

# INFORMATION TECHNOLOGY CONCEPTS (56)

REGIONAL 2011

CONTESTANT ID# \_\_\_\_\_ START TIME \_\_\_\_\_ END TIME \_\_\_\_\_



TOTAL POINTS \_\_\_\_\_ (500)

10 POINTS EACH

***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

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*Workplace Skills Assessment Program* competition.

1. John installed a TWAIN-compliant scanner on a user's computer. He tested the scanner to verify that it works. What should he do next?
  - a. Give the user the instruction manual for the scanner and leave.
  - b. Instruct the user that the scanner should work with any TWAIN-compliant application.
  - c. Ask the user if they understand TWAIN.
  - d. Instruct the user how to use the scanner and have the user try out the scanner before you leave.
  
2. You have a client that connects to the Internet using a slow speed connecting from time to time while traveling. Though he wants to make sure that the computer is updated with security updates in a timely manner, but does not want the computer to download updates when he is connected through a slow link to the Internet. What can you do?
  - a. On the automatic Updates tab, select Automatic (recommended).
  - b. On the Automatic Updates tab, select Download updates for me, but let me choose when to install them.
  - c. On the Automatic Updates tab, select Notify me but don't automatically download or install them.
  - d. On the Automatic Update tab, turn off automatic updates.
  
3. What should be done before cleaning a fuser assembly?
  - a. Shut down and unplug the computer.
  - b. Shut down the computer and unplug the printer cable.
  - c. Turn off the printer and let it cool down.
  - d. Attach an ESD strap to the printer's casing, and then turn off the printer.
  
4. What utility would you use to view errors reported by the operating system components?
  - a. Event Viewer Application log.
  - b. Event Viewer System log.
  - c. System monitor.
  - d. System information.
  
5. A client reports memory errors. Which utility will allow you to determine how much physical memory is installed, how much is currently being used, and the size of the paging file on the computer running Windows XP?
  - a. System Information utility
  - b. System Control Panel utility
  - c. Msconfig
  - d. Task Manager
  
6. Client has three shifts and each shift will be using the same computer loaded with windows XP. How would you limit the amount of disc space each user can use?

- a. Enable disk quotas in the hard disk properties.
  - b. Define disk quotas on the My Documents folder for each user.
  - c. Define disk quotas in the default user profile.
  - d. Define disk quota on the documents and settings folder.
7. Jose installed second hard disk drive to his system by adding a second drive on the existing IDE cable. When he restarted the computer and entered the BIOS configuration program, it is not detecting either drive, even though both hard drives are spinning. What most likely is the problem?
- a. The new drive is defective.
  - b. The power cable to the new drive is not connected.
  - c. The IDE cable is defective.
  - d. You need to set one drive to master and the other drive to slave.
8. A customer reports that the B key sometimes will not register or registers multiple times. The problem only affects the B key. What should be done to fix the problem?
- a. Install a new keyboard.
  - b. Install a new keyboard driver.
  - c. Check the keyboard for dust and/or debris around the B key.
  - d. Use Accessibility Options to disable Sticky keys.
9. When you are finished running a FTP session from the command line, which command will properly terminate the session?
- a. LOGOUT
  - b. EXIT
  - c. BYE
  - d. FTP
10. You are operating with a cordless mouse, but it is not operating. The light does not come on. What should you do to get it to work properly?
- a. Verify that the mouse has a line of sight with the computer.
  - b. Check the Power Options settings.
  - c. Install a new mouse driver.
  - d. Check the batteries.

11. What does the red "X" mark over a device icon indicate in Device Manager?
  - a. The device is not on the HCL.
  - b. The device driver has a resource conflict with another device.
  - c. The device does not have power.
  - d. The device is disabled.
  
12. Your laptop is plugged into the wall but the computer shuts off with a low battery light prior to shut down. You try to re-power it up but nothing happens. What should you do next?
  - a. Plug the computer into a different wall socket using the existing AC adapter.
  - b. Plug in the computer using a AC adapter with a higher voltage.
  - c. Plug in the computer using a different AC adapter with the same voltage and amperage.
  - d. Remove the battery and plug the computer in using the existing AC adapter.
  
13. You are diagnosing a problem with a circuit and you will be using a multi-meter to troubleshoot the problem. What should you do before measuring resistance?
  - a. Disconnect the device from the power source.
  - b. Touch the black probe to the ground.
  - c. Touch the red probe to the ground.
  - d. Connect the device to a power source.
  
14. A customer has multiple users using the same inkjet printer. Several of the users report that the color of the print job is incorrect. After running a diagnostic print, you determine that the magenta areas are not printing. You believe that the ink cartridge is faulty and replace it but the problem still exists, what should be done next?
  - a. Replace the printer driver.
  - b. Use the maintenance software provided by the printer manufacturer.
  - c. Clean the nozzles with denatured alcohol.
  - d. Use a low static vacuum to clean the printer.
  
15. Which type of network media is least subject to eavesdropping?
  - a. Coaxial
  - b. Wireless
  - c. Fiber optic
  - d. Shielded twisted pair

16. What is the proper method to clean a CRT monitor?
- Wipe with glass cleaner and a soft cloth.
  - Wipe screen with soap and water on a sponge and wipe dry with a clean cloth.
  - Wipe with window cleaner and a paper towel.
  - Wipe with a dry paper towel.
17. John works in two groups in his company. In one of the groups he has Allow Modify permission and the other group he has Deny Write permission. The AP folder is on a computer running Window XP. The AP folder is shared and the share has Everyone-Full Control permission. What is John's access to the folder when accessing it through the network share?
- He can read and modify files in the folder.
  - He can read only files in the folder.
  - He can read, modify and delete files in the folder.
  - He cannot access any files in the folder.
18. A customer has a laser printer that keeps having a paper jam issue. What should you do to solve the problem?
- Clean the fuser assembly rollers with a fibrous cleaning towel.
  - Replace the fuser assembly.
  - Run the maintenance software to re-align the guide rollers.
  - Clean the guide rollers with alcohol on a fibrous cleaning towel.
19. A client will be traveling across the country and will not have access to a standard electrical outlet all the time. He would need access to his laptop during the drive what should he do?
- Purchase a back up battery for his laptop.
  - Purchase a Y-adapter.
  - Purchase a PCMCIA card.
  - Purchase a 12 volt power adapter.
20. When should you not use an ESD wrist strap while working with computer equipment?
- When adding memory to a computer.
  - When replacing a network card.
  - When working on an open CRT monitor.
  - When installing a internal hard drive.

21. You are trouble shooting a computer that is running Windows XP. You want to start the computer without launching specific startup applications. Other than those changes you want the computer to boot up normally. What should you do?
- Start the computer in Safe Mode.
  - Remove all the shortcuts from the C:\Documents and Settings\All Users\Start Menu\Programs\Startup folder.
  - Use Msconfig to disable the startup applications
  - Start the computer in Safe Mode with Networking.
22. You are servicing a computer and determine that the computer needs a new hard disk. While examining the hard disk, you find a folder that has a large number of music files. What should be done next?
- Make a back up of the hard disk. Burn a copy of the music files you like onto a CD. Replace the hard disk and restore the backup.
  - Make a back up of the hard disk. Replace the hard disk and restore the backup.
  - Make two backups of the hard disk. Use one to restore the computer after you have replaced the hard disk. Send the other to the user's manager.
  - Make a backup of all the files on the hard disk except the music files. Replace the hard disk and restore from the backup.
23. You are diagnosing a problem with a laser printer. The laser printer prints the diagnostic page correctly. But, when the user attempts to print a document, gibberish characters are printed on the page. What should be tried next?
- Replace the primary corona wire.
  - Reinstall the printer driver.
  - Change the toner cartridge.
  - Clean the photosensitive drum.
24. You have a mechanical mouse that sporadically moves, you attempt to lean the ball, but the mouse is still moving erratically. What should you do next?
- Clean the rollers with alcohol and a cotton swab.
  - Install a new battery.
  - Verify that the mouse is correctly connected to the port.
  - Install a new driver.
25. Which TCP/IP utility allows a user to perform a manual DNS query of any DNS database?
- NSLOOKUP
  - TRACERT
  - IPCONFIG
  - WINIPCFG

26. You are diagnosing a problem with a laser printer. When the printer prints, each page leaves white vertical lines down the page. What should be done next?
- Clean the photosensitive drum
  - Reinstall the printer driver
  - Replace the fuser assembly
  - Shake the toner cartridge.
27. Which boot option can you use to move system boot logs from a failing computer to another computer to determine the problem?
- Recovery Console
  - Debugging Mode
  - Enable Boot Logging
  - Safe Mode with Networking
28. What storage locations can you access from the Recovery Console in Windows XP?
- The %systemroot% folder
  - Any internal hard drive
  - A networking file share
  - Any location on the C drive
29. You are working on a user's laptop computer. You notice that there is a file marked personal. What should you do?
- Open the folder to verify that it does not contain files that violate the company policies.
  - Make a copy of the file and give it the user's manager.
  - Copy the file to a CD-ROM to store the information in case a problem arises later.
  - Do the work that you have to do and leave the personal file alone.
30. Which component should you store in an anti-static bag when it is not in a computer?
- Power supplies
  - Backup tapes
  - RAM
  - Fiber optic cables
31. Which TCP/IP command can be used to enter commands into a remote computer?
- ARP
  - Nbtstat
  - Netstat
  - telnet

32. You add 512MB of RAM to a laptop computer that already has 512MB of RAM. The laptop is configured for 64MB of shared video memory. The user runs graphic intensive application. What is the useable memory for this application?
- a. 1088MB
  - b. 960MB
  - c. 896MB
  - d. 1024MB
33. A user cannot access the network. You attempt to ping the loopback address and receive no response. What should you do?
- a. The network adapter is configured with an invalid subnet mask for the network.
  - b. The DHCP server is not functioning.
  - c. The network adapter is configured with an invalid IP address for the network.
  - d. TCP/IP needs to be reinstalled.
34. Which disk utility provides the best way to improve disk performance?
- a. FDISK
  - b. DEFRAG
  - c. CHKDSK
  - d. SCANDISK
35. Which wireless security standard uses dynamic encryption keys and supports public key authentication?
- a. MAC filtering
  - b. WPA
  - c. 802.1x
  - d. WEP
36. A customer reports that her PDA will turn on but cannot select any information that is present on the screen. She was using the device on a hot and humid afternoon, but the problem started to occur when she returned to her air-conditioned office. What should be done first to diagnosis the problem?
- a. Recalibrate the device
  - b. Replace the battery.
  - c. Replace the stylus.
  - d. Replace the screen.



37. You have just completed an upgrade to your systems BIOS with an update from the manufacturer, you receive a CMOS Checksum error after rebooting. How do you clear the error?
- Press ENTER key and turn off the computer before losing all the data.
  - Replace the BIOS chip with a new one from the manufacturer.
  - Reboot the PC, enter CMOS setup, and check and save CMOS settings.
  - Reboot the PC and flash the BIOS again.
38. You are working on a problem for a user and to solve the problem is taking longer than you expected and you have a department meeting that you need to attend. What should you do?
- Excuse yourself to go to the meeting and return later to finish fixing the problem.
  - Continue working on the problem until the problem is solved even though this will mean missing the meeting.
  - Excuse yourself to call your department manager and explain the situation.
  - Tell the user that you have a more pressing issue and that you will return later to finish fixing his issue.
39. You arrive at a site to replace a hard disk in a customer's computer and discover that there is water dripping from the ceiling near where the computer is located and the floor is wet. What should you do?
- Move the computer to a dry location and install the new hard drive.
  - Inform the customer that you will return and complete the work on the computer when the water is dried up and explain to him the dangers of having computers near water.
  - Put a ESD strap on before working on the computer.
  - Repair the computer, but then tell your manager that the customer has a water leak near the computer.
40. You are using the Windows 2000 Recovery Console to help repair a serious problem. However you cannot remember the command that you need. What command will provide you with information about other commands?
- Control H
  - ?
  - Command
  - Help

41. You arrive at a customer's location with the complaint that the computer keeps breaking down and it is not even a year old. The location is extremely dusty and upon opening the computer there is dust everywhere. What should you do?
- Run your finger through the dust and hold it up for the customer to see. Tell the customer that dust is bad for computers.
  - Explain to the customer that dust can affect computer components. Use compressed air to clean the dust from the computer, and verify that the computer is working properly.
  - Patently explain to the customer that dust can affect computer components. Show the customer how to use compressed air to clean the dust from the computer.
  - Tell the customer that the problem is due to the fact that the office is a mess.
42. What type of fire extinguisher should be recommended to your customer to purchase to protect the server room?
- Class A
  - Class B
  - Class C
  - Class D
43. You are on the phone with a user that is trying to explain an issue he is having, but you are not sure what he means. What should you do?
- Tell the user to reboot the computer and call back if the problem still exists.
  - Ask the user to repeat the problem again and listen more carefully.
  - Tell the user not to touch anything because you have no idea what he is talking about and you will be right over.
  - Ask questions to the user till you understand the nature of the problem.

44. You need to configure a laser printer for the Marketing department. The printer is attached to the network. You need to limit access to the printer to those user in the Marketing department only. Users need to be able to delete their own documents in the printer queue. The Marketing manager should be able to delete any document from the print queue. What should be done?
- Create a shared printer object on a computer running Windows XP, Windows 2000, or Windows Server 2003. Grant the Marketing group the Print permission. Grant the Marketing manager the Manage Document permission.
  - Create a shared printer object on a computer running Windows XP, Windows 2000, or Windows Server 2003. Grant the Marketing group the Manage Document permission. Grant the Marketing manager the Manage Printers permission.
  - On each of the user's computer, create a printer object. Grant the user Manage Documents permission to the printer object. On the Marketing manager's computer, create a printer object and grant the Manage Printers permission.
  - On each of the user's computer, create a printer object. Grant the user Print permission to the printer object. On the Marketing manager's computer, create a printer object and grant the Manage Documents permission.
45. How can you designate an EIDE hard drive as a slave?
- Remove the jumper on the Slave port.
  - Designate it as Slave in the BIOS Setup.
  - Connect the hard drive to the Slave port on the motherboard.
  - Connect the hard drive to the motherboard using the Slave connector port of a Cable Select cable.
46. You have just completed installing more memory in a laptop computer. You boot the computer and log on. When you try to use the touchpad to open the Start menu, the cursor does not move. What should you try?
- Remove the ESD wrist strap.
  - Verify that the Fn key is not pressed.
  - Reboot the computer and enter CMOS to change the input device.
  - Verify that the mouse is not connected to the PS/2 port.
47. What is TWAIN?
- A specification for allowing a computer to support two or more active input devices.
  - A specification that allows a computer to support two display devices.
  - A specification for allowing bidirectional communication between a computer and a printer.
  - A specification for an interface supported by scanners to allow them to be controlled by third-party applications, such as Adobe Photoshop.

48. What optimization task is performed by the Disk Cleanup in Windows XP professional?
- Defragmenting user documents
  - Deleting temporary Internet files
  - Compressing and defragmenting the paging files
  - Deleting files in My Documents that have not been accessed recently
49. You have a client and his laptop has a built-in wireless antenna. He cannot connect to the wireless access point. When he attempts to view the wireless networks, none are listed. Other computers can connect to the wireless access point. What should you try to do?
- Verify that the user's TCP/IP settings are configured for automatic addressing.
  - Disable the Ethernet adapter.
  - Verify that the wireless antenna is turned on.
  - Verify that there is a line of sight between the laptop and the wireless access point.
50. A customer has a laptop computer with two Type II PCMCIA card slots, one on top of the other. How many Type III hard disk PC cards can the user install in the laptop?
- 4
  - 0
  - 1
  - 2



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## KEY

Regional–2011

**TOTAL POINTS** \_\_\_\_\_ (500)

**10 POINTS EACH**

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***Judges/Graders:***

Please double-check and verify all scores!

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1. D	26. D
2. C	27. B
3. C	28. A
4. B	29. D
5. A	30. C
6. A	31. D
7. D	32. B
8. C	33. D
9. C	34. B
10. D	35. C
11. D	36. A
12. C	37. C
13. A	38. C
14. B	39. A
15. C	40. D
16. A	41. B
17. B	42. C
18. d	43. D
19. D	44. A
20. C	45. D
21. C	46. A
22. B	47. D
23. B	48. B
24. A	49. C
25. A	50. C