

一、客观题

- 1: Black-box testing attempts to find errors in which of the following categories
 - A) incorrect or missing functions
 - B) interface errors
 - C) performance errors
 - D) all of the above
 - E) none of the above
- 2: Boundary value analysis can only be used to do white-box testing.
 - A) True
 - B) False
- 3: Loop testing is a control structure testing technique where the criteria used to design test cases is that they
 - A) rely basis path testing
 - B) exercise the logical conditions in a program module
 - C) select test paths based on the locations and uses of variables
 - D) focus on testing the validity of loop constructs
- 4: Client/server architectures cannot be properly tested because network load is highly variable.
 - A) True
 - B) False
- 5: Testing OO class operations is made more difficult by
 - A) encapsulation
 - B) inheritance
 - C) polymorphism
 - D) both b and c
- 6: Use-cases can provide useful input into the design of black-box and state-based tests of OO software.
 - A) True
 - B) False
- 7: The testing technique that requires devising test cases to demonstrate that each program function is operational is called
 - A) black-box testing
 - B) glass-box testing
 - C) grey-box testing
 - D) white-box testing
- 8: What types of errors are missed by black-box testing and can be uncovered by white-box testing?
 - A) behavioral errors
 - B) logic errors
 - C) performance errors
 - D) typographical errors
 - E) both b and d
- 9: Real-time applications add a new and potentially difficult element to the testing mix
 - A) performance
 - B) reliability

- C) security
- D) time

10: With thorough testing it is possible to remove all defects from a program prior to delivery to the customer.

- A) True
- B) False

11: Multiple class testing is too complex to be tested using random test cases.

- A) True
- B) False

12: Fault-based testing is best reserved for

- A) conventional software testing
- B) operations and classes that are critical or suspect
- C) use-case validation
- D) white-box testing of operator algorithms

13: Tests derived from behavioral class models should be based on the

- A) data flow diagram
- B) object-relation diagram
- C) state diagram
- D) use-case diagram

14: Random order tests are conducted to exercise different class instance life histories.

- A) True
- B) False

15: Data flow testing is a control structure testing technique where the criteria used to design test cases is that they

- A) rely on basis path testing
- B) exercise the logical conditions in a program module
- C) select test paths based on the locations and uses of variables
- D) focus on testing the validity of loop constructs

16: Equivalence testing divides the input domain into classes of data from which test cases can be derived to reduce the total number of test cases that must be developed.

- A) True
- B) False

17: Comparison testing is typically done to test two competing products as part of customer market analysis prior to product release.

- A) True
- B) False

18: The cyclomatic complexity metric provides the designer with information regarding the number of

- A) cycles in the program
- B) errors in the program
- C) independent logic paths in the program
- D) statements in the program

19: Orthogonal array testing enables the test designer to maximize the coverage of the test cases devised for relatively small input domains.

A) True

B) False

20: Which of these techniques is not useful for partition testing at the class level

A) attribute-based partitioning

B) category-based partitioning

C) equivalence class partitioning

D) state-based partitioning

21: Condition testing is a control structure testing technique where the criteria used to design test cases is that they

A) rely on basis path testing

B) exercise the logical conditions in a program module

C) select test paths based on the locations and uses of variables

D) focus on testing the validity of loop constructs

22: The cyclomatic complexity of a program can be computed directly from a PDL representation of an algorithm without drawing a program flow graph.

A) True

B) False

23: Test case design "in the small" for OO software is driven by the algorithmic detail of the individual operations.

A) True

B) False

24: The testing technique that requires devising test cases to exercise the internal logic of a software module is called

A) behavioral testing

B) black-box testing

C) grey-box testing

D) white-box testing

25: Deep structure testing is not designed to

A) examine object behaviors

B) exercise communication mechanisms

C) exercise object dependencies

D) exercise structure observable by the user

26: Which of the following are characteristics of testable software?

A) observability

B) simplicity

C) stability

D) all of the above

27: Scenario-based testing

A) concentrates on actor and software interaction

B) misses errors in specifications

C) misses errors in subsystem interactions

D) both a and b

28: Program flow graphs are identical to program flowcharts.

A) True

B) False

29 : Encapsulation of attributes and operations inside objects makes it easy to obtain object state information during testing.

A) True

B) False

30: Graph-based testing methods can only be used for object-oriented systems

A) True

B) False

二、主观题

31: What are the attributes of a good software test?

32: What is scenario-based testing?

33: What is equivalence partitioning as it applies to software testing?

34: Describe three partitioning strategies that can be used when performing class level testing for OO systems.

35: Describe three control structure testing strategies.

36: Describe the differences between black-box testing and white-box testing.