

一、客观题

- 1: In many cases there is no need to create a graphical representation of a usage scenario.
A) True
B) False
- 2: Operations are object procedures that are invoked when an object receives a message.
A) True
B) False
- 3: The data flow diagram must be augmented by descriptive text in order to describe the functional requirements for a software product.
A) True
B) False
- 4: For purposes of behavior modeling a state is any
A) consumer or producer of data.
B) data object hierarchy.
C) observable mode of behavior.
D) well defined process.
- 5: Attributes cannot be defined for a class until design has been completed.
A) True
B) False
- 6: In analysis models the only data objects that need representation are those that will be implemented using software classes.
A) True
B) False
- 7: The values that are assigned to an object's attributes make that object unique.
A) True
B) False
- 8: Class responsibilities are defined by
A) its attributes only
B) its collaborators
C) its operations only
D) both its attributes and operations
- 9: The entity relationship diagram
A) depicts relationships between data objects
B) depicts functions that transform the data flow
C) indicates how data are transformed by the system
D) indicates system reactions to external events
- 10: An analysis package involves the categorization of analysis model elements into useful groupings.
A) True
B) False
- 11: Which of these is not an element of an object-oriented analysis model?
A) Behavioral elements
B) Class-based elements
C) Data elements

D) Scenario-based elements

12: Control flow diagrams are

A) needed to model event driven systems.

B) required for all systems.

C) used in place of data flow diagrams.

D) useful for modeling real-time systems.

E) both a and d

13: Which of the following is not an objective for building an analysis model?

A) define set of software requirements that can be validated

B) describe customer requirements

C) develop an abbreviated solution for the problem

D) establish basis for software design

14: Which of the following should be considered as candidate objects in a problem space?

A) events

B) people

C) structures

D) all of the above

15: The state diagram

A) depicts relationships between data objects

B) depicts functions that transform the data flow

C) indicates how data are transformed by the system

D) indicates system reactions to external events

16: The relationships shown in a data model must be classified to show their

A) cardinality

B) directionality

C) modality

D) probability

E) both a and c

17: Object-oriented domain analysis is concerned with the identification and specification of reusable classes within an application domain.

A) True

B) False

18: Which of the following items does not appear on a CRC card?

A) class collaborators

B) class name

C) class reliability

D) class responsibilities

19: Which of the following is not one of the broad categories used to classify operations?

A) computation

B) data manipulation

C) event monitors

D) transformers

20: The data flow diagram

A) depicts relationships between data objects

- B) depicts functions that transform the data flow
 - C) indicates how data are transformed by the system
 - D) indicates system reactions to external events
 - E) both b and c
- 21: UML activity diagrams are useful in representing which analysis model elements?
- A) Behavioral elements
 - B) Class-based elements
 - C) Flow-based elements
 - D) Scenario-based elements
- 22: Which of the following items does not appear on a CRC card?
- A) class collaborators
 - B) class name
 - C) class reliability
 - D) class responsibilities
- 23: A generalized description of a collection of similar objects is a
- A) class
 - B) instance
 - C) subclass
 - D) super class
- 24: The data dictionary contains descriptions of each software
- A) control item
 - B) data object
 - C) diagram
 - D) notation
 - E) both a and b
- 25: Events occur whenever a(n)
- A) actor and the OO system exchange information
 - B) class operation is invoked
 - C) messages are passed between objects
 - D) all of the above

二、主观题

- 26: What are the steps needed to build an object-behavior model?
- 27 : How is an object-relationship model built from a set of CRC (class responsibility collaborator) cards?
- 28 : Which UML (unified modeling language) diagrams are useful in object-oriented analysis modeling?
- 29: What are the data modeling elements represented in the entity relationship diagram (ERD)?
- 30 : Explain why encapsulation, inheritance, and polymorphism are three important characteristics of object-oriented systems.

31: List the elements of the structured analysis model and explain the role of each element.

32: Describe the general process of creating a data flow diagram (DFD).