Contestant Number: _____

Time: _____

Rank: _____

PC SERVICING AND TROUBLESHOOTING
(305)

REGIONAL – 2018

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

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 1-7.

1. Component marked number 1 is the computer's _____.
   a. Hard drive
   b. RAM
   c. Power supply
   d. Motherboard

2. Component marked number 2 is the computer's _____.
   a. 5.25" expansion bay
   b. RAM
   c. Power supply
   d. Motherboard

3. Component marked number 3 is the computer's _____.
    a. RAM
    b. CPU
    c. Power supply
    d. Motherboard

4. Component marked number 4 is the computer's _____.
    a. Hard drive
    b. RAM
    c. Power supply
    d. Fan

5. Component marked number 5 is the computer's _____.
    a. Hard drive
    b. Fan
    c. Power supply
    d. Motherboard

6. Component marked number 6 is the computer's _____.
    a. Video card
    b. Hard drive
    c. Power supply
    d. Motherboard

7. Component marked number 7 is the computer's _____.
    a. Hard drive
    b. RAM
    c. Power supply
    d. Motherboard

8. USB 3.1 has a data transfer rate of _____.
    a. 1.5 Mbit/s
    b. 12 Mbit/s
    c. 5 Gbit/s
    d. 10 Gbit/s

9. Which of the following is *not* a benefit of a solid state drive?
    a. Faster data retrieval rate
    b. Lower cost
    c. Increased durability
    d. Less noise

10. If a computer is hard wired to a network but is powered down, it can still communicate on that network.
    a. True
    b. False

11. The hard drive space requirement for the installation of the Windows 10 operating system is _____.
    a. 4GB
    b. 8GB
    c. 16GB
    d. 32GB

12. What is WiFi sense?
    a. Security feature built into Windows 8 that restricts sharing of WiFi passwords across applications
    b. Security feature built into Windows 8 that restricts sharing of WiFi passwords across devices
    c. Security feature built into Windows 10 that allows sharing of WiFi passwords across Windows 10 devices
    d. Security feature built into Windows 10 that restricts sharing of WiFi passwords across applications

13. Microsoft's successor to Internet Explorer is called _____.
    a. Firefox
    b. Chrome
    c. Edge
    d. Pandora

14. What is "safe mode?"
    a. Running applications isolated so that they don't interfere with each other
    b. Forcing all users to log in under different accounts so that they can't see each other's data
    c. Booting up a PC with no startup applications and only essential drivers
    d. Ensuring that the computer is secured on a desk or floor prior to powering on

15. Which of the below is *not* a registry hive?
    a. HKEY_CURRENT_USER
    b. HKEY_CURRENT_CONFIG
    c. HKEY_LOCAL_MACHINE
    d. HKEY_CDRIVE
    e. HKEY_USERS

16. Windows 8 gives the user the option to Refresh PC if the system is *not* running well. What does Refresh PC actually do?
    a. provides the user with a $200 credit toward a new computer
    b. reinstalls Windows 8 and removes all user settings and files
    c. reinstalls Windows 8 preserving all user settings and files
    d. upgrades the computer to Windows 10 and removes all user settings and files

17. File History automatically makes a copy of all files in _____.
    a. Documents
    b. Music
    c. Photos
    d. All of the above

18. The command to get the IP address of your computer is _____.
    a. Echo IP
    b. NETSTAT
    c. IPCONFIG
    d. FDISK

19. How many GB is 1738 MB?
    a. 1.738 GB
    b. 17.38 GB
    c. 173.8 GB
    d. 1738 GB

20. How many KB is 1932 MB?
    a. 19.32 KB
    b. 1.932 KB
    c. 1932000 KB
    d. 19320 KB

21. 10.0.0.0 is a _____ Network.
    a. Class A
    b. Class B
    c. Class C
    d. Class 10

22. These address ranges (10.x.x.x and 172.16.x.x) are significant because _____.
    a. they can only be used by the Federal government
    b. they can only be used by the military
    c. they can only be used by colleges in the United States
    d. they are not routable

23. In this address range (192.168.10.0/24), 24 represents _____.
    a. the number of computers that can use the network at any time
    b. the default gateway
    c. the subnet mask
    d. the network speed rating

24. A VPN is a _____.
    a. Virtual Private Network
    b. Very Personal Network
    c. Virtual Public Network
    d. Very Public Network

25. If a computer needs to exchange data with a host on a different network, it must communicate through the _____.
    a. subnet mask
    b. VLAN
    c. default gateway
    d. repeater hub

26. A DNS server's purpose is to _____.
    a. translate your computer's name into a protocol
    b. translate an IP address into a URL
    c. monitor security on the Internet
    d. translate a computer name into an IP address

27. A computer in an office will most likely obtain its IP address from a _____.
    a. DNS Server
    b. DHCP Server
    c. WINS Server
    d. domain controller

28. When a computer is powered on, the first thing that happens is _____.
    a. the hard drive is scanned for an operating system
    b. the computer obtains an IP address, so it can communicate with the network
    c. the power on self-test (POST) is run
    d. the hard drive is checked for boot viruses

29. Configuring a computer to write all data to a set of two hard drives is known as _____.
    a. data reflection
    b. mirroring with parity
    c. RAID 1
    d. RAID 0

30. In a standard RAID 5 disk array, how many drives can fail without incurring a loss of data?
   a. 0
   b. 1
   c. 2
   d. 4

31. ROM is volatile memory, which gets erased whenever a computer is powered down.
   a. True
   b. False

32. Running the cmd.exe executable, _____ will open.
   a. the network card properties window
   b. a Command Prompt window
   c. a Windows Explorer window
   d. an Internet browser window

33. DisplayPort is backwards compatible with VGA, DVI and HDMI through the use of passive and active adapters.
   a. True
   b. False

34. Up-to-date antivirus software will *not* _____.
   a. slow down your computer
   b. speed up your computer
   c. protect your computer from known viruses
   d. use both processor and memory resources

35. To make Windows 8 look more like Windows 7 _____.
   a. downgrade the operating system
   b. switch to list view from detail
   c. switch from tiles to classic view
   d. upgrade the operating system

36. A UPS is _____
   a. universal power source
   b. upgraded personal system
   c. utility-based protocol signal
   d. uninterruptable power supply

37. Ctrl + C will _____.
   a. clear the highlighted text
   b. close the active program
   c. cancel the last action
   d. copy the highlighted text to the clipboard

38. Windows key + D will _____.
    a. minimize everything showing only the Desktop
    b. delete the highlighted text
    c. minimize active window
    d. disable the mouse

39. CHKDSK is used to _____.
    a. check and repair issues on the disk
    b. clean up temp files and empty Recycle Bin
    c. defragment system hard drive
    d. make changes to partitions of storage

40. The MMC is _____.
    a. the Microsoft Management Console
    b. composed of action specific snap-ins
    c. used to manage computer policies
    d. all of the above

41. Which of the below is *not* a MMC snap-in _____.
    a. Active Directory
    b. Exchange
    c. Group Policy
    d. Task Manager

42. The list of computer hardware that is compatible with a particular operating system is known as_____.
    a. HCL
    b. ACL
    c. LDL
    d. CLH

43. What does LAN stand for?
    a. Longitude Area Network
    b. Long Array Node
    c. Local Area Network
    d. Labeled Asset Number

44. What does WAN stand for?
    a. Water Avoidance Notice
    b. Wide Area Network
    c. World Area Network
    d. Wide Array Node

45. A computer hard drive has crashed. Which is *not* one of the ways to get the data off the disk?
    a. Turn the old drive into a secondary on another working machine and copy the data off.
    b. Send the hard drive to a vendor specializing in data recovery services.
    c. Place the hard drive in the freezer for 12 hours to loosen stuck parts.
    d. Tap the hard drive using a screwdriver or small hammer to loosen stuck parts.

46. WannaCry is _____.
    a. an virus where the users files are encrypted, and the attacker is demanding money to provide the decryption key
    b. what happens when my computer will *not* work
    c. the new open source operating system
    d. a new network protocol

47. Which of the following is *not* a Microsoft licensing type?
    a. OEM
    b. Work
    c. Professional
    d. Volume

48. To get a new IP address on a computer using DHCP, type _____ at the command line.
    a. TRACERT IP
    b. IPCONFIG/flushDNS
    c. IPCONFIG /release
    d. IPCONFIG/renew

49. How do you get to Advanced Startup Options for Windows 10 repair?
    a. F9
    b. F7
    c. F8
    d. F11

50. Convert decimal value 1034 to hex.
    a. 40A
    b. 42f
    c. 37e
    d. 103