

45. All the following are examples of hardware interfaces EXCEPT _____.
- (A) sensors
 - (B) touch screens
 - (C) pop-up menus
 - (D) Braille keyboards
46. A _____ is a device that is externally connected to, and under the control of the central processing unit.
- (A) bistable
 - (B) peripheral
 - (C) disk controller
 - (D) memory controller
47. _____ is a primary storage device that may be programmed and reprogrammed by the user.
- (A) RAM
 - (B) ROM
 - (C) PROM
 - (D) EPROM
48. Automated directory assistance services utilize _____ technology for accepting user input.
- (A) voice capture
 - (B) voice recognition
 - (C) voice response
 - (D) sound capture
49. To which category of software does Microsoft Works belong?
- (A) custom-written
 - (B) customized
 - (C) integrated
 - (D) special purpose
50. Banks and other financial institutions utilize _____ technology that automatically verifies the identity of callers wishing to access their accounts.
- (A) voice capture
 - (B) voice recognition
 - (C) voice response
 - (D) sound capture
51. In an airport, a system consisting of sensors, bar code readers and remote controls is MOST LIKELY used for _____.
- (A) aircraft boarding.
 - (B) baggage handling.
 - (C) border control.
 - (D) passenger check-in.
52. Some _____ printers spray ink, while others use heat or lasers to create images.
- (A) non-impact
 - (B) line
 - (C) impact
 - (D) hard-copy
53. A monitor is measured in the same way as a television is measured, that is _____.
- (A) vertically from the top corner to the bottom
 - (B) horizontally from the left corner to the right
 - (C) diagonally from one corner to the other
 - (D) in square units that indicate the area of the screen

54. A(n) _____ printer is usually faster than a(n) _____ printer but sometimes slower than a _____ printer.
- (A) dot-matrix, inkjet, laser
(B) dot-matrix, laser, inkjet
(C) inkjet, dot-matrix, laser
(D) ink-jet, laser, dot-matrix
55. The ability of a computer to execute two or more programs at the same time, using one CPU is called _____.
- (A) multitasking
(B) multiprocessing
(C) microprocessing
(D) multiprogramming
56. Which of the following activity is NOT a function of an operating system?
- (A) file management
(B) print management
(C) memory management
(D) process management
57. A train station may use a _____ system to notify passengers of schedule information or a train's status.
- (A) voice capture
(B) voice recognition
(C) voice response
(D) sound capture
58. Amazon, the US-based online retailer, allows third-party companies to use excess processing capacity on its computer system. This is an example of the _____ processing mode?
- (A) batch
(B) on-line
(C) real-time
(D) time-sharing
59. _____ is a character representation scheme.
- (A) ASCII
(B) BCD
(C) Sign and magnitude
(D) Two's complement
60. The _____ representation of the base 10 value 23 is 0010 0011.
- (A) ASCII
(B) BCD
(C) sign and magnitude
(D) two's complement

TEST 4

Problem-solving and Program Design

61. ALL the following are simple data types EXCEPT _____.
- (A) character
(B) integer
(C) real
(D) string
62. In flowcharting, which basic operation is a rectangle used to represent?
- (A) decision
(B) input/output
(C) process/assignment
(D) storage

63. Which of the following is NOT a significant part of a simple problem?
- (A) input
 - (B) processing
 - (C) output
 - (D) solution
64. During problem decomposition, expected results are documented in the _____ column in the defining diagram.
- (A) input
 - (B) processing
 - (C) output
 - (D) storage
65. Developing and representing algorithms are included in the _____ step in the problem solving process.
- (A) first
 - (B) third
 - (C) fourth
 - (D) last
66. In which one of the following processes is a defining diagram used?
- (A) Problem diagramming
 - (B) Problem partitioning
 - (C) Program definition
 - (D) Stepwise refinement
67. All the following are true about variables and constants EXCEPT that _____.
- (A) they have names called identifiers.
 - (B) their names refer to an area of memory.
 - (C) their names are created by the programmer.
 - (D) they can be used interchangeably.
68. Which of the following is an incorrect variable name?
- (A) 1stchoice
 - (B) Firstchoice
 - (C) firstChoice
 - (D) FIRSTCHOICE
69. A _____ is a named location in memory, the value of which remains fixed.
- (A) constant
 - (B) literal
 - (C) half-constant
 - (D) variable
70. Which data type is MOST appropriate for storing a value representing the weight of a newborn child?
- (A) character
 - (B) integer
 - (C) real
 - (D) string
71. Which statement represents a characteristic of an algorithm?
- (A) Has a precise number of steps.
 - (B) Always represent a part of a solution.
 - (C) Is always structured.
 - (D) Relates to programming only.
72. A value has been input. It must be doubled and the result stored. The initial value and the result must be displayed. Which algorithm segment is correct?
- (A) double value, print value
 - (B) double value. print value
print result
 - (C) double value, store result
print product
 - (D) double value, store result
print value, print result

73. Which condition will determine if n is of a higher value than ten?

- (A) $n \geq 10$
- (B) $n > 10$
- (C) $n \leq 10$
- (D) $n < 10$

74. Consider the following: Five numbers are to be input (under the control of a loop). The biggest number must be determined and output. How many columns are necessary for the required trace table?

- (A) 6
- (B) 5
- (C) 3
- (D) 2

75. The number of _____ in an algorithm determines the number of rows in a trace table?

- (A) constants
- (B) calculations
- (C) passes
- (D) variables

76. The "AND" in the program statement " $X = 5$ AND $Y < 7$ " is an example of a(n) _____ operator.

- (A) arithmetic
- (B) boolean
- (C) comparison
- (D) logical

77. Pseudocode is a _____ method of representing algorithms.

- (A) graphical
- (B) textual
- (C) verbal
- (D) visual

QUESTIONS 78 - 80 ARE BASED ON THE FOLLOWING NARRATIVE:

Five numbers are input using a for loop. As each is entered, it is doubled. The results are stored separately.

78. How many columns are required for a trace table for the algorithm?

- (A) 2
- (B) 3
- (C) 4
- (D) 5

79. How many values should be in the first row of the trace table?

- (A) 2
- (B) 3
- (C) 4
- (D) 5

80. How many values should be in the second column of the trace table?

- (A) 2
- (B) 3
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