Status	Finished
Started	Saturday, 12 October 2024, 8:20 AM
Completed	Saturday, 12 October 2024, 8:30 AM
Duration	9 mins 50 secs
Grade	**10.00** out of 10.00 (**100**%)

Question **1**

Correct

Mark 1.00 out of 1.00

What is an architectural pattern?

Select one:

○ a. Stylized description of any good example about designing a user user interface.

○ b. Stylized description of any good example about implementing computer program.

◉ c. Stylized description of any good (architectural) design practice, which has been tried and tested in different   ✓
environments.

○ d. None of the other answers is correct.

The correct answer is: Stylized description of any good (architectural) design practice, which has been tried and tested in different environments.

⬭ Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

Mark 1.00 out of 1.00

In software architecture design, which of the following decomposition approaches can be used?

Select one:

○ a. None of the other answers is correct.

○ b. Maximum coupling (more inter-component connections/relations) and minimum cohesion (less inner-component
connection relations).

◉ c. Minimum coupling (less inter-component connections/relations) and Maximum cohesion (more inner-   ✓
component connection relations).

○ d. Balancing both inner-components and inter-components connections/relations (cohesion ~ coupling).

The correct answer is: Minimum coupling (less inter-component connections/relations) and Maximum cohesion (more   ⌃
inner-component connection relations).

⬭ Correct

Marks for this submission: 1.00/1.00.

Question 3

Correct

Mark 1.00 out of 1.00

Which of the following relationships between architectural views and UML diagrams are correct?

Select one:

- ○ a. Logical: class diagram; process: sequence diagram; development: component diagram; physical: deployment.
- ○ b. Logical: state-chart diagram; process: sequence diagram; development: component diagram; physical: deployment.
- ⦿ c. Logical: class diagram; process: activity diagram; development: component diagram; physical: deployment. ✓
- ○ d. All the other answers are correct.

The correct answer is: Logical: class diagram; process: activity diagram; development: component diagram; physical: deployment.

(Correct)
Marks for this submission: 1.00/1.00.

Question 4

Correct

Mark 1.00 out of 1.00

Which is INCORRECT about the 4+1 (view) models in software architecture.

Select one:

- ○ a. Process view shows how, at runtime, the system is composed of interacting processes.
- ⦿ b. Development or Implementation view is for presenting how the components/sub-systems are distributed around the network. ✓
- ○ c. Use-case view shows the use-cases or scenarios.
- ○ d. Logical view shows the key abstractions in the system as objects and classes.

The correct answer is: Development or Implementation view is for presenting how the components/sub-systems are distributed around the network.

(Correct)
Marks for this submission: 1.00/1.00.

Question 5

Correct

Mark 1.00 out of 1.00

Which of the following is NOT acceptable in software architecture decision?

Select one:

○ a. Critical components should be deployed on the same machine rather than distributed around the network to have better performance.

○ b. Localize safety-critical features in a small number of sub-systems to increase safety.

○ c. Secure important components for security.

◉ d. Use important and non-replaceable components to make the system stable for increase the maintainability. ✓

The correct answer is: Use important and non-replaceable components to make the system stable for increase the maintainability.

[Correct]

Marks for this submission: 1.00/1.00.

Question 6

Correct

Mark 1.00 out of 1.00

Software architecture is decided based on _____.

Select one:

◉ a. All the other answers are correct. ✓

○ b. Functional and non-functional requirements.

○ c. Application types and equivalent architectures.

○ d. Pre-defined decision criteria

The correct answer is: All the other answers are correct.

[Correct]

Marks for this submission: 1.00/1.00.

Question 7

Correct

Mark 1.00 out of 1.00

The 4+1 (view) models in software architecture design are ___.

Select one:

- ○ a. All the other answers are correct.
- ◉ b. Logical, Process, Development, Physical, and Use-case or Scenario. ✔
- ○ c. Context, Interaction, Behavioral, State, and Data.
- ○ d. Static, Dynamic, Process, Implementation, and Deployment.

The correct answer is: Logical, Process, Development, Physical, and Use-case or Scenario.

Correct

Marks for this submission: 1.00/1.00.

Question 8

Correct

Mark 1.00 out of 1.00

Which of the following is acceptable in software architecture decision?

Select one:

- ◉ a. All the other answers are correct. ✔
- ○ b. Making layers to hide key component/data to increase the Security.
- ○ c. Localizing the kernel functions and minimizing the interaction between components to increase the performance.
- ○ d. Accepting duplicated components to increase the Availability

The correct answer is: All the other answers are correct.

Correct

Marks for this submission: 1.00/1.00.

Question 9
Correct
Mark 1.00 out of 1.00

Software architectures ___ .

Select one:

○ a.   Are low-level designs to program.

◉ b.   Are high-level/abstraction designs. ✔

○ c.   Model the connections between hardware/components.

○ d.   All the other answers are correct.

The correct answer is: Are high-level/abstraction designs.

[Correct]
Marks for this submission: 1.00/1.00.

Question 10
Correct
Mark 1.00 out of 1.00

Software architecture design is ___ .

Select one:

○ a.   An early stage in software design

◉ b.   All the other answers are correct. ✔

○ c.   Often carried out in parallel with some specification activities.

○ d.   Basically to identify major system components and their communications

The correct answer is: All the other answers are correct.

[Correct]
Marks for this submission: 1.00/1.00.