

Virginia Online Health and Physical Education 9 (HPE 9) Practice Exam (Sample)

Study Guide



Everything you need from our exam experts!

This is a sample study guide. To access the full version with hundreds of questions,

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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. Don't worry about getting everything right, 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, and take breaks to retain information better.

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.

7. Use Other Tools

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!

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Questions

- 1. What is the relationship between physical activity and mental health?**
 - A. Regular exercise can reduce symptoms of anxiety and depression**
 - B. Physical activity has no effect on mental health**
 - C. Exercise increases stress levels**
 - D. Physical activity only benefits physical health**
- 2. What is the primary function of Helper T-cells?**
 - A. To destroy infected cells directly**
 - B. To trigger the production of B-cells and killer T-cells**
 - C. To provide immediate immune response**
 - D. To produce antibodies**
- 3. What lifestyle choice can reduce the risk of chronic diseases?**
 - A. Inconsistent exercise**
 - B. A sedentary lifestyle**
 - C. Maintaining a balanced diet**
 - D. High consumption of sugary drinks**
- 4. What does mindful eating encourage individuals to do?**
 - A. Eat as quickly as possible**
 - B. Focus on food choices and portion sizes**
 - C. Ignore hunger signals**
 - D. Consume as many calories as possible**
- 5. Which type of cell coordinates and performs many functions in specific immunity?**
 - A. Lymphocyte**
 - B. Pathogen**
 - C. Vector**
 - D. Antibody**

- 6. Which condition is characterized by damage to the skin and tissues due to extreme cold?**
- A. Frostbite**
 - B. Hypothermia**
 - C. Heat exhaustion**
 - D. Heatstroke**
- 7. Why is adequate hydration important for health?**
- A. It helps with skin health only**
 - B. It aids physical and mental performance**
 - C. It is not particularly important**
 - D. It can replace the need for balanced nutrition**
- 8. What type of pathogen is characterized by being microscopic, single-celled organisms?**
- A. Viruses**
 - B. Fungi**
 - C. Bacteria**
 - D. Parasites**
- 9. Which exercise involves intense short bursts of activity where muscles work without using oxygen?**
- A. Aerobic exercise**
 - B. Anaerobic exercise**
 - C. Muscular endurance**
 - D. Body composition**
- 10. What element is essential for constituting a healthy diet?**
- A. A diet rich in only carbohydrates**
 - B. A balanced diet that includes a variety of foods from all food groups**
 - C. A high-protein diet without fruits and vegetables**
 - D. A low-calorie diet**

Answers

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

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Explanations

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1. What is the relationship between physical activity and mental health?

A. Regular exercise can reduce symptoms of anxiety and depression

B. Physical activity has no effect on mental health

C. Exercise increases stress levels

D. Physical activity only benefits physical health

Regular exercise can significantly reduce symptoms of anxiety and depression, highlighting the positive relationship between physical activity and mental health. Engaging in physical activity triggers the release of endorphins and other chemicals in the brain, which can improve mood and create a sense of well-being. This biochemical response can alleviate feelings of anxiety and melancholy, making exercise an effective tool in managing these mental health challenges. Additionally, physical activity can provide a sense of accomplishment and routine, further enhancing mental resilience. In contrast, the other options do not align with the well-established understanding of physical activity's benefits for mental health. The idea that physical activity has no effect on mental health contradicts numerous studies that show its positive outcomes. Similarly, the notion that exercise increases stress levels overlooks the stress-relief benefits associated with regular physical activity. Finally, limiting the benefits of physical activity to only physical health fails to recognize the integrated nature of mental and physical well-being, as both aspects are closely linked.

2. What is the primary function of Helper T-cells?

A. To destroy infected cells directly

B. To trigger the production of B-cells and killer T-cells

C. To provide immediate immune response

D. To produce antibodies

The primary function of Helper T-cells is to trigger the production of B-cells and killer T-cells. These cells are crucial for the adaptive immune response, as they assist in coordinating the immune system's attack against pathogens. When Helper T-cells recognize foreign antigens presented by antigen-presenting cells, they become activated and release cytokines. These signaling molecules stimulate B-cells to produce antibodies that can neutralize pathogens and help activate killer T-cells, which directly attack and destroy infected or cancerous cells. This all-encompassing role in regulating and amplifying the immune response underscores the importance of Helper T-cells in maintaining an effective immune defense. In contrast, the other options describe functions of different immune cells or responses. While some immune cells destroy infected cells directly, Helper T-cells do not perform this action themselves. Immediate immune responses are typically managed by other components of the innate immune system, and the production of antibodies is a function carried out by B-cells rather than Helper T-cells directly.

3. What lifestyle choice can reduce the risk of chronic diseases?

- A. Inconsistent exercise**
- B. A sedentary lifestyle**
- C. Maintaining a balanced diet**
- D. High consumption of sugary drinks**

Maintaining a balanced diet is recognized as a crucial lifestyle choice that can significantly reduce the risk of chronic diseases. A balanced diet involves consuming a variety of foods in the right proportions, which provides essential nutrients necessary for the body to function optimally. This includes adequate fruits, vegetables, whole grains, lean proteins, and healthy fats, which support overall health, boost the immune system, and can lower the risk of conditions such as obesity, diabetes, heart disease, and certain cancers. In contrast, inconsistent exercise and a sedentary lifestyle associated with limited physical activity can lead to weight gain, decreased cardiovascular health, and various metabolic disorders, increasing the risk of chronic diseases. Additionally, high consumption of sugary drinks is linked to obesity, type 2 diabetes, and dental problems, posing further health risks. Therefore, maintaining a balanced diet stands out as a proactive approach to fostering long-term health and wellness, highlighting its importance in disease prevention.

4. What does mindful eating encourage individuals to do?

- A. Eat as quickly as possible**
- B. Focus on food choices and portion sizes**
- C. Ignore hunger signals**
- D. Consume as many calories as possible**

Mindful eating encourages individuals to focus on food choices and portion sizes by promoting an awareness of the eating experience. This practice involves appreciating the flavors, textures, and aromas of food, as well as recognizing hunger and satiety signals. By being present during meals and paying attention to what and how much they are eating, individuals can make healthier choices, enjoy their food more, and reduce overeating. This approach fosters a more positive relationship with food and helps in developing better eating habits.

5. Which type of cell coordinates and performs many functions in specific immunity?

A. Lymphocyte

B. Pathogen

C. Vector

D. Antibody

Lymphocytes are a crucial component of the immune system, particularly in specific immunity, which is the body's targeted response to specific pathogens. There are two main types of lymphocytes: B cells and T cells. B cells are responsible for producing antibodies, which help neutralize pathogens, while T cells can directly attack infected cells and help orchestrate the immune response by coordinating other immune cells. The role of lymphocytes extends beyond merely recognizing pathogens. They undergo a process of activation, proliferation, and differentiation to effectively mount a tailored response to specific infections. This specificity is vital for developing immunological memory, allowing the body to respond more efficiently to future infections by the same pathogen. In contrast, the other choices do not perform coordinating functions in specific immunity. Pathogens are the harmful organisms that trigger the immune response; vectors are organisms that carry and transmit pathogens without being affected themselves; and antibodies are proteins produced by B cells as a result of lymphocyte activity targeting the pathogens. Therefore, lymphocytes are indeed the key players in coordinating and executing the functions critical to specific immunity.

6. Which condition is characterized by damage to the skin and tissues due to extreme cold?

A. Frostbite

B. Hypothermia

C. Heat exhaustion

D. Heatstroke

Frostbite is a condition that occurs when skin and other tissues freeze due to prolonged exposure to extremely cold temperatures. This damage primarily affects the fingers, toes, ears, and nose, as these areas are typically more susceptible to cold temperatures. When frostbite occurs, ice crystals can form inside the cells, leading to cell damage and potentially resulting in permanent injury if not treated promptly. The affected areas may appear pale or waxy and can become numb, which signifies significant tissue damage. In contrast, hypothermia results from the body losing heat faster than it can produce it, leading to a dangerous drop in body temperature rather than localized tissue damage. Heat exhaustion and heatstroke are conditions related to excessive heat exposure, not cold, and address different physiological responses and health risks.

7. Why is adequate hydration important for health?

- A. It helps with skin health only
- B. It aids physical and mental performance**
- C. It is not particularly important
- D. It can replace the need for balanced nutrition

Adequate hydration is essential for both physical and mental performance because water plays a crucial role in maintaining the body's overall functioning. It helps regulate body temperature, lubricates joints, and supports cellular processes that are vital for health. When the body is properly hydrated, it can perform at its best during physical activities, enhancing endurance, strength, and coordination. Furthermore, staying hydrated is also vital for cognitive functions such as concentration, alertness, and mood stability, which are important for mental performance in academic and everyday tasks. Thus, hydration is key to optimal functioning in both physical activities and mental tasks, making it an integral part of a healthy lifestyle.

8. What type of pathogen is characterized by being microscopic, single-celled organisms?

- A. Viruses
- B. Fungi
- C. Bacteria**
- D. Parasites

Bacteria are indeed characterized as microscopic, single-celled organisms. They are among the simplest forms of life and can be found in various environments, including soil, water, and even within the human body. Bacteria have a simple structure, lacking a nucleus and other membrane-bound organelles, which is a key feature distinguishing them as prokaryotes. The other types of pathogens mentioned do not fit this specific definition. Viruses are much smaller than bacteria, require a host cell to replicate, and are not truly considered living organisms in the same way that bacteria are. Fungi, while they can be single-celled (like yeast), are typically multi-cellular organisms, such as molds and mushrooms. Parasites are organisms that live on or in a host and can be single-celled or multi-cellular, but they are not classified simply as microscopic, single-celled organisms. Hence, bacteria uniquely meet the criteria of the question posed.

9. Which exercise involves intense short bursts of activity where muscles work without using oxygen?

- A. Aerobic exercise**
- B. Anaerobic exercise**
- C. Muscular endurance**
- D. Body composition**

The exercise involving intense short bursts of activity where muscles work without using oxygen is referred to as anaerobic exercise. Anaerobic exercise is characterized by high-intensity efforts that typically last from a few seconds to around two minutes. During such activities, the body's demand for oxygen exceeds the oxygen supply available, leading to the production of energy without relying on oxygen. This type of exercise often includes activities like sprinting, heavy weight lifting, and high-intensity interval training (HIIT). In these scenarios, the body primarily relies on energy sources stored in the muscles, such as glycogen, to fuel the activity. The inability to sustain this level of intensity for long periods is a hallmark of anaerobic exercise, as it leads to the lactic acid buildup and eventual fatigue. Understanding the distinction between anaerobic and aerobic exercise is crucial for developing effective workout regimes. Aerobic exercise, in contrast, involves sustained efforts that improve cardiovascular endurance and utilize oxygen for energy production over longer durations. The other options, such as muscular endurance and body composition, refer to different concepts related to fitness and health, rather than specific exercise types.

10. What element is essential for constituting a healthy diet?

- A. A diet rich in only carbohydrates**
- B. A balanced diet that includes a variety of foods from all food groups**
- C. A high-protein diet without fruits and vegetables**
- D. A low-calorie diet**

A balanced diet that includes a variety of foods from all food groups is essential for constituting a healthy diet because it provides the necessary nutrients that the body needs to function optimally. Each food group offers different vitamins, minerals, and macronutrients that contribute to overall health. For instance, fruits and vegetables are rich in vitamins, minerals, and fiber; grains provide carbohydrates for energy; proteins are essential for growth and repair of tissues; and dairy provides calcium and other necessary nutrients for bone health. A balanced diet helps prevent nutritional deficiencies, supports immune function, and reduces the risk of chronic diseases. It promotes overall well-being by ensuring that the body receives a wide array of nutrients essential for maintaining energy levels, boosting mood, and supporting physiological functions. Thus, the variety in food choices allows individuals to cover their nutritional bases while also enjoying their meals.

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://vaonlinehpe9.examzify.com>

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