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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. Computer science focuses on a broad set of interrelated ideas.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | |

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| 2. Informally, a computing agent is like a recipe.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | |

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| 3. An algorithm describes a process that ends with a solution to a problem.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | |

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| 4. Each individual instruction in an algorithm is well defined.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | |

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| 5. An algorithm describes a process that may or may not halt after arriving at a solution to a problem.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | |

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| 6. An algorithm solves a general class of problems.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | |

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| 7. The algorithms that describe information processing can also be represented as information.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | |

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| 8. When using a computer, human users primarily interact with the memory.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | |

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| 9. Information is stored as patterns of bytes (1s and 0s).   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | |

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| 10. The part of a computer that is responsible for processing data is the central processing unit (CPU).   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | |

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| 11. Magnetic storage media, such as tapes and hard disks, allow bit patterns to be stored as patterns on a magnetic field.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | |

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| 12. A program stored in computer memory must be represented in binary digits, which is also known as ASCII code.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | |

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| 13. The most important example of system software is a computer's operating system.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | |

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| 14. An important part of any operating system is its file system, which allows human users to organize their data and programs in permanent storage.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | |

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| 15. A programmer typically starts by writing high-level language statements in a text editor.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | |

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| 16. Ancient mathematicians developed the first algorithms.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | |

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| 17. In the 1930s, the mathematician Blaise Pascal explored the theoretical foundations and limits of algorithms and computation.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | |

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| 18. The first electronic digital computers, sometimes called mainframe computers, consisted of vacuum tubes, wires, and plugs, and filled entire rooms.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | |

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| 19. In the early 1940s, computer scientists realized that a symbolic notation could be used instead of machine code, and the first assembly languages appeared.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | |

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| 20. The development of the transistor in the early 1960s allowed computer engineers to build ever smaller, faster, and less expensive computer hardware components.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | |

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| 21. Moore's Law states that the processing speed and storage capacity of hardware will increase and its cost will decrease by approximately a factor of 3 every 18 months.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | |

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| 22. In the 1960s, batch processing sometimes caused a programmer to wait days for results, including error messages.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | |

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| 23. In 1984, Apple Computer brought forth the Macintosh, the first successful mass-produced personal computer with a graphical user interface.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | |

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| 24. By the mid 1980s, the ARPANET had grown into what we now call the Internet, connecting computers owned by large institutions, small organizations, and individuals all over the world.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | |

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| 25. In Python, the programmer can force the output of a value by using the cout statement.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | |

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| 26. How is data stored within a computer's memory?   |  |  |  | | --- | --- | --- | |  | a. | It is stored as hexadecimal data. | |  | b. | It is stored as octal data. | |  | c. | It is stored as binary data. | |  | d. | It is stored in plain text data. |  |  |  | | --- | --- | | *ANSWER:* | c | |

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| 27. In a computer, what component is known as the "processor"?   |  |  |  | | --- | --- | --- | |  | a. | RAM | |  | b. | CPU | |  | c. | basic input/output devices | |  | d. | motherboard |  |  |  | | --- | --- | | *ANSWER:* | b | |

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| 28. A flash memory stick is an example of what type of storage media?   |  |  |  | | --- | --- | --- | |  | a. | magnetic storage media | |  | b. | optical storage media | |  | c. | electrical storage media | |  | d. | semiconductor storage media |  |  |  | | --- | --- | | *ANSWER:* | d | |

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| 29. What program is used by a programmer to convert high-level code into executable code?   |  |  |  | | --- | --- | --- | |  | a. | translator | |  | b. | run-time system | |  | c. | interpreter | |  | d. | text editor |  |  |  | | --- | --- | | *ANSWER:* | a | |

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| 30. What problem was the Atanasoff-Berry Computer designed to solve?   |  |  |  | | --- | --- | --- | |  | a. | The automatic creation of ballistics tables for the U.S. military. | |  | b. | The coded transmissions used by Germany in WWII. | |  | c. | The solving of systems of simultaneous linear equations. | |  | d. | The calculation of maritime navigation routes for the U.S. Navy. |  |  |  | | --- | --- | | *ANSWER:* | c | |

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| 31. Who is credited as having created the World Wide Web in 1992?   |  |  |  | | --- | --- | --- | |  | a. | Steve Jobs | |  | b. | Albert Gore | |  | c. | Tim Berners-Lee | |  | d. | Paul Allen |  |  |  | | --- | --- | | *ANSWER:* | c | |

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| 32. What kind of programming language is Python?   |  |  |  | | --- | --- | --- | |  | a. | An interpreted language. | |  | b. | A compiled language. | |  | c. | A interpolated language. | |  | d. | A manufactured language. |  |  |  | | --- | --- | | *ANSWER:* | a | |

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| 33. What is the name used for the integrated program development environment that comes with a Python installation?   |  |  |  | | --- | --- | --- | |  | a. | Eclipse | |  | b. | IDLE | |  | c. | PyShell | |  | d. | PyDDL |  |  |  | | --- | --- | | *ANSWER:* | b | |

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| 34. While viewing a screen displaying an active IDLE session, what does green text mean?   |  |  |  | | --- | --- | --- | |  | a. | The text is the result of output, or is the name of a function. | |  | b. | The text represents a string. | |  | c. | The text is a built-in function name. | |  | d. | The text indicates a variable's name. |  |  |  | | --- | --- | | *ANSWER:* | b | |

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| 35. What built-in function should you use in Python to prompt a user for data input?   |  |  |  | | --- | --- | --- | |  | a. | input | |  | b. | cin | |  | c. | prompt | |  | d. | get |  |  |  | | --- | --- | | *ANSWER:* | a | |

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| 36. What would be the output if you were to print the variable named value as declared by this statement: value = "2" + "2"?   |  |  |  | | --- | --- | --- | |  | a. | The number "4". | |  | b. | A floating point value of 4.0. | |  | c. | The string "22". | |  | d. | A type error, as integers cannot be concatenated. |  |  |  | | --- | --- | | *ANSWER:* | c | |

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| 37. When a Python interpreter runs a script, what is the script translated into?   |  |  |  | | --- | --- | --- | |  | a. | assembly code | |  | b. | byte code | |  | c. | interpolated language code | |  | d. | ELF-formatted binary |  |  |  | | --- | --- | | *ANSWER:* | b | |

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| 38. What component of Python is responsible for the execution of Python byte code?   |  |  |  | | --- | --- | --- | |  | a. | IDLE | |  | b. | Python interpreter | |  | c. | Python virtual machine (PVM) | |  | d. | Python Script Engine (PSE) |  |  |  | | --- | --- | | *ANSWER:* | c | |

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| 39. At what point in the interpretation of a Python program are syntax error messages generated?   |  |  |  | | --- | --- | --- | |  | a. | After the conversion of the code into byte code. | |  | b. | Before execution of the program, when it is passed through the translator. | |  | c. | During execution of the program by the Python virtual machine. | |  | d. | After user input defined by the program is collected. |  |  |  | | --- | --- | | *ANSWER:* | b | |

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| 40. When using IDLE for Python programming, what color is used to distinguish built-in function names?   |  |  |  | | --- | --- | --- | |  | a. | blue | |  | b. | green | |  | c. | purple | |  | d. | red |  |  |  | | --- | --- | | *ANSWER:* | c | |

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| 41. What language, created by Tim Berners-Lee, allows browsers to structure the information to be displayed on Web pages?   |  |  |  | | --- | --- | --- | |  | a. | Python | |  | b. | HTML | |  | c. | HTTP | |  | d. | Java |  |  |  | | --- | --- | | *ANSWER:* | b | |

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| 42. What processor was contained in the first mass-produced personal computer?   |  |  |  | | --- | --- | --- | |  | a. | Intel 8080 | |  | b. | AMD486 | |  | c. | NEC V20 | |  | d. | Motorola 88000 |  |  |  | | --- | --- | | *ANSWER:* | a | |

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| 43. What type of processing occurs when processes run for a slice of time, then yield access to the CPU to another process, cycling through processes repeatedly?   |  |  |  | | --- | --- | --- | |  | a. | coalescent processing | |  | b. | cooperative processing | |  | c. | concurrent processing | |  | d. | divisive processing |  |  |  | | --- | --- | | *ANSWER:* | c | |

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| 44. What is NOT one of the initial four locations connected by the ARPANET in the 1970s?   |  |  |  | | --- | --- | --- | |  | a. | Stanford Research Institute | |  | b. | University of California at Los Angeles | |  | c. | UC Santa Barbara | |  | d. | Massachusetts Institute of Technology |  |  |  | | --- | --- | | *ANSWER:* | d | |

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| 45. Regardless of whether print is passed a single or multiple expressions, what does output always end with by default?   |  |  |  | | --- | --- | --- | |  | a. | A carriage return. | |  | b. | A null terminator. | |  | c. | A newline. | |  | d. | An EOL. |  |  |  | | --- | --- | | *ANSWER:* | c | |

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| 46. In order to change the print function to output on the same line as the previous one, without printing a newline, what expression can be added?   |  |  |  | | --- | --- | --- | |  | a. | terminator = "" | |  | b. | end = "" | |  | c. | eol = "" | |  | d. | newline = 0 |  |  |  | | --- | --- | | *ANSWER:* | b | |

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| 47. What language was designed based on a theory of recursive functions and is considered to be an ideal language for solving difficult or complex problems?   |  |  |  | | --- | --- | --- | |  | a. | COBOL | |  | b. | FORTRAN | |  | c. | LISP | |  | d. | Assembler |  |  |  | | --- | --- | | *ANSWER:* | c | |

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| 48. What technology replaced the vacuum tube as the mechanism for implementing electronic switches in computer hardware?   |  |  |  | | --- | --- | --- | |  | a. | transistor | |  | b. | resistor | |  | c. | fully programmable gate array | |  | d. | microprocessor |  |  |  | | --- | --- | | *ANSWER:* | a | |

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| 49. When reading the syntax for the print command, what does the ellipsis between expressions indicate?   |  |  |  | | --- | --- | --- | |  | a. | They indicate that all expressions are required to be included. | |  | b. | They indicate that the program has a minimum number of expressions that must be included. | |  | c. | They indicate that you must pass a value of specific type to the expression. | |  | d. | They indicate that you could include multiple expressions after the first one. |  |  |  | | --- | --- | | *ANSWER:* | d | |

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| 50. What was the first PC-based operating system called?   |  |  |  | | --- | --- | --- | |  | a. | Microsoft Disk Operating System (MS-DOS) | |  | b. | UNIX | |  | c. | Linux | |  | d. | Control Program for Microcomputers (CP/M) |  |  |  | | --- | --- | | *ANSWER:* | d | |