**Member ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Rank: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**



**Device Configuration and Troubleshooting**

(305)

**REGIONAL 2024**

**CONCEPT KNOWLEDGE:**

Multiple Choice (50 @ 2 points each) \_\_\_\_\_\_\_\_\_\_\_\_\_ (100 points)

**Test Time: 60 minutes**

**GENERAL GUIDELINES:**

*Failure to adhere to any of the following rules will result in disqualification:*

1. Member must hand in this test booklet and all printouts if any. Failure to do so will result in disqualification.
2. No equipment, supplies, or materials other than those specified for this event are allowed in the testing area. No previous BPA tests and/or sample tests (handwritten, photocopied, or keyed) are allowed in the testing area.
3. Electronic devices will be monitored according to ACT standards.

**Multiple Choice Questions**

*Directions:* Identify the letter of the choice that best completes the statement or answers the question.

1. Which of the following is NOT a type of storage device?
   1. IDE
   2. SATA
   3. SCSI
   4. USB Type-C
2. Which type of cable is commonly used to connect IDE devices?
   1. USB Type-C
   2. HDMI
   3. IDE ribbon cable
   4. Ethernet cable
3. SATA is an abbreviation for:
   1. Serial Advanced Technology Attachment
   2. Secure Advanced Transfer Algorithm
   3. Systematic ATA Adapter
   4. Simplified Access to Attached Devices
4. Which type of storage device is known for its fast data transfer rates and hot-swapping capabilities?
   1. IDE
   2. SCSI
   3. SATA
   4. USB Type-C
5. What is a notable feature of USB Type-C connectors?
   1. Reversible plug orientation
   2. Exclusive compatibility with USB 2.0 devices
   3. Limited data transfer speed
   4. Inability to deliver power
6. Which of the following devices would most likely use an IDE interface?
   1. Solid-state drive (SSD)
   2. Blu-ray drive
   3. External hard drive
   4. USB flash drive
7. SATA interfaces are commonly found in:
   1. Laptops and desktop computers
   2. Gaming consoles
   3. Printers and scanners
   4. Smartphones and tablets
8. USB Type-C supports which of the following features?
   1. Power delivery
   2. Audio output
   3. Video input
   4. Parallel data transfer
9. Which of the following interfaces is the oldest?
   1. IDE
   2. SATA
   3. SCSI
   4. USB Type-C
10. Which component is responsible for processing data in a computer system?
    1. CPU
    2. GPU
    3. RAM
    4. SSD

11. Which component stores instructions and data that the CPU needs to access quickly?

1. Hard Drive
2. RAM
3. Power Supply
4. Motherboard

12. Which component is primarily responsible for displaying images on a computer screen?

* 1. GPU
  2. CPU
  3. SSD
  4. PSU

13. Which component connects all other components of a computer together?

1. CPU
2. Motherboard
3. SSD
4. GPU

14. Which component is responsible for converting AC power from the wall outlet to DC power for the computer?

1. Power Supply
2. CPU
3. GPU
4. RAM

15. Which component is responsible for providing a temporary power supply to keep the computer running during power outages?

1. Battery
2. UPS
3. PSU
4. RAM

16. Which component is responsible for storing the computer's date, time, and BIOS settings?

1. CPU
2. RAM
3. Motherboard
4. CMOS Battery

17. When troubleshooting a non-functional USB port, which of the following should you check first?

1. Device drivers
2. USB cable
3. Power supply
4. Port settings

18. A user connects a printer to their computer, but the computer does not recognize the printer. What is the most likely cause of the issue?

1. Faulty printer driver
2. USB port malfunction
3. Incorrect printer configuration
4. Printer firmware update required

19. What should you do if a peripheral device connected to a USB port is not working?

1. Restart the computer
2. Reinstall the operating system
3. Check for firmware updates
4. Replace the USB port

20. If a laptop's audio output port is not working, which of the following actions should you take?

1. Install audio drivers
2. Connect external speakers
3. Replace the sound card
4. Check audio settings

21. When troubleshooting a non-responsive network port, which of the following should you verify first?

1. Network cable connectivity
2. Power outlet functionality
3. Network switch configuration
4. Router firmware version

22. A user reports that their webcam is not functioning when connected to a USB port. What should you check first?

1. Webcam driver installation
2. USB port power output
3. Webcam compatibility with the operating system
4. Webcam firmware version

23. Which of the following is an example of an input device?

1. Printer
2. Scanner
3. Speaker
4. Monitor

24. What is the purpose of a graphics tablet?

1. Outputting visual data
2. Storing digital files
3. Inputting handwritten drawings
4. Displaying images

25. Which peripheral device is commonly used for video conferencing?

1. Printer
2. Webcam
3. Speaker
4. Scanner

26. What is the function of a joystick?

1. Inputting text
2. Controlling cursor movement
3. Printing documents
4. Scanning images

27. Which device allows you to connect multiple computers to a network?

1. Router
2. Monitor
3. Printer
4. Keyboard

28. Which peripheral device enables the printing of physical copies of documents?

1. Mouse
2. Monitor
3. Printer
4. Speaker

29. When troubleshooting a network issue, which tool can help identify connectivity problems?

1. Screwdriver
2. Multimeter
3. Cable tester
4. Scissors

30. Which of the following is an example of preventative maintenance for a computer?

1. Regularly defragmenting the hard drive
2. Forgetting to install antivirus software
3. Running multiple resource-intensive programs simultaneously
4. Leaving the computer running for weeks without rest

31. Which of the following can be a symptom of a failing hard drive?

1. Faster system performance
2. Loud grinding noises
3. Blue screen errors
4. Smoother video playback

32. What is an example of preventative maintenance for a smartphone?

1. Not installing any updates
2. Keeping the device in extreme temperatures
3. Regularly clearing cache and temporary files
4. Using the device with a low battery constantly

33. What can cause a computer to overheat?

1. Placing it on a flat surface
2. Using it in an air-conditioned room
3. Dust accumulation in the cooling system
4. Running energy-efficient software

34. Which of the following is a good practice for preventing data loss?

1. Storing all files in a single folder
2. Regularly creating backups
3. Opening suspicious email attachments
4. Disabling antivirus software

35. How can you prevent static electricity damage to computer components?

1. Touching metal objects before handling components
2. Working on a carpeted surface
3. Ignoring static precautions
4. Wearing wool clothing while working

36. Which of the following can be a sign of malware infection?

1. Smooth system performance
2. Unwanted pop-up advertisements
3. Up-to-date antivirus software
4. Decreased internet speed

37. What is the purpose of firmware updates in preventative maintenance?

1. To improve hardware compatibility
2. To decrease system security
3. To reduce system stability
4. To disable system features

38. What is a common step to take when troubleshooting a mobile device with poor battery life?

1. Overcharging the device
2. Closing all running apps
3. Disabling power-saving features
4. Resetting the device to factory settings

39. Which operating system is open source and freely available to use?

1. Windows
2. Linux
3. macOS
4. Android

40. Which of the following file systems is commonly used in Windows installations?

1. NTFS
2. Ext4
3. FAT32
4. HFS+

41. Which of the following is an example of a package manager used in Linux distributions?

1. App Store
2. Google Play Store
3. Synaptic
4. Microsoft Store

42. Which utility is used to upgrade Windows to a newer version while preserving files and settings?

1. Windows Update
2. Windows Upgrade Assistant
3. Control Panel
4. Windows Store

43. Which utility is used to create a bootable USB drive for installing Windows?

1. Rufus
2. Disk Utility
3. Etcher
4. dd

44. Which utility is used to uninstall software programs in Windows?

1. Control Panel
2. Windows Store
3. App Cleaner
4. Software Center

45. Which of the following is a popular command-line text editor in Linux?

1. Notepad
2. Word
3. nano
4. TextEdit

46. Which operating system is commonly used for gaming?

1. Windows
2. Linux
3. macOS
4. Chrome OS

47. Which utility is used to check the disk for errors and repair them in Windows?

1. Disk Utility
2. chkdsk
3. fsck
4. scandisk

48. Which of the following is a common Linux package format?

1. EXE
2. MSI
3. RPM
4. DMG

49. Which operating system is known for its strong focus on security and privacy?

1. Windows
2. Linux
3. macOS
4. Android

50. Which of the following components is responsible for initiating the boot process in a computer system?

1. BIOS
2. CPU
3. RAM
4. Hard Drive