

一、客观题

- 1: OCL is not strong enough to be used to describe pre- or post conditions for design actions.
A) True
B) False
- 2: The object constraint language (OCL) complements UML by allowing a software engineer to use a formal grammar to construct unambiguous statements about design model elements.
A) True
B) False
- 3: In traditional software engineering, modules must serve in which of the following roles?
A) Control component
B) Infrastructure component
C) Problem domain component
D) All of the above
- 4: The use of stereotypes can help identify the nature of components at the detailed design level.
A) True
B) False
- 5: In the context of object-oriented software engineering a component contains
A) attributes and operations
B) instances of each class
C) roles for each actor (device or user)
D) a set of collaborating classes
- 6: During component-level design it is customary to ignore organization issues like subsystem membership or packaging.
A) True
B) False
- 7: Software coupling is a sign of poor architectural design and can always be avoided in every system.
A) True
B) False
- 8: In component-level design "persistent data sources" refer to
A) Component libraries
B) Databases
C) Files
D) All of the above
E) both b and c
- 9: A decision table should be used
A) to document all conditional statements
B) to guide the development of the project management plan
C) only when building an expert system
D) when a complex set of conditions and actions appears in a component
- 10: A program design language (PDL) is often a
A) combination of programming constructs and narrative text
B) legitimate programming language in its own right

- C) machine readable software development language
- D) useful way to represent software architecture

11: In component design, elaboration requires which of the following elements to be described in detail?

- A) Source code
- B) Attributes
- C) Interfaces
- D) Operations
- E) b, c and d

12: Software engineers always need to create components from scratch in order to meet customer expectations fully.

- A) True
- B) False

13: Which of these is a graphical notation for depicting procedural detail?

- A) process diagram
- B) decision table
- C) ER diagram
- D) flowchart

14: In the most general sense a component is a modular building block for computer software.

- A) True
- B) False

15: Classes and components that exhibit functional, layer, or communicational cohesion are relatively easy to implement, test, and maintain.

- A) True
- B) False

16: Which of the following is not one of the four principles used to guide component-level design?

- A) Dependency Inversion Principle
- B) Interface Segregation Principle
- C) Open-Closed Principle
- D) Parsimonious Complexity Principle

17: Which of these constructs is used in structured programming?

- A) branching
- B) condition
- C) repetition
- D) sequence
- E) b, c, and d

18: Which of these criteria are useful in assessing the effectiveness of a particular design notation?

- A) maintainability
- B) modularity
- C) simplicity
- D) size
- E) a, b, and c

二、主观题

19: List three characteristics that can be to assess the quality of a design notation.

20: Describe the differences between the software engineering terms coupling and cohesion?

21 : What are the steps used to complete the component-level design for a software development project?

22: How does the object-oriented view of component-level design differ from the conventional view?