

# Product Questions: 144

## Version: 4.1

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**Question: 1**

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Which of the following is the most important consideration when opening a file on an OS GUI?

- A. File extension
- B. Default permissions
- C. Backup policy
- D. Data compression

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**Answer: A**

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Explanation:

The most important consideration when opening a file on an Operating System Graphical User Interface (OS GUI) is the file extension. A file extension identifies the type of file and determines which software application can open it. In the official CompTIA ITF+ Student Guide, it is stated that:

“The last part of the file name represents an extension, which describes what type of file it is and is used by Windows to associate the file with an application.”

“Files are usually opened by double-clicking them. You may want to open a file in a software product other than the default, however. When you right-click a file, the shortcut menu displays a list of suitable choices, or you can choose Open With and browse for a different application. You can also use the Default Programs applet to configure file associations.”

“Do not change a file's extension if it is shown. If you delete or change the extension, the file will not be associated with the correct program for opening it.”

This means the OS uses the file extension to decide which application to use to open a file. Changing or deleting the extension can result in the file not opening properly because it no longer matches the program expected to open it.

Reference:

Official CompTIA ITF+ Student Guide Book (Page 299-300, 301)

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**Question: 2**

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A database has the following schema (as shown in the images above):

ID	Name	Age
2	John	36
6	Jane	39
12	Allison	42
21	Anna	29

Which of the following is the number of records in the schema?

- A. 3
- B. 4
- C. 12
- D. 21

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**Answer: B**

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Explanation:

In the database schema shown in the images, there are four rows (excluding the header row) representing data entries for four people (John, Jane, Allison, and Anna).

Each row represents a record in the database table, also known as a tuple. The term record refers to a complete set of fields (ID, Name, and Age) for one entry. So, counting the four rows:

John

Jane

Allison

Anna

That makes a total of 4 records in the database schema.

Reference:

The official CompTIA ITF+ Study Guide states:

"A record (or tuple) in a database is a complete set of fields that represents one entity – for example, a single row in a database table."

Thus, the correct answer is B.

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**Question: 3**

Which of the following devices extends the range of a network?

- A. Modem
- B. Server
- C. Host firewall
- D. Access point

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**Answer: D**

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Explanation:

An access point is a networking hardware device that allows wireless devices to connect to a wired network using Wi-Fi or related standards. It helps extend the range of a wireless network by creating additional coverage areas. This is directly outlined in CompTIA ITF+ documentation:

"A wireless access point (AP) is a device that allows wireless clients to connect to a wired network. It serves to extend or broaden the wireless coverage."

In contrast:

A modem connects to the internet via an ISP.

A server provides network services, not range.

A host firewall protects a single device or network; it does not expand connectivity.

Thus, the most appropriate answer is D.

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**Question: 4**

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A user receives a notification about a new software vulnerability. Which of the following is the best way to secure the software?

- A. Configuring a firewall
- B. Applying updates
- C. Enabling authentication
- D. Uninstalling the program

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**Answer: B**

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Explanation:

When a new vulnerability is discovered in software, the best way to secure it is by applying updates (patches) released by the software vendor. According to the CompTIA ITF+ objectives:

“Vendors regularly release software updates and security patches to fix vulnerabilities that could be exploited by attackers. Installing these patches promptly is crucial for maintaining system security.”

Although configuring a firewall and authentication improves overall security, they do not directly patch or fix the vulnerability. Uninstalling may be an option only if a patch is unavailable or the software is no longer needed. Therefore, the best and most proactive response is B: Apply updates.

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### **Question: 5**

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Which of the following is used to determine whether users accessed inappropriate online content?

- A. System logs
- B. Cookie data
- C. Location tracking
- D. Web browser history

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**Answer: D**

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Explanation:

The web browser history stores records of websites that a user has visited. This is typically the most straightforward and accessible method for determining whether users accessed inappropriate or unauthorized online content. The CompTIA ITF+ documentation explains:

“Web browsers maintain a history of visited URLs, which can be used for monitoring and auditing user activity, including detecting policy violations regarding internet usage.”

System logs are broader and generally capture system or security events.

Cookies store session and tracking data but don't always show what content was accessed.

Location tracking helps with geolocation, not content monitoring.

Therefore, the correct choice is D.

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**Question: 6**

A company updates its password policy to require that all passwords be reset every 60 days. Which of the following best describes this requirement?

- A. Password complexity
- B. Password management
- C. Password expiration
- D. Password privacy

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**Answer: C**

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Explanation:

The requirement to change passwords every 60 days is a policy known as password expiration. It is part of enforcing secure authentication by limiting the amount of time a password is valid.

“Password expiration is a security measure that requires users to change their passwords after a specific period, such as every 60 or 90 days, to reduce the risk of compromised credentials being used over time.” — CompTIA ITF+ Official Guide

Password complexity refers to rules about what characters are required.

Password management refers to overall policies and tools for handling passwords.

Password privacy relates to confidentiality but not periodic resets.

Thus, the correct choice is C.

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**Question: 7**

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Which of the following encryption types protects data at rest?

- A. File-level
- B. VPN
- C. HTTPS
- D. Plaintext

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**Answer: A**

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Explanation:

Data at rest refers to information stored on a device or disk, such as a hard drive. The encryption that protects it is typically file-level encryption (or full-disk encryption).

“File-level encryption applies encryption to individual files or directories on storage media and is used to protect data at rest.” — CompTIA ITF+ Study Guide

VPN and HTTPS protect data in transit.

Plaintext means data is unencrypted, and therefore is not protective.

Therefore, A is the correct answer.

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**Question: 8**

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Which of the following is the smallest storage unit?

- A. Petabyte
- B. Terabyte
- C. Kilobyte
- D. Megabyte

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**Answer: C**

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Explanation:

The correct order of storage units from smallest to largest is:

Kilobyte (KB)

Megabyte (MB)

Terabyte (TB)

Petabyte (PB)

“A kilobyte is approximately 1,000 bytes. It is smaller than a megabyte (1 million bytes), terabyte (1 trillion bytes), or petabyte (1 quadrillion bytes).” — CompTIA ITF+ Reference

Hence, C. Kilobyte is the smallest unit listed.

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**Question: 9**

A user lives in a remote area that does not have cabling or towers available. The user wants to connect to the internet. Which of the following is the best solution?

- A. Fiber optic
- B. IDSL
- C. Cellular
- D. Satellite

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**Answer: D**

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Explanation:

For locations without cable or cellular towers, satellite internet is the most viable solution. Satellite does not require terrestrial infrastructure beyond a dish and has global coverage.

“Satellite is often used in remote or rural locations where wired and cellular connectivity is not available. It uses a dish to communicate with orbiting satellites for internet access.” — CompTIA ITF+ Curriculum

Fiber optic and IDSL require ground cabling.

Cellular requires nearby towers, which the scenario rules out.

Correct answer: D. Satellite

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**Question: 10**

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Which of the following display types is bidirectional?

- A. DisplayPort
- B. VGA
- C. DVI
- D. USB-C

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**Answer: D**

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Explanation:

USB-C supports bidirectional communication, which means it can both send and receive data, including video, audio, power, and data signals over the same cable. This is unlike traditional video cables such as VGA, DVI, or even DisplayPort, which primarily transmit data in one direction.

“USB-C is a reversible connector capable of transmitting power, data, video, and audio signals. It is also bidirectional, allowing two-way communication between devices.” — CompTIA ITF+ Study Guide

VGA, DVI, and even DisplayPort are primarily unidirectional video outputs.

Only USB-C fully supports modern bidirectional multimedia communication.

Correct answer: D

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**Question: 11**

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A user needs to read documentation on a device while walking around outdoors in bright sunlight. Which of the following is the best type of device for this purpose?

- A. Laptop
- B. Tablet
- C. E-reader
- D. Smartphone

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**Answer: C**

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Explanation:

E-readers (especially those using e-ink displays) are specifically designed for reading in bright environments. E-ink mimics the appearance of ink on paper, offering excellent visibility in sunlight with minimal glare and very low power consumption.

“E-readers use e-ink technology which makes the screen easily readable in bright environments like sunlight. This makes them ideal for reading documentation outdoors.” — CompTIA ITF+ Guide

Laptops, tablets, and smartphones may suffer from glare or screen dimming in direct sunlight.

Correct answer: C

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**Question: 12**

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A user attempts to log in to a website and receives a prompt to update their password. Which of the following is this an example of?

- A. Password privacy
- B. Password history
- C. Password complexity
- D. Password expiration

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**Answer: D**

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Explanation:

This scenario describes a policy where the system enforces password expiration, prompting users to update passwords after a defined period.

“Password expiration is a security policy that requires users to reset their passwords periodically—commonly 30, 60, or 90 days—to mitigate the risk of compromised credentials.” — CompTIA ITF+ Objectives

Password privacy refers to keeping the password confidential.

Password history restricts reuse of old passwords.

Password complexity enforces character rules (e.g., uppercase, numbers, symbols).

Correct answer: D

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**Question: 13**

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Which of the following types of AI is used to edit images?

- A. Assistive
- B. Predictive
- C. Chatbot
- D. Generative

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**Answer: D**

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Explanation:

Generative AI is used to create new content including images, music, videos, or text. This includes tasks like image editing, enhancement, or generation using tools such as DALL•E, MidJourney, or generative adversarial networks (GANs).

“Generative AI creates new data or content, such as images, music, or text. It is commonly used in image editing, graphic design, and media production.” — CompTIA ITF+ Guide

Other AI types:

Assistive AI helps with tasks like navigation or text suggestions.

Predictive AI forecasts outcomes using existing data.

Chatbots simulate conversation, often in customer service.

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**Question: 14**

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Given the following pseudocode:

<BODY>

```
<P>This is a paragraph.</P>
```

```
</BODY>
```

Which of the following best represents the type of language used by this code?

- A. Markup
- B. Query
- C. Compiled
- D. Scripting

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**Answer: A**

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Explanation:

The syntax shown uses tags like `<BODY>` and `<P>`, which are characteristic of a markup language, specifically HTML (HyperText Markup Language). Markup languages describe the structure and presentation of text.

“Markup languages, such as HTML and XML, are used to annotate text so that the computer can manipulate it. HTML is used to design the structure of web pages using tags like `<body>`, `<p>`, `<h1>`, etc.” — CompTIA ITF+ Official Guide

Other options:

Query languages like SQL retrieve data.

Compiled languages require compilation into machine code (e.g., C++).

Scripting languages are used for automation but don't use markup syntax.

Correct answer: A

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**Question: 15**

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Which of the following can be used to input commands for a computer to execute?

- A. Services

- B. Attributes
- C. Process
- D. Console

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**Answer: D**

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Explanation:

A console or command-line interface (CLI) allows users to input text-based commands that the computer can execute.

“The console (or command prompt or terminal) allows direct command input to control an operating system or application without using a graphical interface.” — CompTIA ITF+ Guide

Services are background processes.

Attributes define properties of objects or elements.

Processes are executing programs but are not used for inputting commands.

Correct answer: D

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### **Question: 16**

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Which of the following is the last tool that should be used when creating a custom-length network cable?

- A. Cable tester
- B. Crimper
- C. Wire cutter
- D. Ethernet connector

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**Answer: A**

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Explanation:

The correct order for creating a network cable:

Measure and cut with wire cutter

Strip the wires

Attach Ethernet connector using a crimper

Finally, test the cable with a cable tester to ensure connectivity and proper pinout.

“After crimping the RJ-45 connectors, a cable tester is used to validate the electrical continuity and correct wiring order.” — CompTIA ITF+ Curriculum

Correct answer: A

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**Question: 17**

Given the following pseudocode:

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10 FOR Q=1 TO 100
```

```
20 PRINT Q
```

```
30 NEXT Q
```

```
40 EXIT
```

Which of the following best represents line 10?

- A. Attribute
- B. Sequence
- C. Branch
- D. Loop

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**Answer: D**

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Explanation:

Line 10 starts with “FOR Q=1 TO 100,” which is a loop construct. It defines a loop that will run 100 times, incrementing Q from 1 to 100 and executing the enclosed lines (20 and 30).

“Loops are programming constructs that repeat a set of instructions until a condition is met. A ‘FOR’ loop is a common control structure in procedural programming.” — CompTIA ITF+ Official Objectives

Other options:

Attribute applies to objects, not control flow.

Sequence is the overall flow of code lines.

Branches involve decision-making (e.g., IF/ELSE), not repetition.

Correct answer: D

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**Question: 18**

A user is logged in but unable to access a shared folder on the network. Which of the following security concepts is in place?

- A. Authentication
- B. Authorization
- C. Accounting
- D. Non-repudiation

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**Answer: B**

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Explanation:

This scenario describes a situation where a user has already successfully logged into the system (i.e., has been authenticated) but cannot access a particular network resource (the shared folder). This falls under the concept of authorization, which determines what actions or resources a user is permitted to access after authentication.

“Authorization is the process of granting or denying access to network resources once the user has been authenticated.” — CompTIA ITF+ Official Study Guide

Authentication verifies the identity of the user (e.g., username and password).

Authorization controls access rights (e.g., shared folders, files).

Accounting tracks user activity (e.g., audit logs).

Non-repudiation ensures actions or transactions cannot be denied later.

Therefore, the correct answer is B: Authorization.

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**Question: 19**

Given the following table:

ID	Month	Day	Year	Name
1	October	6	1969	James
2	May	13	1970	Jane
3	September	25	1999	John
4	April	15	1976	Helena

Which of the following fields best represents a primary key?

- A. ID
- B. Month
- C. Day
- D. Year
- E. Name

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**Answer: A**

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Explanation:

A primary key is a unique identifier for each record in a database table. It must be unique and not null across all rows. In this table, the field ID is the only column that uniquely identifies each row and does not repeat.

“A primary key is a field (or a set of fields) that uniquely identifies a record in a table. It ensures that each record can be uniquely retrieved.” — CompTIA ITF+ Official Study Guide

Analysis of other options:

Month, Day, Year, and Name can have duplicate values across multiple records and therefore do not serve as unique identifiers.

Correct answer: A

The ID field contains unique values for each record and is typically used as a primary key in a database. A primary key uniquely identifies each row in a table.

Month, Day, Year, and Name may have duplicates and do not guarantee uniqueness.

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### Question: 20

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A technician needs to install input devices while setting up a new desktop PC. Which of the following should the technician install? (Choose two.)

- A. Printer
- B. Mouse

- C. Keyboard
- D. CPU
- E. Speaker
- F. SSD

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**Answer: B, C**

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Explanation:

Input devices allow users to interact with the computer by sending data to it. The most common input devices for a desktop PC setup are:

Mouse – allows the user to point, click, and interact with the GUI.

Keyboard – used to enter text and commands.

“Input devices such as the keyboard and mouse are essential for entering data into a computer.” —  
CompTIA ITF+ Study Guide

Other options explained:

A . Printer – Output device

D . CPU – Core processing unit, not an input device

E . Speaker – Output device

F . SSD – Storage device

Correct answers: B and C

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### **Question: 21**

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Users are discussing the birthdays and home addresses of notable public figures in a public chat room. Which of the following security concepts is being compromised?

- A. Confidentiality
- B. Integrity
- C. Privacy
- D. Availability

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**Answer: C**

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Explanation:

Privacy involves protecting personal or sensitive information from being disclosed without consent. Sharing individuals' birthdays and home addresses—even if they are public figures—violates the privacy principle.

“Privacy ensures that personal data is collected, used, and shared responsibly and legally. Exposing personal information in public forums can breach this principle.” — CompTIA ITF+ Official Objectives

Correct answer: C

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**Question: 22**

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Which of the following can best protect a computer when an infected file has been downloaded?

- A. Anti-malware
- B. Firewall
- C. Patching
- D. Permissions

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**Answer: A**

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Explanation:

Anti-malware software is specifically designed to detect, quarantine, and remove malicious software from a system. It is the most appropriate tool for protecting a computer after a suspicious or infected file is downloaded.

“Anti-malware software scans downloaded files and running processes to identify and remove malicious software, providing real-time protection against viruses, trojans, and spyware.” — CompTIA ITF+ Study Guide

Other options:

- B . Firewall – Prevents unauthorized access but doesn't clean infections
- C . Patching – Prevents exploitation of known vulnerabilities, not infection removal
- D . Permissions – Limit access but do not remove malware

Correct answer: A

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**Question: 23**

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Which of the following is commonly used to measure the RAM capacity of a smartphone?

- A. GB
- B. KB
- C. MB
- D. TB

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**Answer: A**

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Explanation:

RAM (Random Access Memory) in smartphones and computers is most commonly measured in gigabytes (GB) today. Typical smartphone RAM ranges from 2GB to 16GB depending on performance and price.

“Memory capacity in modern devices like smartphones is measured in gigabytes (GB), reflecting their need to support multitasking and app usage.” — CompTIA ITF+ Official Resources

Other options:

KB and MB were used in earlier computing generations.

TB is used for storage, not RAM.

Correct answer: A

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**Question: 24**

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A user identifies the reason a computer is not working, repairs it, and prints a test page. Which of the following steps should the user take next?

- A. Submit a support ticket
- B. Test the theory
- C. Implement the solution

D. Document the actions taken

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**Answer: D**

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Explanation:

After identifying the issue, implementing a solution, and verifying functionality (test page), the next step in the troubleshooting process is to document the solution for future reference.

“The final step in the troubleshooting methodology is to document findings, actions, and outcomes to ensure organizational learning and continuity.” — CompTIA ITF+ Study Guide

Correct answer: D

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**Question: 25**

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Which of the following is the number of bits in a byte of data?

- A. 2
- B. 4
- C. 8
- D. 16

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**Answer: C**

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Explanation:

A byte consists of exactly 8 bits. Bits (binary digits) are the smallest unit of data, and eight of them grouped together form one byte, which is used to represent characters and numbers in digital systems.

“A byte is made up of 8 bits and is the standard unit of data used to represent information such as characters in computing.” — CompTIA ITF+ Fundamentals

Correct answer: C

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**Question: 26**

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