

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

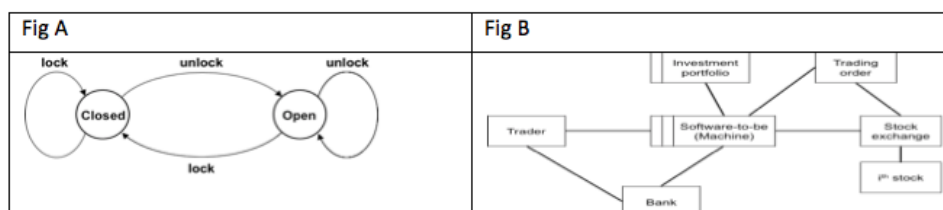
The correct answer is: Boundary Testing

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

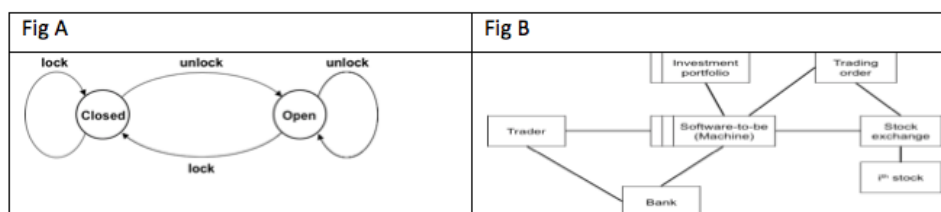
Grade 66.67 out of 100.00

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

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'.

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'.