

Started on	Wednesday, 13 September 2023, 10:28 AM
State	Finished
Completed on	Wednesday, 13 September 2023, 10:29 AM
Time taken	1 min 2 secs
Marks	2.00/6.00
Grade	33.33 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

Hiding the object state , so that it can be observed or affected only via object's methods is known as -----?

Select one:

- ☐ a. Classification
- ☒ b. Encapsulation ✓
- ☐ c. Objectification
- ☐ d. None of the above

The correct answer is: Encapsulation

Question 2

Incorrect

Mark 0.00 out of 1.00

Because Use Cases represent recipes for user achieving 'goals', each use case name must include a 'verb' capturing the goal achievement.

Select one:

- ☐ True
- ☒ False ✗

The correct answer is 'True'.

Question 3

Incorrect

Mark 0.00 out of 1.00

An ----- is a software packaging of data and code together into a unit within a running computer program.

Select one:

- ☐ a. Method
- ☐ b. Function
- ☐ c. Object
- ☒ d. Class ✖

The correct answer is: Object

Question 4

Incorrect

Mark 0.00 out of 1.00

Objects are abstractions that specify the state and behavior of different collections of objects.

Select one:

- ☒ True ✖
- ☐ False

The correct answer is 'False'.

Question 5

Incorrect

Mark 0.00 out of 1.00

Process models are described as agile because they ?

Select one:

- ☐ a. eliminate the need for cumbersome documentation
- ☐ b. emphasize maneuverability and adaptability
- ☐ c. do not waste development time on planning activities
- ☒ d. make extensive use of prototype creation ✖

The correct answer is: emphasize maneuverability and adaptability

Question 6

Correct

Mark 1.00 out of 1.00

Software is a product and can be manufactured using the same technologies used for other engineering artifacts?

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Started on	Wednesday, 13 September 2023, 10:29 AM
State	Finished
Completed on	Wednesday, 13 September 2023, 10:30 AM
Time taken	43 secs
Marks	4.00/6.00
Grade	66.67 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

Methods that are even more aggressive in terms of short iterations and heavy user involvement are often characterized as -----?

Select one:

- ☐ a. Complex
- ☒ b. Agile ✓
- ☐ c. Iterative
- ☐ d. Incremental

The correct answer is: Agile

Question 2

Correct

Mark 1.00 out of 1.00

Software engineering umbrella activities are only applied during the initial phases of software development projects.

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Question 3

Correct

Mark 1.00 out of 1.00

Decomposing a problem into simpler ones is common when dealing with complex problems. This is known as -----?

Select one:

- ☐ a. Divide and conquer
- ☐ b. Modularity
- ☐ c. Only A
- ☐ d. Only B
- ☒ e. Both A and B ✓

The correct answer is: Both A and B

Question 4

Incorrect

Mark 0.00 out of 1.00

Concept Maps, while representing knowledge about the problem domain, are expressed in terms of 'concepts' and -----, and are used to represent knowledge, beliefs, feelings etc.

Select one:

- ☐ a. Problems
- ☐ b. Propositions
- ☐ c. Adverbs
- ☒ d. Verbs ✗

The correct answer is: Propositions

Question 5

Incorrect

Mark 0.00 out of 1.00

Objects are abstractions that specify the state and behavior of different collections of objects.

Select one:

- ☒ True ✗
- ☐ False

The correct answer is 'False'.

Question 6

Correct

Mark 1.00 out of 1.00

Software is a product and can be manufactured using the same technologies used for other engineering artifacts?

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Started on	Wednesday, 13 September 2023, 10:30 AM
State	Finished
Completed on	Thursday, 14 September 2023, 1:55 PM
Time taken	1 day 3 hours
Marks	0.00/6.00
Grade	0.00 out of 100.00

Question 1

Not answered

Marked out of 1.00

Process models are described as agile because they ?

Select one:

- ☐ a. eliminate the need for cumbersome documentation
- ☐ b. emphasize maneuverability and adaptability
- ☐ c. do not waste development time on planning activities
- ☐ d. make extensive use of prototype creation

The correct answer is: emphasize maneuverability and adaptability

Question 2

Not answered

Marked out of 1.00

Because Use Cases represent recipes for user achieving 'goals', each use case name must include a 'verb' capturing the goal achievement.

Select one:

- ☐ True
- ☐ False

The correct answer is 'True'.

Question 3

Not answered

Marked out of 1.00

Methods that are even more aggressive in terms of short iterations and heavy user involvement are often characterized as -----?

Select one:

- ☐ a. Complex
- ☐ b. Agile
- ☐ c. Iterative
- ☐ d. Incremental

The correct answer is: Agile

Question 4

Not answered

Marked out of 1.00

Decomposing a problem into simpler ones is common when dealing with complex problems. This is known as -----?

Select one:

- ☐ a. Divide and conquer
- ☐ b. Modularity
- ☐ c. Only A
- ☐ d. Only B
- ☐ e. Both A and B

The correct answer is: Both A and B

Question 5

Not answered

Marked out of 1.00

Hiding the object state , so that it can be observed or affected only via object's methods is known as -----?

Select one:

- ☐ a. Classification
- ☐ b. Encapsulation
- ☐ c. Objectification
- ☐ d. None of the above

The correct answer is: Encapsulation

Question 6

Not answered

Marked out of 1.00

Concept Maps, while representing knowledge about the problem domain, are expressed in terms of 'concepts' and -----, and are used to represent knowledge, beliefs, feelings etc.

Select one:

- ☐ a. Problems
- ☐ b. Propositions
- ☐ c. Adverbs
- ☐ d. Verbs

The correct answer is: Propositions

Started on	Thursday, 21 September 2023, 10:47 AM
State	Finished
Completed on	Thursday, 21 September 2023, 10:49 AM
Time taken	1 min 49 secs
Marks	4.00/6.00
Grade	66.67 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

Acceptance Tests are the test specified by the customer, written during the requirements analysis.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 2

Incorrect

Mark 0.00 out of 1.00

Software architecture focuses on -----requirements and decomposition of -----requirements.

Select one:

- ☒ a. Functional , Non Functional ✗
- ☐ b. Non Functional, Functional
- ☐ c. Behavioral, Contextual
- ☐ d. Contextual, Behavioral

The correct answer is: Non Functional, Functional

Question 3

Correct

Mark 1.00 out of 1.00

'Velocity' of the development team (in effort estimation) is defined are the -----?

Select one:

- ☐ a. Duration needed to develop the system
- ☐ b. Effort needed to develop the system
- ☒ c. Productivity of the team ✓
- ☐ d. Speed of the team

The correct answer is: Productivity of the team

Question 4

Correct

Mark 1.00 out of 1.00

The correct order for all requirement engineering techniques is

Select one:

- ☐ a. Analysis, Gathering, Specifications
- ☐ b. Gathering, Specifications, Analysis
- ☒ c. Gathering, Analysis, Specifications ✓
- ☐ d. Analysis, Specifications, Gathering

The correct answer is: Gathering, Analysis, Specifications

Question 5

Incorrect

Mark 0.00 out of 1.00

The final outcome of requirement engineering is a Requirement Specification Document?

Select one:

- ☐ True
- ☒ False ✗

The correct answer is 'True'.

Question 6

Correct

Mark 1.00 out of 1.00

The job of the requirements engineer is to categorize all stakeholder information in a way that allows decision makers to choose an internally consistent set of requirements.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Started on	Thursday, 21 September 2023, 10:51 AM
State	Finished
Completed on	Thursday, 21 September 2023, 10:51 AM
Time taken	52 secs
Marks	3.00/6.00
Grade	50.00 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

The correct order for all requirement engineering techniques is

Select one:

- ☐ a. Analysis, Gathering, Specifications
- ☐ b. Gathering, Specifications, Analysis
- ☒ c. Gathering, Analysis, Specifications ✓
- ☐ d. Analysis, Specifications, Gathering

The correct answer is: Gathering, Analysis, Specifications

Question 2

Correct

Mark 1.00 out of 1.00

'Velocity' of the development team (in effort estimation) is defined are the -----?

Select one:

- ☐ a. Duration needed to develop the system
- ☐ b. Effort needed to develop the system
- ☒ c. Productivity of the team ✓
- ☐ d. Speed of the team

The correct answer is: Productivity of the team

Question 3

Incorrect

Mark 0.00 out of 1.00

The result of the requirements engineering elaboration task is an analysis model that defines which of the following problem domain(s)?

Select one:

- ☒ a. Information ✖
- ☐ b. Functional
- ☐ c. Behavioral
- ☐ d. All of the above

The correct answer is: All of the above

Question 4

Correct

Mark 1.00 out of 1.00

The final outcome of requirement engineering is a Requirement Specification Document?

Select one:

- ☒ True ✔
- ☐ False

The correct answer is 'True'.

Question 5

Incorrect

Mark 0.00 out of 1.00

Software Architecture is a phase of software development

Select one:

- ☐ True
- ☒ False ✖

The correct answer is 'True'.

Question 6

Incorrect

Mark 0.00 out of 1.00

The term FURPS refers to

Select one:

- ☒ a. Functional system properties ✖
- ☐ b. Non functional system properties
- ☐ c. Both a and b
- ☐ d. None of the above

The correct answer is: Non functional system properties

Started on	Thursday, 21 September 2023, 10:49 AM
State	Finished
Completed on	Thursday, 21 September 2023, 10:50 AM
Time taken	1 min 26 secs
Marks	3.00/6.00
Grade	50.00 out of 100.00

Question 1

Incorrect

Mark 0.00 out of 1.00

The term FURPS refers to

Select one:

- ☐ a. Functional system properties
- ☐ b. Non functional system properties
- ☒ c. Both a and b ✖
- ☐ d. None of the above

The correct answer is: Non functional system properties

Question 2

Incorrect

Mark 0.00 out of 1.00

Software Architecture is a phase of software development

Select one:

- ☐ True
- ☒ False ✖

The correct answer is 'True'.

Question 3

Correct

Mark 1.00 out of 1.00

The result of the requirements engineering elaboration task is an analysis model that defines which of the following problem domain(s)?

Select one:

- ☐ a. Information
- ☐ b. Functional
- ☐ c. Behavioral
- ☒ d. All of the above ✓

The correct answer is: All of the above

Question 4

Correct

Mark 1.00 out of 1.00

Acceptance Tests are the test specified by the customer, written during the requirements analysis.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 5

Correct

Mark 1.00 out of 1.00

The job of the requirements engineer is to categorize all stakeholder information in a way that allows decision makers to choose an internally consistent set of requirements.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 6

Incorrect

Mark 0.00 out of 1.00

Software architecture focuses on -----requirements and decomposition of -----requirements.

Select one:

- ☐ a. Functional , Non Functional
- ☐ b. Non Functional, Functional
- ☒ c. Behavioral, Contextual ✖
- ☐ d. Contextual, Behavioral

The correct answer is: Non Functional, Functional

Started on	Thursday, 28 September 2023, 1:01 PM
State	Finished
Completed on	Thursday, 28 September 2023, 1:02 PM
Time taken	1 min 51 secs
Marks	3.00/6.00
Grade	50.00 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

An actor is any entity (human, physical object, or another system) external to the system-to-be that interacts with the system-to-be.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 2

Incorrect

Mark 0.00 out of 1.00

To prioritize the work on use cases, we use

Select one:

- ☐ a. Product Matrix
- ☒ b. Process Matrix ✗
- ☐ c. Traceability Matrix
- ☐ d. None of the above

The correct answer is: Traceability Matrix

Question 3

Incorrect

Mark 0.00 out of 1.00

Consider the following diagram:



Which of the following is true for the image?

Select one:

- ☐ a. If an instance of A is deleted, the contained instances of B are not affected.
- ☒ b. If an instance of B is deleted, all contained instances of A are also deleted. ✖
- ☐ c. If an instance of A is deleted, all contained instances of B are also deleted.
- ☐ d. None of the above

The correct answer is: If an instance of A is deleted, all contained instances of B are also deleted.

Question 4

Correct

Mark 1.00 out of 1.00

A use case represents an activity that an actor can perform on the system and what the system does in response.

Select one:

- ☒ True ✔
- ☐ False

The correct answer is 'True'.

Question 5

Incorrect

Mark 0.00 out of 1.00

In UML diagrams, relationship between object and component parts is represented by

Select one:

- ☒ a. ordination ✖
- ☐ b. aggregation
- ☐ c. segregation
- ☐ d. increment

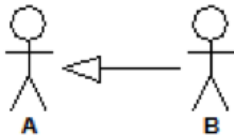
The correct answer is: aggregation

Question 6

Correct

Mark 1.00 out of 1.00

Which of the following statements about the given diagram clipping are true? (more than one answer)



Select one or more:

- ☒ a. B inherits all of A's associations ✓
- ☐ b. A inherits all of B's associations
- ☐ c. A can execute the same use cases as B
- ☒ d. B can execute the same use cases as A. ✓

The correct answers are: B inherits all of A's associations, B can execute the same use cases as A.

Started on	Thursday, 28 September 2023, 1:03 PM
State	Finished
Completed on	Thursday, 28 September 2023, 1:04 PM
Time taken	1 min 20 secs
Marks	4.00/6.00
Grade	66.67 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

Initiating actor is the -----actor where as participating actor is the ----- actor.

Select one:

- ☐ a. Secondary, Primary
- ☒ b. Primary , Secondary ✓
- ☐ c. None of the above

The correct answer is: Primary , Secondary

Question 2

Correct

Mark 1.00 out of 1.00

Which of the following statements characterize use cases?

Select one:

- ☐ a. Use cases specify the procedural process within a system
- ☐ b. Use cases are suitable for modeling interfaces between two systems
- ☒ c. Use cases specify the functionalities and the behavior that the system which is being developed should have. ✓
- ☐ d. None of the above

The correct answer is: Use cases specify the functionalities and the behavior that the system which is being developed should have.

Question 3

Incorrect

Mark 0.00 out of 1.00

The association between an actor and a use case is (more than one answer)

Select one or more:

- ☒ a. Is modeled with a dashed line ✖
- ☒ b. Is modeled with a directed line with an arrowhead ✖
- ☐ c. Is an undirected continuous line
- ☐ d. Is binary

The correct answers are: Is an undirected continuous line, Is binary

Question 4

Correct

Mark 1.00 out of 1.00

To prioritize the work on use cases, we use

Select one:

- ☐ a. Product Matrix
- ☐ b. Process Matrix
- ☒ c. Traceability Matrix ✔
- ☐ d. None of the above

The correct answer is: Traceability Matrix

Question 5

Incorrect

Mark 0.00 out of 1.00

A use case represents an activity that an actor can perform on the system and what the system does in response.

Select one:

- ☐ True
- ☒ False ✖

The correct answer is 'True'.

Question 6

Correct

Mark 1.00 out of 1.00

Consider the following diagram:



Which of the following is true for the image?

Select one:

- ☐ a. If an instance of A is deleted, the contained instances of B are not affected.
- ☐ b. If an instance of B is deleted, all contained instances of A are also deleted.
- ☒ c. If an instance of A is deleted, all contained instances of B are also deleted. ✓
- ☐ d. None of the above

The correct answer is: If an instance of A is deleted, all contained instances of B are also deleted.

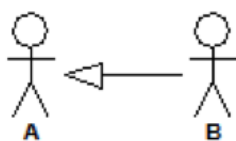
Started on Thursday, 28 September 2023, 1:04 PM**State** Finished**Completed on** Thursday, 28 September 2023, 1:05 PM**Time taken** 57 secs**Marks** 5.00/6.00**Grade** 83.33 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

Which of the following statements about the given diagram clipping are true? (more than one answer)



Select one or more:

- ☒ a. B inherits all of A's associations ✓
- ☐ b. A inherits all of B's associations
- ☐ c. A can execute the same use cases as B
- ☒ d. B can execute the same use cases as A. ✓

The correct answers are: B inherits all of A's associations, B can execute the same use cases as A.

Question 2

Correct

Mark 1.00 out of 1.00

Which of the following statements characterize use cases?

Select one:

- ☐ a. Use cases specify the procedural process within a system
- ☐ b. Use cases are suitable for modeling interfaces between two systems
- ☒ c. Use cases specify the functionalities and the behavior that the system which is being developed should have. ✓
- ☐ d. None of the above

The correct answer is: Use cases specify the functionalities and the behavior that the system which is being developed should have.

Question 3

Incorrect

Mark 0.00 out of 1.00

In UML diagrams, relationship between object and component parts is represented by

Select one:

- ☐ a. ordination
- ☐ b. aggregation
- ☒ c. segregation ✖
- ☐ d. increment

The correct answer is: aggregation

Question 4

Correct

Mark 1.00 out of 1.00

The association between an actor and a use case is (more than one answer)

Select one or more:

- ☐ a. Is modeled with a dashed line
- ☐ b. Is modeled with a directed line with an arrowhead
- ☒ c. Is an undirected continuous line ✔
- ☒ d. Is binary ✔

The correct answers are: Is an undirected continuous line, Is binary

Question 5

Correct

Mark 1.00 out of 1.00

An actor is any entity (human, physical object, or another system) external to the system-to-be that interacts with the system-to-be.

Select one:

- ☒ True ✔
- ☐ False

The correct answer is 'True'.

Question 6

Correct

Mark 1.00 out of 1.00

Initiating actor is the -----actor where as participating actor is the ----- actor.

Select one:

- ☐ a. Secondary, Primary
- ☒ b. Primary , Secondary ✓
- ☐ c. None of the above

The correct answer is: Primary , Secondary

Started on	Thursday, 28 September 2023, 1:22 PM
State	Finished
Completed on	Thursday, 28 September 2023, 1:23 PM
Time taken	28 secs
Marks	3.50/6.00
Grade	58.33 out of 100.00

Question 1

Incorrect

Mark 0.00 out of 1.00

To prioritize the work on use cases, we use

Select one:

- ☒ a. Product Matrix ❌
- ☐ b. Process Matrix
- ☐ c. Traceability Matrix
- ☐ d. None of the above

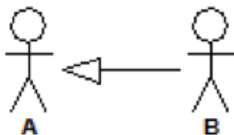
The correct answer is: Traceability Matrix

Question 2

Correct

Mark 1.00 out of 1.00

Which of the following statements about the given diagram clipping are true? (more than one answer)



Select one or more:

- ☒ a. B inherits all of A's associations ✓
- ☐ b. A inherits all of B's associations
- ☐ c. A can execute the same use cases as B
- ☒ d. B can execute the same use cases as A. ✓

The correct answers are: B inherits all of A's associations, B can execute the same use cases as A.

Question 3

Correct

Mark 1.00 out of 1.00

An actor is any entity (human, physical object, or another system) external to the system-to-be that interacts with the system-to-be.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 4

Not answered

Marked out of 1.00

Which of the following statements characterize use cases?

Select one:

- ☐ a. Use cases specify the procedural process within a system
- ☐ b. Use cases are suitable for modeling interfaces between two systems
- ☐ c. Use cases specify the functionalities and the behavior that the system which is being developed should have.
- ☐ d. None of the above

The correct answer is: Use cases specify the functionalities and the behavior that the system which is being developed should have.

Question 5

Correct

Mark 1.00 out of 1.00

Consider the following diagram:



Which of the following is true for the image?

Select one:

- ☐ a. If an instance of A is deleted, the contained instances of B are not affected.
- ☐ b. If an instance of B is deleted, all contained instances of A are also deleted.
- ☒ c. If an instance of A is deleted, all contained instances of B are also deleted. ✓
- ☐ d. None of the above

The correct answer is: If an instance of A is deleted, all contained instances of B are also deleted.

Question 6

Partially correct

Mark 0.50 out of 1.00

The association between an actor and a use case is (more than one answer)

Select one or more:

- ☐ a. Is modeled with a dashed line
- ☐ b. Is modeled with a directed line with an arrowhead
- ☒ c. Is an undirected continuous line ✓
- ☐ d. Is binary

The correct answers are: Is an undirected continuous line, Is binary

Started on	Thursday, 28 September 2023, 1:49 PM
State	Finished
Completed on	Thursday, 28 September 2023, 1:55 PM
Time taken	6 mins
Marks	0.00/6.00
Grade	0.00 out of 100.00

Question 1

Not answered

Marked out of 1.00

A use case represents an activity that an actor can perform on the system and what the system does in response.

Select one:

- ☐ True
- ☐ False

The correct answer is 'True'.

Question 2

Not answered

Marked out of 1.00

In UML diagrams, relationship between object and component parts is represented by

Select one:

- ☐ a. ordination
- ☐ b. aggregation
- ☐ c. segregation
- ☐ d. increment

The correct answer is: aggregation

Question 3

Not answered

Marked out of 1.00

Initiating actor is the -----actor where as participating actor is the ----- actor.

Select one:

- ☐ a. Secondary, Primary
- ☐ b. Primary , Secondary
- ☐ c. None of the above

The correct answer is: Primary , Secondary

Question 4

Not answered

Marked out of 1.00

Which of the following statements characterize use cases?

Select one:

- ☐ a. Use cases specify the procedural process within a system
- ☐ b. Use cases are suitable for modeling interfaces between two systems
- ☐ c. Use cases specify the functionalities and the behavior that the system which is being developed should have.
- ☐ d. None of the above

The correct answer is: Use cases specify the functionalities and the behavior that the system which is being developed should have.

Question 5

Not answered

Marked out of 1.00

The association between an actor and a use case is (more than one answer)

Select one or more:

- ☐ a. Is modeled with a dashed line
- ☐ b. Is modeled with a directed line with an arrowhead
- ☐ c. Is an undirected continuous line
- ☐ d. Is binary

The correct answers are: Is an undirected continuous line, Is binary

Question 6

Not answered

Marked out of 1.00

An actor is any entity (human, physical object, or another system) external to the system-to-be that interacts with the system-to-be.

Select one:

- ☐ True
- ☐ False

The correct answer is 'True'.

Started on	Monday, 2 October 2023, 6:13 AM
State	Finished
Completed on	Monday, 2 October 2023, 6:15 AM
Time taken	1 min 28 secs
Marks	5.00/5.00
Grade	100.00 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

Organizations are often fronted by a point-of-contact person. A common pattern is to have a specialized worker to take orders from the clients and orchestrate the workings of the workers inside the system. This type of object is known as Controller.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 2

Correct

Mark 1.00 out of 1.00

Analysis phase is concerned about the _____ aspect of software engineering where as Design is more focused on _____ aspect.

Select one:

- ☐ a. When, What
- ☐ b. How, What
- ☒ c. What, How ✓
- ☐ d. What, When

Your answer is correct.

The correct answer is: What, How

Question 3

Correct

Mark 1.00 out of 1.00

This traceability property is critical for a good development method (process), because the design elaboration progresses systematically, without great leaps that are difficult to grasp and/or follow.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 4

Correct

Mark 1.00 out of 1.00

Domain models represents real - world concepts, not the software components.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 5

Correct

Mark 1.00 out of 1.00

A popular approach to micro-level design is known as *responsibility-driven design* (RDD). We know the types of responsibilities that objects can have:

- Type 1 responsibility (knowing): Memorizing data or references, such as data values, data collections, or references to other objects, represented as a _____.
- Type 2 responsibility (doing): Performing computations, such as data processing, control of physical devices, etc., represented as a _____.
- Type 3 responsibility (communicating): Communicating with other objects, represented as _____ sending (method invocation).

Select one:

- ☐ a. Message, Method, Property
- ☒ b. Property, Method, Message ✓
- ☐ c. Method, Property, Message
- ☐ d. Property, Message, Method

Your answer is correct.

The correct answer is: Property, Method, Message

Started on	Monday, 2 October 2023, 6:15 AM
State	Finished
Completed on	Monday, 2 October 2023, 6:16 AM
Time taken	44 secs
Marks	4.00/5.00
Grade	80.00 out of 100.00

Question 1

Incorrect

Mark 0.00 out of 1.00

Object's coupling is indirectly proportional to the number of different messages the object sends to other objects.

Select one:

- ☒ True ✖
- ☐ False

The correct answer is 'False'.

Question 2

Correct

Mark 1.00 out of 1.00

Domain models represents real - world concepts, not the software components.

Select one:

- ☒ True ✔
- ☐ False

The correct answer is 'True'.

Question 3

Correct

Mark 1.00 out of 1.00

Analysis phase is concerned about the _____ aspect of software engineering where as Design is more focused on _____ aspect.

Select one:

- ☐ a. When, What
- ☐ b. How, What
- ☒ c. What, How ✓
- ☐ d. What, When

Your answer is correct.

The correct answer is: What, How

Question 4

Correct

Mark 1.00 out of 1.00

Organizations are often fronted by a point-of-contact person. A common pattern is to have a specialized worker to take orders from the clients and orchestrate the workings of the workers inside the system. This type of object is known as Controller.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 5

Correct

Mark 1.00 out of 1.00

A popular approach to micro-level design is known as *responsibility-driven design* (RDD). We know the types of responsibilities that objects can have:

- Type 1 responsibility (knowing): Memorizing data or references, such as data values, data collections, or references to other objects, represented as a _____.
- Type 2 responsibility (doing): Performing computations, such as data processing, control of physical devices, etc., represented as a _____.
- Type 3 responsibility (communicating): Communicating with other objects, represented as _____ sending (method invocation).

Select one:

- ☐ a. Message, Method, Property
- ☒ b. Property, Method, Message ✓
- ☐ c. Method, Property, Message
- ☐ d. Property, Message, Method

Your answer is correct.

The correct answer is: Property, Method, Message

Started on	Monday, 2 October 2023, 6:16 AM
State	Finished
Completed on	Monday, 2 October 2023, 6:16 AM
Time taken	35 secs
Marks	5.00/5.00
Grade	100.00 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

This traceability property is critical for a good development method (process), because the design elaboration progresses systematically, without great leaps that are difficult to grasp and/or follow.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 2

Correct

Mark 1.00 out of 1.00

Object's coupling is indirectly proportional to the number of different messages the object sends to other objects.

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Question 3

Correct

Mark 1.00 out of 1.00

A popular approach to micro-level design is known as *responsibility-driven design* (RDD). We know the types of responsibilities that objects can have:

- Type 1 responsibility (knowing): Memorizing data or references, such as data values, data collections, or references to other objects, represented as a _____.
- Type 2 responsibility (doing): Performing computations, such as data processing, control of physical devices, etc., represented as a _____.
- Type 3 responsibility (communicating): Communicating with other objects, represented as _____ sending (method invocation).

Select one:

- ☐ a. Message, Method, Property
- ☒ b. Property, Method, Message ✓
- ☐ c. Method, Property, Message
- ☐ d. Property, Message, Method

Your answer is correct.

The correct answer is: Property, Method, Message

Question 4

Correct

Mark 1.00 out of 1.00

Organizations are often fronted by a point-of-contact person. A common pattern is to have a specialized worker to take orders from the clients and orchestrate the workings of the workers inside the system. This type of object is known as Controller.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 5

Correct

Mark 1.00 out of 1.00

Domain models represents real - world concepts, not the software components.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Started on	Sunday, 8 October 2023, 6:47 AM
State	Finished
Completed on	Sunday, 8 October 2023, 6:48 AM
Time taken	50 secs
Marks	5.00/6.00
Grade	83.33 out of 100.00

Question 1

Incorrect

Mark 0.00 out of 1.00

2. -----measures the degree to which the specification or code of a software program has been exercised by tests. -----
--measures the degree to which the source code of a program has been tested.

Select one:

- ☐ a. Test coverage, Code coverage
- ☒ b. Code coverage, Test coverage ✖
- ☐ c. Acceptance Test, Unit Test
- ☐ d. Unit Test, Acceptance Test

The correct answer is: Test coverage, Code coverage

Question 2

Correct

Mark 1.00 out of 1.00

Equivalence testing divides the input domain into classes of data from which test cases can be derived to reduce the total number of test cases that must be developed.

Select one:

- ☒ True ✔
- ☐ False

The correct answer is 'True'.

Question 3

Correct

Mark 1.00 out of 1.00

For an input parameter specified as a **Boolean value**, partition the value space into one valid and one invalid equivalence class.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 4

Correct

Mark 1.00 out of 1.00

Boundary value analysis can only be used to do white-box testing.

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Question 5

Correct

Mark 1.00 out of 1.00

Acceptance tests are normally conducted by the developer?

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Question 6

Correct

Mark 1.00 out of 1.00

A **Test**, is an erroneous hardware or software element of a system that can cause the system to fail.

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Started on	Sunday, 8 October 2023, 6:48 AM
State	Finished
Completed on	Sunday, 8 October 2023, 6:49 AM
Time taken	1 min 20 secs
Marks	5.00/6.00
Grade	83.33 out of 100.00

Question 1

Incorrect

Mark 0.00 out of 1.00

Boundary testing and Control-flow testing are criteria for ?

Select one:

- ☒ a. Unit Testing ✖
- ☐ b. Test Coverage
- ☐ c. Code Coverage
- ☐ d. None of the above

The correct answer is: Code Coverage

Question 2

Correct

Mark 1.00 out of 1.00

The unit to be tested is also known as the **fixture**.

Select one:

- ☒ True ✔
- ☐ False

The correct answer is 'True'.

Question 3

Correct

Mark 1.00 out of 1.00

Selects elements from the “edges” of the equivalence class, or “outliers” such as- zero, min/max values, empty set, empty string, and null, confusion between > and >=, etc. This type of testing is known as

Select one:

- ☐ a. Test Coverage
- ☒ b. Boundary Testing ✓
- ☐ c. Unit Testing
- ☐ d. Integration Testing

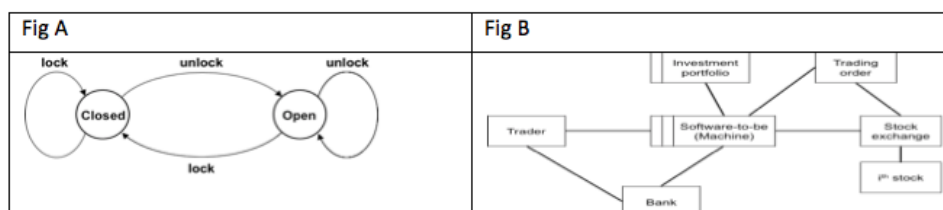
The correct answer is: Boundary Testing

Question 4

Correct

Mark 1.00 out of 1.00

7. Look at the two diagrams and identify them.



Select one:

- ☐ a. UML, State
- ☐ b. Context, State
- ☒ c. State , Context ✓
- ☐ d. None of the above

The correct answer is: State , Context

Question 5

Correct

Mark 1.00 out of 1.00

A **Test**, is an erroneous hardware or software element of a system that can cause the system to fail.

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Question 6

Correct

Mark 1.00 out of 1.00

Acceptance tests are normally conducted by the developer?

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Started on Sunday, 8 October 2023, 6:50 AM

State Finished

Completed on Sunday, 8 October 2023, 6:50 AM

Time taken 50 secs

Marks 4.00/6.00

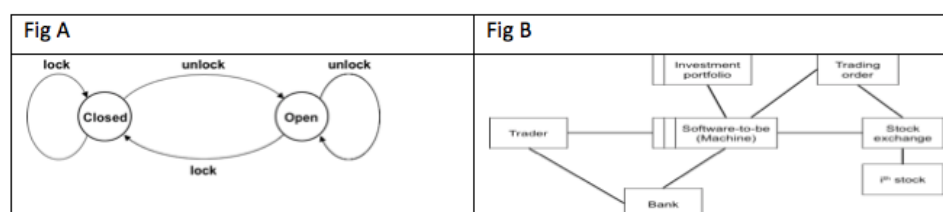
Grade 66.67 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

7. Look at the two diagrams and identify them.



Select one:

- ☐ a. UML, State
- ☐ b. Context, State
- ☒ c. State , Context ✓
- ☐ d. None of the above

The correct answer is: State , Context

Question 2

Correct

Mark 1.00 out of 1.00

Equivalence testing divides the input domain into classes of data from which test cases can be derived to reduce the total number of test cases that must be developed.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 3

Incorrect

Mark 0.00 out of 1.00

Boundary testing and Control-flow testing are criteria for ?

Select one:

- ☐ a. Unit Testing
- ☒ b. Test Coverage ✖
- ☐ c. Code Coverage
- ☐ d. None of the above

The correct answer is: Code Coverage

Question 4

Incorrect

Mark 0.00 out of 1.00

Selects elements from the “edges” of the equivalence class, or “outliers” such as- zero, min/max values, empty set, empty string, and null, confusion between > and >=, etc. This type of testing is known as

Select one:

- ☐ a. Test Coverage
- ☐ b. Boundary Testing
- ☐ c. Unit Testing
- ☒ d. Integration Testing ✖

The correct answer is: Boundary Testing

Question 5

Correct

Mark 1.00 out of 1.00

For an input parameter specified as a **Boolean value**, partition the value space into one valid and one invalid equivalence class.

Select one:

- ☒ True ✔
- ☐ False

The correct answer is 'True'.

Question 6

Correct

Mark 1.00 out of 1.00

The unit to be tested is also known as the **fixture**.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Started on	Saturday, 14 October 2023, 2:30 PM
State	Finished
Completed on	Saturday, 14 October 2023, 2:31 PM
Time taken	1 min 11 secs
Marks	3.00/6.00
Grade	50.00 out of 100.00

Question 1

Incorrect

Mark 0.00 out of 1.00

The four basic steps in software project estimation are:

1. Estimate the size of the development product. { either Lines of Code (LOC) or Function Points (FP)}
2. Estimate the effort in person-months or person-hours.
3. Estimate the schedule in calendar months.
4. Estimate the project cost in dollars (or local currency)

Select one:

- ☐ True
- ☒ False ✖

The correct answer is 'True'.

Question 2

Correct

Mark 1.00 out of 1.00

Cohesion is of two types, Internal and Syntactic.

Select one:

- ☐ True
- ☒ False ✔

The correct answer is 'False'.

Question 3

Correct

Mark 1.00 out of 1.00

Cyclomatic complexity measures software complexity from the machine's viewpoint in terms of how the size of the input data affects an algorithm's usage of computational resources (usually running time or memory)

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Question 4

Correct

Mark 1.00 out of 1.00

LOC-based estimation techniques require problem decomposition based on

Select one:

- ☐ a. information domain values
- ☐ b. project schedule
- ☒ c. software functions ✓
- ☐ d. process activities

The correct answer is: software functions

Question 5

Incorrect

Mark 0.00 out of 1.00

Cyclomatic complexity of graph G equals #edges + #nodes - 2

$$V(G) = e + n - 2$$

Select one:

- ☒ True ✗
- ☐ False

The correct answer is 'False'.

Question 6

Incorrect

Mark 0.00 out of 1.00

For a strongly connected graph a ***real edge*** is created to connect the END node to the BEGIN node

Select one:

- ☒ True ✖
- ☐ False

The correct answer is 'False'.

Started on	Saturday, 14 October 2023, 2:31 PM
State	Finished
Completed on	Saturday, 14 October 2023, 2:32 PM
Time taken	1 min 2 secs
Marks	5.00/6.00
Grade	83.33 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

On the Ordinal Cohesion Scale, rate the following in the Lowest to Highest order of cohesion.

Select one:

- ☐ a. Logical , Coincidental, Sequential, Temporal, Functional
- ☐ b. Coincidental, Sequential, Functional, Temporal, Logical
- ☒ c. Coincidental, Logical, Temporal, Sequential, Functional ✓
- ☐ d. Logical, Sequential, Coincidental, Temporal, Functional

The correct answer is: Coincidental, Logical, Temporal, Sequential, Functional

Question 2

Incorrect

Mark 0.00 out of 1.00

4. A ----- is a path that begins and ends at the same node whereas a ----- is a circuit with no node (other than the starting node) included more than once

Select one:

- ☒ a. Cycle, Circuit ✗
- ☐ b. Circuit, Cycle
- ☐ c. Valid, Invalid
- ☐ d. None of the above

The correct answer is: Circuit, Cycle

Question 3

Correct

Mark 1.00 out of 1.00

The size estimate for a software product to be built must be based on a direct measure like LOC.

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Question 4

Correct

Mark 1.00 out of 1.00

-----cohesion is difficult to automate

Select one:

- ☐ a. Syntactic
- ☒ b. Semantic ✓
- ☐ c. Internal
- ☐ d. None of the above

The correct answer is: Semantic

Question 5

Correct

Mark 1.00 out of 1.00

For a strongly connected graph a **real edge** is created to connect the END node to the BEGIN node

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Question 6

Correct

Mark 1.00 out of 1.00

Cyclomatic complexity of graph G equals #edges + #nodes - 2

$$V(G) = e + n - 2$$

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Started on	Saturday, 14 October 2023, 2:32 PM
State	Finished
Completed on	Saturday, 14 October 2023, 2:33 PM
Time taken	44 secs
Marks	6.00/6.00
Grade	100.00 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

LOC-based estimation techniques require problem decomposition based on

Select one:

- ☐ a. information domain values
- ☐ b. project schedule
- ☒ c. software functions ✓
- ☐ d. process activities

The correct answer is: software functions

Question 2

Correct

Mark 1.00 out of 1.00

-----cohesion is difficult to automate

Select one:

- ☐ a. Syntactic
- ☒ b. Semantic ✓
- ☐ c. Internal
- ☐ d. None of the above

The correct answer is: Semantic

Question 3

Correct

Mark 1.00 out of 1.00

The four basic steps in software project estimation are:

1. Estimate the size of the development product. { either Lines of Code (LOC) or Function Points (FP)}
2. Estimate the effort in person-months or person-hours.
3. Estimate the schedule in calendar months.
4. Estimate the project cost in dollars (or local currency)

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 4

Correct

Mark 1.00 out of 1.00

Cyclomatic complexity measures software complexity from the machine's viewpoint in terms of how the size of the input data affects an algorithm's usage of computational resources (usually running time or memory)

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Question 5

Correct

Mark 1.00 out of 1.00

Cohesion is of two types, Internal and Syntactic.

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Question 6

Correct

Mark 1.00 out of 1.00

4. A ----- is a path that begins and ends at the same node whereas a ----- is a circuit with no node (other than the starting node) included more than once

Select one:

- ☐ a. Cycle, Circuit
- ☒ b. Circuit, Cycle ✓
- ☐ c. Valid, Invalid
- ☐ d. None of the above

The correct answer is: Circuit, Cycle

Started on	Saturday, 14 October 2023, 2:33 PM
State	Finished
Completed on	Saturday, 14 October 2023, 2:34 PM
Time taken	30 secs
Marks	6.00/6.00
Grade	100.00 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

The size estimate for a software product to be built must be based on a direct measure like LOC.

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Question 2

Correct

Mark 1.00 out of 1.00

On the Ordinal Cohesion Scale, rate the following in the Lowest to Highest order of cohesion.

Select one:

- ☐ a. Logical , Coincidental, Sequential, Temporal, Functional
- ☐ b. Coincidental, Sequential, Functional, Temporal, Logical
- ☒ c. Coincidental, Logical, Temporal, Sequential, Functional ✓
- ☐ d. Logical, Sequential, Coincidental, Temporal, Functional

The correct answer is: Coincidental, Logical, Temporal, Sequential, Functional

Question 3

Correct

Mark 1.00 out of 1.00

Cohesion is of two types, Internal and Syntactic.

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Question 4

Correct

Mark 1.00 out of 1.00

LOC-based estimation techniques require problem decomposition based on

Select one:

- ☐ a. information domain values
- ☐ b. project schedule
- ☒ c. software functions ✓
- ☐ d. process activities

The correct answer is: software functions

Question 5

Correct

Mark 1.00 out of 1.00

The four basic steps in software project estimation are:

1. Estimate the size of the development product. { either Lines of Code (LOC) or Function Points (FP)}
2. Estimate the effort in person-months or person-hours.
3. Estimate the schedule in calendar months.
4. Estimate the project cost in dollars (or local currency)

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 6

Correct

Mark 1.00 out of 1.00

Cyclomatic complexity measures software complexity from the machine's viewpoint in terms of how the size of the input data affects an algorithm's usage of computational resources (usually running time or memory)

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Started on	Saturday, 21 October 2023, 8:41 PM
State	Finished
Completed on	Saturday, 21 October 2023, 8:42 PM
Time taken	1 min 4 secs
Marks	4.00/5.00
Grade	80.00 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

Kerckhoffs' Principle states that a cryptosystem should remain secure even if everything about it other than the key is public knowledge. The security of a system's design is in no way dependent upon the secrecy of the design, in and of itself.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 2

Incorrect

Mark 0.00 out of 1.00

In the RSA system, the receiver does as follows:

1. Randomly select two large prime numbers p and q , which always must be kept secret.
2. Select an integer number E , known as the public exponent, such that $(p-1)$ and E have no common divisors, and $(q-1)$ and E have no common divisors.
3. Determine the private exponent, D , such that $(ED-1)$ is exactly divisible by both $(p-1)$ and $(q-1)$. In other words, given E , we choose D such that the integer remainder when ED is divided by $(p-1)(q-1)$ is 1.
4. Determine the product $n = pq$, known as public modulus.
5. Release publicly the public key, which is the pair of numbers n and E , $K = (n, E)$. Keep secret the private key, $K = (n, D)$.

The above events are mentioned in the correct order as they are performed while writing the algorithm.

Select one:

- ☒ True ✗
- ☐ False

The correct answer is 'False'.

Question 3

Correct

Mark 1.00 out of 1.00

The term _____ is often used to describe modifying the design and/or implementation of a software module without changing its external behavior, and is sometimes informally referred to as “cleaning it up.”

Select one:

- ☐ a. Designing
- ☐ b. Factoring
- ☒ c. Refactoring ✓
- ☐ d. Polymorphism

The correct answer is: Refactoring

Question 4

Correct

Mark 1.00 out of 1.00

If you are able to anticipate that the components are likely to be reused in future projects then it is not advisable to use the Pub-Sub design pattern.

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Question 5

Correct

Mark 1.00 out of 1.00

Indirect communication is usually used when an object cannot or does not want to know the identity of the object whose method it calls.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Started on	Saturday, 21 October 2023, 8:42 PM
State	Finished
Completed on	Saturday, 21 October 2023, 8:43 PM
Time taken	33 secs
Marks	5.00/5.00
Grade	100.00 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

Kerckhoffs' Principle states that a cryptosystem should remain secure even if everything about it other than the key is public knowledge. The security of a system's design is in no way dependent upon the secrecy of the design, in and of itself.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 2

Correct

Mark 1.00 out of 1.00

Indirect communication is usually used when an object cannot or does not want to know the identity of the object whose method it calls.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 3

Correct

Mark 1.00 out of 1.00

The term _____ is often used to describe modifying the design and/or implementation of a software module without changing its external behavior, and is sometimes informally referred to as “cleaning it up.”

Select one:

- ☐ a. Designing
- ☐ b. Factoring
- ☒ c. Refactoring ✓
- ☐ d. Polymorphism

The correct answer is: Refactoring

Question 4

Correct

Mark 1.00 out of 1.00

If you are able to anticipate that the components are likely to be reused in future projects then it is not advisable to use the Pub-Sub design pattern.

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Question 5

Correct

Mark 1.00 out of 1.00

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1. Randomly select two large prime numbers p and q , which always must be kept secret.
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4. Determine the product $n = pq$, known as public modulus.
5. Release publicly the public key, which is the pair of numbers n and E , $K = (n, E)$. Keep secret the private key, $K = (n, D)$.

The above events are mentioned in the correct order as they are performed while writing the algorithm.

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Started on	Saturday, 21 October 2023, 8:43 PM
State	Finished
Completed on	Saturday, 21 October 2023, 8:43 PM
Time taken	35 secs
Marks	5.00/5.00
Grade	100.00 out of 100.00

Question 1

Correct

Mark 1.00 out of 1.00

In the RSA system, the receiver does as follows:

1. Randomly select two large prime numbers p and q , which always must be kept secret.
2. Select an integer number E , known as the public exponent, such that $(p-1)$ and E have no common divisors, and $(q-1)$ and E have no common divisors.
3. Determine the private exponent, D , such that $(ED-1)$ is exactly divisible by both $(p-1)$ and $(q-1)$. In other words, given E , we choose D such that the integer remainder when ED is divided by $(p-1)(q-1)$ is 1.
4. Determine the product $n = pq$, known as public modulus.
5. Release publicly the public key, which is the pair of numbers n and E , $K = (n, E)$. Keep secret the private key, $K = (n, D)$.

The above events are mentioned in the correct order as they are performed while writing the algorithm.

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Question 2

Correct

Mark 1.00 out of 1.00

The term _____ is often used to describe modifying the design and/or implementation of a software module without changing its external behavior, and is sometimes informally referred to as "cleaning it up."

Select one:

- ☐ a. Designing
- ☐ b. Factoring
- ☒ c. Refactoring ✓
- ☐ d. Polymorphism

The correct answer is: Refactoring

Question 3

Correct

Mark 1.00 out of 1.00

Indirect communication is usually used when an object cannot or does not want to know the identity of the object whose method it calls.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 4

Correct

Mark 1.00 out of 1.00

Kerckhoffs' Principle states that a cryptosystem should remain secure even if everything about it other than the key is public knowledge. The security of a system's design is in no way dependent upon the secrecy of the design, in and of itself.

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 5

Correct

Mark 1.00 out of 1.00

If you are able to anticipate that the components are likely to be reused in future projects then it is not advisable to use the Pub-Sub design pattern.

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.