Quizlet

NAME_____

44 Multiple choice questions

99%

1. A loop consisting of a loop variable initialization, a loop expression, and a loop variable update that typically describes iterating for a specific number of times.

A. ✓ for loop

B. Pseudocode

C. Nested Loop

D. parameter

2. The progress of writing, compiling, and testing a small amount of code, then writing, compiling, and testing a small amount more (an incremental amount), and so on.

A. structural diagrams

B. ✓ Incremental development

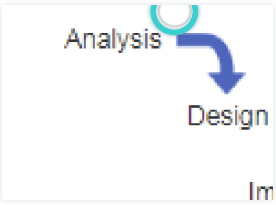
C. Modular development

D. Implementation

3. First step in the waterfall approach. Defines a program's goals.

CORRECT

✓



4. A function input specified in a function definition.

A. ✓ parameter

B. interpreter

C. Argument

D. Iteration

5. A number with a fractional part, even if that fraction is 0.

A. ✗ floating-point number

B. Algorithm time efficiency

C. function definition

D. ✓ Floating-point literal

6. used to run a program's statements

A. Not a number

B. Iteration

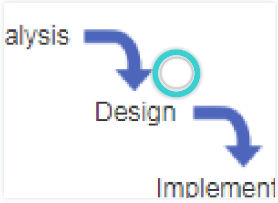
C. ✓ interpreter

D. class diagram

7. The second step in the waterfall approach of SDLC. Defines specifics of a program.

CORRECT

✓



8. Text (characters) within double quotes.

A. Nested Loop

B. ✓ String literal

C. binary number

D. Run, execute

9. A program performs computations on that data, such as adding two values like x + y.

A. Program

B. comment

C. input

D. ✓ process

10. Modeling language for software design that uses different types of diagrams to visualize the structure and behavior of programs.

A. ✓ Universal Modeling Language

B. behavioral diagrams

C. Incremental Development

D. Modular development

11. A graphical language for creating computer programs.

A. Characters

B. ✓ flowchart

C. Function

D. Boolean

12. A program can be built by doing small amounts of each SDLC phases in sequence, then repeating.

A. sequence diagram

B. ✓ Agile or spiral approach

C. Systems development life cycle (SDLC)

D. Loop

13. Implementation

CORRECT

✓

14. A function may return one value and does so by assigning a return variable with the return value.

A. return statement

B. ✓ Return variable

C. Type conversion

D. Nested branches

15. Supports decomposing a program into objects.

A. behavioral diagrams

B. Not a number

C. assignment statement

D. ✓ object-oriented language

16. Each element's location number of an array.

A. Iteration

B. ✓ Index

C. byte

D. Boolean

17. A loop that repeatedly executes the loop body while the loop's expression evaluates to true.

A. ✓ while loop

B. Characters

C. Arguments

D. Function

18. Any function input values that appear within ( ), and are separated by commas if more than one.

A. ✓ Arguments

B. Argument

C. Characters

D. RandomNumber()

19. Engineers have reduced switch sizes by half about every 2 years.

A. function call

B. ✓ Moore's Law

C. Expression

D. Type conversion

20. Can be a number, a variable name (numApples), or a simple calculation like (numApples + 1).

A. ✓ Expression

B. Operator

C. Iteration

D. while loop

21. Dividing a nonzero floating-point number by zero.

A. object-oriented language

B. structural diagrams

C. ✓ Infinity or -Infinity

D. function definition

22. American Standard Code for Information Interchange. Code that is the numerical representation of a character. Ex. Z would be stored in a computer as 1011010.

A. If-else

B. sequence diagram

C. Design

D. ✓ ASCII

23. A list of statements, each statement carrying out some action and executing one at a time.

A. algorithm

B. ✓ Program

C. Function

D. library

24. Statement that returns the specified value and immediately exits the function.

A. ✓ return statement

B. Precedence rules

C. Use Case Diagram

D. Implementation

25. An invocation of a function's name, causing the function's statements to execute.

A. Function

B. Precedence rules

C. ✓ function call

D. modulo operator

26. Any letter (a-z, A-Z), digit (0-9), or symbol (~, !, @, etc.).

A. Not a number

B. Expression

C. ✓ Characters

D. Argument

27. A single 0 or 1.

A. Operator

B. integer

C. ✓ bit

D. Loop

28. A decision and its two branches. IF the decision's expression is true then the first branch executes, ELSE the second branch executes.

A. Function

B. Use Case

C. ✓ If-else

D. for loop

29. A program construct that repeatedly executes the loop's statements (known as loop body).

A. ✓ Loop

B. Array

C. Output

D. comment

30. interaction between software components and order of events

A. return statement

B. activity diagram

C. ✓ sequence diagram

D. ASCII

31. Type that has just two values: true or false.

A. ✓ Boolean

B. Output

C. Nested Loop

D. comment

32. Used by programs to refer to data. It is a named item, used to hold a value.

A. Epsilon

B. Argument

C. comment

D. ✓ variable

33. A conversion of one data type to another, such as an integer to a float.

A. Implementation

B. ✓ Type conversion

C. function definition

D. Precedence rules

34. Checks whether two operands' values are the same (==) or different(!=).

A. return statement

B. Implementation

C. logical operator

D. ✓ Equality operator

35. A program written in a compiled language is first converted by a tool (compiler) into machine code, which can run on a particular machine. Ex. C, C++, and Java.

A. Incremental development

B. ✓ compiled language

C. Use Case Diagram

D. Sentinel value

36. A program gets data, perhaps from a file, keyboard, touchscreen, network, etc.

- **A.** ✓ input
- **B.** Operator
- **C.** Branch
- **D.** process

37. Treats operands as being true or false, and evaluates to true or false.

- **A.** Use Case Diagram
- **B.** ✓ logical operator
- **C.** Divide-by-zero error
- **D.** activity diagram

38. A symbol that performs a built-in calculation, like the + which performs addition.

- **A.** modulo operator
- **B.** Characters
- **C.** ✓ Operator
- **D.** Use Case

39. A word that is part of the language, like integer, Get or Put. These words cannot be used as an identifier.

- **A.** Universal Modeling Language
- **B.** floating-point number
- **C.** ✓ Reserved word (or keyword)
- **D.** Interpreted Language

40. Loop that first executes the loop body's statements, then checks the loop condition.

- **A.** ✓ do-while loop
- **B.** Use Case Diagram
- **C.** Expression
- **D.** while loop

41. Refers to the decimal point being able to appear anywhere ("float") in the number. Ex. 98.6, 0.0006.

- **A.** Equality operator
- **B.** Sentinel value
- **C.** ✓ floating-point number
- **D.** relational operator

42. Carrying out the SDLC phases in sequence.

A. function definition

B. Lower camel case

C. ✓ Waterfall Approach

D. structural diagrams

43. Consists of the new function's name and block of statements.

A. ✓ function definition

B. floating-point number

C. structural diagrams

D. Divide-by-zero error

44. A sequence of statements only executed under a certain condition.

A. algorithm

B. Argument

C. variable

D. ✓ Branch

44 True/False questions

1. Special value indicating the end of a list, such as a list of positive integers ending with 0. → function call

CORRECT

✓ False

It should be → Sentinel value

2. UML diagrams used to design dynamic elements of a program → activity diagram

CORRECT

✓ False

It should be → behavioral diagrams

3. A value provided to a function's parameter during a function call. → Characters

CORRECT

✓ False

It should be → Argument

4. Behavioral diagram used to visually model how a user interacts with a software program. → Type conversion

CORRECT

✓ False

It should be → Use Case Diagram

5. UML diagrams used to design static elements of a program → function definition

CORRECT

✓ False

It should be → structural diagrams

6. A named list of statement → function

CORRECT

✓ True

7. Sequence of steps that solves a program, generating correct output for any valid input values. → library

CORRECT

✓ False

It should be → algorithm

8. A named value item that holds a value that cannot change. → Characters

CORRECT

✓ False

It should be → constant

9. A name created by a programmer for an item like a variable or function. Must be a sequence of letters, underscores, and digits or start with a letter or underscore. They are case sensitive. → Identifier

CORRECT

✓ True

10. A process in which a programmer writes and tests a few statements, then writes and tests a small amount more. → compiled language

CORRECT

✓ False

It should be → Incremental Development

11. declares a new variable, specifying the variable's name and type. → variable declaration

CORRECT

✓ True

12. Capitalize each word except the first, as in numApples. → Lower camel case

CORRECT

✓ True

13. a flowchart of an activity (loop, function, etc.) within the program → activity diagram

CORRECT

✓ True

14. describes a singular goal of one user and briefly outlines how they will accomplish the goal → Pseudocode

CORRECT

✓ False

It should be → Use Case

15. Text that resembles a program in a real programming language but is simplified to aid human understanding. → while loop

CORRECT

✓ False

It should be → Pseudocode

16. Variable type that can hold whole numbers. → integer

CORRECT

✓ True

17. Each item in an array. → Index

CORRECT

✓ False

It should be → Element

18. Occurs at runtime if a divisor is 0, causing a program to terminate. → function definition

CORRECT

✓ False

It should be → Divide-by-zero error

19. evaluates to the remainder of the division of two integer operands. Ex: 23 % 10 is 3. → modulo operator

CORRECT

✓ True

20. Checks how one operand's value relates to another. For example, >=. → floating-point number

CORRECT

✓ False

It should be → relational operator

21. A special variable having one name, but storing a list of data items, with each item being directly accessible. → Array

CORRECT

✓ True

22. The difference threshold indicating that floating-point numbers are equal. → Expression

CORRECT

✓ False

It should be → Epsilon

23. A program puts that data somewhere, such as to a file, screen, network, etc. → input

CORRECT

✓ False

It should be → Output

24. A list of statements executed by invoking the function's name, with such invoking know as a function call. → Program

CORRECT

✓ False

It should be → Function

25. Text a programmer adds to a program, to be read by humans (other programmers), but ignored by the program when executing. → comment

CORRECT

✓ True

26. An expression is evaluated using the order of standard mathematics. → Precedence rules

CORRECT

✓ True

27. A language that is run one statement at a time by another program called an interpreter. Ex. Python, Javascript, C#. → compiled language

CORRECT

✓ False

It should be → Interpreted Language

28. A set of style guidelines defined by a company, team, teacher, etc., for naming variables. → floating-point number

CORRECT

✓ False

It should be → Naming conventions

29. The process of dividing a program into separate modules that can be developed and tested separately and then integrated into a single program. → Incremental development

CORRECT

✓ False

It should be → Modular development

30. Analysis Phase, Design Phase, Implementation phase, testing phase → Systems development life cycle (SDLC)

CORRECT

✓ True

31. Loop that appears in the body of another loop. → Pseudocode

CORRECT

✓ False

It should be → Nested Loop

32. The nested branches can take on various forms, and the if-else branches may even use different variables. → Nested branches

CORRECT

✓ True

33. A set of pre-written functions that carry out common tasks, that a programmer can use to improve productivity. → library

CORRECT

✓ True

34. Special two-character sequence \n whose appearance in an output string literal causes the cursor to move to the next output line. → newline

CORRECT

✓ True

35. The number of calculations required to solve a problem. → Floating-point literal

CORRECT

✓ False

It should be → Algorithm time efficiency

36. Words for carrying out a program's statements. → Run, execute

CORRECT

✓ True

37. models the objects of a program → class diagram

CORRECT

✓ True

38. The fourth step of the waterfall approach. Checks that the programs correctly meets the goals. → Epsilon

CORRECT

✓ False

It should be → Testing

39. Indicates an unrepresentable or undefined value. → binary number

CORRECT

✓ False

It should be → Not a number

40. A function is a built-in zyFlowchart function that takes two arguments, lowValue and highValue, and returns a random integer in the range lowValue to highValue. Ex: RandomNumber(1, 10) returns a random integer in the range 1 to 10. → Return variable

CORRECT

✓ False

It should be → RandomNumber()

41. Assigns a variable with a value, such as X=5. → assignment statement

CORRECT

✓ True

42. Each time through a loop's statement. → interpreter

CORRECT

✓ False

It should be → Iteration

43. using base two numbers, 0 and 1 → function call

CORRECT

✓ False

It should be → binary number

44. Eight bits. Ex. 11000101 → interpreter

CORRECT

✓ False

It should be → byte