Overview
This event provides recognition for FBLA members who have a broad base of knowledge and competency in core hardware and operating system technologies including installation, configuration, diagnostics, preventative maintenance, and basic networking.

This is an individual online test.

Competencies and Task Lists
http://www.fbla-pbl.org/competitive-event/computer-problem-solving/

Website Resources
- A+ Essentials Hardware Practice Questions
  http://www.simulationexams.com/SampleQuestions/aplus-questions.htm
- How PCs Work
  http://computer.howstuffworks.com/pc.htm
- How Operating Systems Work
  http://computer.howstuffworks.com/operating-system.htm

COMPUTER PROBLEM SOLVING SAMPLE QUESTIONS

1) What signals the processor to temporarily stop a running program to allow a handler to run instead?
   A) IPv6
   B) DMA
   C) X64
   D) IRQ

   Competency: Personal Computer Components

2) _____ is a minimal operating system used to prepare a computer for Windows installation, to copy disk images from a network file server, and to initiate Windows Setup.
   A) Linux
   B) Windows PE
   C) Solaris
   D) DOS

   Competency: Personal Computer Components

3) _____ is a high-speed serial computer expansion bus standard designed to replace the older PCI, PCI-X, and AGP bus standards.
A) IEEE
B) VGA
C) PCIe
D) HDMI

Competency: Personal Computer Components

4) 'Missing OS' could mean which of the following?
A) MBR is corrupted
B) DBR is corrupted
C) HDD has crashed
D) The system partition is corrupted

Competency: Personal Computer Components

5) Which of the following key needs to be pressed while interrupting the OS loading process for the purpose of troubleshooting in Windows?
A) F5.
B) F1.
C) DEL.
D) F8.

Competency: Personal Computer Components

6) A processor for laptops is typically smaller, but more importantly, in order to run cooler, it uses less _____ than its desktop counterpart.
A) memory
B) electricity
C) copper
D) silicon

Competency: Laptop and Portable Devices

7) As LCDs do **not** produce light themselves, they need to produce a visible image which is usually provided by a:
A) radio-luminescent panel
B) backlight
C) cathode ray tube
D) fluoride glow rod

Competency: Laptop and Portable Devices

8) What key combination in Windows brings up a menu where you can change your password?
A) Press CTRL+ALT+P and then click Change Password
B) Press SHIFT+ALT+DELETE and then click Change Password
C) Press CTRL+ALT+DELETE and then click Change Password
D) Press SHIFT+ALT+P and then click Change Password

Competency: Laptop and Portable Devices

9) Typically, printer memory is most relevant to a _____ printer because they hold the entire image of each page in memory before printing.
A) dot-matrix
B) inkjet
C) thermal
D) laser

Competency: Printers and Scanner

10) Some printers require _____ to properly align the print device to the paper.
A) firmware updates
B) calibration
C) new ink
D) cleaning

Competency: Printers and Scanners

11) A customer who just bought a computer from you yesterday calls frantically. He tells you the computer says he performed an illegal operation. What do you tell him?
A) Bring the computer in for repair
B) Tell him he's got a virus
C) Choose OK and restart the program
D) Explain that he told the CPU to do something that the CPU can't do. Tell him not to do it again.

Competency: Printers and Scanners

12) The OS X operating system is based on:
A) Windows
B) FreeBSD
C) Linux
D) FreeDOS

Competency: Operating Systems

13) "Hot Docking" means that:
A) a hot boot must be done before a device is removed\installed
B) power must be off to remove\install a device
C) a warm boot must be done before a device is removed\installed
D) power can be on to remove\install a device

Competency: Operating Systems

14) The Windows operating system holds many configuration settings in the:
A) /etc directory
B) Registry
C) /opt directory
D) %systemroot% file

Competency: Operating Systems

15) To rename file 1.txt to 2.txt in UNIX run the command:
A) build 1.txt 2.txt
B) rename 1.txt 2.txt
C) mv 1.txt 2.txt
D) cp 1.txt 2.txt

Competency: Operating Systems

16) Which command makes a file read only?
A) Attrib +r "filename"
B) Read_only +r "filename"
C) Readonly /y "filename"
D) Attrib /r "filename"

Competency: Operating Systems

17) What is the data rate of a USB port?
A) 12 Mbps
B) 16 Mbps
C) 100 Mbps
D) 120 Mbps

Competency: Operating Systems

18) What is the application used by chat rooms?
A) PPP
B) SNMP
C) SMTP
D) IRC

Competency: Networks

19) NTFS file systems limit the length of the file names to how many characters?
A) 8
B) 512
C) No limit
D) 255

Competency: Networks

20) The system of pathways that is used for communication in a computer system is referred to as which of the following terms?
A) Memory
B) Traces
C) Cache memory
D) Bus

Competency: Networks

21) If one segment goes down on a _____ network, the remaining segments past that point also go down.
A) FDDI
B) Fiber ring
C) Star
D) Bus

Competency: Networks

22) One option to consider enabling when moving to _____ Ethernet is jumbo frames.
A) Gigabit
B) 10mb
C) 100mb
D) 16mb

Competency: Networks

23) TFTP uses the _____ protocol
A) IPX
B) UDP
C) SPX
D) TCP

Competency: Networks

24) A(n) _____ is an observable occurrence in an information system that actually happened at some point in time.
A) occurrence
B) event
C) log entry
D) incident

Competency: Security

25) _____ is a type of virus which can replicate itself.
A) Ransomware
B) Spam
C) Worm
D) Phishing

Competency: Security

26) Which command can be used to encrypt and decrypt large numbers of files and folders?
A) Decrypt
B) Encrypt
C) Cipher
D) Secure

Competency: Security

27) Which component is NOT part of the Windows Security Center?
A) Windows Firewall
B) Computer Management
C) Malware protection
D) Automatic Updates

Competency: Security

28) The first hard disk in your computer is having one primary partition and one Extended partition. The extended partition is divided into two logical drives D and E. When you install a second hard drive, you create a primary and extended partition. You create one logical drive only and format it. What would be the drive letter assigned to the first logical drive on the extended partition of first hard disk?
A) G
B) F
C) D
D) E

Competency: Safety and Environmental Issues

29) What is the command syntax for assigning "Hidden" attribute to file c:\myfile?
A) ATTRIB +R C:\MYFILE
B) ATTRIB H C:\MYFILE
C) ATTRIB +H C:\MYFILE
D) ATTRIB H C:\MYFILE

Competency: Safety and Environmental Issues

30) Burns are the most common _____-related injury.
A) aeronautical
B) medical
C) electrical shock
D) vehicle

Competency: Safety and Environmental Issues