

INFORMATION TECHNOLOGY CONCEPTS (391)

– OPEN EVENT –

REGIONAL – 2017

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.

Identify the choice that best completes the statement or answers the question.

1. Modern refrigerators, washing machines, and other appliances are controlled by integrated circuits called _____ that combine sensors with processing circuitry.
 - a. microcontrollers
 - b. microdevices
 - c. servers
 - d. microcomputers

2. Which of the following is *not* an example of an expansion port?
 - a. HDMI
 - b. Thunderbolt
 - c. USB 3.0
 - d. RAM

3. Which of the following is an *advantage* of a wired connection?
 - a. faster speeds
 - b. more dependable
 - c. more secure
 - d. all of the above

4. What type of computer should you consider purchasing if you want a portable system that is good for students and on-the-go professionals who want to create content and be productive, in addition to consuming content?
 - a. tablet
 - b. desktop
 - c. smartphone
 - d. laptop

5. Which of the following would *not* be considered an essential element of a browser?
 - a. navigation buttons
 - b. bookmark toolbar
 - c. address box
 - d. refresh button

6. The primary purpose of _____ software is to help the computer system monitor itself in order to function efficiently.
 - a. input
 - b. system
 - c. memory
 - d. application

7. Which type of network connects smart devices or consumer electronics within a range of about 30 feet (10 meters) and without the use of wires or cables?
 - a. LAN
 - b. VPN
 - c. WAN
 - d. PAN

8. The _____ number system allows digital devices to represent virtually any number simply by using 0's and 1's.
 - a. text
 - b. digital
 - c. numeric
 - d. binary

9. A(n) _____ is software that helps a peripheral device establish communication with its host device.
 - a. hot-plug
 - b. device hub
 - c. device driver
 - d. data bus

10. The term _____ refers to the part of a digital device that holds the system board.
 - a. CPU
 - b. system board
 - c. form factor
 - d. system unit

11. In a browser, _____ link to pages that you use frequently.
 - a. bookmarks
 - b. favorites
 - c. both A and B
 - d. none of the above

12. The most popular battery type used in today's electronic devices is _____.
- lithium-ion
 - alkaline
 - nickel-cadmium
 - none of the above
13. Which type of protocol provides a way to transfer files from one computer to another over any TCP/IP network, such as a LAN or the Internet?
- TCP
 - FTP
 - UDP
 - PAN
14. To turn off bold for the remainder of the text in an HTML document, what tag would you use?
- `<i>`
 - `</bold>`
 - ``
 - ``
15. Sampling _____ refers to the number of times per second that a sound is measured during the recording process.
- depth
 - rate
 - sound
 - compression
16. Which optical storage technology stores data permanently on a disc, which cannot be subsequently added to or changed?
- rewritable
 - read-only
 - recordable
 - none of the above
17. Which of the following is data that would *not* be found in a cookie?
- customer number
 - shopping cart number
 - information it reads from your hard drive
 - access date

18. In the context of bitmap graphics editing, what technique employs algorithms that pulls pixels from one area of an image and then applies them to another area?
- inpainting
 - cloning
 - noise reduction
 - image enhancement
19. _____ is a temporary holding area for data and programs.
- RISC
 - CISC
 - RAM
 - ROM
20. A web _____ is an Internet-based computer that stores website content and accepts requests from browsers.
- server
 - store
 - browser
 - site
21. What organization is the top-level authority for supervising domain name requests?
- DNS
 - ISPs
 - ICANN
 - HTTP
22. Which of the following options are well suited for using vector graphics?
- logos
 - line art
 - diagrams
 - all of the above
23. When were the original HTML specifications developed by Tim Berners-Lee?
- 2000
 - 1980
 - 1990
 - 1970

24. ASCII requires _____ bits for each character.
- a. seven
 - b. six
 - c. ten
 - d. two
25. Transmission speeds are expressed in _____, whereas storage space is expressed in _____.
- a. binary, numeric
 - b. bits, bytes
 - c. bytes, bits
 - d. none of the above
26. The part of the data bus that runs between the microprocessor and RAM is called the _____ bus.
- a. USB
 - b. local
 - c. network
 - d. expansion
27. Processors that execute one instruction at a time are considered to be _____ processors
- a. parallel
 - b. pipeline
 - c. serial
 - d. none of the above
28. The World Wide Web is a collection of HTML documents, images, videos, and sound files that can be linked to each other and accessed over the Internet using a protocol called _____.
- a. FTP
 - b. IP
 - c. HTML
 - d. HTTP
29. The electronic components of most digital devices are mounted on a circuit board called a _____.
- a. system board
 - b. motherboard
 - c. main board
 - d. all of the above

30. A link contains the _____ that links to another web page.
- CSS
 - hypertext
 - domain name
 - URL
31. Which of the following tools would be found in 3-D graphics software?
- ray tracing tools
 - rendering tools
 - surface texture tools
 - all of the above
32. The main circuits on the system board that carry data are called the _____.
- expansion bus
 - RAM
 - ROM
 - data bus
33. Suppose you wanted to run a web server or FTP server from your home. What type of IP address would you want?
- broadband
 - static
 - dynamic
 - TCP
34. If you wanted to set the text in a section of your HTML document to italics, what tag would you use?
- `<i>`
 - `<it>`
 - `<italic>`
 - none of the above
35. Which of the following is based on computer technology?
- tablets
 - game consoles
 - ebook readers
 - all of the above

36. Which type of communication protocol converts data into standard formats that can be used by applications?
- a. physical
 - b. transport
 - c. arrival
 - d. none of the above
37. _____ are designed to provide connectivity for devices within a limited area, typically within the premises of a home, office building, business, or school.
- a. LANs
 - b. WANs
 - c. BANs
 - d. PANs
38. Today's color display devices represent color using the _____ color model.
- a. PNG
 - b. RGB
 - c. BMP
 - d. none of the above
39. _____ data consists of numbers that can be used in arithmetic operations.
- a. Binary
 - b. Digital
 - c. Numeric
 - d. Text
40. Which of the following file extensions indicates the file is an HTML document?
- a. .html
 - b. .htm
 - c. .doc
 - d. both A and B
41. _____ LANs are usually arranged in a star topology with computers wired to central switching circuitry that is incorporated in modern routers.
- a. Wireless
 - b. Ethernet
 - c. Mobile
 - d. Internet

42. What is another term for vector graphics software?
- photo editing software
 - drawing software
 - digital compositing
 - all of the above
43. Which of the following is a markup language?
- XML
 - XHTML
 - SGML
 - All of the above
44. Which type of network covers a large geographical area and usually consists of several smaller networks, which might use different computer platforms and network technologies?
- WAN
 - VPN
 - PAN
 - LAN
45. Digital audio is stored in a variety of file formats, including _____.
- WAV
 - WMA
 - MP3
 - all of the above
46. Which of the following file extensions is *not* a vector graphic?
- .svg
 - .eps
 - .tif
 - .ai
47. Today's widescreen devices, such as laptops and smartphones, are designed for the 16:9 _____.
- aspect ratio
 - resolution
 - frame rate
 - all of the above

48. Which of the following is *not* used to create or edit HTML documents?
- a. Filezilla FTP client
 - b. online HTML editor
 - c. word processing software
 - d. HTML conversion utility
49. Which is a component of a search engine?
- a. indexer
 - b. web crawler
 - c. query processor
 - d. all of the above
50. What type of Internet connection do you have when upload speed differs from download speed?
- a. broadband
 - b. asymmetric
 - c. dynamic
 - d. symmetric