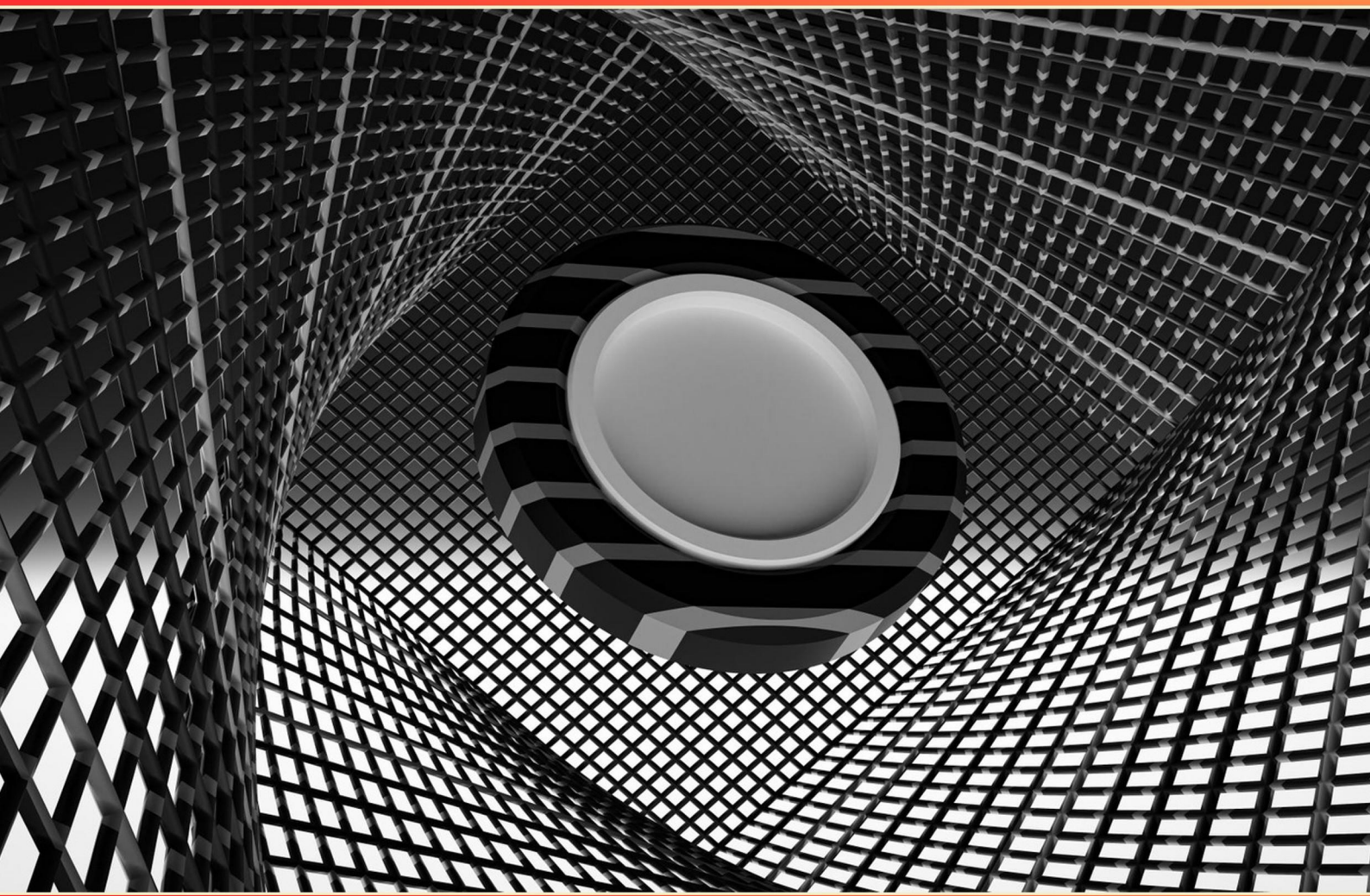
ITEC EMERGING TECH PRACTICE EXAM (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR THE FULL VERSION STUDY GUIDE

https://itecemergingtech.examzify.com

Copyright © 2026 by Examzify - A Kaluba Technologies Inc. product.

ALL RIGHTS RESERVED.

No part of this book may be reproduced or transferred in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, web distribution, taping, or by any information storage retrieval system, without the written permission of the author.

Notice: Examzify makes every reasonable effort to obtain accurate, complete, and timely information about this product from reliable sources.

SAMPLE

Table of Contents

Copyright 1

Table of Contents 2

Introduction 3

How to Use This Guide 4

Questions 5

Answers 8

Explanations 10

Next Steps 16

SAMPLE

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.

SAMPLE

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!

SAMPLE

Questions

SAMPLE

1. **Which of the following is often cited as a disadvantage of biometric systems?**

   A. On-the-spot verification

   B. Cost of biometric devices

   C. High accuracy metrics

   D. Speed of data access

2. **An electronic element that stores data by changing its resistance based on current is called a(n)?**

   A. Capacitor

   B. Memristor

   C. Transistor

   D. Resistor

3. **What is the name of Amazon's satellite-based broadband solution?**

   A. Project Apollo

   B. Project Starlink

   C. Project Orion

   D. Project Kuiper

4. **What does GPU stand for?**

   A. General processing unit

   B. Graphics processing unit

   C. Global processing unit

   D. Graphical processing unit

5. **What is a smart city?**

   A. An urban area that uses IoT and other technologies to enhance infrastructure, services, and living conditions

   B. A city focused solely on environmental conservation

   C. A digital platform for urban planning

   D. A traditional city with historical significance

SAMPLE

6. What does mobile app development involve?

A. Creating hardware for mobile devices

B. Designing mobile web pages

C. Creating software applications for mobile devices

D. Configuring network infrastructure

7. The world's first concept for zero-emission commercial aircraft was recently discussed by which company?

A. Airbus

B. Boeing

C. Lockheed Martin

D. Virgin Atlantic

8. What is the primary focus of companies like Insilico Medicine?

A. Improving artificial intelligence applications

B. Developing new drugs at lower costs

C. Enhancing gaming technologies

D. Increasing data storage solutions

9. Which of the following describes a major benefit of utilizing multiple small rovers instead of one large rover for lunar exploration?

A. Lower launch costs

B. Greater area coverage

C. Increased complexity

D. Reduced equipment wear

10. What emerging technology is described as allowing the deaf to feel sound?

A. Biofeedback Systems

B. Haptic Feedback Technology

C. Language Learning Devices

D. Advanced Hearing Aids

SAMPLE

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. Which of the following is often cited as a disadvantage of biometric systems?

A. On-the-spot verification

B. Cost of biometric devices

C. High accuracy metrics

D. Speed of data access

The cost of biometric devices is often considered a disadvantage of biometric systems. While biometrics offer high security and convenience, the initial investment required for the hardware, software, and infrastructure can be significant. This includes expenses related to the technology needed for capturing biometric data, such as fingerprint scanners, facial recognition cameras, or iris readers. Additionally, implementing and maintaining these systems can incur ongoing costs for updates, maintenance, and personnel training. The economic barrier can limit the accessibility of biometric systems for smaller organizations or those with restricted budgets, potentially making them less appealing as a security option compared to traditional password or ID systems. As a consequence, while biometric systems may provide enhanced security and user experience, financial considerations can impede their widespread adoption.

2. An electronic element that stores data by changing its resistance based on current is called a(n)?

A. Capacitor

B. Memristor

C. Transistor

D. Resistor

The correct answer identifies a memristor as an electronic element that stores data by changing its resistance based on current. Memristors are a fundamental nonlinear passive two-terminal electrical component that maintains a relationship between the time-integral of current and the voltage across it. This property allows them to "remember" the amount of charge that has previously passed through them, hence their role in data storage. Unlike capacitors, which store electrical energy in an electric field, and transistors, which act as switches or amplifiers and do not inherently store data, memristors uniquely leverage changes in resistance to store information. Resistors, on the other hand, primarily impede the flow of electrical current and do not change their resistance based on stored data or previous current. The ability of memristors to retain information without a constant power supply positions them as promising elements in the realm of non-volatile memory and brain-inspired computing.

SAMPLE

3. What is the name of Amazon's satellite-based broadband solution?

A. Project Apollo

B. Project Starlink

C. Project Orion

D. Project Kuiper

Amazon's satellite-based broadband solution is called Project Kuiper. This initiative aims to provide high-speed internet access to underserved and unserved communities around the world using a constellation of low Earth orbit (LEO) satellites. The project is significant as it represents Amazon's entry into the competitive market of satellite internet, competing with other companies like SpaceX's Starlink. Project Kuiper is designed to deliver reliable internet service in areas where traditional broadband may be unavailable or limited, highlighting Amazon's commitment to expanding connectivity. The project incorporates advanced technology to ensure optimal performance and low latency. These features are essential in meeting the increasing demand for connectivity as more people rely on the internet for work, education, and entertainment. The name of the project, Kuiper, honors Gerard Kuiper, a prominent astronomer, and is reflective of the project's focus on utilizing satellite technology to expand internet access, making it a crucial part of Amazon's broader strategy in the technology and communications sectors.

4. What does GPU stand for?

A. General processing unit

B. Graphics processing unit

C. Global processing unit

D. Graphical processing unit

The term GPU stands for Graphics Processing Unit. This designation identifies a specialized electronic circuit designed to accelerate the processing of images and videos for display on a computer screen. A GPU performs rapid mathematics calculations that are required for rendering graphics, thus improving the performance of graphics rendering tasks compared to standard CPUs, which are optimized for general-purpose computations. The use of the term "graphics" implies the GPU's primary function relates to handling complex visual computations, which stem from 2D and 3D graphics rendering, image processing, and, more recently, tasks in general-purpose computing like machine learning and artificial intelligence. By contrast, options such as "general processing unit," "global processing unit," and "graphical processing unit" either misrepresent or inaccurately expand on the term, diluting the specific context within which GPUs operate. Therefore, understanding that GPU stands for Graphics Processing Unit is essential in grasping its role in computing and graphics performance.

SAMPLE

5. What is a smart city?

A. An urban area that uses IoT and other technologies to enhance infrastructure, services, and living conditions

B. A city focused solely on environmental conservation

C. A digital platform for urban planning

D. A traditional city with historical significance

A smart city is fundamentally defined by its integration of Internet of Things (IoT) technologies and other advancements to improve the delivery of services and the overall quality of life for its residents. This involves utilizing connected devices and systems to monitor and optimize resources such as energy, water, and traffic management. By applying data analytics, smart cities can enhance their infrastructure, making it more efficient and responsive to the needs of citizens. This often leads to improvements in public safety, transportation, healthcare, and environmental sustainability, creating a more livable urban environment. In contrast, a focus solely on environmental conservation does not encompass the broader technological and infrastructural enhancements that characterize a smart city. While environmental initiatives can be a part of a smart city's goals, they are not the defining feature. Similarly, describing a smart city as only a digital platform for urban planning limits its breadth, as this concept neglects the real-time data collection and interaction that are essential to the smart city experience. Finally, a traditional city with historical significance does not capture the transformative and innovative aspects that modern technologies bring to urban living, as it lacks the integration of advanced tech and responsive infrastructure.

6. What does mobile app development involve?

A. Creating hardware for mobile devices

B. Designing mobile web pages

C. Creating software applications for mobile devices

D. Configuring network infrastructure

Mobile app development primarily involves the process of creating software applications specifically designed to run on mobile devices such as smartphones and tablets. This encompasses various phases, including concept development, user interface design, coding, testing, and deployment to app stores. The end goal is to produce functional and user-friendly applications that leverage the capabilities of mobile operating systems like iOS and Android. This aspect of software development focuses on ensuring compatibility with mobile hardware and optimizing performance for the unique constraints and expectations of mobile use, such as limited screen size, touch-based navigation, and connectivity considerations. The applications can serve a multitude of purposes, from social networking and gaming to productivity tools and e-commerce, making them an integral part of the mobile technology ecosystem. In contrast, creating hardware pertains to the physical devices themselves, while designing mobile web pages targets web content rather than standalone applications. Configuring network infrastructure involves setting up the systems that connect devices, which, while important for mobile applications, is a separate domain from app development itself.

SAMPLE

7. The world's first concept for zero-emission commercial aircraft was recently discussed by which company?

A. Airbus

B. Boeing

C. Lockheed Martin

D. Virgin Atlantic

Airbus has been a pioneer in exploring sustainable aviation solutions, and as part of its commitment to reducing the environmental impact of air travel, the company unveiled its concept for zero-emission commercial aircraft, known as the ZEROe initiative. This initiative outlines ambitious plans to develop aircraft powered entirely by hydrogen by 2035. The discussion around this concept highlights Airbus's innovative approach to addressing climate change within the aviation sector and showcases their investment in research and development for sustainable technologies. The focus on hydrogen as a clean fuel source positions Airbus at the forefront of the shift toward greener aviation, making them a significant player in the quest for zero-emission flight capabilities.

8. What is the primary focus of companies like Insilico Medicine?

A. Improving artificial intelligence applications

B. Developing new drugs at lower costs

C. Enhancing gaming technologies

D. Increasing data storage solutions

The primary focus of companies like Insilico Medicine is to develop new drugs at lower costs. Insilico Medicine utilizes advanced artificial intelligence and machine learning techniques to accelerate the drug discovery process. This enables them to analyze vast amounts of biological data, predict how new compounds might behave, and identify potential drug candidates more efficiently. By streamlining these processes, they can significantly reduce both the time and financial investments required to develop new pharmaceuticals, thereby making them more accessible. In contrast, the other choices do not align with Insilico Medicine's core mission. Improving artificial intelligence applications is certainly part of their methodology, but it is a means to achieve their primary goal of drug development rather than the overarching focus itself. Enhancing gaming technologies and increasing data storage solutions falls outside the realm of their objectives, which center around medicinal research and biopharmaceutical innovations.

9. Which of the following describes a major benefit of utilizing multiple small rovers instead of one large rover for lunar exploration?

A. Lower launch costs

B. Greater area coverage

C. Increased complexity

D. Reduced equipment wear

Utilizing multiple small rovers for lunar exploration provides significant advantages in terms of greater area coverage. With several smaller rovers, the combined operational range is considerably expanded, allowing for simultaneous exploration of different locations on the lunar surface. This distributed approach means that each rover can gather data from distinct areas, significantly increasing the amount of information collected in a shorter time frame. Moreover, the adaptability of small rovers allows them to maneuver in various terrains and environments, which would be more challenging for a single large rover that might face limitations due to its size and weight. Thus, the ability to cover diverse terrain and varied locations efficiently makes the deployment of multiple small rovers a strategic choice in lunar exploration missions.

SAMPLE

10. What emerging technology is described as allowing the deaf to feel sound?

A. Biofeedback Systems

B. Haptic Feedback Technology

C. Language Learning Devices

D. Advanced Hearing Aids

Haptic feedback technology is designed to provide tactile sensations in response to sounds, vibrations, or other stimuli. This capability is particularly significant for individuals who are deaf or hard of hearing, as it enables them to perceive sound through touch. By using various devices that emit vibrations or pulses, haptic feedback technology allows these individuals to "feel" music, speech, or environmental sounds, thereby creating a richer experience that goes beyond what traditional sound systems can offer. In contrast, biofeedback systems focus on measuring physiological responses to improve health or manage stress, rather than conveying sound as tactile feedback. Language learning devices typically assist with language acquisition through auditory and visual means but do not cater specifically to the sense of touch in relation to sound. Advanced hearing aids enhance auditory perception but do not provide the tactile experience that haptic technology does. Therefore, haptic feedback technology stands out as the solution that directly addresses the unique needs of those who are deaf, enabling them to engage with sound in an innovative way.

SAMPLE

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://itecemergingtech.examzify.com

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

SAMPLE