Rank: _____

PC SERVICING & TROUBLESHOOTING (305)

REGIONAL – 2014

_____(500)

TOTAL POINTS

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

- 1. Contestant must hand in this test booklet and all printouts. 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 or facsimile (handwritten, photocopied, or keyed) are allowed in the testing area.
- 3. Electronic devices will be monitored according to ACT standards.

No more than 60 minutes testing time

Property of Business Professionals of America. May be reproduced only for use in the Business Professionals of America *Workplace Skills Assessment Program* competition. Answer the multiple choice questions using the Scantron scoring sheet provided. Write your contestant number, along with the contest number on the scantron sheet. (10 pts. each)

- 1. Which type of printer uses a drum, plastic toner, and fuser to create a printed page?
 - a. Dot matrix
 - b. Ink jet
 - c. Laser
 - d. Dye sublimation
- 2. What method does a DVD drive use for storing data?
 - a. Magnetic film
 - b. Reflective surface and optical readers
 - c. Reprogrammable memory
 - d. Magnetic disks and platters
- 3. You have a PSU configured to receive 110 volts. How can you configure the PSU to receive 220 volts?
 - a. Edit the BIOS and modify the voltage input setting
 - b. Purchase a PSU that is compatible with the European voltage of 220
 - c. Move the power selector switch on the PSU to the different voltage
 - d. Purchase a voltage converter
- 4. Which of the following types of cards are attached to the mobo and have expansion cards plug into them instead of the mobo?
 - a. PCMCIA
 - b. Riser
 - c. Communicator
 - d. NIC
- 5. Which of the following components is necessary to save system settings when you power off the computer?
 - a. Jumpers
 - b. CMOS battery
 - c. Northbridge chip
 - d. BIOS password
- 6. You have been asked to recommend a printer that will be used by an auto parts shop. The printer will be used to print invoices. Each invoice has three pages and the same information must show up on all three pages with a single pass of the printer. Which printer type would you recommend?
 - a. Ink Jet
 - b. Laser
 - c. Impact
 - d. Dye sublimation

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- 7. What is the name for the routine that tests the mobo, RAM, disk controllers, video, keyboard and other system hardware?
 - a. SATA
 - b. CMOS
 - c. BIOS
 - d. POST
- 8. You want to build a new gaming desktop computer that is portable so you can easily take it to gaming parties. Which of the following form factors would you likely select?
 - a. Micro-ATX
 - b. NLX
 - c. BTX
 - d. Baby-AT
- 9. Which of the following is an error detection technique that can also correct the error?
 - a. Parity
 - b. EDO
 - c. Non-parity
 - d. ECC
- 10. Which tool in Windows lets you perform automatic backups at regular times?
 - a. Device Manager
 - b. Event Manager
 - c. Scheduled Tasks
 - d. Task Manager
- 11. Which of the following refers to an online device to protect against under voltages?
 - a. SPS
 - b. Line conditioner
 - c. UPS
 - d. Surge protector
- 12. Which of the following should you do if you cannot turn a laptop off?
 - a. Unplug the AC power
 - b. Remove the battery
 - c. Disconnect the keyboard
 - d. Unplug the AC power and remove the battery
- 13. What does a beeping from the UPS mean:
 - a. The UPS is not connected to the computer
 - b. The computer is running on the UPS battery power
 - c. The computer is about to shut down
 - d. The UPS battery is no longer able to hold a charge

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- 14. Lately your computer is spontaneously rebooting and freezing. What is the most likely cause?
 - a. Overheated CPU
 - b. Bad NIC
 - c. Failed UPS
 - d. Failing CD-Rom drive
- 15. While you are manning the phones, a customer calls and complains that he cannot print to the workgroup laser printer. Which of the following should be the first question you ask?
 - a. Have you checked the cables?
 - b. Have you ever printed to that printer?
 - c. Have you rebooted the printer?
 - d. Have you rebooted and chosen safe mode?
- 16. What happens when you run Disk Defragmenter?
 - a. Increases the size of the hard drive
 - b. Doubles RAM
 - c. Speeds up performance
 - d. Spaces programs all over the hard drive
- 17. You have just connected four new computers to an Ethernet switch using spare patch cables. After the installation, only three computers are able to access the network. What is the first action you should take?
 - a. Check the Event Viewer
 - b. Inspect the patch cables for wear
 - c. Open the case and remove the NIC
 - d. Turn the Ethernet switch off and on
- 18. Aero is a feature of which Windows version?
 - a. Windows Vista
 - b. Windows Vista and Windows 7
 - c. Windows XP, Windows Vista, and Windows 7
 - d. Windows XP and Windows Vista
- 19. You have a small network of computers all running Windows 7. You have created a HomeGroup for your network. You have a laptop that you use at work running Windows 7 Professional. You connect the laptop to the network. You are unable to see shared files on other computers. What should you do?
 - a. Set the profile for the network connection to HomeGroup.
 - b. Create a HomeGroup on the laptop and add the other computers to that HomeGroup.
 - c. Reconfigure NTFS permissions on all shared resources.
 - d. Join the laptop to the HomeGroup.

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- 20. Which Windows version(s) include the following features: Flip 3D, Gadgets, Snap, and Peek?
 - a. Windows 7
 - b. Windows Vista
 - c. Windows Vista and Windows 7
 - d. Windows XP, Windows Vista and Windows 7
- 21. Which of the following reasons would justify doing a clean installation of Windows 7 Professional instead of performing an upgrade?
 - a. You want to dual boot.
 - b. You are running Windows Vista.
 - c. You want to keep existing applications and preferences as they are.
 - d. You want to preserve local accounts created under Windows XP.
- 22. One of the programs that launches automatically at startup is causing your Windows XP computer to lock up. You have examined the Startup folder, and the problem application is not present. Which Windows utility should you use to prevent the program from starting automatically?
 - a. Add/Remove Programs Control Panel applet
 - b. Msconfig.exe
 - c. Recover Console
 - d. System Information
- 23. You have a file which you would like other users to see, but not modify. Which file attribute should you use?
 - a. R
 - b. A
 - с. Н
 - d. S
- 24. You have a computer running Windows Vista Business that you would like to upgrade to Windows 7 Ultimate. You want to perform the upgrade with the least amount of effort and cost. What should you do?
 - a. Purchase an upgrade version of Windows 7; perform an in-place upgrade.
 - b. Purchase a full version of Windows 7; perform a new or custom installation.
 - c. Purchase a full version of Windows 7; perform an in-place upgrade.
 - d. Purchase an upgrade version of Windows 7; perform a new or custom installation.
- 25. You were attempting to tweak the OS when you accidentally corrupted the system. It will no longer boot to a logon prompt. After pressing F8, which option should you choose first?
 - a. Safe Mode
 - b. Last Known Good Configuration
 - c. Safe Mode with Command Prompt
 - d. Boot Normally

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- 26. Which term describes a PC card that you can insert and remove without rebooting the computer?
 - a. Plug and Play
 - b. AT attachment
 - c. Hot-swappable
 - d. Hot-plug
- 27. Which feature allows a tablet to recognize multiple finger touches at the same time?
 - a. Accelerometer
 - b. Multi-touch
 - c. Gyroscope
 - d. Resistive touch screen
- 28. You want to enable a screen saver password on your Windows 7 PC. Which Control Panel option should you use to do this?
 - a. Power Options
 - b. Personalization
 - c. System and Security
 - d. Windows Firewall
- 29. Which of the following is *not* a form of biometrics?
 - a. Face recognition
 - b. Fingerprint
 - c. Retina scan
 - d. Token device
- 30. You have received an e-mail from your bank with a link asking you to provide your username and password. Upon investigation, you discover the bank did not send this e-mail. What kind of attack just occurred?'
 - a. Piggybacking
 - b. Smurf
 - c. Denial of service
 - d. Phishing
- 31. Which of the following forms of network is highly susceptible to data interception and must be secured accordingly?
 - a. Satellite
 - b. DSL
 - c. Wireless
 - d. Dial-up
- 32. What is the best countermeasure against social engineering?
 - a. User awareness training
 - b. Acceptable use policy
 - c. Strong passwords
 - d. Access auditing

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- 33. Which LCD component is used to illuminate a notebook computer's display?
 - a. Backlight
 - b. Inverter
 - c. Transformer
 - d. Liquid crystals
- 34. Which term refers to a situation where two files try to claim the same cluster on the hard disk?
 - a. S.M.A.R.T. error
 - b. Corrupt MBR
 - c. Cross-linked clusters
 - d. Lost clusters
- 35. Which Windows 7 operating system startup component replaces the boot.ini file that was used by earlier versions of Windows?
 - a. Boot Configuration Data
 - b. Windows Boot Manager
 - c. Winload.exe
 - d. Bcdedit.exe
- 36. You are troubleshooting a computer running Windows 7. The operating system has halted and a blue screen has been displayed on the monitor with an error message. What is the first step you should take in troubleshooting the issue?
 - a. Search for the error in Microsoft's knowledgebase or in a search engine on the Internet.
 - b. Uninstall the last application that was installed.
 - c. Remove all memory modules and replace them one at a time until the error reappears.
 - d. Update the BIOS.
- 37. Which of the following tasks would you complete as part of a SATA installation?
 - a. Configure the device ID using a jumper.
 - b. Use the 4-pin molex power connector.
 - c. Use the 15-pin power connector.
 - d. Set the master/slave relationship using a jumper.
- 38. You are in the process of buying a new computer. You would like to configure your computer to use Crossfire to improve performance when playing your favorite game. Which of the following will be part of the configuration process?
 - a. Purchase two identical video cards.
 - b. Purchase a video card that supports the NTSC standards.
 - c. Purchase a video card that supports HDCP.
 - d. Purchase a video card that supports the ATSC standards.

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- 39. You want to purchase a motherboard that has built-in digital audio output. Which port would you likely find on the motherboard faceplate that indicates digital audio support?
 - a. DB-25
 - b. DB-15
 - c. S/PDIF
 - d. Mini-DIN
- 40. A user on your network has been moved to another office down the hall. After the move, she calls you complaining that she has only occasional network access through her wireless connection. Which of the following is most likely the cause of the problem?
 - a. The client system has moved too far away from the access point.
 - b. The client has incorrect WPA2 settings.
 - c. The encryption level has been erroneously set back to the default settings.
 - d. An SSID mismatch between the client and the server.
- 41. Which connector is used with unshielded twisted pair (UTP) cable?
 - a. BNC
 - b. DIX
 - c. RJ-45
 - d. AUI
- 42. What protocol is used to send e-mail messages from a mail client to a mail server?
 - a. SNMP
 - b. POP3
 - c. IMAP
 - d. SMTP
- 43. Which of the following situations is likely to require a system BIOS upgrade?
 - a. You are upgrading a modem.
 - b. You are upgrading a processor.
 - c. You are upgrading a sound card.
 - d. You are upgrading a network card.
- 44. Which of the following devices can store large amounts of electricity even when unplugged?
 - a. DVD optical drive
 - b. Hard disk drive
 - c. CRT monitor
 - d. LCD monitor

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- 45. While on a service call at a customer site, you are discussing the problem with the customer when your cell phone rings. You check the caller ID and you see that the call is not work-related. What is the most professional way to handle the situation?
 - a. Answer the phone by saying, "I'm busy right now, I'll call you right back."
 - b. Immediately forward the call to voicemail.
 - c. Ask the customer to excuse you, and then step into the hallway to briefly take the call.
 - d. Ignore the phone; let it continue until the caller reaches your voicemail.
- 46. Which tool lets you view and directly edit the registry?
 - a. Msconfig
 - b. Msinfo32
 - c. Regedit
 - d. System Configuration Utility
- 47. What is the purpose of the dxdiag tool?
 - a. Configure your system to enable optimal troubleshooting and diagnosis of technical issues with your computer.
 - b. Gather information about your computer and to diagnose issues with your computer.
 - c. View information related to DirectX operation.
 - d. View logs about programs, system events, and security.
- 48. You have a computer running the original version of Windows 7. You would like to take advantage of several new features available in SP2. How can you do this?
 - a. Download and install SP1, then download and install SP2.
 - b. Download and install SP2.
 - c. Download and manually install each individual feature needed.
 - d. Purchase a new version of Windows 7 that already has SP2 installed.
- 49. Which tool can you use to view, but not modify, hardware and software configuration information for your computer?
 - a. Regedit
 - b. Msinfo32
 - c. Advanced System Settings
 - d. Msconfig.exe
- 50. You have implemented a regular backup schedule for your Windows server, backing up all data every weekend with incremental backups every other night. Your company has decided against storing backup tapes at an offsite location. Where would be the next best place to keep your backup tapes?
 - a. Locked in a room away from the server room.
 - b. In a fireproof, locked safe.
 - c. On a shelf next to the backup device in the server room.
 - d. In a drawer in your office.