060010413 - CC13 Software Engineering - Quiz 02

Due May 28 at 11am **Points** 40 **Questions** 40
Available May 27 at 11:30am - May 28 at 1pm 1 day **Time Limit** 40 Minutes

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	23 minutes	36 out of 40

ⓘ Correct answers will be available on May 28 at 1pm.

Score for this quiz: **36** out of 40
Submitted May 27 at 11:59am
This attempt took 23 minutes.

Question 1 — 1 / 1 pts

The class modelling technique:

- (•) Combines data and functions
- ( ) Separates data and functions
- ( ) Gives more importance to functions
- ( ) Gives more importance to data

Incorrect

Question 2 — 0 / 1 pts

Which are the modeling techniques used in Object-Oriented Analysis?

i. Flowcharts

ii. Use cases

iii. Data Flow Diagrams

iv. Activity diagram

v. Sequence diagram

- (i), (ii), (iv)
- (i), (iii), (iv)
- (ii), (iv), (v)
- (ii), (iii), (v)

Question 3

1 / 1 pts

If there is a change in the interface, then the interface class should, but the entity classes and control classes will remain unaffected.

- True
- False

Question 4

1 / 1 pts

The control classes represent …

- All of the above

- Handle the tasks of the events
- The dynamics of the system
- Handle the sequence of the events

Question 5

1 / 1 pts

Which of the following is not true?

- Control classes are not affected by the changes in the entity classes.
- Control classes are used to control the flow of events.
- Control classes are independent of their surroundings.
- None of the above

Question 6

1 / 1 pts

If a class is a whole and other classes are its parts, then which type of relationship should be modelled?

- Dependency
- Aggregation
- Association
- Generalization

Question 7

1 / 1 pts

Which type of relationship is modelled by the aggregation relationship?

- Parent-child
- Has-a
- Is-a
- Type-of

Question 8

1 / 1 pts

Which type of relationship signifies that the changes in one class affect the other class?

- Composition
- Dependency
- Aggregation
- Association

Question 9

1 / 1 pts

What is the generalization relationship?

- It signifies parent-child relationship among classes.
- It provides structural connections between instances of classes.
- It provides whole-part kind of relationship between classes.
- It provides strong aggregation between classes.

Question 10

1 / 1 pts

Which of the following is a mechanism that allows several objects in a class hierarchy to have different methods with the same name?

- Polymorphism
- Aggregation
- Inheritance

- All of the mentioned

Incorrect

Question 11

0 / 1 pts

In which of the following relationships, multiplicity can be specified?

(i) Aggregation (ii) Generalization (iii) Dependency (iv) Association

- (i) and (ii)
- (i) and (iv)
- (i), (ii) and (iv)
- (i) and (iv)

Question 12

1 / 1 pts

Classes _____ both attributes and operations that operate on those attributes, into a single unit.

- Inheritance
- Message passing
- Polymorphism
- Encapsulate

Question 13

1 / 1 pts

The operations of a class must be:

- Insignificant
- Extensive
- Cohesive
- Standard

Question 14

1 / 1 pts

The extent to which different classes are dependent upon each other is called:

- Inheritance
- Coupling
- Modularity
- Cohesion

Incorrect

Question 15

0 / 1 pts

The operations of a class can be identified by:

- the flow of events given in the use case description.
- the flow of events given in the classes.
- the objects given in the use case description.
- None of the above

Question 16

1 / 1 pts

The instance of a class can only be modified through:

- the objects
- the inheritance
- the attributes
- the operations

Question 17

1 / 1 pts

Structured approach involves:

- None of the above
- Bottom-up approach
- (•) Top-down approach
- Sandwitch approach

Question 18

1 / 1 pts

Identify the difference between Object-Oriented Analysis and Structured Analysis for the purpose of software development.

- (•) In OOA, the focus is more on capturing the real-world objects, while in SA, the focus is only on process and procedures.
- In SA, the focus is more on capturing the real-world objects, while in OOP, the focus is only on process and procedures.
- None of the above.
- In OOA, the focus is more on capturing the real-world objects, while in SA also, the focus is more on capturing the real-world objects.

Question 19

1 / 1 pts

Classes can be categorized into:

- [x] Entity, control, interface
- [ ] Entity, control, abstract
- [ ] Virtual, abstract, template
- [ ] Entity, boundary, monitor

Question 20

1 / 1 pts

The attributes and operations of an entity class may be identified by the _____ of the use case.

- [ ] None of the above
- [ ] Object
- [ ] Class
- [x] Actor

Question 21

1 / 1 pts

In which phase, an ideal model is created with the aim to build a maintainable model?

- [ ] None of the above
- [ ] Object-Oriented Design
- [x] Object-Oriented Analysis

- Object-Oriented Implementation

Question 22

1 / 1 pts

Interaction diagram model is:

- Constant aspects of the system
- Static aspects of the system
- None of the above
- Dynamic aspects of the system

Question 23

1 / 1 pts

In which diagram, the messages sent between objects are timely ordered?

- Class diagrams
- Sequence diagrams
- Collaboration diagrams
- State transition diagrams

Question 24

1 / 1 pts

How the objects of a class are written in sequence diagrams?

- (●) Objectname:classname
- ( ) Classname objectname
- ( ) Classname:objectname
- ( ) Objectname/classname

Question 25

1 / 1 pts

The rectangle appearing on the vertical axis in a sequence diagrams is known as:

- ( ) Line of control
- ( ) Object
- (●) Focus of control
- ( ) Lifeline

Question 26

1 / 1 pts

In the synchronous type of messages:

- ( ) Sending object send create response
- (●) Sending object waits to receive a response

- Sending object does not wait to receive a response
- Object sends a message to itself

Question 27

1 / 1 pts

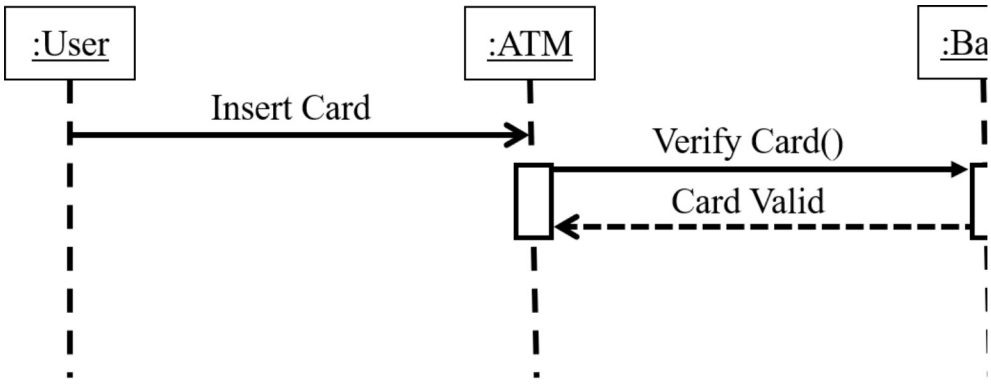
The destruction of an object is represented by:

- Big Y
- Rectangle
- Big X
- Square

Question 28

1 / 1 pts

Which type of message is “Verify Card” in the following sequence diagram?



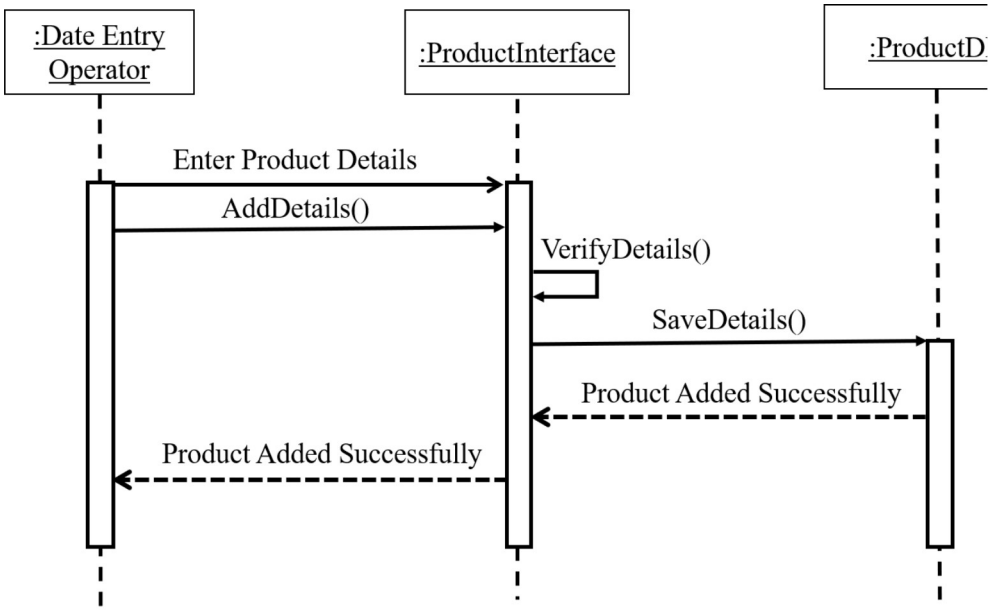
- Synchronous

- Asynchronous
- Return
- Procedure Call

Question 29

1 / 1 pts

Which type of message is VerifyDetails(), in the following sequence diagram?



- Asynchronous
- Reflexive
- Synchronous
- Return

Question 30

1 / 1 pts

Which one of the following is true for collaboration diagrams?

- Collaboration diagrams depict time-ordered messages between objects.
- Collaboration diagrams consist of a lifeline and focus of control.
- Collaboration diagrams represent static view of the system.
- (selected) Collaboration diagrams depict interaction between objects which are not time ordered.

Question 31

1 / 1 pts

Which diagrams are used to model the behaviour of an operation?

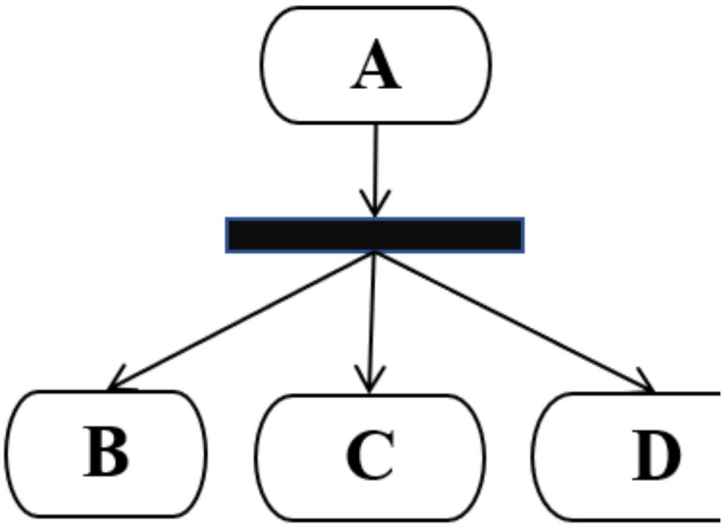
- Use case diagram
- (selected) Activity diagram
- Statechart diagram
- Sequence diagram

Question 32

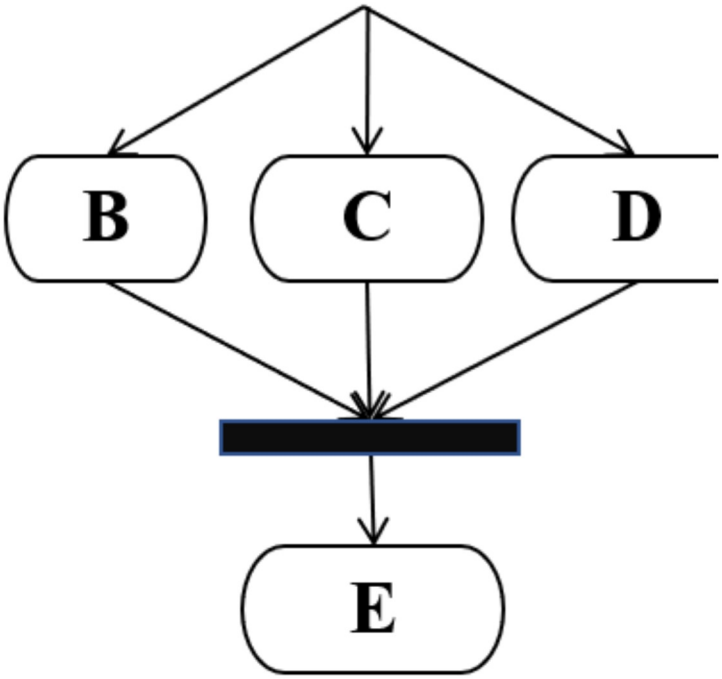
1 / 1 pts

Identify the correct example(s) of fork and join for the activity diagrams:

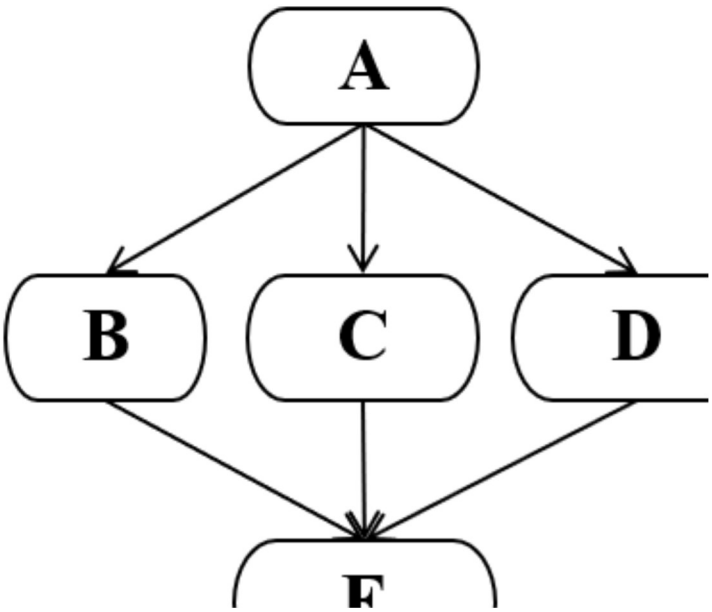
(a)



(b)



(c)



- (a) is an example of Fork, (b) is an example of Join; and (c) is a wrong example.
- (a) is an example of Join, (b) is an example of Fork; and (c) is a wrong example.
- (a) and (b) are examples of Fork; and (c) is an example of Join.
- (a) and (b) are examples of Join; and (c) is an example of Fork.

Question 33

1 / 1 pts

_____ represents the path from one activity to another activity.

- Line
- Join
- Transition
- Fork

Question 34

1 / 1 pts

Fork and join are used to represent:

- Concurrent sub-activities
- Branch conditions

- Decision conditions
- Serial sub-activities

Question 35

1 / 1 pts

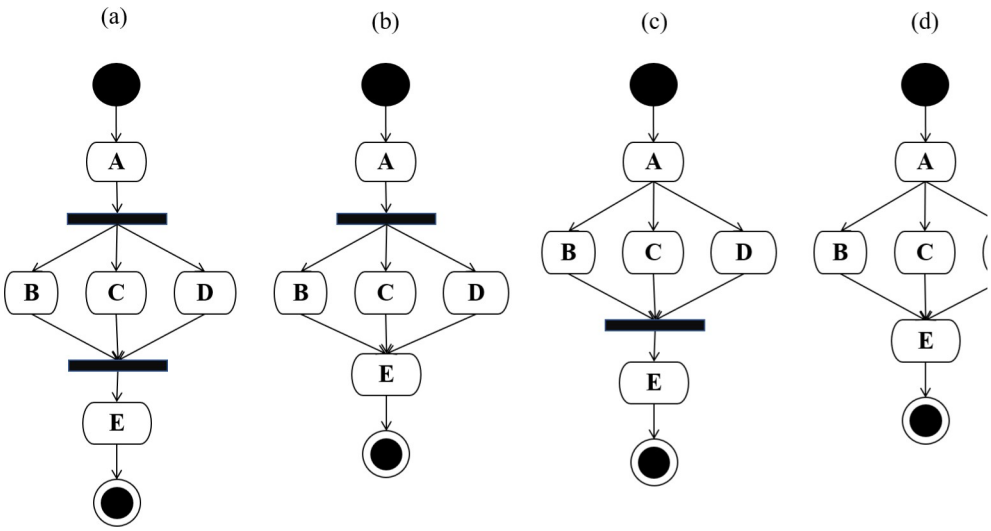
Can the activity diagrams be used to model the working of only the system's use cases?

- Yes, they are only used to model a system as a use case, but not more than five uses.
- Yes, they are only used to model a system as a use case.
- No, it can also be used to model the working of the use case diagram's systems.
- **No, it can also be used to model the working of the system's process or an operation.**

Question 36

1 / 1 pts

Identify the correct activity diagram:



- (c)
- (d)
- (b)
- (a)

Incorrect

Question 37

0 / 1 pts

The difference between activity diagrams and statechart diagrams is:

- Activity diagram models the states of an object's lifetime, whereas statechart diagram models the sequence of activities in a process or operation.
- None of the above
- Statechart diagram models the states of an object's lifetime, whereas activity diagram models the sequence of activities in a process or operation.
-

Statechart diagram models the states of an object's lifetime, whereas activity diagram models the interaction between objects.

Question 38

1 / 1 pts

A state transition may be associated as:

- Guard condition[Event]/ Actions
- Event[guard condition]/ Actions
- Event(guard condition)/ Actions
- Actions[gsuard condition]/ Event

Question 39

1 / 1 pts

Match the following pairs:

1. Activity diagram	a. Requirements
2. Use case diagram	b. States
3. Sequence diagram	c. Process
4. Statechart diagram	d. Messages

- 1-c, 2-a, 3-d, 4-b
- 1-c, 2-a, 3-b, 4-d
- 1-b, 2-a, 3-d, 4-c
- 1-c, 2-b, 3-d, 4-a

Question 40

1 / 1 pts

To improve the software quality, the number of messages sent and received between classes should be reduced.

- (•) True
- ( ) False

Quiz Score: **36** out of 40