

Name _____

[/test-bank-understanding-operating-systems-8e-mchoes](#)

Class _____

Date _____

: _____ : _____ e: _____

Chapter 1: Introducing Operating Systems

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

- a. True
- b. False

ANSWER:

True

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

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

- a. True
- b. False

ANSWER:

True

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

- a. True
- b. False

ANSWER:

False

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

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

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

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

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

Chapter 1: Introducing Operating Systems

- a. True
- b. False

ANSWER: True

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

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

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

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

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

- a. True
- b. False

ANSWER: False

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

- a. True
- b. False

ANSWER: True

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

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

Chapter 1: Introducing Operating Systems

- a. True
- b. False

ANSWER: False

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

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

- a. True
- b. False

ANSWER: False

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

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

22. A ____ chip holds software that is used to start the computer.

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

ANSWER: b

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

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

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

Chapter 1: Introducing Operating Systems

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

ANSWER: a

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

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

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

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

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

31. The name for the core portion of an operating system is the _____.

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

ANSWER: d

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

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.

Name _____ Class _____ Date _____
: _____ : _____ e: _____

Chapter 1: Introducing Operating Systems

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

ANSWER: d

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

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

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

37. _____ allows separate partitions of a single server to support different operating systems.

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

ANSWER: c

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