

OPERATING SYSTEM QUESTIONS

1. What is the primary function of an operating system?

- A) Manage hardware and software resources
- B) Run applications
- C) Provide internet connectivity
- D) Store files and data

2. Which of the following is an example of a GUI-based operating system?

- A) Linux
- B) MS-DOS
- C) Windows
- D) UNIX

3. Which of the following is NOT a type of operating system?

- A) Single-tasking
- B) Multi-user

- C) Multi-core
- D) Real-time

4. What does the acronym "BIOS" stand for?

- A) Basic Integrated Operating System
- B) Basic Input Output System
- C) Binary Input Output System
- D) Basic Internal Operating System

5. Which of the following is the most common example of a mobile operating system?

- A) Android
- B) Windows 10
- C) macOS
- D) Ubuntu

6. What is the primary purpose of a file system in an operating system?

- A) To manage memory
- B) To manage hardware components
- C) To organize and store files
- D) To run programs

7. Which of the following operating systems is open-source?

- A) Windows
- B) macOS
- C) Linux
- D) Android

8. Which part of the operating system manages memory allocation?

- A) File System
- B) Kernel
- C) Shell
- D) User Interface

9. Which of the following is NOT an operating system service?

- A) Process management
- B) Disk management
- C) User interface
- D) File encryption

10. Which of these is an example of a real-time operating system (RTOS)?

- A) Windows 10
- B) IOS
- C) Linux
- D) VxWorks

11. Which of the following is a function of an OS scheduler?

- A) Manage user interface
- B) Allocate memory to applications
- C) Control hardware devices
- D) Schedule tasks for execution by the CPU

12. What is the purpose of virtual memory in an operating system?

- A) To store files in compressed format
- B) To simulate more RAM than physically available
- C) To store backup data
- D) To manage CPU scheduling

13. Which of the following is an example of a multitasking operating system?

- A) MS-DOS
- B) UNIX
- C) Windows 3.1
- D) Apple II OS

14. What is the main difference between a 32-bit and a 64-bit operating system?

- A) 64-bit OS supports more RAM
- B) 32-bit OS runs faster
- C) 64-bit OS is easier to install
- D) 32-bit OS can support more applications

15. Which of the following is an example of a command-line interface (CLI) operating system?

- A) Windows 10
- B) macOS
- C) MS-DOS
- D) Android

16. Which of the following is a function of the kernel in an operating system?

- A) Provide network services
- B) Manage user input
- C) Control hardware and resources
- D) Create user interfaces

17. Which of the following operating systems is primarily used on servers?

- A) Linux
- B) Windows Server
- C) Ubuntu
- D) Both A and B

18. What is the purpose of a device driver in an operating system?

- A) To manage data backups
- B) To control hardware devices
- C) To handle network communication
- D) To manage system resources

19. Which of the following is an example of a multi-user operating system?

- A) MS-DOS
- B) UNIX
- C) Windows 7
- D) IOS

20. Which of the following is NOT a type of operating system architecture?

- A) Monolithic
- B) Microkernel
- C) Client-server
- D) Multi-core

21. Which of the following is NOT a function of an operating system?

- A) Memory management
- B) Process scheduling
- C) User data backup
- D) Hardware control

22. Which of the following operating systems is based on the Linux kernel?

- A) Ubuntu
- B) Windows
- C) macOS
- D) Chrome OS

23. What is a system call in the context of an operating system?

- A) A method to call user programs
- B) A mechanism to request services from the kernel
- C) A way to allocate memory
- D) A process running in the background

24. Which of the following operating systems uses the "ZFS" file system?

- A) Linux
- B) macOS
- C) Solaris
- D) Windows

25. Which type of operating system is designed to manage embedded systems or small devices?

- A) Mobile OS
- B) Desktop OS
- C) Real-Time OS (RTOS)
- D) Server OS

26. Which of the following is a key feature of a distributed operating system?

- A) Single CPU management
- B) Resource sharing across multiple machines
- C) Centralized management of hardware
- D) Single user accessibility

27. What is the primary purpose of an operating system's "scheduler"?

- A) To ensure efficient memory allocation
- B) To decide which process runs next
- C) To manage hardware drivers
- D) To provide a graphical user interface

28. What does the "swap space" in an operating system refer to?

- A) Virtual memory stored on the hard drive
- B) A temporary storage location for files
- C) The area of memory dedicated to running applications
- D) A backup space for system files

29. Which of the following is an example of a batch processing operating system?

- A) UNIX
- B) IBM OS/360
- C) Windows 10
- D) macOS

30. Which of the following OS types allows users to run multiple applications simultaneously?

- A) Single-user OS
- B) Multi-tasking OS
- C) Embedded OS
- D) Time-sharing OS

31. Which of the following components of an OS interacts directly with hardware?

- A) Shell
- B) Kernel
- C) User interface
- D) File system

32. What is the function of a "kernel" in an operating system?

- A) User interface
- B) Process management
- C) Application software
- D) Hardware abstraction and resource management

33. Which of the following is an example of a peer-to-peer operating system?

- A) Windows XP
- B) Windows Server
- C) Linux
- D) MS-DOS

34. What does the acronym "GUI" stand for in the context of operating systems?

- A) General User Interface
- B) Graphical Uniform Interface
- C) Generalized User Interface
- D) Graphical User Interface

35. Which of the following is used to manage user accounts in an operating system?

- A) User Management Tool
- B) User Interface
- C) Access Control List
- D) File System

36. Which command is used to display the current directory in a Unix-based OS?

- A) cd
- B) pwd
- C) ls
- D) dir

37. What does the "task manager" in Windows allow a user to do?

- A) Manage storage devices
- B) Monitor and manage running processes
- C) Change system settings
- D) View hardware components

38. Which of the following is true about virtual machines in the context of an operating system?

- A) They allow multiple OS to run on a single hardware system
- B) They are slower than physical machines
- C) They can only run Windows operating systems
- D) They do not require a hypervisor

39. Which of the following is the primary difference between a process and a thread in an operating system?

- A) A thread is a lightweight process
- B) A process and a thread are the same
- C) A process cannot have multiple threads

- D) A thread consumes more memory than a process

40. Which of the following is an example of a multi-threaded operating system?

- A) Windows 95
- B) UNIX
- C) MS-DOS
- D) IBM OS/2

41. Which of the following file systems is commonly used in Linux-based operating systems?

- A) NTFS
- B) HFS+
- C) ext4
- D) FAT32

42. What is the purpose of the "inode" in a Linux file system?

- A) To store the contents of files
- B) To store metadata about files
- C) To keep track of file versions

- D) To assign user permissions to files

43. Which of the following is NOT a method of inter-process communication (IPC)?

- A) Message passing
- B) Shared memory
- C) File management
- D) Semaphore

44. Which type of operating system is designed to run on small, resource-constrained devices?

- A) Desktop OS
- B) Server OS
- C) Embedded OS
- D) Mobile OS

45. What is a "hypervisor" in the context of virtualization?

- A) A virtual operating system
- B) A tool for monitoring processes
- C) Software that creates and manages virtual machines

- D) A process scheduler

46. What is the main difference between a "monolithic" kernel and a "microkernel"?

- A) A monolithic kernel is smaller and faster
- B) A microkernel contains fewer system services than a monolithic kernel
- C) A monolithic kernel is less stable
- D) A microkernel runs in user space

47. Which of the following is the main purpose of a file system in an OS?

- A) To manage network communication
- B) To define how data is stored and retrieved
- C) To schedule processes
- D) To manage CPU time

48. Which of the following is a common characteristic of a cloud-based operating system?

- A) It operates primarily in a network environment
- B) It manages hardware directly
- C) It is designed to work on a single machine

- D) It requires constant updates from users

49. What is the primary function of a "shell" in an operating system?

- A) To manage network security
- B) To interact with the user via command-line or GUI
- C) To process and run applications
- D) To control the CPU

50. What is the purpose of system logs in an operating system?

- A) To store user data
- B) To keep track of system events and errors
- C) To monitor memory usage
- D) To run system processes