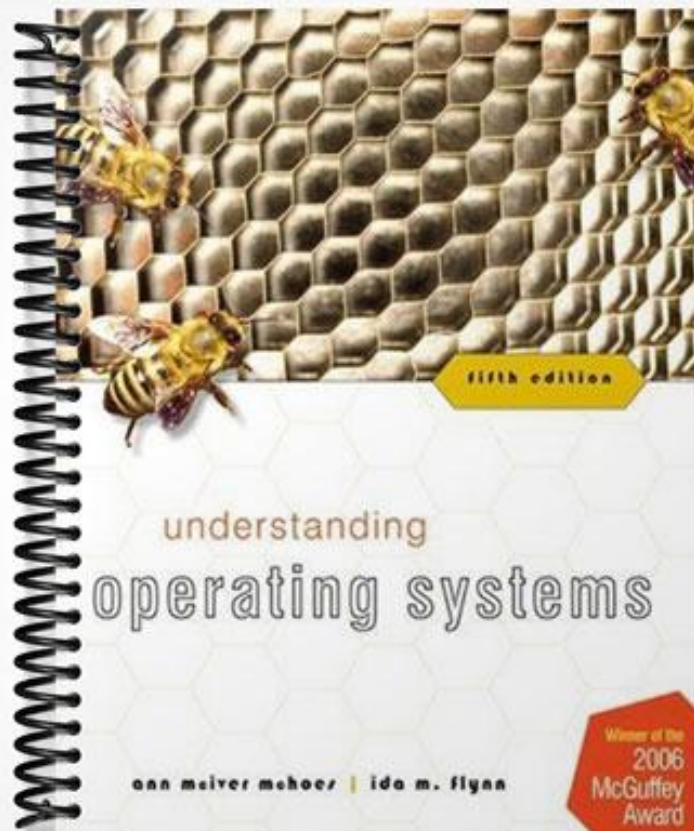


# TEST BANK



# ch1

## True/False

*Indicate whether the statement is true or false.*

- \_\_\_ 1. The operating system manages each and every piece of hardware and software.
- \_\_\_ 2. An operating system is a special type of hardware.
- \_\_\_ 3. The Memory Manager, the Interface Manager, the User Manager, and the File Manager are the basis of all operating systems.
- \_\_\_ 4. Networking was not always an integral part of operating systems.
- \_\_\_ 5. The Memory Manager is in charge of indirect memory, also known as ROM.
- \_\_\_ 6. The high-level portion of the Process Manager is called the Process Scheduler.
- \_\_\_ 7. The Device Manager monitors every device, channel, and control unit.
- \_\_\_ 8. The File Manager is responsible for data files but not program files.
- \_\_\_ 9. When the Processor Manager receives a command, it determines whether the program must be retrieved from storage or is already in memory, and then notifies the appropriate manager.
- \_\_\_ 10. Operating systems with networking capability have a fifth essential manager called the Network Manager that provides a convenient way for users to share resources while controlling users' access to them.
- \_\_\_ 11. The central processing unit (CPU) is the brains of the computer with the circuitry to control the interpretation and execution of instructions.
- \_\_\_ 12. Until the mid-1970s, all computers were classified by price alone.
- \_\_\_ 13. The supercomputer was developed primarily for government applications needing massive and fast number-crunching ability to carry out military operations and weather forecasting.
- \_\_\_ 14. The minicomputer of the 1970s was smaller than the microcomputer.
- \_\_\_ 15. Since the mid-1970s rapid advances in computer technology have blurred the distinguishing characteristics of early machines.
- \_\_\_ 16. The Intel 4004 chip in 1971 had 2,300 transistors while the Pentium II chip twenty years later had 7.5 million, and the Pentium 4 Extreme Edition processor introduced in 2004 had 178 trillion transistors.
- \_\_\_ 17. Card systems date from the earliest computers, which relied on punched cards or tape for input when a job was entered by assembling the cards into a deck and running the entire deck of cards through a card reader as a group.

- \_\_\_ 18. Real-time systems are used in time-critical environments where reliability is key and data must be processed within a strict time limit.
- \_\_\_ 19. Onboard systems are computers placed inside other products to add features and capabilities.
- \_\_\_ 20. The first bug was a moth trapped in a Harvard computer.
- \_\_\_ 21. Many early programs used convoluted logic that only the original programmer could understand, so it was nearly impossible for anyone else to debug or change the program later on.
- \_\_\_ 22. In the 1950s, only one FORTRAN program could run at a time, and then the FORTRAN compiler had to be reloaded into memory.
- \_\_\_ 23. If the control unit has two buffers, the second buffer can be loaded while the first buffer is transmitting its contents to or from the CPU.
- \_\_\_ 24. Few major advances were made in data management during the 1960s.
- \_\_\_ 25. A process requires space in main memory where it resides during its execution although, from time to time, it requires other resources such as data files or I/O devices.

**Multiple Choice**

*Identify the choice that best completes the statement or answers the question.*

- \_\_\_ 26. \_\_\_\_, part of the operating system, is unique to each operating system.
  - a. User Command Interface
  - b. Process Manager
  - c. Memory Manager
  - d. File Manager
- \_\_\_ 27. The \_\_\_\_ allocates each resource, starts its operation, and, finally, deallocates the resource, making it available to the next process or job.
  - a. Device Manager
  - b. File Manager
  - c. Keyboard Manager
  - d. Memory Manager
- \_\_\_ 28. \_\_\_\_ include(s) every peripheral unit in the system such as printers, disk drives, CD/DVD drives, flash memory, keyboards, and so on.
  - a. The CPU
  - b. I/O Devices
  - c. Processors
  - d. Secondary components
- \_\_\_ 29. In a computer, the \_\_\_\_ holds the Central Processing Unit, the Arithmetic and Logic Unit, registers, cache, and main memory.
  - a. parallel system
  - b. USB interface
  - c. tower
  - d. monitor
- \_\_\_ 30. A supercomputer can perform \_\_\_\_ floating-point operations per second.
  - a. 240 million
  - b. 2.4 billion
  - c. 2.4 trillion
  - d. 24 trillion
- \_\_\_ 31. Powerful microcomputers developed for use by commercial, educational and government enterprises are called \_\_\_\_.
  - a. supercomputers
  - b. minicomputers
  - c. terminals
  - d. workstations

- \_\_\_ 32. \_\_\_ operating systems are typically used for a network platform.
- IRIX, UNICOS
  - Linux, Macintosh, MS-DOS, Windows 2000/XP
  - Linux, NetWare, UNIX, Windows
  - IBM OS/390, UNIX
- \_\_\_ 33. The primary distinguishing characteristic of modern computers is \_\_\_.
- memory capacity
  - processor capacity
  - disk space
  - physical size
- \_\_\_ 34. \_\_\_ systems are used in time-critical environments where reliability is key and data must be processed within a strict time limit.
- Embedded
  - Hybrid
  - Interactive
  - Real-time
- \_\_\_ 35. A hybrid system is a combination of the \_\_\_ systems.
- batch and interactive
  - batch and real-time
  - interactive and real-time
  - real-time and general-purpose
- \_\_\_ 36. The type of system designed to perform one specific function is \_\_\_.
- Real-time
  - Interactive
  - Embedded
  - Hybrid
- \_\_\_ 37. Vacuum tube computers were used during the period of \_\_\_.
- 1920s-1930s
  - 1935-1945
  - 1940-1955
  - 1945-1960
- \_\_\_ 38. Second-generation computers were developed to meet the needs of \_\_\_.
- the government
  - businesses
  - secondary education
  - scientific labs
- \_\_\_ 39. \_\_\_ introduced the need for control cards, which defined the exact nature of each program and its requirements.
- Job scheduling
  - Control scheduling
  - Job control
  - Structure control
- \_\_\_ 40. \_\_\_ means that several logical records are grouped within one physical record.
- Grouping
  - Fixing
  - Combining
  - Blocking
- \_\_\_ 41. In second-generation computers, 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.
- control unit
  - scheduler
  - holder
  - buffer manager
- \_\_\_ 42. The most common mechanism for implementing multiprogramming was the introduction of the \_\_\_ concept, which is when the CPU is notified of events needing operating systems services.
- paging
  - sharing
  - messaging
  - interrupt
- \_\_\_ 43. A system with \_\_\_ divides programs into parts and keep them in secondary storage, bringing each part into memory only as it is needed.
- virtual memory
  - segmented processing

- b. shared memory
- d. passive multiprogramming

- \_\_\_ 44. The \_\_\_ 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
- \_\_\_ 45. The overwhelming demand for \_\_\_ capability in the mid-1990s sparked the proliferation of networking capability.
- a. e-mail
  - b. processing
  - c. Internet
  - d. FTP
- \_\_\_ 46. A typical \_\_\_ computer houses devices to perform audio, video, and graphic creation and editing.
- a. multiprocessor
  - b. multimedia
  - c. networked
  - d. PDA
- \_\_\_ 47. \_\_\_ is the partitioning of a single server, each of which can support a different operating system.
- a. Multiprocessing
  - b. Multithreading
  - c. Virtualization
  - d. Shared processing
- \_\_\_ 48. A thread (or \_\_\_) can be defined as a unit smaller than a process, which can be scheduled and executed.
- a. heavyweight process
  - b. lightweight process
  - c. kernel
  - d. distributor
- \_\_\_ 49. The name for the core part of an operating system is \_\_\_.
- a. manager
  - b. center
  - c. core
  - d. kernel
- \_\_\_ 50. \_\_\_ are self-contained modules (units of software) that provide models of the real world and can be reused in different applications.
- a. Objects
  - b. Kernels
  - c. Peripherals
  - d. Threads

## ch1

### Answer Section

#### TRUE/FALSE

1.	ANS: T	PTS: 1	REF: 4
2.	ANS: F	PTS: 1	REF: 4
3.	ANS: F	PTS: 1	REF: 4
4.	ANS: T	PTS: 1	REF: 5
5.	ANS: F	PTS: 1	REF: 6
6.	ANS: F	PTS: 1	REF: 6
7.	ANS: T	PTS: 1	REF: 7
8.	ANS: F	PTS: 1	REF: 7
9.	ANS: T	PTS: 1	REF: 7
10.	ANS: T	PTS: 1	REF: 8
11.	ANS: T	PTS: 1	REF: 8
12.	ANS: F	PTS: 1	REF: 8
13.	ANS: T	PTS: 1	REF: 9
14.	ANS: F	PTS: 1	REF: 10
15.	ANS: T	PTS: 1	REF: 10
16.	ANS: F	PTS: 1	REF: 11
17.	ANS: F	PTS: 1	REF: 12
18.	ANS: T	PTS: 1	REF: 12
19.	ANS: F	PTS: 1	REF: 13
20.	ANS: T	PTS: 1	REF: 14
21.	ANS: T	PTS: 1	REF: 15
22.	ANS: F	PTS: 1	REF: 16
23.	ANS: T	PTS: 1	REF: 17
24.	ANS: T	PTS: 1	REF: 18
25.	ANS: T	PTS: 1	REF: 24

#### MULTIPLE CHOICE

26.	ANS: A	PTS: 1	REF: 5
27.	ANS: A	PTS: 1	REF: 7
28.	ANS: B	PTS: 1	REF: 8
29.	ANS: C	PTS: 1	REF: 9
30.	ANS: C	PTS: 1	REF: 9
31.	ANS: D	PTS: 1	REF: 10
32.	ANS: C	PTS: 1	REF: 10
33.	ANS: B	PTS: 1	REF: 11
34.	ANS: D	PTS: 1	REF: 12
35.	ANS: A	PTS: 1	REF: 13
36.	ANS: C	PTS: 1	REF: 13
37.	ANS: C	PTS: 1	REF: 14
38.	ANS: B	PTS: 1	REF: 15

39.	ANS: A	PTS: 1	REF: 16
40.	ANS: D	PTS: 1	REF: 16
41.	ANS: A	PTS: 1	REF: 17
42.	ANS: D	PTS: 1	REF: 18
43.	ANS: A	PTS: 1	REF: 19
44.	ANS: B	PTS: 1	REF: 20
45.	ANS: C	PTS: 1	REF: 21
46.	ANS: B	PTS: 1	REF: 21
47.	ANS: C	PTS: 1	REF: 22
48.	ANS: B	PTS: 1	REF: 24
49.	ANS: D	PTS: 1	REF: 24
50.	ANS: A	PTS: 1	REF: 25