

CS 504-Software Engineering-I

Quiz # 1 January 2021

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If found any correction needed do it accordingly

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1. Thin Client Model is one of the configurations of _____ Model.
 - a. Data-centered
 - b. Client Server** page 130
 - c. Layered
 - d. Reference
 2. STL Stands for _____
 - a. Standard Template Library** page 138
 - b. Standard Type Link
 - c. Standard Tempo Line
 - d. Standard Type Link
 3. The three basic principles that guide maintainability are:
 - (a) Clarity
 - (b) Enhancement
 - (c) Flexibility
 - (d) Simplicity
 - a. (a),(b) and (c)
 - b. (a),(c) and (d)** page 149
 - c. (b),(c) and (d)
 - d. All of above
 4. Goto statements violate the idea of
 - a. object oriented code
 - b. structured code** page 164
 - c. control structure
 - d. repetition structure
 5. A function should not be larger in any case and should not exceed _____ in length
 - a. Half page
 - b. One page** page 150
 - c. Two pages
 - d. Three Pages
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6. Data Centered Architectural Style is also called _____

a. Repository model page 129

b. Client Server model

c. Sub System model

d. Reference model

7. Global variables in C++ should always be referred to by using the

a. ::operator page 153

b. :operator

c. Without an operator

d. None of the given

8. There are _____ layers in OSI reference model.

a. 5

b. 6

c. 7 page 134

d. 8

9. Fat Client Model is one of the configurations of _____ Model.

a. Data-centered

b. Layered

c. Reference

d. Client Server page 133

10. Dynamic process model shows the process _____ of the System.

a. Components

b. Objects

c. Structure page 129

d. Linkage

11. Which of the following shows a commented statement in C++

a. # Ans = first + second

b. // Ans = first + second page 162

c. \ Ans = first + second

d. /# Ans = first + second

12. _____ architectural model is widely used in Mainframe application.

a. Client-Server Model

b. Repository Model page 130

c. Filter Model

d. Layered Model

13. Variables should be initialized where they are _____ and they should be declared in the _____ scope possible.

- a. defined and smallest
- b. declared and medium
- c. defined and medium

d. declared and smallest page 161

14. Identifier names also play a significant role in enhancing the _____ of a program,

- a. Writ ability

b. Readability page 151

- c. Reliability
- d. All of the given choices

15. MVC stands for _____

a. Model View Controller page 140

- b. Modern View Center
- c. Model View Center
- d. Modern View Controller

16. Which of the following is not a possible server in client server environment?

- a. Database Server
- b. Transaction Server
- c. File Server

d. Time Server page 132

17. In case of using unrelated operators in a single expression, ____ would be the best choice to prevent the logical errors.

- a. Comments
- b. Indents

c. Parenthesis page 166

- d. Short Cuts

18. In case of header files, construction is to avoid ____ errors, the construction should appear in the top of the file (before the file header).

a. Compilation page 160

- b. run time
- c. logical
- d. All of the given

19. A self-documenting code is a code that explains itself without the need of comments and extraneous documentation, like _____

- a. Flowcharts
- b. UML diagrams
- c. Process-flow state diagrams

d. All of the given choices page 150

20. Which one of these represents the Krutchen's 4+1 architectural view model

a. Logical view, Process view. Physical view. Development view. Use case view

b. Logical view. Dynamic view. Physical view. Development view. Use case view

c. Logical view. Process view, Physical view. Development view. Sequence view

d. Dynamic view, Process view. Physical view, Development view. Use case view

21. Client server is a _____ system model.

a. Integrated

b. Distributed page 130

c. Heterogeneous

d. Homogeneous

22. Vertical partitioning is also known as _____

a. Balancing

b. Mutating

c. Parallelizing

d. Factoring page 135

23. "is" prefix should be used for _____ variables and methods.

a. General

b. Boolean page 152

c. Constant

d. None of the given

24. Thin client model places a heavy processing load on _____

a. Only server

b. Only network

c. Both server and network page 133

d. Neither server nor network

25.C++ header files should have the extension____.Source files can have the extension_____

- a. .c and .h
- b. .cc and .h

c. .h and.cpp page 158

- d. All of the given

26.Which of following is among ten things, which the basic template of GOF design pattern includes.

- a. IQ

b. Context page 142

- c. Performance
- d. Requirements

27.Vertical partitioning divides the architecture applicationfrom a_____ making perspective.

a. Decision page 135

- b. Design
- c. Conclusion
- d. Move

28.Issues like system performance, availability, scalability, and security are analyzed in_____

- a. Logical View

b. Physical View page 127

- c. Code View
- d. Concurrency View

29.Class variables should never be declared public. Publicvariables violate which of the following:

- a. Information hiding
- b. Encapsulation

c. Information hiding and Encapsulation page 161

- d. None of the give

30.Charles Simonyi first discussed Hungarian Notation, He was of_____

a. Microsoft page152

- b. IBM
- c. Dell
- d. Cisco

31. Patterns are devices that allow programs to share knowledge about their _____

a. Code

b. Design page 137

c. Analysis

d. Implementation

32. Process view in Krutchen's 4+1 architectural view model captures _____

a. Object model of the design

b. Concurrency and synchronization aspects of the design page 122

c. Mapping(s) of the software onto the hardware and reflects its distributed aspect

d. Static organization of the software in its development environment

33. In the N-Tire architecture, the idea is to enhance scalability and _____ by disturbing both the data and the application using multiple server machines

a. Usability

b. Performance page 134

c. Interoperability

d. Integrity

34. Names representing methods and functions should be _____ and written in mixed case starting with _____ case

a. Noun _____ lower

b. Verb _____ lower page 153

c. Noun _____ upper

d. Verb _____ upper

35. Floating point constant should always be written with decimal point and at least

a. One decimal page 164

b. Two decimal

c. Three decimal

d. none of the given

36. Static structural model shows the major system _____

a. Leaks

b. Components page 129

c. Activates

d. Objectives

37. Distributing the responsibilities to different subsystems so that we get a software system which is easy to maintain, is called _____ the architecture

a. Subtracting

b. Partitioning page 138

c. Cloning

d. Balancing

38. It ensures that a class only has one instance and provides a global point of access to it

a. Singleton pattern page 145

b. Observer pattern

c. Real pattern

d. None of the given

39. N-tier architecture stems from the struggle to find a ___ between the fat-client architecture and the thin client architecture

a. Concurrency

b. Distribution point

c. Middle ground page 134

d. Similarity

40. In client server model, the application is modeled as a set of ___ that are provided by servers.

a. Request

b. Protocols

c. Service page 130

d. Requirements

41. Maintainability and portability issues are discussed in _____

a. Functional view

b. Physical view

c. Code view page 126

d. Logical view

42. In case of a file server, client request selected records from a ___ and the server transmits recorded to client over the network

a. Local memory

b. Network

c. Database

d. File page 132

43. Physical view in Krutchen's 4+1 architectural view model captures _____.

- a. Object model of the design
- b. Concurrency and synchronization aspects of the design
- c. Mapping(s) of the software onto the hardware and reflects its distributed aspect**
- d. Static organization of the software in its development environment

44. Logical view in Krutchen's 4+1 architectural view model captures _____.

- a. Concurrency and synchronization aspects of the design
- b. Mapping(s) of the software onto the hardware and reflects its distributed aspect

c. Object model of the design

- d. Static organization of the software in its development environment

45. When programmers use shortcuts and cryptic codes in their program, _____ becomes a major problem.

a. Maintenance

- b. Reusability
- c. Availability
- d. Readability

46. Which one is correct?

a. double total = 0.5;

- b. double total = .5;
- c. double total = .50;
- d. all of the given

47. "Description of communicating objects and classes that are customized to solve a general design problem in a particular context" is called _____.

a. Design Pattern

- b. System Pattern
- c. System Design
- d. Design Method

48. Development view in Krutchen's 4+1 architectural view model captures

- a. Object model of the design
- b. Concurrency and synchronization aspects of the design
- c. Mapping(s) of the software onto the hardware and reflects its distributed aspect

d. Static organization of the software in its development environment

49. Client server model tries to _____ data and processing.

a. Distribute

b. Merge

c. Clone

d. Proceed

50. Which indent size eliminates the chance of code lines splitting?

a. 2

b. 4

c. 3

d. 6

51. Which one of these is a correct short cut used by the programmer?

a. $x*=a$

b. $x=*a$

c. $x*a=$

d. $=a*x$

52. _____ was the first pure Object Oriented language in which observer pattern was used in implementing its Model View Controller pattern

a. Smalltalk

b. PASCAL

c. JAVA

d. C++

53. Identify the TRUE statement

a. Portability effects Security

b. Size of data types vary from one machine to other

c. Size of control structures vary from one machine to other

d. None of the given options

54. 1) $x = (a + 2 > 3) ? a : a - 1;$

2) $\text{if}((a + 2) > 3)$

$x = a;$

else

$x = a - 1;$

a. Statement (1) is more complex than (2)

b. Statement (2) is more complex than (1)

c. Both statements are very complex

d. None of the given options

55. which of the following statements are same in output

1) $a = a \gg 2$

2) $a = a/4$

3) $a = a * 2$

a. (1) and (3) only

b. (2) and (3) only

c. (1) and (2) only page 168

d. All produce the same result

56. Code should not be:

a. Commented page 162

b. indented

c. cryptic page 164

d. aligned

57. If $!(\text{block} < \text{activeBlock})$

is equivalent to:

a. if $(\text{block} < \text{activeBlock})$

b. if $((\text{block} == \text{activeBlock}))$

c. if $((\text{block} \geq \text{activeBlock}))$ page 163

d. None of the given

58. The form for $(;)$ should be used for

a. Nested loop

b. Empty loop page 159

c. More than 1000 iteration

d. Less than 1000 iterations

59. using proper parenthesis normally makes the code

a. easy to read

b. easy to understand page 167

c. less ambiguous

d. All of the given option

60. The clients and servers, in a client server environment, are connected through

a. Framework

b. Interface

c. Middleware page 129

d. Groupware

61. _____ provides a unified interface to a set of intelligence in a sub-system

- a. Observer pattern
- b. Singleton pattern

c. Façade pattern **page 143**

- d. All of the above

62. Complex expressions:

- a. Make the code easy to modify

b. Make the code difficult to modify **page 164**

- c. Make the code easy to understand
- d. Does not effect understandability

63. Which of the following is used for multi level commenting?

- a. // Comment

b. /*Comment*/

- c. (Comment)
- d. */Comment/*

64.