**Mcqs For OOAD LAB**

Which of the following is a primary goal of a use case diagram?

A. To show the sequence of actions that occur in a system

B. To define the requirements of a system

C. To show the actors involved in a system

D. To show the interactions between actors and a system

Answer: D

What is an actor in a use case diagram?

A. A person or system that initiates a use case

B. A step in a use case scenario

C. A constraint on a use case

D. A data flow in a use case

Answer: A

What is a system boundary in a use case diagram?

A. The area outside the system that interacts with it

B. The area inside the system where use cases occur

C. The line that separates the system from the actors

D. The line that separates different use cases

Answer: C

What is the difference between an include relationship and an extend relationship in a use case diagram?

A. An include relationship is optional, while an extend relationship is mandatory

B. An include relationship shows a basic flow, while an extend relationship shows an alternative flow

C. An include relationship shows an alternative flow, while an extend relationship shows a basic flow

D. There is no difference between the two relationships

Answer: B

Which of the following is an example of an actor in a use case diagram?

A. A database

B. A server

C. A user

D. A programming language

Answer: C

What is a use case scenario?

A. A detailed description of a use case

B. A high-level overview of a use case

C. A set of use cases that work together to achieve a goal

D. A diagram that shows the interactions between actors and a system

Answer: A

What is a use case diagram used for?

A. To model the architecture of a system

B. To show the interactions between actors and a system

C. To design the user interface of a system

D. To document the code of a system

Answer: B

What is the purpose of an actor in a use case diagram?

A. To represent a use case scenario

B. To define the requirements of a system

C. To initiate a use case

D. To show the sequence of actions that occur in a system

Answer: C

What is the difference between an association relationship and an extend relationship in a use case diagram?

A. An association relationship is optional, while an extend relationship is mandatory

B. An association relationship shows a basic flow, while an extend relationship shows an alternative flow

C. An association relationship shows an alternative flow, while an extend relationship shows a basic flow

D. There is no difference between the two relationships

Answer: D

What is the purpose of a use case diagram?

A. To show the behavior of a system

B. To show the structure of a system

C. To define the requirements of a system

D. To design the user interface of a system

Answer: C

What is the primary purpose of a class diagram?

A. To show the interactions between objects in a system

B. To show the sequence of actions in a system

C. To show the structure of a system

D. To show the behavior of a system

Answer: C

What is a class in a class diagram?

A. A sequence of actions in a system

B. An object in a system

C. A data type in a system

D. A template for creating objects in a system

Answer: D

What is an attribute in a class diagram?

A. A method that can be called on a class

B. A variable that belongs to a class

C. An object that belongs to a class

D. A relationship between two classes

Answer: B

What is a method in a class diagram?

A. An attribute that belongs to a class

B. A variable that belongs to a class

C. An action that a class can perform

D. A relationship between two classes

Answer: C

What is the difference between a class and an object in a class diagram?

A. A class is an instance of an object

B. A class defines the properties and behavior of an object

C. An object defines the properties and behavior of a class

D. There is no difference between a class and an object

Answer: B

What is the purpose of an association in a class diagram?

A. To show the inheritance hierarchy between classes

B. To show the relationship between classes

C. To define the behavior of a class

D. To show the attributes of a class

Answer: B

What is the difference between an aggregation and a composition in a class diagram?

A. An aggregation is a weaker form of relationship than a composition

B. A composition is a weaker form of relationship than an aggregation

C. An aggregation represents a whole-part relationship, while a composition represents a containment relationship

D. An aggregation represents a containment relationship, while a composition represents a whole-part relationship

Answer: C

What is the purpose of an abstract class in a class diagram?

A. To define a class that cannot be instantiated

B. To define a class that can be instantiated

C. To define a class that can only be used as a superclass

D. To define a class that can only be used as a subclass

Answer: A

What is the purpose of a stereotype in a class diagram?

A. To add additional information to a class

B. To show the behavior of a class

C. To show the attributes of a class

D. To show the relationships between classes

Answer: A

What is the purpose of a generalization in a class diagram?

A. To show the relationship between classes

B. To show the attributes of a class

C. To show the behavior of a class

D. To show the inheritance hierarchy between classes

Answer: D

What is an activity diagram used for?

A. To show the flow of objects in a system

B. To show the sequence of actions in a system

C. To show the structure of a system

D. To show the behavior of a system

Answer: B

What is an activity in an activity diagram?

A. A sequence of actions in a system

B. An object in a system

C. A data type in a system

D. A template for creating objects in a system

Answer: A

What is a decision in an activity diagram?

A. A point in the activity where the flow can split into multiple paths

B. A point in the activity where the flow merges from multiple paths

C. A point in the activity where a loop occurs

D. A point in the activity where an exception occurs

Answer: A

What is a merge in an activity diagram?

A. A point in the activity where the flow can split into multiple paths

B. A point in the activity where the flow merges from multiple paths

C. A point in the activity where a loop occurs

D. A point in the activity where an exception occurs

Answer: B

What is a fork in an activity diagram?

A. A point in the activity where the flow can split into multiple paths

B. A point in the activity where the flow merges from multiple paths

C. A point in the activity where a loop occurs

D. A point in the activity where an exception occurs

Answer: A

What is a join in an activity diagram?

A. A point in the activity where the flow can split into multiple paths

B. A point in the activity where the flow merges from multiple paths

C. A point in the activity where a loop occurs

D. A point in the activity where an exception occurs

Answer: B

What is a swimlane in an activity diagram?

A. A visual element that groups activities based on the participant responsible for them

B. A visual element that represents a decision point

C. A visual element that represents a merge point

D. A visual element that represents a loop

Answer: A

What is an object flow in an activity diagram?

A. A visual element that represents the flow of objects between activities

B. A visual element that represents the flow of control between activities

C. A visual element that represents the flow of data between activities

D. A visual element that represents the flow of exceptions between activities

Answer: A

What is a control flow in an activity diagram?

A. A visual element that represents the flow of objects between activities

B. A visual element that represents the flow of control between activities

C. A visual element that represents the flow of data between activities

D. A visual element that represents the flow of exceptions between activities

Answer: B

What is the difference between an activity diagram and a sequence diagram?

A. An activity diagram shows the flow of control between activities, while a sequence diagram shows the flow of objects between methods

B. An activity diagram shows the flow of objects between activities, while a sequence diagram shows the flow of control between methods

C. An activity diagram shows the structure of a system, while a sequence diagram shows the behavior of a system

D. An activity diagram shows the behavior of a system, while a sequence diagram shows the structure of a system

Answer: B

What is a sequence diagram used for?

A. To show the flow of objects in a system

B. To show the sequence of actions in a system

C. To show the structure of a system

D. To show the behavior of a system

Answer: B

What is a lifeline in a sequence diagram?

A. A horizontal line that represents the lifetime of an object

B. A vertical line that represents the sequence of events

C. A visual element that groups messages based on the participant sending or receiving them

D. A visual element that represents a decision point

Answer: A

What is a message in a sequence diagram?

A. A communication between objects in a system

B. A visual element that groups activities based on the participant responsible for them

C. A visual element that represents a decision point

D. A visual element that represents a merge point

Answer: A

What is a synchronous message in a sequence diagram?

A. A message that requires an immediate response before the sender can continue

B. A message that can be sent at any time and does not require a response

C. A message that is sent to multiple recipients

D. A message that is sent when an exception occurs

Answer: A

What is an asynchronous message in a sequence diagram?

A. A message that requires an immediate response before the sender can continue

B. A message that can be sent at any time and does not require a response

C. A message that is sent to multiple recipients

D. A message that is sent when an exception occurs

Answer: B

What is a return message in a sequence diagram?

A. A message that is sent from the receiver back to the sender

B. A message that is sent from the sender to the receiver

C. A message that is sent when an exception occurs

D. A message that is sent when a loop occurs

Answer: A

What is an object destruction in a sequence diagram?

A. A message that represents the destruction of an object

B. A message that represents the creation of an object

C. A message that represents a loop

D. A message that represents a decision point

Answer: A

What is the difference between a sequence diagram and a collaboration diagram?

A. A sequence diagram shows the flow of objects between methods, while a collaboration diagram shows the flow of control between methods

B. A sequence diagram shows the flow of control between methods, while a collaboration diagram shows the flow of objects between methods

C. A sequence diagram shows the behavior of a system, while a collaboration diagram shows the structure of a system

D. A sequence diagram shows the structure of a system, while a collaboration diagram shows the behavior of a system

Answer: B

What is an interaction occurrence in a sequence diagram?

A. A visual element that groups messages based on the participant sending or receiving them

B. A visual element that represents a decision point

C. A visual element that represents a loop

D. A visual element that represents the occurrence of an object

Answer: D

What is a combined fragment in a sequence diagram?

A. A visual element that represents a decision point

B. A visual element that represents a loop

C. A visual element that groups messages based on the participant sending or receiving them

D. A visual element that represents a sequence of events that must occur together

Answer: D