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**Grade** 7.00 out of 10.00 (70%)

## Question 1

Incorrect

Mark 0.00 out of 1.00

Which of the following explanation about software design is acceptable?

Select one:

- a. All of the other answers are correct. ✗
- b. A detail [sequence diagram](#) usually show related classes and their methods
- c. For software that uses database system, each table in the database should be represented by a class and each table column should be represented by one and only one class member/attribute.
- d. Design all classes and [class diagram](#) first, and then the other diagrams.

The correct answer is: A detail [sequence diagram](#) usually show related classes and their methods

## Question 2

Correct

Mark 1.00 out of 1.00

The design models \_\_\_\_ .

Select one:

- a. show the objects and object classes and relationships between these entities
- b. have to be abstract to show the relationships between entities and the system requirements; and have to include enough detail for programmers to make implementation decisions.
- c. All of the other answers are correct. ✓
- d. consist of static models representing static structure, and dynamic models representing dynamic interactions between objects.

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

## Question 3

Incorrect

Mark 0.00 out of 1.00

Which of the following is INCORRECT?

Select one:

- a. A software design has to have all sequence diagrams, collaboration diagrams, activity diagrams, state-chart diagrams and use-case diagram.
- b. It is possible to convert a sequence diagram to a collaboration diagram (without any more information). X
- c. Activity diagram represents activities of the system.
- d. Classes are necessary in object-oriented software design.

The correct answer is: A software design has to have all sequence diagrams, collaboration diagrams, activity diagrams, state-chart diagrams and use-case diagram.

## Question 4

Incorrect

Mark 0.00 out of 1.00

Which of the following opinion about software design is acceptable?

Select one:

- a. Software design = software architecture design. X
- b. When we use the best software design tool, we do not need to program because the best tool will generate the source code automatically.
- c. None of the other answers is acceptable .
- d. Detail design is not required when the programmers know how to build the software.

The correct answer is: None of the other answers is acceptable .

## Question 5

Correct

Mark 1.00 out of 1.00

Which of the following is the best opinion on software design?

Select one:

- a. The software designers do not need to care about implementing when they design the software.
- b. Designing module/component interface is a part of software design. ✓
- c. Architectural design is not a part of software design.
- d. Designing classes and their methods is responsible only by the requirement analyst.

The correct answer is: Designing module/component interface is a part of software design.

## Question 6

Correct

Mark 1.00 out of 1.00

For design models, which of the following explanation is NOT quite correct?

Select one:

- a. Use-case diagrams can be used to represent static models ✓
- b. Sequence model and State machine model are dynamic models
- c. [Class diagram](#) can be used to represent static models
- d. We always need both static and dynamic models

The correct answer is: Use-case diagrams can be used to represent static models

## Question 7

Correct

Mark 1.00 out of 1.00

(Module/Component) Interface specification is necessary. Why?

Select one:

- a. All of the other answers are correct. ✓
- b. In some case, each module/component can be upgraded continuously and independently
- c. Modules/components can hide their private attributes/methods
- d. Modules/components can be developed concurrently (in parallel)

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

## Question 8

Correct

Mark 1.00 out of 1.00

Which of the following explanations is correct?

Select one:

- a. All of the other answers are correct.
- b. [Sequence diagram](#) describes interactions between components (chronologically) ✓
- c. Interface specification is specification about user interface
- d. State diagram is for representing the use-case of the system

The correct answer is: [Sequence diagram](#) describes interactions between components (chronologically)

## Question 9

Correct

Mark 1.00 out of 1.00

Which of the following explanation about design models is NOT quite correct?

Select one:

- a. Subsystem models show logical groupings of objects into coherent subsystems and can be represented using package diagrams.
- b. Sequence models show the sequence of object interactions and can be represented using sequence/collaboration diagrams
- c. State machine models show how individual objects change their state in response to events and can be represented using state-chart diagrams.
- d. Inter-connection models show logical communications of the system. ✓

The correct answer is: Inter-connection models show logical communications of the system.

## Question 10

Correct

Mark 1.00 out of 1.00

Which of the following is correct?

Select one:

- a. We only need some general idea (written) in the design document, all details must be discussed in the meeting with the developer team.
- b. We do not need details in desianina stage. it is possiblv chanaed in proaramming stage.

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