

Member ID: _____

Time: _____

Rank: _____



DEVICE CONFIGURATION & TROUBLESHOOTING (305)

REGIONAL 2023

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.

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

- 1) If you opened your laptop to expose components, what type of persistent storage are you likely to see?
 - A. Read-only rope memory
 - B. Tape drive
 - C. M.2
 - D. Floppy drive
- 2) Which of these is true about DIMMs?
 - A. SO-DIMMs are most often used in enterprise level devices.
 - B. Different DIMMs are specific keyed form factors that only fit on the motherboard slots in one way.
 - C. SO-DIMM, RDIMM, UDIMM, and LRDIMM are all interchangeable.
 - D. None of these are true.
- 3) Which of these is true regarding GPT?
 - A. Only 2 partitions are supported
 - B. It can be on the same disk as MBR
 - C. FAT32 is the preferred formatting
 - D. NTFS is the preferred formatting.
- 4) You are troubleshooting a system that has a service that has stopped running. What is the best tool to use to begin troubleshooting?
 - A. Perfmon
 - B. Task Manager
 - C. msconfig
 - D. Event Viewer
- 5) If a system is in BIOS boot mode with a Windows OS, what type of partition is the system booting from?
 - A. MBR
 - B. GPT
 - C. UEFI
 - D. VBR
- 6) After installing Windows, your wireless headset is not working. What would be the best first step to take to troubleshoot this issue?
 - A. Install custom software and management applications
 - B. Install Windows Updates
 - C. Install device drivers
 - D. Buy a new headset

- 7) What type of port is commonly used with an ethernet cable?
 - A. DVI
 - B. RJ45
 - C. Serial
 - D. VGA
- 8) What port is the commonly used for data transfer?
 - A. USB
 - B. VGA
 - C. Serial
 - D. DVI
- 9) What peripheral would NOT connect to an USB port without an adaptor?
 - A. Mouse
 - B. Headphones
 - C. Printer
 - D. Ethernet cable
- 10) What purpose does the RJ45 port serve?
 - A. Phone Line for an integrated Fax Modem
 - B. Audio Output for Digital Fiber-Optic Audio Systems
 - C. Networking
 - D. Integrated Graphics
- 11) This measurement unit is used to measure the speed of system components and represents the number of “clock” cycles per second they perform.
 - A. BPS
 - B. Volts
 - C. Hertz
 - D. RPS
- 12) Windows 11 requires how much system memory for a 64-Bit installation (minimum)?
 - A. 8GB
 - B. 2GB
 - C. 4GB
 - D. 1GB
- 13) Which of the following are valid capacities for a single stick of RAM?
 - A. 8 GBs
 - B. 15 GBs
 - C. 10 GBs
 - D. 18 GBs

- 14) If a user has added a new hard drive to their system but doesn't see it available to use in Windows Explorer, what tool would initialize it and allow them to format it?
- A. Disk Explorer
 - B. System Formatter
 - C. Storage Management
 - D. Disk Management
- 15) What is the maximum size for a disk whose partition data is stored using a Master Boot Record?
- A. 300GBs
 - B. 9 TBs
 - C. 10 TBs
 - D. 2 TBs
- 16) When a permission is assigned to a folder, does that permission also get applied to its subfolders?
- A. True
 - B. False
- 17) A user indicates that they cannot power on their system. They can see lights on the motherboard, but they can't hear fans spinning. There is no network activity. When a monitor is attached, they cannot see anything displayed. What scenario does this describe?
- A. No Boot
 - B. No POST/No Video
 - C. No Power
 - D. No POST
- 18) Which of the following processes are Data-Destructive?
- A. CHKDSK
 - B. Format
 - C. Bootrec.exe
 - D. A and C
- 19) Convert the number decimal 99 to binary.
- A. 1011110
 - B. 1111110
 - C. 1100011
 - D. 0010010
- 20) What tool is used to determine if a remote system is reachable over a network?
- A. NETTEST
 - B. DNS
 - C. HTTPS
 - D. PING

- 21) When installing a printer or scanner, what utility in Windows should one use?
- A. Printer Installer and Manager
 - B. Task Manager
 - C. Device Manager
 - D. Devices and Printers
- 22) The keyboard shortcut for “Cut” in most word processor applications is which combination below:
- A. Ctrl+Alt+C
 - B. Ctrl+C
 - C. Ctrl+Z
 - D. Ctrl+X
- 23) Data is encapsulated into what unit on a network?
- A. Pings
 - B. Packets
 - C. Cells
 - D. Octets
- 24) System memory capable of recovering from a single-bit error is using which of the following technologies?
- A. Internal Parity Correction
 - B. Automatic Registry Cleaning
 - C. Memory Corruption Detection
 - D. Error Correction Code
- 25) What type of printer uses negatively charged areas on a metallic drum to pick up toner which is then bonded to the paper using pressure from a heated roller?
- A. Impact
 - B. Inkjet
 - C. Laser
 - D. Thermal
- 26) A file that can be mounted in Windows as a Virtual CD/DVD, also known as a Disk Image, might have which file extension?
- A. .jpg
 - B. .iso
 - C. .zip
 - D. .dsk

- 27) When troubleshooting a system that will not complete POST or display video, which of the following steps would be the best for you perform first before attempting to power on again?
- A. Remove all system memory
 - B. Remove the internal SATA hard drive
 - C. Remove the USB Keyboard
 - D. Remove the video card
- 28) A collection of previously released updates, fixes, security patches and enhancements that helps make Windows more reliable is called ____.
- A. A critical update
 - B. A security patch
 - C. A new version of Windows
 - D. A service pack
- 29) As a Linux operator, how would you display the file and directory contents of your current directory?
- A. cd
 - B. ls
 - C. chmod
 - D. grep
- 30) Which of the following cable types is used with an RJ-45 Connector for Ethernet networks?
- A. CAT-3
 - B. CAT-5e
 - C. Coaxial
 - D. Ribbon
- 31) As a Windows administrator managing a Group Policy for a group of workstation devices, what command would be best to use to apply updates to the group policy without rebooting the workstation?
- A. ipconfig
 - B. defrag
 - C. reboot
 - D. gpupdate
- 32) Which service is responsible for translating hostnames to IP addresses and vice versa?
- A. DHCP
 - B. IPv6
 - C. DNS
 - D. SNMP

- 33) You are configuring a setup for an end user to utilize a VOIP connection. The switch supports VOIP without the device needing its own external power. What is this feature called?
- A. QoS
 - B. VLAN
 - C. VLT
 - D. PoE
- 34) You are building a workstation that will specifically be used for virtualization. What are the most important hardware components to consider when building this workstation?
- A. A fast specialized GPU.
 - B. A CPU with a high number of cores.
 - C. Having lots of USB ports.
 - D. Additional network cards.
- 35) An end user comes to you because they are unable to get their Windows workstation to print anything to the locally connected printer. You have confirmed the printer is working and the printer is available to the workstation. What would be the best next step to continue troubleshooting?
- A. Delete the printer drivers and install again.
 - B. Install a known-good printer cable to the workstation and printer.
 - C. Clear the print queue and restart the printing service.
 - D. Replace the printer.
- 36) Which of the following would NOT meet the minimum requirements to install Windows 10 32-bit?
- A. 1 GHz CPU
 - B. 1 GB RAM
 - C. 15 GB hard disk space
 - D. 800 x 600 display
- 37) Your system is running slowly, and you suspect the issue may be not having enough memory. What tool allows you to quickly view real time performance information?
- A. Task Manager
 - B. Event Viewer
 - C. Task Scheduler
 - D. Device Manager
- 38) What does NOT cause a Windows Blue Screen error?
- A. Faulty hardware
 - B. Bad device drivers
 - C. Software errors
 - D. Printer errors

- 39) Which of the following is NOT a safe place for an ESD-sensitive component?
- A. On top of an anti-static bag
 - B. On top of a grounded anti-static mat
 - C. In your hand while wearing a grounded anti-static wrist strap
 - D. On top of anti-static foam
- 40) You need to add a list of pre-approved websites to allow pop-ups in Microsoft Edge. What is the fastest way to accomplish this?
- A. Navigate to each web site and click the "pop up blocked" icon near the URL bar and select "always allow from this site".
 - B. Navigate to Control Panel > Security > Pop-up Blocker > Settings
 - C. In Edge select Settings > Cookies and site permissions > Pop-ups and redirects > Allow > Add
 - D. In Edge select Settings > Privacy, search, and services > Pop-ups and redirects > Allow > Add
- 41) When setting up a wireless network for your office, what device would be best to support the most wireless end users possible?
- A. access point
 - B. managed switch
 - C. router
 - D. network hub
- 42) A user has forgotten their password to access their Linux system. What command would you use to alter the user's password?
- A. passwordchg
 - B. passwd
 - C. pw
 - D. pwd
- 43) Which of the following components can be installed or removed while the PC is turned on?
- A. RAM
 - B. CPU
 - C. GPU
 - D. External Hard Drive
- 44) Insulators should be at least ____ away from your workstation when working with ESD sensitive components.
- A. 6 inches
 - B. 12 inches
 - C. 18 inches
 - D. 24 inches

- 45) Which one of these is not a primary function of the Basic Input/Output System?
- A. Scans for a boot device and hands off to the best OS available.
 - B. Checks the hardware health for any errors.
 - C. Initializes firmware for the hardware devices.
 - D. Scans the drive media for block errors.
- 46) You are an administrator of a Linux environment. One of the user systems you are working on requires you to have administrative access to the OS. What command can you use to grant temporary administrative access?
- A. chmod
 - B. sudo
 - C. usrmod
 - D. chown
- 47) Which of the following is one of the requirements to install Ubuntu Linux on a workstation?
- A. Confirm you have a network card installed in the workstation.
 - B. Confirm you have a DVD or USB drive available with the version of Ubuntu you are installing.
 - C. Confirm you have access to a command line guide to navigate within the terminal.
 - D. Confirm you have a sound card installed in the workstation.
- 48) What type of cables do Ethernet RJ45 utilize?
- A. Twisted pair copper cables
 - B. Coaxial cables
 - C. Fiber optic cables
 - D. Ribbon cables
- 49) What tool will allow you to change a service's startup type?
- A. Perfmon
 - B. Task Manager
 - C. Services
 - D. Msconfig
- 50) For which of these would you use Device Manager?
- A. Installing and updating applications
 - B. Installing and updating programs
 - C. Installing and updating drivers
 - D. All of the other answers are correct