

PC SERVICING AND TROUBLESHOOTING (305)

REGIONAL 2020

TOTAL POINTS _____ (*500 points*)

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

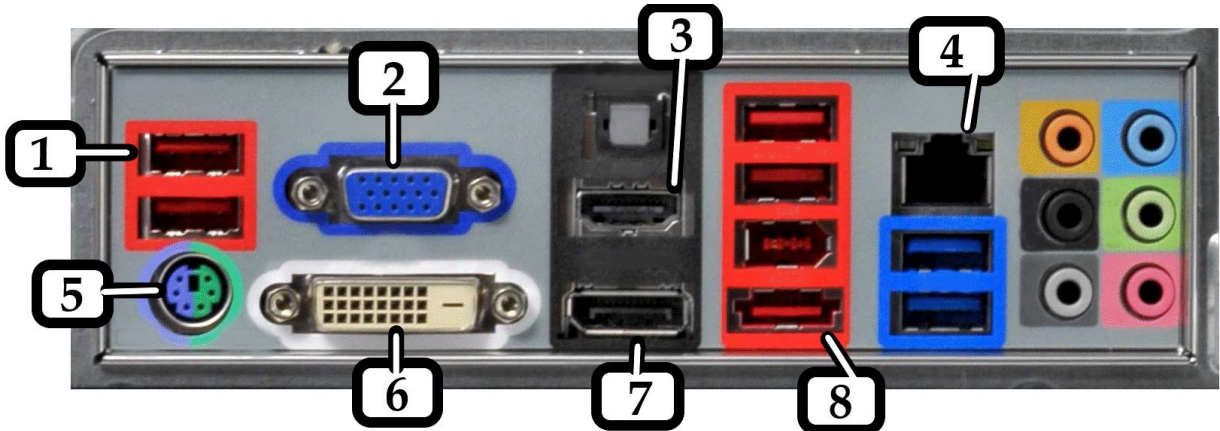
- 1. Contestant must hand in this test booklet and all printouts. Failure to do so will result in disqualification.**
- 2. No equipment, supplies, or materials other than those specified for this event are allowed in the testing area. No previous BPA tests and/or sample tests or facsimile (handwritten,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

No more than sixty (60) minutes testing time

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Workplace Skills Assessment Program competition.

MULTIPLE CHOICE

Identify the letter of the choice that best completes the statement or answers the question. Mark A if the statement is True. Mark B if the statement is False.



Use the diagram above to answer questions 1 -8.

1. The port marked number 1 is a/an _____ port.
 - a. HDMI
 - b. eSATA
 - c. USB
 - d. DisplayPort

2. The port marked number 2 is a/an _____ port.
 - a. VGA
 - b. serial
 - c. DB9
 - d. DVI

3. The port marked number 3 is a/an _____ port.
 - a. HDMI
 - b. eSATA
 - c. IEEE 1394
 - d. USB

4. The port marked number 4 is a/an _____ port.
 - a. modem
 - b. PS/2
 - c. S/PDIF
 - d. RJ-45

5. What would you most likely plug into port 5?
 - a. printer
 - b. headphones
 - c. mouse
 - d. game console

6. The port marked number 6 is a/an _____ port.
 - a. VGA
 - b. DVI
 - c. printer
 - d. DB9

7. The port marked number 7 is a/an _____ port.
 - a. FireWire
 - b. eSATA
 - c. DisplayPort
 - d. HDMI

8. The port marked number 8 is a/an _____ port.
 - a. eSATA
 - b. HDMI
 - c. USB
 - d. SATA

9. What is the unit that measures cycles per second or frequency of electrical components?
 - a. Amps
 - b. Bps
 - c. Hertz
 - d. Watts

10. The system hangs at odd times or motherboard functions have stopped working. What should you try first?
 - a. replace the motherboard
 - b. flash the BIOS / UEFI
 - c. use Windows recovery drive or system repair disk utilities
 - d. replace the CMOS battery

11. The _____ process initializes, partitions and formats the drive.
 - a. CHKDSK
 - b. DEFRAG
 - c. Low-level formatting
 - d. Windows installation

12. A/an _____ socket has blunt pins that contact the lands of the processor chip.
- BGA
 - LGA
 - PGA
 - SPGA
13. Which of the following protects you from electric shock when working with computer equipment?
- wear an anti-static bracelet attached to the power supply unit or CRT monitor
 - power off equipment and unplug it before working on it
 - ground yourself before opening a power supply unit
 - all of the above
14. The label on a memory module reads "PC2-4200/512MB." Which of the following is true about this memory?
- it's DDR2
 - it's DDR4
 - it's double-sided
 - none of the above
15. A device that can be added or removed while the computer is running is _____.
- only compatible with Windows 10
 - dynamic host configuration protocol
 - plug and play
 - hot swappable
16. The _____ processes almost all data and instructions in a computer.
- chipset
 - RAM
 - CPU
 - internal hard drive
17. If all other characteristics are equivalent, which is the slowest memory?
- CL4
 - CL6
 - CL8
 - CL10
18. What type of printer uses a high-voltage power supply and requires charging a drum?
- impact
 - inkjet
 - laser
 - thermal

19. What is the minimum amount of memory required for a 64-bit installation of Windows 8?
- 1GB
 - 2GB
 - 4GB
 - 16GB
20. When identifying a computer problem, what is the first thing you should do?
- back up data on the computer
 - ask the user questions about the problem
 - make sure there are no loose cords
 - examine the system and establish a theory
21. Device manager can be used to:
- enable or disable a device
 - update drivers or rollback an update
 - uninstall a device
 - all of the above
22. What device allows you to use a single monitor, mouse, and keyboard with multiple computers without having to move cables around each time?
- KVM switch
 - USB hub
 - switch
 - VPN
23. How many bits are in Byte?
- 2
 - 8
 - 16
 - 32
24. What is the subnet mask for the following IP address: 192.168.40.17/17
- 255.255.0.0
 - 255.255.1.0
 - 255.255.128.0
 - 255.255.255.1
25. Which of the following is not a method used by Windows to share resources on a network.
- cluster
 - domain
 - homegroup
 - workgroup

26. Which of the following is true about 32-bit and 64-bit Windows operating systems?
- 64-bit OS requires more memory than 32-bit OS but is faster
 - 32-bit OS supports less memory than 64-bit OS but performs better
 - Windows 10 is only distributed as a 64-bit OS
 - 32-bit OS can be upgraded to a 64-bit OS
27. Which of the following provides details, such as installed hardware and software, how much RAM is installed, what version of BIOS is on the computer, the size of the hard drive, and directory where the OS is installed?
- task manager
 - system information window
 - device manager
 - action center
28. A _____ topology consists of a network devices connected to a single hub or switch.
- bus
 - star
 - mesh
 - ring
29. 192.168.49.18 is an example of a _____ address.
- Class A
 - Class B
 - Class C
 - Class 192
30. Which of the following is an error detection technique that can detect and correct errors in a single bit?
- EDO
 - ECC
 - Parity
 - Non-parity
31. Ctrl + X will _____ .
- close the active application
 - cut the highlighted text and copy it to the clipboard
 - lock the computer
 - close all open applications
32. The decimal value 175 is _____ in binary.
- 10101111
 - 10100101
 - 11001011
 - 10110011

33. Which registry key stores hardware, software and security information?
- HKEY_SECURITY_HIVE
 - HKEY_CURRENT_CONFIG
 - HKEY_CLASSES_ROOT
 - HKEY_LOCAL_MACHINE
34. What tool can report computer hardware errors that occur before the OS launches?
- multimeter
 - UEFI
 - POST card
 - Windows diagnostics
35. Which of the following should you avoid doing if your computer is overheating?
- make sure fans are plugged in and working
 - remove the cover to improve ventilation
 - move the computer away from walls / obstructions
 - clean dust out of the computer case
36. RAID 0, striping data across 2 disks, increases performance and provides redundancy.
- true
 - false
37. How many MB is 16GB?
- 16000MB
 - 160000MB
 - 1600MB
 - 0.16MB
38. Which of the following is not a benefit of a computer network?
- fast information transfer between different locations
 - multiple computers can share expensive peripherals, such as printers
 - provides greater security to your computer
 - facilitates collaboration among people in different locations
39. The decimal value 2221 is _____ in hex.
- 11011101
 - 8AD
 - 4255
 - 4C6
40. The hex value 14C is _____ in decimal.
- 143
 - 332
 - 492
 - 3596

41. What utility is used to install a printer in Windows?
- task manager
 - devices and printers
 - printer manager
 - device manager
42. Which of the following is true about MAC addresses?
- They are assigned by a DHCP server.
 - They have a network id and host id.
 - They identify the network adapter.
 - They are usually written in decimal notation.
43. Which of the following happens during a soft boot or warm boot?
- UEFI/BIOS runs POST
 - processor is initialized
 - memory is cleared
 - operating system restarts
44. You just installed a new video card, started up the computer, and hear a series of beeps. What is most likely causing the error?
- outdated video drivers
 - corrupt operating system
 - onboard video port is still enabled
 - UEFI/BIOS can't detect the card.
45. To troubleshoot a networking problem in which you're unable to reach a destination host, use the _____ command to display each hop to the destination.
- TRACERT
 - PING
 - NSLOOKUP
 - NETSTAT
46. A computer can access a website using an IP address but not the fully qualified domain name. The problem is most likely in the _____ server or configuration.
- TCP/IP
 - DHCP
 - DNS
 - UPS
47. Where is the data stored that Windows needs for a successful boot?
- MBR
 - BCD
 - startup log
 - MMC

48. What is the maximum range of USB 3.1 with a standard cable?
- a. 3 m
 - b. 10 m
 - c. 15 m
 - d. 100 m
49. Which of the following is a disadvantage of using a tape drive to store data?
- a. more expensive than other storage systems
 - b. holds significantly less data than other storage systems
 - c. data is volatile
 - d. slow and inconvenient to retrieve data from it
50. A permission that is passed to a folder from its parent folder is _____ .
- a. local
 - b. inherited
 - c. downgraded
 - d. shared