|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. The operating system manages each and every piece of hardware and software.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | True |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2. The Memory Manager, the Interface Manager, the User Manager, and the File Manager are the four essential managers of every major operating system.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | False |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3. Networking was not always an integral part of operating systems.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | True |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4. The Memory Manager is in charge of main memory**,** widely known as ROM.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | False |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5. The content of a random access memory (RAM) chip is nonvolatile, meaning that it is not erased when the power is turned off.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | False |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6. The Device Manager is responsible for connecting with every device that’s available on the system and for choosing the most efficient way to allocate them.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | True |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7. An important function of the Processor Manager is to keep track of the status of each job, process, and thread.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | True |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8. Operating systems with networking capability have a fifth essential manager called the Network Manager that provides a convenient way for authorized users to share resources.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | True |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9. There are two primary types of user interfaces: the graphical user interface and the command line interface.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | True |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10. When executing a job, the File Manager determines whether a user request requires that a file be retrieved from storage or whether it is already in memory.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | False |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11. The central processing unit (CPU) is the brains of the computer with the circuitry to control the interpretation and execution of instructions.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | True |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12. Onboard systems are computers that are physically placed inside the products that they operate to add features and capabilities.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | False |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13. Batch systems date from early computers, when each job consisted of a stack of chips entered into the system as a unit known as a stack.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | False |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14. General-purpose operating systems such as Linux or Windows are used in embedded systems.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | False |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15. The first bug was a moth trapped in a Harvard computer.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | True |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16. The buffers used in the 1950s to reduce the discrepancy in speed between the I/O and the CPU were conceptually similar to those now used routinely by Web browsers to make video and audio playback smoother.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | True |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17. In active multiprogramming schemes, a job can monopolize the CPU for a long time while all other jobs waited.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | False |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18. In the 1980s, as a result of multiprocessing techniques, it became possible to execute two programs at the same time in parallel.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | True |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19. With distributed operating systems, users need to be aware of which processor is actually running their applications.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | False |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20. In the 2010s, chips with millions of transistors that were very close together helped increase system performance dramatically.

|  |  |  |
| --- | --- | --- |
|   | a.  | True |
|   | b.  | False |

|  |  |
| --- | --- |
| *ANSWER:* | True |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21. The \_\_\_\_ is often very different from one operating system to the next, sometimes even between different versions of the same operating system.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | User Interface | b.  | Process Manager |
|   | c.  | Memory Manager | d.  | File Manager |

|  |  |
| --- | --- |
| *ANSWER:* | a |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22. A \_\_\_\_ chip holds software that is used to start the computer.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | RAM | b.  | ROM |
|   | c.  | CPU | d.  | buffer |

|  |  |
| --- | --- |
| *ANSWER:* | b |

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| 23. The \_\_\_\_ uniquely identifies each resource, starts its operation,monitors its progress, and, finally, deallocates it, making the operating system available to the next waiting process.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | Device Manager | b.  | File Manager |
|   | c.  | Keyboard Manager | d.  | Memory Manager |

|  |  |
| --- | --- |
| *ANSWER:* | a |

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| 24. Each peripheral device has its own software, called a(n) \_\_\_\_, which contains the detailed instructions required to start that device, allocate it to a job, use the device correctly, and deallocate it when it’s appropriate.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | device controller | b.  | device software |
|   | c.  | device handler | d.  | device driver |

|  |  |
| --- | --- |
| *ANSWER:* | d |

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| 25. \_\_\_\_ is the practice of using Internet-connected resources to perform processing, storage, or other operations.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | Cloud computing | b.  | Command line interfacing |
|   | c.  | Process management | d.  | Network management |

|  |  |
| --- | --- |
| *ANSWER:* | a |

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| 26. \_\_\_\_ is where the data and instructions of a computer must reside to be processed.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | CPU | b.  | Main memory |
|   | c.  | Read-only memory | d.  | I/O memory |

|  |  |
| --- | --- |
| *ANSWER:* | b |

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| 27. The efficiency of a batch system is measured in \_\_\_\_, which is the number of jobs completed in a given amount of time.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | processes | b.  | threads |
|   | c.  | throughput | d.  | turnaround time |

|  |  |
| --- | --- |
| *ANSWER:* | c |

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| 28. \_\_\_\_ systems are used in time-critical environments where reliability is key and data must be processed within a strict time limit.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | Embedded | b.  | Hybrid |
|   | c.  | Interactive | d.  | Real-time |

|  |  |
| --- | --- |
| *ANSWER:* | d |

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| 29. There are two types of real-time systems depending on the consequences of missing the deadline. A \_\_\_\_ real-time system risks total system failure if the predicted time deadline is missed.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | constrained | b.  | restricted |
|   | c.  | soft | d.  | hard |

|  |  |
| --- | --- |
| *ANSWER:* | d |

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| 30. A hybrid system is a combination of \_\_\_\_ systems.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | batch and interactive | b.  | batch and real-time |
|   | c.  | interactive and real-time | d.  | real-time and general-purpose |

|  |  |
| --- | --- |
| *ANSWER:* | a |

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| 31. The name for the core portion of an operating system is the \_\_\_\_.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | manager | b.  | center |
|   | c.  | nucleus | d.  | kernel |

|  |  |
| --- | --- |
| *ANSWER:* | d |

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| 32. Starting in the 1950s, to reduce the discrepancy in speed between the I/O and the CPU, an interface called the \_\_\_\_ was placed between them to act as a buffer.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | control unit | b.  | scheduler |
|   | c.  | holder | d.  | buffer manager |

|  |  |
| --- | --- |
| *ANSWER:* | a |

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| 33. The most common mechanism for implementing multiprogramming was the introduction of the \_\_\_\_ concept, whereby the CPU was notified of events needing operating systems services.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | paging | b.  | sharing |
|   | c.  | messaging | d.  | interrupt |

|  |  |
| --- | --- |
| *ANSWER:* | d |

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| 34. A system with \_\_\_\_ divides programs into parts and keep them in secondary storage, bringing each part into memory only as it is needed.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | virtual memory | b.  | shared memory |
|   | c.  | segmented processing | d.  | passive multiprogramming |

|  |  |
| --- | --- |
| *ANSWER:* | a |

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| 35. In active multiprogramming, each program is allowed to use only a preset amount of CPU time before it is interrupted so another job can begin its execution. The interrupted job resumes execution at some later time. This idea is called \_\_\_\_.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | shared processing | b.  | CPU sharing |
|   | c.  | time slicing | d.  | distributed processing |

|  |  |
| --- | --- |
| *ANSWER:* | c |

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| 36. The word \_\_\_\_ is used to indicate that a program is permanently held in ROM (read only memory), as opposed to being held in secondary storage.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | hardware | b.  | firmware |
|   | c.  | software | d.  | shareware |

|  |  |
| --- | --- |
| *ANSWER:* | b |

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| 37. \_\_\_\_ allows separate partitions of a single server to support different operating systems.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | Multiprocessing | b.  | Multithreading |
|   | c.  | Virtualization | d.  | Shared processing |

|  |  |
| --- | --- |
| *ANSWER:* | c |

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| 38. With the development of \_\_\_\_ technology, a single chip was equipped with two or more processor cores.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | multiprogramming | b.  | multimedia |
|   | c.  | networking | d.  | multicore |

|  |  |
| --- | --- |
| *ANSWER:* | d |

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