

TEST BANK



HANDBOOK OF
Informatics
FOR
Nurses
&
**Healthcare
Professionals**

4th Edition

Toni Hebda
Patricia Czar



MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) Which statement concerning "thin client technology" is correct? 1) _____
- A) Software exists on the server, so upgrades are done in one step for all clients.
 - B) When implemented, older PCs formerly used in networking must be replaced.
 - C) A thin client consists of a display with keyboard and requires its own storage device.
 - D) System processing occurs on both the server and on the local PC.

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

- 2) Match the term to the appropriate operating system. 2) _____
- I. Intensive graphics applications are needed. A. Linux
 - II. Diverse commercially available programs are needed. B. Windows
 - III. Large commercial mainframe computer is needed to crunch numbers. C. Mac OS
 - IV. Lesser known option for PCs is needed. D. UNIX

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 3) Which health risk related to computer use has been best documented? 3) _____
- A) Ulnar nerve syndrome
 - B) Carpal tunnel syndrome
 - C) Cataracts
 - D) Miscarriage or sterility
- 4) Healthcare information plans to add superusers to their staff. Which person is most appropriate? 4) _____
- A) A clinical nurse specialist for three departments, employed at the institution for six years.
 - B) An informatics nurse specialist with a master's degree and informatics certification.
 - C) An experienced staff nurse who has been employed at the institution for three years.
 - D) A newly hired charge nurse who has practiced for ten years in an intensive care unit.
- 5) Which example best fits the description of a local area network (LAN)? 5) _____
- A) Client computers are interconnected with multiple servers.
 - B) One server communicates with multiple PCs and printers.
 - C) Office computers are connected through the use of the Internet.
 - D) Internet technology is used to communicate with hospital suppliers.
- 6) In which instance is using a wireless device an advantage for healthcare provider staff? 6) _____
- A) An increase in security is needed to prevent physician orders from being intercepted on the Intranet.
 - B) Error reduction is needed to input data, such as vital signs from a client's isolation room.
 - C) A larger screen is needed to track data, such as medication administration times with vital signs.
 - D) More memory is needed to input data for glucose monitoring and insulin coverage.
- 7) Which of these is the most flexible and reliable secondary storage device? 7) _____
- A) Magnetic tape drive.
 - B) Zip drive.
 - C) DVD drive.
 - D) CD-ROM drive.
- 8) Which of these is an advantage in the use of personal digital assistants (PDAs) in the healthcare setting? 8) _____
- A) Data loss is minimized due to long battery life and ease of backups.
 - B) PDAs may be synchronized with any network without the use of special equipment or software.
 - C) Current medication information may be easily stored and compared to actual client data.
 - D) PDAs minimize the chance of interception of data transmission.

- 9) Research best supports the use of which ergonomic device? 9) _____
- A) Lumbar back support to maintain natural curves of the back.
 - B) Wrist rests to support the wrists while inputting data and typing.
 - C) Support brace used while typing to prevent carpal tunnel syndrome.
 - D) Ergonomic mouse to reduce wrist and hand pain.

- 10) Many workstations house clinical information systems and provide Internet access in the acute care setting. Which type of software program is most likely to be used by the healthcare staff providing direct patient care? 10) _____
- A) A programming language such as Visual Basic to enter data.
 - B) A programming language such as COBOL to create databases.
 - C) A virus checker to increase security for Internet connections.
 - D) An programming language such as Java to access the Internet.

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

- 11) Using good ergonomics when one is utilizing a computer-work station can reduce related injuries. List at least three specific examples of how ergonomics may be used to reduce the risk of computer-induced injury and provide a rationale for each. 11) _____
- 12) Match the appropriate role to the desired activity: 12) _____
- | | |
|---|---|
| <ul style="list-style-type: none"> I. Clinical Information Analyst system II. Help desk III. Clinical liaison automation of IV. Superuser V. Trainer | <ul style="list-style-type: none"> A. represents needs of users during design and implementation. B. serves as a local resource person. C. responsible for the successful information management. D. responsible for educating clinical users. E. first line of user support within an organization. |
|---|---|

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 13) Which statement best describes the role of the Chief Privacy Officer (CPO)? 13) _____
- A) Duties include strategic planning, information security, and overall management of the information system.
 - B) Duties include design, maintenance, and security of materials placed on the Internet, intranet, and extranet.
 - C) Duties include protection of the personal health information of patients, both electronic and paper.
 - D) Duties include assigning and monitoring system access identification codes and passwords.
- 14) What is the one byte binary code representation for the Arabic number "8"? 14) _____
- A) 00001000 B) 1000 C) 11111111 D) 2222

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

- 15) Match the appropriate computer component to the desired term: star 15) _____
- | | |
|--|--|
| <ul style="list-style-type: none"> I. Central Processing Unit (CPU) only II. Arithmetic Logic Unit (ALU) as well as III. Read-only memory (ROM) IV. Random access memory (RAM) | <ul style="list-style-type: none"> A. disappears when the power is off; provides temporary storage for the active program, for data that are being processed. B. remains when the power is off; contains the |
|--|--|

16) Match the computer type to the desired application:

16) _____

- | | |
|-------------------|--|
| I. Supercomputer | A. used to present a slide presentation at a meeting |
| II. Mainframe | B. translates hand writing into digital text |
| III. Minicomputer | C. used to support research at a large university |
| IV. Desktop PC | D. used to control drug delivery devices |
| V. Laptop PC | E. used as a client or server on a LAN |
| VI. Tablet PC | F. used to send text messages |
| VII. Hybrid chain | G. provides corporate computing at a large hospital |
| VIII. Embedded | H. provides computing at a small hospital |

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 17) Which of the following best describes RAID technology? 17) _____
- A) Community clinics use a primary data storage drive.
 - B) RAID costs more than using one large disk drive.
 - C) The computer shuts down when a single disk fails.
 - D) Duplicate disks mirror copies of data.

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

- 18) List at least four specific requirements to consider when selecting a computer system and related hardware: 18) _____

- 19) Match the software category or type to the correct function: 19) _____

- | | |
|--|---------------------|
| I. Query or search a database for specific information | A. Application |
| II. Create and edit documents language | B. Programming |
| III. Perform system backup | C. Operating system |
| IV. Control computer hardware | D. Utility program |

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 20) Which of the following best describes an Intranet? 20) _____
- A) Limited to systems affiliated with education and government agencies.
 - B) A network outside of the hospital system for use by customers or suppliers.
 - C) A private hospital system that is protected from outside access.
 - D) The largest and best known electronic network in the world.

- 21) The instructions for controlling a computer during initial start up are stored in Random Access Memory (RAM). 21) _____
- A) True B) False

- 22) Blu-ray is a high density magnetic disc format rival to HD-DVD. 22) _____
- A) True B) False

- 23) Portable or laptop computers can be connected to a network by inserting a network interface card into one of the slots provided in the motherboard. 23) _____
- A) True B) False

- 24) When discussing client/server technology the names "thin client" and "fat client" refer to hardware requirements. 24) _____

A) True

B) False

25) A mobile device can be a specialized computer workstation on a cart.

25) _____

A) True

B) False

- 1) A
- 2) C, B, D, A
- 3) B
- 4) C
- 5) B
- 6) B
- 7) C
- 8) C
- 9) A
- 10) C

11) Answers should include at least 3 examples of ways to avoid eyestrain, repetitive stress injuries, and fatigue. Specifics: take frequent breaks; use comfortable chairs with lumbar support, reclined posture of 100 to 110 degrees; use good posture to reduce physical strain; correctly position monitors just below eye level approximately one arm's length away and 20-40 degrees below the line of sight; adjust screen resolution, font size and brightness as needed, since sharp screen images help reduce eye strain; periodically look away from monitor to distant objects to help avoid eye-focusing problems; position keyboard so wrists are flat and elbow angle is 90 degrees or more to prevent nerve compression; choose sturdy surfaces or furniture with sufficient workspace; intersperse computer work with other activities to avoid repetitive stress injuries; avoid noisy locations as noise is distracting and stressful; locate in a well-ventilated area, as fresh air and a comfortable temperature enhance working conditions; use ergonomic devices with caution, using those that are researched.

(Reference: textbook Box 2-2 Measures to Ensure Good Ergonomics When Using a Computer-Work Station.)

- 12) C, E, A, B, D
- 13) C
- 14) A
- 15) D, C, B, A
- 16) C, G, H, E, A, B, F, D
- 17) D
- 18) Answer should include at least four of the following: application needs, program execution speed, number of users during peak usage periods, storage capacity, backup options, budget considerations, and maintenance.
- 19) B, A, D, C
- 20) C
- 21) B
- 22) B
- 23) B
- 24) A
- 25) A