CIS 201 Chapter 5 Review Test

True/False
Indicate whether the statement is true or false.

1. (1 point) An actor is always outside of the automation boundary.
2. (1 point) Two difference scenarios of a use case would normally be described in a single fully developed use case description.
3. (1 point) Activity diagrams are not helpful when the flow of activities is too complex.
4. (1 point) An activity diagram and the flow of activities in a fully developed use case description serve the same purpose.
5. (1 point) Since an activity diagram is not object-oriented (e.g. no objects), it is not a standard model of the object-oriented Unified Modeling Language (UML).
6. (1 point) In a system sequence diagram the order of the messages is determined by numbering the messages.
7. (1 point) A true/false condition on a sequence diagram indicates whether the message can be processed or not.
8. (1 point) A loop frame and an asterisk mean the same thing in a sequence diagram.
9. (1 point) On a sequence diagram, a message represents a service request.
10. (1 point) An Opt frame and an Alt frame do essentially the same thing.
11. (1 point) An Opt frame and a true/false condition on a message serve essentially the same purpose.
12. (1 point) Activity diagrams are not helpful in developing system sequence diagrams (SSDs).
13. (1 point) In the object-oriented approach to systems development, the flow of information is achieved by sending messages either to and from actors or back and forth between internal objects.
14. (1 point) Activity diagrams cannot be used to describe processes that involve automated system activities.

Multiple Choice
Identify the choice that best completes the statement or answers the question.

15. (1 point) Another way to think of a actor using a use case is as a(n) _______.
   a. external entity
   b. person
   c. system
   d. role
16. (1 point) Numbering exception conditions, which often uses hierarchical numbering, in a fully developed use case description is helpful to _______.
a. tie exception conditions to other diagrams or descriptions
b. show which exception conditions are subordinate to other exceptions
c. provide an identifier for each exception condition
d. tie the exception condition to a processing step

17. (1 point) In UML terminology in a sequence diagram, a message refers to a(n) _______.
a. input data
b. communication between actors
c. event
d. action

18. (1 point) In a sequence diagram a horizontal dashed line represents what?
a. A return message
b. An input message
c. A lifeline
d. An event

19. (1 point) If the True/False condition on a message evaluates to false in a sequence diagram, which of the following is correct?
a. The message is false.
b. The message has no return value.
c. The message is not processed.
d. The message is not sent.

20. (1 point) Which of the following documents information about classes that are part of the problem domain of the user?
a. Activity diagram
b. State machine diagram
c. Use case diagram
d. System sequence diagram

21. (1 point) The guard-condition on a transition indicates what?
a. Whether the transition fires.
b. Whether the action-expression executes.
c. Whether the object is in the correct state.
d. Whether the trigger message is received.

22. (1 point) An action-expression occurs when?
a. Before the object leaves the origin state.
b. After the object enters the destination state.
c. Before the object enters the destination state.
d. Before the transition fires.

23. (1 point) On a systems sequence diagram, _____ indicate(s) a true/false condition.
a. ()
b. [ ]
c. { }
d. *

24. (1 point) To document ____, draw a composite state with the lower portion divided into multiple compartments for each concurrent path of behavior.
a. simple nested states
b. concurrent behavior of a single object
c. concurrent behavior of different objects
d. simple paths

25. (1 point) Which of the following is NOT an element in a transition label?
   a. trigger
   b. transition name
   c. guard condition
   d. action expression

26. (1 point) A message event causes what to happen?
   a. An activity to finish.
   b. A message to fire.
   c. A guard condition to be evaluated.
   d. A transition to fire.

27. (1 point) Which of the following is NOT a step in the development of a state machine diagram?
   a. List all the status conditions for an object.
   b. Identify state exiting transitions.
   c. Expand the name of each state to identify concurrent activities.
   d. Sequence the state-transition fragments.

28. (1 point) Which of the following is NOT an advantage of object-oriented modeling with several models is that _____.
   a. developing new models allows the analyst to discard unnecessary diagrams.
   b. developing new models ensures a consistency in the requirements.
   c. developing new models helps correct previously drawn diagrams.
   d. developing new models helps gain deeper understanding of user requirements.