use cases showing that one use case can take longer to execute than the other use case.

(A) True	(B) False
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- Which is not a step of requirement engineering?

(A) Requirements elicitation	(B) Requirements analysis
(C) Requirements design	(D) Requirements documentation
- Identify the correct functional requirement.

(A) Robustness	(B) Portability
(C) Maintainability	(D) None
- You are given the following activity diagram, which of the following action sequences are possible during one execution of the activity diagram?



(A) $A \rightarrow C$
 (C) $A \rightarrow B$

(B) $A \rightarrow B \rightarrow C$
 (D) $A \rightarrow C \rightarrow B$

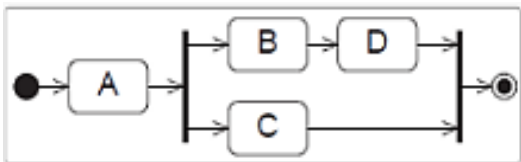
Q2: State the main activities of the reuse-oriented software engineering model? [4 Marks]

Name: Department: Section No:

Q1: Choose the correct answer

[6 Marks]

1. In UML a guard condition is shown inside a decision node as with flowchart?
 - (A) True
 - (B) False
2. Requirements elicitation means
 - (A) Gathering of requirements
 - (B) Capturing of requirements
 - (C) Understanding of requirements
 - (D) All of the above
3. Infrastructure software is covered under which of the following categories?
 - (A) Customized products
 - (B) Generic products
 - (C) Generic and customized products
 - (D) None
4. Identify a metric of the non-functional requirement
 - (A) Standards
 - (B) Security
 - (C) Size
 - (D) None
5. You are given the following activity diagram, which of the following action sequences are possible during one execution of the activity diagram?



- (A) A → B → C → D
- (B) A → B → D
- (C) A → C
- (D) A → B → D → C

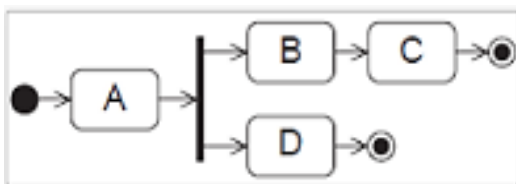
Q2: State the main activities of the incremental development model of the software development process? [4 Marks]

Name: Department: Section No:

Q1: Classify the following as *functional* / *non-functional* requirements for a banking system?

[4 Marks]

- a) Verifying bank balance.
- b) Withdrawing money from bank.
- c) Completion of transaction in less than 1 second.
- d) Extending system by providing more tellers for customers.
- e) You are given the following activity diagram, which of the following action sequences are possible during one execution of the activity diagram?



- (A) A → B → C
- (B) A → B → D
- (C) A → D
- (D) A → B → C → D

Q2: State the different techniques used for requirements discovery?

[4 Marks]