Use Case Design

Question 1. Which task is performed during use-case realization refinement?
A. identify participating classes
B. allocate responsibilities among classes
C. model messages between classes
D. model associated class relationships

Question 2. Given the following configuration: Package A, which contains class aClass is in the presentation layer. Package B, which contains a class bClass and an interface bInterface is in the business layer. Package C, which contains cClass is in the data layer. Which is a poor practice?
A. aClass calls a method in bClass.
B. aClass has an attribute of type cClass.
C. aClass realizes bInterface.
D. bClass realizes bInterface.

Question 3. What is the relationship between operation and method?
A. The terms are synonymous.
B. An operation describes how a method is implemented.
C. A method describes how an operation is implemented.
D. There is no relationship.

Question 4. Why would you use subsystem interfaces rather than subsystem instances on sequence diagrams?
A. to make it easier to model subsystems during Subsystem Design
B. to make use-case realizations easier to change
C. to ease sequence diagram maintenance when message signatures change
D. to reduce the number of classes needed to implement the subsystem

Question 5. Additional subsystems can be discovered during Use Case Design by noting _____.
A. common subflows between objects on several sequence diagrams
B. similar objects on several sequence diagrams
C. a consistent series of state transitions for multiple classes involved in a use-case realization
D. the same design classes involved in more than one use-case realization

Question 6. Which activities are performed during Use Case Design?
A. converting analysis classes into design classes and design subsystems
B. describing persistence-related behavior
C. describing object interactions that implement interface operations
D. simplifying sequence diagrams using design classes
Question 7. Which artifact is used to describe use-case realizations?
A. textual use-case descriptions
B. communication diagrams
C. state charts
D. activity diagrams

Question 8. What defines a subsystems responsibilities?
A. its internal class behavior
B. the operations of the interfaces it implements
C. the use-case realizations in which the subsystem appears
D. the operations on a class contained within the subsystem

Question 9. Use Case Design is part of which workflow detail?
A. Design Use Cases
B. Analyze Behavior
C. Design Components
D. Design Classes and Subsystems

Question 10. Supplemental sequence diagram documentation, in the form of notes and scripts, is commonly used for _____. (Choose three.)
A. describing required timing between messages
B. providing details about conditional behavior
C. specifying the attributes for objects that appear in the diagram
D. correlating extension points in the use case with specific locations in the sequence diagrams

Question 11. With respect to persistence, what are two functions of transactions? (Choose two)
A. ensure that a set of operations is performed either in total, or not at all
B. enable a designer to selectively define operations that will be executed with priority when there is a shortage of system resources
C. ensure that sets of objects move from one consistent state to another
D. simplify design work, so that persistence does not need to be explicitly considered during Use Case Design
E. simply design work, by providing standardized approaches for representing persistent objects in UML

Question 12. What are three purposes of Use Case Design? (Choose three)
A. to refine use-case realizations in terms of interactions
B. to ensure the completeness of the View of Participating Classes diagrams for each use-case realization
C. to refine requirements on the operations of design classes
D. to refine requirements on the operations of design subsystems and/or their interfaces

**Question 13. Which is a Use Case Design output artifact?**
A. analysis classes  
B. design classes  
C. interfaces  
D. the Design Model

**Question 14. Which is an example of an Execution Environment?**
A. Gigabit network switch  
B. virtual private network  
C. J2EE application server  
D. handheld computer

**Question 15. The purpose of Unify Classes and Subsystems is to ensure _____.**
A. each subsystem has a corresponding subsystem component  
B. all classes are assigned to at most one subsystem  
C. the responsibilities of design elements do not overlap  
D. each defined interface has a cohesive and coherent API

**Question 16. Which is a guideline for encapsulating subsystem interactions on sequence diagrams?**
A. Messages to subsystems should correspond to subsystem interface operations.  
B. Messages from subsystems should correspond to operations of the subsystem component.  
C. During Use Case Design, secondary sequence diagrams should be created to model the interactions within subsystems.  
D. A subsystem should be represented on sequence diagrams using its subsystem component.

**Question 17. Additional subsystems can be discovered during Use Case Design by noting _____.**
A. common subflows between objects on several sequence diagrams  
B. similar objects on several sequence diagrams  
C. a consistent series of state transitions for multiple classes involved in a use-case realization  
D. the same design classes involved in more than one use-case realization