|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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 |

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| --- | --- |
| *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. |

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| --- | --- |
| *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 |

 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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 |

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