25B IT Essentials Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

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Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- **Practice answering questions under realistic conditions,**
- **Improve accuracy and speed,**
- **Review explanations to strengthen weak areas, and**
- **Approach the exam with greater confidence.**

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here’s how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don’t just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There’s no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

Questions

1. **Which of the following best describes the function of a projector?**

   A. Inputting information into a computer

   B. Outputting images to a larger screen

   C. Storing data securely

   D. Processing calculations

2. **Which two storage devices use a magnetic medium for storing data?**

   A. USB Flash Drive and SSD

   B. Optical Disc and Tape Drive

   C. Tape Drive and Hard Disk Drive

   D. Memory Card and Floppy Disk

3. **Which type of RAM is characterized by processing massive amounts of data at high speeds?**

   A. SRAM

   B. DDR4 SDRAM

   C. GDDR SDRAM

   D. DRAM

4. **What command can be used to display the MAC address of a device in Windows?**

   A. ping

   B. tracert

   C. ipconfig /all

   D. netstat

5. **What does a network switch do?**

   A. Connects devices on a network and filters traffic

   B. Routes data between different networks

   C. Resets network connections

   D. Increases internet bandwidth

6. Which of the following best describes a KVM switch?

- **A. A device that manages network traffic**
- **B. A tool for switching power between devices**
- **C. A device that connects multiple computers to share peripherals**
- **D. A software application for remote desktop access**

7. Which components can be shared using a KVM switch?

- **A. Only keyboard**
- **B. Keyboard and mouse only**
- **C. Mouse and monitor only**
- **D. Keyboard, video, and mouse**

8. What does the acronym BIOS stand for?

- **A. Basic Input/Output System**
- **B. Binary Integrated Operating System**
- **C. Basic Internal Operating Software**
- **D. Binary Input/Output Software**

9. Which two activities are normally controlled by the Northbridge part of the chipset?

- **A. Access to the hard drive and access to the network**
- **B. Access to the RAM and access to the video card**
- **C. Access to the CPU and access to the keyboard**
- **D. Access to the printer and access to USB ports**

10. Which of the following is NOT a data storage device?

- **A. SSD**
- **B. USB Flash Drive**
- **C. Network Cable**
- **D. Hard Drive**

Answers

1. B
2. C
3. C
4. C
5. A
6. C
7. D
8. A
9. B
10. C

Explanations

1. Which of the following best describes the function of a projector?

A. Inputting information into a computer

B. Outputting images to a larger screen

C. Storing data securely

D. Processing calculations

The function of a projector is primarily to output images to a larger screen, making option B the best description. Projectors are designed to take visual data from a computer or other video sources and display it on a larger surface, such as a screen or wall. This capability is essential for presentations, lectures, movies, and various forms of visual communication, allowing multiple viewers to see the content simultaneously in a way that is clear and comprehensible. Inputting information into a computer relates to devices like keyboards and scanners, which are designed to gather data. Storing data securely refers to storage devices like hard drives and SSDs, which serve to save and protect information rather than display it. Processing calculations is a task typically performed by CPUs within computers, which handle data processing tasks but do not involve the visual output that projectors provide. Understanding these functions helps clarify why outputting images to a larger screen is indeed the primary role of a projector.

2. Which two storage devices use a magnetic medium for storing data?

A. USB Flash Drive and SSD

B. Optical Disc and Tape Drive

C. Tape Drive and Hard Disk Drive

D. Memory Card and Floppy Disk

The correct answer highlights two storage devices that utilize a magnetic medium to store data: the Tape Drive and Hard Disk Drive. Tape drives store data on magnetic tape, allowing for sequential access, which is particularly useful for backups and archiving large volumes of data due to their high capacity and cost-effectiveness. The magnetic tape is coated with a magnetic material that allows data to be written and read using a magnetic head. Hard disk drives (HDDs) also employ a magnetic medium, utilizing spinning disks coated with a magnetic material to store data. Data is read and written by moving read/write heads that are positioned over these spinning disks. HDDs are widely used for regular data storage in computers and servers due to their balance of speed and capacity. In contrast, the other options contain devices that do not primarily use magnetic media. USB flash drives and SSDs rely on flash memory, which is non-volatile and does not involve magnetic components. Optical discs utilize lasers to read and write data on the surface of the disc, and memory cards use similar flash technology. Floppy disks did use magnetic media, but they are largely considered obsolete and not a common reference point today. Thus, the correct pairing of Tape Drive and Hard Disk Drive in this context demonstrates

3. Which type of RAM is characterized by processing massive amounts of data at high speeds?

A. SRAM

B. DDR4 SDRAM

C. GDDR SDRAM

D. DRAM

The choice of GDDR SDRAM as the correct answer is rooted in its specific design and purpose. GDDR, which stands for Graphics Double Data Rate Synchronous Dynamic Random Access Memory, is optimized for high bandwidth and efficient handling of large amounts of data, making it particularly well-suited for graphics processing tasks in gaming and professional applications. GDDR SDRAM is engineered to support the demanding requirements of graphics cards, as it allows for greater data throughput compared to standard RAM types, facilitating faster data retrieval and processing. This high-speed performance is crucial in environments where rendering frames or processing visual data in real time is necessary. In contrast, while other types of RAM such as SRAM, DDR4 SDRAM, and DRAM serve important roles in computing, they do not reach the same levels of performance tailored specifically for the graphical workload that GDDR SDRAM does. SRAM, for instance, is typically used in cache memory due to its faster access speeds but is not usually employed for high-volume data processing. DDR4 SDRAM, although faster than previous generations, is primarily geared toward general-purpose computing rather than optimized for graphics. DRAM, the base form of memory, operates slower compared to GDDR in terms of high-speed data processing for graphic-intensive tasks

4. What command can be used to display the MAC address of a device in Windows?

A. ping

B. tracert

C. ipconfig /all

D. netstat

The command to display the MAC address of a device in Windows is "ipconfig /all." When this command is executed in the Command Prompt, it provides detailed information about the network configuration of all network interfaces on the device. Among the information displayed, the Physical Address is the MAC address, which is a unique identifier assigned to the network interface for communications at the data link layer. Using this command is particularly useful for troubleshooting network issues, configuring networks, or identifying different devices on a local network. It also helps users verify their network settings, including IP addresses, subnet masks, and default gateways, alongside the MAC addresses of their network interfaces. This level of detail is essential for network management and monitoring. The other commands listed serve different purposes. For instance, ping is used to test connectivity between devices, tracert traces the route packets take to reach their destination, and netstat displays current network connections and related statistics.

5. What does a network switch do?

A. Connects devices on a network and filters traffic

B. Routes data between different networks

C. Resets network connections

D. Increases internet bandwidth

A network switch is a crucial component of a local area network (LAN) that connects various devices, such as computers, printers, and servers, allowing them to communicate with one another. Its primary function is to receive incoming data packets from one device and intelligently filter and forward them only to the target device based on its MAC address. This selective forwarding helps to optimize network traffic and overall performance by reducing the chances of data collisions. The role of a switch is distinct from that of a router, which operates at Layer 3 of the OSI model and is responsible for routing data between different networks. A switch operates at Layer 2, focusing on connecting devices within a specific network. While switches play an essential role in managing local traffic, they do not have the capability to reset network connections or directly increase internet bandwidth. These functions are associated with other networking equipment or configurations. By understanding the specific role of a switch, one can better appreciate its importance in facilitating efficient communication within a network.

6. Which of the following best describes a KVM switch?

A. A device that manages network traffic

B. A tool for switching power between devices

C. A device that connects multiple computers to share peripherals

D. A software application for remote desktop access

A KVM switch, which stands for Keyboard, Video, and Mouse switch, is designed to enable the control of multiple computers using a single set of peripherals. This device allows users to switch between different computers seamlessly, facilitating the sharing of the keyboard, monitor, and mouse without the need for multiple input devices at the workstation. This is particularly beneficial in environments where space is limited or for users who frequently need to manage several computers simultaneously. The other choices describe different types of devices or tools but do not correspond to the primary function of a KVM switch. For instance, a device that manages network traffic pertains more to network switches or routers, while a power switching tool would relate to power distribution units. Similarly, a software application for remote desktop access refers to programs like Remote Desktop Protocol (RDP) or VNC that allow a user to control a computer over a network, which is distinctly different from the hardware functionality of a KVM switch.

7. Which components can be shared using a KVM switch?

A. Only keyboard

B. Keyboard and mouse only

C. Mouse and monitor only

D. Keyboard, video, and mouse

A KVM switch, which stands for Keyboard, Video, and Mouse switch, is designed to allow a single set of input and output devices (keyboard, monitor, and mouse) to control multiple computers. The correct answer encompasses all three essential components: the keyboard, video (monitor), and mouse. This functionality is particularly useful in environments where space is limited or when managing multiple computers without the clutter of additional peripherals for each machine. For instance, in a server room, an administrator can connect several servers to a KVM switch and manage them through a single keyboard, monitor, and mouse configuration. By sharing these three components, the KVM switch streamlines the workflow, reduces hardware costs, and helps maintain a neat and organized workspace.

8. What does the acronym BIOS stand for?

A. Basic Input/Output System

B. Binary Integrated Operating System

C. Basic Internal Operating Software

D. Binary Input/Output Software

The acronym BIOS stands for Basic Input/Output System. This essential firmware is a crucial part of a computer's startup process. When you power on a computer, the BIOS is responsible for initializing and testing the system hardware components, such as the processor, memory, and storage devices, before handing over control to the operating system. The "Basic" in BIOS signifies that it provides fundamental routines that allow for communication between the hardware and the operating system. "Input/Output" refers to its role in managing data transfer between the computer's internal parts and external devices. Recognizing the significance of BIOS is important because it lays the groundwork for a computer's operational functionality and influences how effectively the hardware interacts with software. The other options do not accurately describe the function of BIOS. The terms used in those options do not align with the standard definitions or commonly accepted terminology in computing. Therefore, understanding that BIOS specifically stands for Basic Input/Output System is crucial for grasping the basics of computer architecture and hardware interactions.

9. Which two activities are normally controlled by the Northbridge part of the chipset?

A. Access to the hard drive and access to the network

B. Access to the RAM and access to the video card

C. Access to the CPU and access to the keyboard

D. Access to the printer and access to USB ports

The Northbridge component of the chipset is responsible for managing communication between the CPU and high-speed peripherals, including RAM and the video card. This is crucial for ensuring efficient data transfer and processing capabilities in a computer system. In particular, the Northbridge connects the CPU to the system memory (RAM), determining how fast and efficiently data can be read from or written to memory. It also interfaces with the graphics processing unit (GPU), allowing for the transmission of visual data essential for rendering graphics and videos. This function is particularly important in tasks that require rapid data processing and high bandwidth, such as gaming or graphic design. The other options mention components that are not typically managed directly by the Northbridge. Access to the hard drive and network, for example, is usually handled by the Southbridge, which manages slower input/output operations. Similarly, access to peripherals like printers and USB ports is primarily managed by the Southbridge, which focuses on those devices that do not require the high-speed communication channels facilitated by the Northbridge. By understanding the roles of the Northbridge and Southbridge in the chipset architecture, it becomes clear why access to RAM and the video card are the correct focus for the Northbridge's responsibilities.

10. Which of the following is NOT a data storage device?

A. SSD

B. USB Flash Drive

C. Network Cable

D. Hard Drive

A network cable is not a data storage device; rather, it is a medium used for transmitting data between devices within a network. Its primary function is to facilitate communication and data transfer rather than to retain or store information. In contrast, solid-state drives (SSD), USB flash drives, and hard drives are all types of storage devices that hold data permanently or semi-permanently, allowing users to save and retrieve information as needed. Understanding the distinct roles of these components is fundamental in IT, highlighting how devices are categorized based on their primary functions—storage versus transmission.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

https://25bitessentials.examzify.com

We wish you the very best on your exam journey. You've got this!