Public Health Sanitarian 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. The conversion of light energy into chemical energy occurs in which part of the plant cell?

A. Mitochondria

B. Chloroplasts

C. Nucleus

D. Cell membrane

2. What is the main reason enriched bread is designated as such?

A. It contains added sugars

B. It contains added minerals and vitamins

C. It has a higher protein content

D. It is made from whole grains

3. An electron has a _____ charge.

A. Positive

B. Neutral

C. Negative

D. Variable

4. Which of the following is NOT classified as an antibiotic?

A. Penicillin

B. Amoxicillin

C. Trypsin

D. Ciprofloxacin

5. In an inspection report on a rat-infested building, which item is likely the least important?

A. Record of past violations by the owner

B. Evidence of current infestation

C. Evidence of sanitation conditions

D. Recommendations for pest control

6. Alpha particles are essentially the same as which of the following?

A. Helium nuclei

B. Protons

C. Neutrons

D. Electrons

7. Which of the following is NOT commonly used as a disinfectant or antiseptic?

A. Chlorhexidine

B. Hydrogen peroxide

C. Ethyl acetate

D. Alcohol

8. If the concentration of a salt solution is given as 0.7243 grams per liter, how can it also be expressed?

A. 72.43 grams per liter

B. 7.243 X 10 -2 grams per liter

C. 72.43 X 10 -2 grams per liter

D. 0.07243 grams per liter

9. Which of the following is NOT considered a disease transmissible through milk?

A. Scarlet fever

B. Septic sore throat

C. Brucellosis

D. Spotted fever

10. How does the specific gravity of milk change if it is adulterated with water?

A. It increases

B. It decreases

C. It remains unchanged

D. It becomes variable

Answers

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

Explanations

1. The conversion of light energy into chemical energy occurs in which part of the plant cell?

A. Mitochondria

B. Chloroplasts

C. Nucleus

D. Cell membrane

The conversion of light energy into chemical energy takes place in the chloroplasts of plant cells. Chloroplasts contain chlorophyll, the pigment responsible for capturing light energy from the sun. Through the process of photosynthesis, which occurs in these organelles, light energy is transformed into chemical energy stored in glucose and other organic molecules. Photosynthesis encompasses two main stages: the light-dependent reactions and the Calvin cycle. In light-dependent reactions, chlorophyll absorbs sunlight and converts it into chemical energy in the form of ATP and NADPH. The subsequent Calvin cycle utilizes this energy to convert carbon dioxide and water into glucose. This process is fundamental to the survival of plants and is a primary source of energy for nearly all life on Earth, as it forms the base of the food chain. In contrast, other parts of the plant cell have different roles. Mitochondria are primarily responsible for cellular respiration, breaking down glucose to produce energy for cellular functions. The nucleus contains genetic material and is vital for regulating cellular activities, while the cell membrane serves as a protective barrier and regulates the movement of substances in and out of the cell. Therefore, chloroplasts are specifically designed for the crucial task of converting light energy into chemical energy.

2. What is the main reason enriched bread is designated as such?

A. It contains added sugars

B. It contains added minerals and vitamins

C. It has a higher protein content

D. It is made from whole grains

Enriched bread is specifically designated as such because it contains added minerals and vitamins that are typically lost during the processing of the flour. The enrichment process is aimed at restoring these essential nutrients to the bread, which may include B vitamins such as niacin, thiamine, and riboflavin, as well as iron. This fortification is crucial as it helps in preventing nutritional deficiencies within the population. While other options, such as added sugars, higher protein content, or being made from whole grains, can enhance bread's nutritional profile, they do not define it as "enriched." The term "enriched" specifically refers to the addition of nutrients that have been lost in the milling process, making option B the correct choice.

3. An electron has a _____ charge.

A. Positive

B. Neutral

C. Negative

D. Variable

An electron is a subatomic particle that carries a fundamental charge, which is negative. This negative charge is essential to the structure of atoms and influences how atoms interact with one another. In an atom, electrons are found in the outer regions surrounding the nucleus, which contains positively charged protons and neutral neutrons. The negative charge of electrons balances the positive charge from protons, enabling the formation of stable atoms and the creation of chemical bonds. Furthermore, the nature of an electron's charge is fixed and does not vary; it is consistently defined as negative across all known physical interactions. Understanding the negative charge of an electron is fundamental in fields such as chemistry and physics, as it dictates electric forces, the behavior of electricity, and various phenomena related to electromagnetic interactions.

4. Which of the following is NOT classified as an antibiotic?

A. Penicillin

B. Amoxicillin

C. Trypsin

D. Ciprofloxacin

Trypsin is classified as a proteolytic enzyme rather than an antibiotic. Antibiotics are substances that target bacteria, either killing them or inhibiting their growth, and they are primarily used to treat bacterial infections. In contrast, trypsin's role is to break down proteins in the digestive system; it does not have antibacterial properties or functions. This distinct functionality is what categorizes it differently from the other substances listed. Penicillin, amoxicillin, and ciprofloxacin are all antibiotics that are used to fight bacterial infections, each with different mechanisms of action and spectrums of activity against various bacteria.

5. In an inspection report on a rat-infested building, which item is likely the least important?

A. Record of past violations by the owner

B. Evidence of current infestation

C. Evidence of sanitation conditions

D. Recommendations for pest control

In the context of an inspection report regarding a rat-infested building, the primary focus should be on immediate and current conditions affecting public health. Evidence of current infestation is crucial, as it directly indicates an ongoing problem that requires immediate attention. Sanitation conditions are also vital, as they can contribute to or exacerbate pest problems and influence the overall health environment of the building. Furthermore, recommendations for pest control are essential for providing actionable steps that the building owner can implement to resolve the infestation. While a record of past violations by the owner may provide some context about the owner's history and compliance, it is less critical in terms of addressing the immediate health risks posed by the current infestation. Addressing current problems takes precedence, as they directly impact public safety and health. Thus, while previous violations may inform future actions, they do not possess the same immediacy as the other considerations related to the current state of infestation and sanitation.

6. Alpha particles are essentially the same as which of the following?

A. Helium nuclei

B. Protons

C. Neutrons

D. Electrons

Alpha particles are essentially the same as helium nuclei because an alpha particle is composed of two protons and two neutrons, which is the same structure as the nucleus of a helium atom. During certain types of radioactive decay, atoms emit alpha particles as a means of losing energy and reducing their atomic mass, which ultimately leads to the transformation of the original atom into a new element. This emission results in a particle that is identical to a helium nucleus itself. In contrast, protons and neutrons are the individual components that make up atomic nuclei but do not fully represent the alpha particle's structure, which requires both types of nucleons (protons and neutrons). Electrons are fundamental components of an atom as well but do not directly relate to the composition of alpha particles, which lack charge due to their balanced proton-neutron composition. Thus, understanding the nature and composition of alpha particles leads to recognizing their equivalence with helium nuclei.

7. Which of the following is NOT commonly used as a disinfectant or antiseptic?

A. Chlorhexidine

B. Hydrogen peroxide

C. Ethyl acetate

D. Alcohol

Ethyl acetate is not commonly used as a disinfectant or antiseptic. While it is a solvent that is sometimes used in laboratory settings and for various industrial purposes, its effectiveness as a disinfectant or antiseptic is not recognized. In contrast, chlorhexidine, hydrogen peroxide, and alcohol are widely recognized for their antimicrobial properties and are regularly utilized in medical and public health contexts. Chlorhexidine is often used for skin disinfection before surgical procedures, hydrogen peroxide serves as a potent disinfectant for various surfaces and can act as an antiseptic for minor wounds, and alcohol is frequently employed for hand sanitization and disinfecting surfaces. Each of these substances has specific efficacy profiles for killing bacteria, viruses, and fungi, making them the standard choices for disinfection in various settings.

8. If the concentration of a salt solution is given as 0.7243 grams per liter, how can it also be expressed?

A. 72.43 grams per liter

B. 7.243 X 10 -2 grams per liter

C. 72.43 X 10 -2 grams per liter

D. 0.07243 grams per liter

To express 0.7243 grams per liter in scientific notation, you want to convert the number into a format that includes a coefficient between 1 and 10 multiplied by a power of ten. In this case, 0.7243 can be rewritten as 7.243, which is now between 1 and 10. To adjust for this change in scale, you need to recognize that moving the decimal place one position to the right (from 0.7243 to 7.243) reduces the power of ten by one. Hence, moving the decimal one place to the right gives you: $0.7243 = 7.243 \times 10^{-1}$ However, if we want it in the format where the power of ten is expressed as an exponent of 2, we could consider multiplying the coefficient by 10 squared while appropriately adjusting the exponent. This leads us to: $7.243 \times 10^{-1} = 72.43 \times 10^{-2}$ This showcases how 0.7243 grams per liter can be represented as 72.43 X 10^-2 grams per liter, confirming the correctness of this choice as

9. Which of the following is NOT considered a disease transmissible through milk?

A. Scarlet fever

B. Septic sore throat

C. Brucellosis

D. Spotted fever

The correct answer is that spotted fever is not considered a disease transmissible through milk. This condition, primarily associated with tick bites, particularly from the Rocky Mountain wood tick, does not have a transmission route associated with milk consumption. On the other hand, scarlet fever, septic sore throat, and brucellosis are linked to milk. Scarlet fever is caused by the same bacteria responsible for strep throat, which can be found in the milk of infected individuals if proper sanitary measures are not in place. Septic sore throat is another term for a severe form of strep throat and can likewise be transmitted through contaminated milk if patients are involved in its production or handling. Brucellosis is a well-known zoonotic disease that can be contracted through the consumption of unpasteurized milk and dairy products from infected animals. It is a significant public health concern in places where dairy farming practices may not enforce strict hygiene controls. Thus, while brucellosis, scarlet fever, and septic sore throat relate directly to milk transmission routes, spotted fever does not.

10. How does the specific gravity of milk change if it is adulterated with water?

A. It increases

B. It decreases

C. It remains unchanged

D. It becomes variable

When milk is adulterated with water, its specific gravity decreases. Specific gravity is a measure of the density of a substance compared to the density of water. Pure milk has a specific gravity of about 1.030 to 1.040, which is greater than that of water. When water, which has a specific gravity of 1.000, is added to milk, it dilutes the milk's composition. This dilution leads to a reduction in the overall density of the mixture because the proportion of the heavier components (such as fats, proteins, and solids) relative to the lighter component (water) decreases. Hence, the specific gravity of the resulting adulterated milk is less than that of pure milk. This phenomenon is significant in milk quality control, as a lower specific gravity can indicate the presence of added water, thus signaling potential adulteration.

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://publichealthsanitarian.examzify.com

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