

## FBLA Computer Problem Solving Sample Questions

***Disclaimer:** These are sample test questions of what a competitor will find in this competition. To view the official study guide, with the knowledge area and objective list, visit the guidelines on the Competitive Events page of the national website at [www.fbla.org](http://www.fbla.org).*

### Operating Systems

1. Which operating system is open source and based on the Linux kernel?
  - a) Windows 11
  - b) macOS Ventura
  - c) Ubuntu
  - d) Chrome OS
2. In Windows, the file extension .bat refers to:
  - a) Batch file
  - b) Binary archive tool
  - c) Backup table
  - d) Basic application template
3. The Windows **Task Manager** is primarily used to:
  - a) Install new software
  - b) Manage running processes and system performance
  - c) Remove viruses
  - d) Back up the system registry
4. Which macOS feature allows you to quickly switch between open applications?
  - a) Spotlight Search
  - b) Finder
  - c) Mission Control
  - d) Dock Manager
5. Which type of software provides the interface between hardware and application programs?
  - a) Firmware
  - b) Operating system
  - c) Utility software
  - d) Application software
6. In Linux, the chmod command is used to:
  - a) Change file permissions
  - b) Create a new directory
  - c) Move files
  - d) Delete files
7. Which file system is default for modern Windows operating systems?
  - a) FAT32
  - b) NTFS
  - c) exFAT
  - d) HFS+

8. The macOS **Finder** is equivalent to Windows:
  - a) Control Panel
  - b) File Explorer
  - c) Command Prompt
  - d) Settings
9. The process of starting up a computer and loading the operating system is called:
  - a) Compiling
  - b) Booting
  - c) Formatting
  - d) Partitioning
10. Which Linux command lists the files in the current directory?
  - a) cp
  - b) ls
  - c) mv
  - d) dir

## Networks

11. What does IP in IP address stand for?
  - a) Internal Protocol
  - b) Internet Protocol
  - c) Interconnected Pathway
  - d) Integrated Packet
12. Which device connects multiple networks and directs data packets between them?
  - a) Switch
  - b) Router
  - c) Hub
  - d) Access Point
13. The standard frequency bands for Wi-Fi are:
  - a) 900 MHz and 1.8 GHz
  - b) 2.4 GHz and 5 GHz
  - c) 3 GHz and 7 GHz
  - d) 5 GHz and 10 GHz
14. In networking, what does LAN stand for?
  - a) Local Area Network
  - b) Large Application Node
  - c) Low Access Network
  - d) Linked Access Node
15. Which protocol is used for securely transferring files over a network?
  - a) FTP
  - b) HTTP
  - c) SFTP
  - d) SMTP

16. What is the primary function of a switch in a network?
- a) Broadcast data to all connected devices
  - b) Filter and forward data to specific devices based on MAC addresses
  - c) Assign IP addresses dynamically
  - d) Encrypt network traffic
17. IPv6 addresses are written in:
- a) Decimal
  - b) Binary
  - c) Hexadecimal
  - d) Octal
18. Which networking device amplifies signals to extend cable length?
- a) Modem
  - b) Repeater
  - c) Gateway
  - d) Patch Panel
19. Which port is typically used by HTTPS traffic?
- a) 21
  - b) 25
  - c) 80
  - d) 443
20. The process of dividing a network into smaller, isolated segments is called:
- a) Packet switching
  - b) Subnetting
  - c) Modulating
  - d) Encapsulation

### **Computer Hardware & Connectivity**

21. The CPU's main function is to:
- a) Store files
  - b) Execute instructions
  - c) Display images
  - d) Provide network access
22. Which type of memory is volatile and loses data when power is off?
- a) ROM
  - b) Flash memory
  - c) RAM
  - d) SSD
23. The BIOS is stored on:
- a) Hard drive
  - b) ROM chip
  - c) RAM
  - d) Optical disk

24. Which expansion slot is commonly used for graphics cards?
- a) AGP
  - b) PCI Express (PCIe)
  - c) ISA
  - d) DIMM
25. What is the standard connector type for most wired Ethernet cables?
- a) RJ-11
  - b) RJ-45
  - c) USB-C
  - d) HDMI
26. Which component converts AC power to DC power in a desktop computer?
- a) PSU
  - b) GPU
  - c) CPU
  - d) UPS
27. SSDs store data using:
- a) Magnetic platters
  - b) Optical lasers
  - c) Flash memory chips
  - d) Tape reels
28. Which type of display uses liquid crystals and a backlight?
- a) CRT
  - b) LCD
  - c) OLED
  - d) Plasma
29. The chipset on a motherboard controls communication between:
- a) CPU, RAM, and peripherals
  - b) GPU and monitor
  - c) HDD and SSD
  - d) PSU and cooling system
30. Which type of port is most commonly used for connecting modern external storage devices?
- a) VGA
  - b) HDMI
  - c) USB
  - d) PS/2

## Security

31. Which type of malware encrypts a user's data and demands payment?
- a) Worm
  - b) Ransomware
  - c) Spyware
  - d) Trojan

32. Two-factor authentication typically requires:
- a) A username and password
  - b) Two different passwords
  - c) Two distinct methods of verifying identity
  - d) Fingerprint only
33. Which is an example of a strong password?
- a) password123
  - b) Qwerty!@#
  - c) T9m\$7hB!2
  - d) 12345678
34. A firewall's main purpose is to:
- a) Detect and remove viruses
  - b) Block unauthorized access
  - c) Encrypt files
  - d) Monitor employee productivity
35. Which type of attack involves overwhelming a system with traffic to make it unavailable?
- a) Phishing
  - b) Brute force
  - c) DDoS
  - d) Spoofing
36. HTTPS ensures data security through:
- a) Compression
  - b) Encryption
  - c) Authentication
  - d) Verification
37. The principle of least privilege means:
- a) Giving users only the access they need
  - b) Denying all access
  - c) Giving admin rights to all users
  - d) Allowing unlimited access to data
38. Which of the following is a biometric security method?
- a) PIN
  - b) Password
  - c) Fingerprint scan
  - d) Security question

### **Laptops, Tablets, and Mobile Devices**

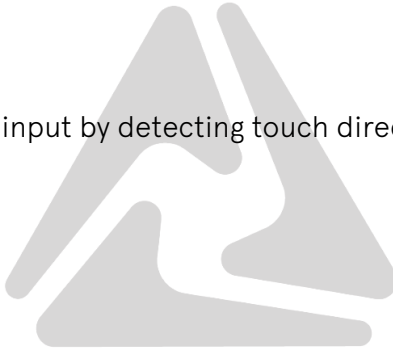
39. Which mobile OS is developed by Google?
- a) iOS
  - b) Windows Mobile
  - c) Android
  - d) HarmonyOS

40. The term "airplane mode" on mobile devices disables:
- a) Camera
  - b) Wireless communications
  - c) Installed apps
  - d) Battery charging
41. Which type of display is most common in smartphones for deep blacks and vibrant colors?
- a) LCD
  - b) LED
  - c) OLED
  - d) Plasma
42. Mobile tethering allows:
- a) Connecting a phone to a TV
  - b) Sharing a phone's internet connection with other devices
  - c) Charging devices wirelessly
  - d) Syncing files between devices
43. Which tablet feature adjusts the screen orientation automatically?
- a) Accelerometer
  - b) Gyroscope
  - c) Light sensor
  - d) GPS
44. Apple's proprietary charging connector for older devices is known as:
- a) USB-C
  - b) Lightning
  - c) 30-pin dock connector
  - d) MagSafe
45. The Secure Enclave in Apple devices is used for:
- a) Gaming performance
  - b) Hardware-based key management and encryption
  - c) Cloud backups
  - d) Camera enhancements

### Printers & Peripherals

46. Which type of printer uses powdered toner and heat to fuse images onto paper?
- a) Inkjet
  - b) Laser
  - c) Dot matrix
  - d) Thermal
47. The DPI specification for a printer refers to:
- a) Data per inch
  - b) Dots per inch
  - c) Display pixel integration
  - d) Disk print interface

48. An advantage of an inkjet printer over a laser printer is:
- a) Faster printing speeds
  - b) Lower cost for high-volume printing
  - c) Higher-quality photo printing
  - d) Longer-lasting cartridges
49. Which interface is most commonly used for connecting printers to computers today?
- a) Parallel port
  - b) USB
  - c) Serial port
  - d) PS/2
50. Which peripheral allows input by detecting touch directly on the screen?
- a) Touchpad
  - b) Stylus
  - c) Touchscreen
  - d) Digitizer



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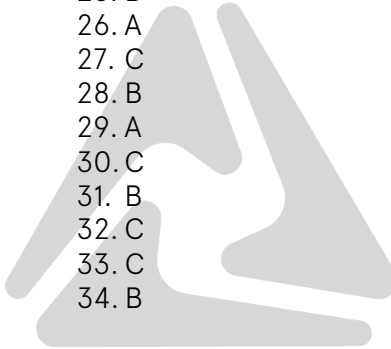
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## Answer Key

1. C
2. A
3. B
4. C
5. B
6. A
7. B
8. B
9. B
10. B
11. B
12. B
13. B
14. A
15. C
16. B
17. C

18. B
19. D
20. B
21. B
22. C
23. B
24. B
25. B
26. A
27. C
28. B
29. A
30. C
31. B
32. C
33. C
34. B

35. C
36. B
37. A
38. C
39. C
40. B
41. C
42. B
43. A
44. C
45. B
46. B
47. B
48. C
49. B
50. C



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