

# INFORMATION TECHNOLOGY CONCEPTS (391)

– OPEN EVENT –

**REGIONAL – 2018**

**DO NOT WRITE ON TEST BOOKLET**

*TOTAL POINTS* \_\_\_\_\_ (*100 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 choice that best completes the statement or answers the question.

1. You are looking for a port that will work for an audio device. Which of the following is likeliest to work?
  - a. DVI
  - b. Ethernet
  - c. VGA
  - d. HDMI
  
2. The top of a top-down hierarchical structure of subdirectories is called the \_\_\_\_\_.
  - a. Base directory
  - b. Root directory
  - c. Top directory
  - d. Volume directory
  
3. You do *not* want to store your data locally on your hard disk. You would rather store it using an Internet service. What is this kind of storage known as?
  - a. distributed storage
  - b. cloud storage
  - c. integrated storage
  - d. VoIP
  
4. A(n) \_\_\_\_\_ server can find an IP address for a computer when the fully qualified domain name is known.
  - a. DHCP
  - b. DNS
  - c. PPP
  - d. NetBIOS
  
5. Which of the following is used to keep the motherboard from contacting the case, preventing a short?
  - a. Standoffs
  - b. Headers
  - c. Retention screws
  - d. Case screws
  
6. An IPv6 address is \_\_\_\_\_ bits long, and consists of \_\_\_\_\_ blocks of hexadecimal numbers.
  - a. 128 bits, 8
  - b. 32 bits, 8
  - c. 128 bits, 16
  - d. 32 bits, 16

7. You need a version of USB technology that will support older USB devices, of which you have many, as well as newer ones. What word do you want to see in the specs?
  - a. backward compatible
  - b. integrated
  - c. multifunctional
  - d. Bluetooth-enabled
  
8. A(n) \_\_\_\_\_ is the name of a computer and can be used in place of its IP address.
  - a. host name
  - b. NetBIOS name
  - c. workgroup name
  - d. domain name
  
9. Word processing software, spreadsheet software, database software, and presentation software are examples of what category of computer software?
  - a. System software
  - b. Application software
  - c. Hardware coordination software
  - d. World Wide Web personal use and productivity software
  
10. A computer that starts up and then shuts off at various stages of the boot, but eventually boots normally, is most likely having an issue with the \_\_\_\_\_.
  - a. electrical system
  - b. hard drive
  - c. video card
  - d. sound card
  
11. When using the nslookup command, what kind of query takes an IP address and returns a domain name?
  - a. Forward lookup
  - b. MX lookup
  - c. Reverse lookup
  - d. Address lookup
  
12. A(n) \_\_\_\_\_ is the software that compresses a video stream when a video is stored, and decompresses the file when the video is played.
  - a. compression
  - b. codec
  - c. bitmap
  - d. resolution

13. Last night, you experienced a power increase that lasted for less than one thousandth of a second. What is the term for this?
  - a. hit
  - b. joule
  - c. spike
  - d. juice
  
14. Some motherboards require an extra power connector for PCIe devices. How many pins is this connector?
  - a. 4 or 8 pins
  - b. 6 or 12 pins
  - c. 6 or 8 pins
  - d. 4 or 12 pins
  
15. Which of the following is *not* a symptom of a virus infection?
  - a. Strange error messages
  - b. Endless pop-ups in a web browser
  - c. Hijacked web searches
  - d. Hard drives making a clicking noise
  
16. The Internet has its roots in a network that became functional in 1969, linking scientific and academic researchers across the United States. What was the name of that network?
  - a. ARPANET
  - b. NSFnet
  - c. LISTSERV
  - d. MPEG
  
17. Which of the following allows access to high-speed Internet services through the cable television network?
  - a. cable transceiver
  - b. cable modem
  - c. cable receiver
  - d. cable dialer
  
18. The most common cause of issues with displays and video equipment is due to \_\_\_\_\_.
  - a. overheating
  - b. improperly seated cables
  - c. lack of adequate power
  - d. too much power
  
19. Which of the following is *not* an element of a secure password?
  - a. Eight or more characters in length
  - b. Mix of upper / lower case characters
  - c. Use of symbols
  - d. Consecutive letters or numbers

20. Which of the following print languages was created by Adobe and uses commands sent to the printer to create a bitmap image?
- GDI
  - PCL
  - PostScript
  - XPS
21. Which of the following is a technology that provides high-speed Internet connection using the telephone network?
- DSL
  - ISP
  - CMOS
  - OSP
22. \_\_\_\_\_ proves that an individual is who they say they are and is accomplished by a variety of techniques, including a username, password, personal identification number (PIN), smart card, or biometric data.
- Authorization
  - Authentication
  - Accounting
  - Mandatory access lists
23. Which of the following is *not* a type of digital video container file?
- MP4
  - AVI
  - VOB
  - PNG
24. What separates the components of a domain name?
- spaces
  - apostrophes
  - commas
  - periods
25. A Mini PCI Express slot uses how many pins on a connector?
- 24 pins
  - 48 pins
  - 52 pins
  - 64 pins
26. Select the video connector that uses separate cables for each RGB signal:
- Composite
  - Component
  - HDMI
  - VGA

27. What is wrong with the following algorithm?

1. Set X to be 1
2. Increment X
3. Print X
4. If  $X > 0$ , repeat from 2

- a. It does not produce a result.
- b. It is ambiguous.
- c. It does not halt in a finite amount of time.
- d. It is not well-ordered.

28. Which parallel port standard allows transmission in only one direction?

- a. ECP
- b. SPP
- c. ECP
- d. EPP

29. Which of the following is a program that finds websites and webpages?

- a. microbrowser
- b. location utility
- c. web finder
- d. search engine

30. Loopback plugs can test which of the following components?

- a. Power supply
- b. Network ports
- c. Expansion slots
- d. RAM sticks

31. Which of the following occurs when one consumer sells directly to another consumer, such as in an online auction?

- a. consumer-to-consumer (C2C) e-commerce
- b. business-to-consumer (B2C) e-commerce
- c. consumer-to-business (C2B) e-commerce
- d. business-to-business (B2B) e-commerce

32. Select the answer below that *best* describes an inverter.

- a. Changes DC to AC
- b. Changes AC to DC
- c. Doubles the incoming power
- d. Can't be used on a car battery

33. Which of the following terms means that the people who are conversing on a computer are online at the same time?
- automatic
  - real-world
  - real time
  - mainline
34. Which file system is used by Blu-Ray discs?
- Universal Disk Format
  - Compact Disc File System
  - FAT32
  - NTFS
35. In a(n) \_\_\_\_\_ backup, all files that have been modified since the last full backup are copied, and have the archive bit unset.
- incremental
  - differential
  - encompassing
  - daily
36. Which of the following is the code of acceptable behaviors users should follow while on the Internet; that is, it is the conduct expected of individuals while online?
- netiquette
  - web politesse
  - Internet behavior
  - web civility
37. Which of the following AMD processor families is *not* intended for desktop use?
- Turion
  - Phenom
  - Athlon
  - FX
38. A host in a network performs which of the following tasks?
- ensures satellite communications are functional
  - exclusively monitors wireless networks to search for data transmission errors
  - routes transmissions over a network to guarantee data reaches its intended destination
  - provides services and connections to other computers on the network
39. A chipset's North Bridge connects to a processor via the \_\_\_\_\_.
- Front side bus
  - South Bridge
  - PCI Bride
  - IO Hub

40. Which power state below saves all work to the hard drive, then powers off the system?
- C1 State
  - S0 State
  - Suspend
  - Hibernation
41. What is the purpose of an Internet Protocol address (IP address)?
- It specifies whether a computer is using a broadband network or a direct-dial network.
  - It differentiates between a server computer and a client computer and contains codes to identify whether the computer can send data or receive data.
  - It contains the protocol schema used to identify whether the computer is on a wired or wireless network.
  - It uniquely identifies the location of each computer or device connected to the Internet.
42. Which of the following is *not* a good reason to flash a motherboard's BIOS?
- Issues with system during the boot sequence
  - Motherboard features are no longer working properly
  - Computer case has been replaced
  - New processor support provided by update
43. A DNS server is able to identify which of the following?
- Every computer or device connected to the Internet
  - An IP address based on a domain name
  - The TLD for a given company
  - The browser being used by a mobile device
44. Which type of disc is a type of storage media that consists of a flat, round, portable metal disc made of metal, plastic, and lacquer that is written and read by a laser?
- solid-state
  - virtual
  - cloud
  - optical
45. Laptop batteries current use what energy storing technology?
- Lithium Ion
  - Nickel Cadmium
  - Carbon phosphate
  - Alkaline



46. Chain of custody ensures that which of the following is *true*?
- Evidence will not be used in court
  - Evidence will be discarded
  - Possession of evidence is tracked
  - Evidence has been improperly secured
47. What type of connection is not typically included for use with a KVM switch?
- Sound
  - USB
  - eSATA
  - VGA
48. A(n) \_\_\_\_\_ is a type of peer-to-peer (P2P) network, which is a network managed by each computer without centralized control.
- Domain
  - Workhome
  - Groupshare
  - Workgroup
49. The process by which sector markings are defined on a disk is known as?
- High-level formatting
  - Low-level formatting
  - Magnetic etching
  - Partitioning
50. A solid state drive uses which type of memory?
- NAND
  - RAM
  - DRAM
  - ROM