OHIO SANITARIAN PRACTICE EXAM (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR THE FULL VERSION STUDY GUIDE

https://ohiosanitarian.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. What is a common reason for well contamination in areas with rock, clay, or hardpan?

A. Seepage of pollutants through soil

B. Failure to seal well casings properly

C. Porosity of the rock

D. Use of inferior quality well casings

2. What does drinking water standards specify for safe water regarding testing results?

A. 10 positive samples out of 100 samples taken

B. 50 coliform organisms per 100 ml

C. 1 positive sample out of 40 samples taken

D. 50 coliform organisms per 200 ml

3. For testing residual chlorine, which method determines free available chlorine with minimal interference?

A. Leuco crystal violet method

B. Stabilized neutral orthotolidine (SNORT) method

C. DPD-colorimetric method

D. DPD-titrimetric method

4. Which diseases may arise from improperly located wells that allow for fecal contamination?

A. Botulism, leptospirosis, typhus fever, malaria

B. Brucellosis, strep infections, cholera, yellow fever

C. Salmonellosis, shigellosis, cholera, hepatitis

D. Relapsing fever, histoplasmosis, psittacosis

5. What does xeriscape landscaping involve?

A. Using rocks as the basis for yard landscapes

B. Eliminating the use of trees in yards for landscaping

C. Selecting plants that can thrive on natural precipitation

D. Using sand as the basis for all landscaping needs

SAMPLE

6. What is the first product of organic matter decomposition that indicates "fresh pollution"?

A. Ammonia

B. Sugar

C. Carbon dioxide

D. Hydrogen sulfide

7. The flushometer valve is typically protected by which device?

A. A non-pressure-type vacuum breaker

B. A pressure-type vacuum breaker

C. A backflow preventer

D. A reduced pressure zone backflow preventer

8. What is the main purpose of using a coagulant in water treatment?

A. To enhance flavor

B. To clarify water by agglomerating particles

C. To disinfect water

D. To reduce sedimentation time

9. What is the desirable level of alkalinity in water?

A. 0 to 30 mg/l

B. 0 to 500 mg/l

C. 30 to 100 mg/l

D. 0 to 5 mg/l

10. According to the Safe Drinking Water Act, what is the minimum number of water supply sources determined by?

A. Daily population served

B. Population served

C. Area of the raw water supply

D. Amount of water treated

SAMPLE

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What is a common reason for well contamination in areas with rock, clay, or hardpan?

A. Seepage of pollutants through soil

B. Failure to seal well casings properly

C. Porosity of the rock

D. Use of inferior quality well casings

Well contamination in areas with rock, clay, or hardpan often occurs due to improper sealing of well casings. A well casing is intended to protect the well from surface contamination and to maintain the integrity of the water supply. When the casing is not properly sealed, contaminants from the surface can migrate down along the casing and into the groundwater, increasing the risk of pollution. Locations with hard geological formations, such as rock and clay, can exacerbate this issue because these materials can create pathways for contaminants to travel. When a casing is inadequately sealed, even small gaps can allow water containing pollutants to enter and interact with the groundwater supply, leading to significant health and safety concerns. In contrast, other factors, such as the porosity of the rock, play a role in water movement but are not the primary reason for contamination. Seepage of pollutants through soil can also occur, but if the casing is secured correctly, it serves to block surface pollutants regardless of surrounding soil composition. The use of inferior quality well casings is a consideration but does not directly address the critical issue of how well casings are sealed in relation to contamination risk. Thus, the most pertinent and immediate concern regarding well contamination in such geological conditions is the proper sealing of well cas

2. What does drinking water standards specify for safe water regarding testing results?

A. 10 positive samples out of 100 samples taken

B. 50 coliform organisms per 100 ml

C. 1 positive sample out of 40 samples taken

D. 50 coliform organisms per 200 ml

The standards for safe drinking water, particularly regarding the presence of coliform bacteria, emphasize the importance of limited positive results from testing. Specifically, the correct answer indicates a threshold allowing for only one positive sample within a specified number of total samples analyzed. This control is crucial because the presence of coliform organisms can indicate possible contamination by pathogenic bacteria, which pose health risks. The regulation typically holds that if a water system tests regularly and finds more than this allowed number of positive samples, it may indicate a failure in the water treatment or distribution system, prompting necessary investigations and remediation efforts to ensure water safety. In other options, the numbers provided do not align with commonly accepted thresholds used to determine safe drinking water quality. Options mentioning higher numbers inaccurately suggest a looser standard that does not adequately protect public health, highlighting why specific regulations exist to limit contamination and safeguard drinking water supplies.

SAMPLE

3. For testing residual chlorine, which method determines free available chlorine with minimal interference?

A. Leuco crystal violet method

B. Stabilized neutral orthotolidine (SNORT) method

C. DPD-colorimetric method

D. DPD-titrimetric method

The DPD-colorimetric method is optimal for testing residual chlorine, particularly free available chlorine, due to its sensitivity and specificity. This method involves the use of DPD (N,N-diethyl-p-phenylenediamine), which reacts with free chlorine to produce a colored compound. The intensity of the color is directly proportional to the concentration of chlorine present and can be measured using a spectrophotometer. One of the key advantages of the DPD-colorimetric method is its minimal interference from other substances that may be present in water samples. This makes it highly reliable for accurately measuring chlorine levels, which is crucial for ensuring safe water quality and compliance with health regulations. The other methods may not offer the same level of specificity or could be more affected by the presence of other oxidants or substances in the water, which could lead to inaccuracies in measuring free available chlorine. Hence, the DPD-colorimetric method stands out as the preferred choice for its reliability and reduced interference in testing residual chlorine.

4. Which diseases may arise from improperly located wells that allow for fecal contamination?

A. Botulism, leptospirosis, typhus fever, malaria

B. Brucellosis, strep infections, cholera, yellow fever

C. Salmonellosis, shigellosis, cholera, hepatitis

D. Relapsing fever, histoplasmosis, psittacosis

Waterborne diseases are often linked to fecal contamination, and the correct answer highlights several pathogens that are commonly associated with this type of contamination. Salmonellosis, shigellosis, cholera, and hepatitis are all diseases that can result from consuming water tainted with fecal matter, which may occur when wells are improperly located. Salmonellosis is caused by Salmonella bacteria, which can enter the water supply through fecal waste from infected animals or humans. Shigellosis, caused by Shigella bacteria, also spreads through fecal contamination and is known for its rapid transmission in areas with poor sanitation. Cholera, caused by Vibrio cholerae, is another waterborne disease that is primarily spread through contaminated drinking water, leading to severe gastrointestinal issues. Lastly, hepatitis A, a viral infection, can be transmitted through fecal contamination of water, resulting in liver disease. Understanding this context emphasizes the importance of proper well location and construction to prevent such diseases from emerging, as they pose significant public health risks when water sources are compromised. The other choices list diseases that are either vector-borne, respiratory, or transmitted through different routes, making them less relevant to the issue of fecal contamination from improperly located wells.

SAMPLE

5. What does xeriscape landscaping involve?

A. Using rocks as the basis for yard landscapes

B. Eliminating the use of trees in yards for landscaping

C. Selecting plants that can thrive on natural precipitation

D. Using sand as the basis for all landscaping needs

Xeriscape landscaping is particularly focused on the selection of plants that are well-suited to thrive in the natural climatic conditions of an area, particularly in dry or arid environments. This approach reduces the need for supplemental watering and promotes water conservation. By choosing drought-resistant plants, a xeriscape can flourish with minimal maintenance while still providing aesthetic and ecological benefits. This method not only conserves water but also minimizes the need for chemical fertilizers and pesticides, creating a more sustainable landscape design. The other options do not accurately represent the principles of xeriscaping. Using rocks or sand as a primary component of landscaping might seem related to water conservation, but it does not encompass the core of xeriscaping, which is about plant selection. Similarly, eliminating trees entirely from landscaping isn't aligned with xeriscaping, as many trees can also be drought-tolerant and beneficial to the local ecosystem.

6. What is the first product of organic matter decomposition that indicates "fresh pollution"?

A. Ammonia

B. Sugar

C. Carbon dioxide

D. Hydrogen sulfide

The first product of organic matter decomposition that indicates "fresh pollution" is ammonia. During the initial stages of decomposition, microorganisms break down proteins and amino acids found in organic matter, resulting in the release of ammonia as they metabolize nitrogen-containing compounds. This process typically occurs in environments where there is an influx of organic waste or material, such as in sewage or heavily polluted water bodies. Ammonia serves as a significant indicator of recent or fresh organic pollution because its presence signals that there has been a relatively recent introduction of organic material into the environment that is currently undergoing bacterial decomposition. This is particularly relevant in environmental monitoring and assessing water quality, where high levels of ammonia can indicate adverse conditions for aquatic life due to its toxicity. In contrast, while sugars, carbon dioxide, and hydrogen sulfide are also products of decomposition, they are not as immediate or definitive indicators of fresh pollution. Sugars may be present in the environment but do not specifically point to organic pollution levels, carbon dioxide is a byproduct of respiration and decomposition that occurs later in the process, and hydrogen sulfide is associated with deeper stages of anaerobic degradation rather than the early phases of fresh pollution. Thus, ammonia is the most appropriate indicator of "fresh pollution."

SAMPLE

7. The flushometer valve is typically protected by which device?

A. A non-pressure-type vacuum breaker

B. A pressure-type vacuum breaker

C. A backflow preventer

D. A reduced pressure zone backflow preventer

The flushometer valve, which is commonly used in commercial toilets, needs to be protected from backflow to prevent contamination of the potable water supply. A non-pressure-type vacuum breaker serves this purpose effectively. This device operates by creating an air gap that prevents the back siphonage of water. When the flushometer is activated, if there is a drop in pressure in the system, air enters through the vacuum breaker, preventing any water from flowing back into the potable line. Since this type of vacuum breaker does not operate under pressure, it is ideally suited for fixtures such as toilet valves where back siphonage might occur during a flush. Understanding the function of a non-pressure-type vacuum breaker is essential in ensuring that the water supply remains safe and free from pollutants, aligning with the public health and safety objectives that sanitarians prioritize.

8. What is the main purpose of using a coagulant in water treatment?

A. To enhance flavor

B. To clarify water by agglomerating particles

C. To disinfect water

D. To reduce sedimentation time

The main purpose of using a coagulant in water treatment is to clarify water by agglomerating particles. Coagulants, such as aluminum sulfate or ferric chloride, are added to water to promote the aggregation of fine suspended particles and colloidal matter. When these chemicals are introduced, they neutralize the charges on the particles, allowing them to stick together and form larger clumps, known as flocs. This aggregation process makes it easier to remove these particles from the water during subsequent filtration and sedimentation processes, resulting in clearer water. This mechanism is crucial in water treatment processes because it significantly improves water quality by removing impurities that could otherwise impart undesirable characteristics or pose health risks. While enhancements to flavor, disinfection, and reducing sedimentation time are important aspects of water treatment, they are not the primary function of coagulants. The pivotal role of coagulants is focused on clarifying the water effectively, making this the correct choice.

9. What is the desirable level of alkalinity in water?

A. 0 to 30 mg/l

B. 0 to 500 mg/l

C. 30 to 100 mg/l

D. 0 to 5 mg/l

The desirable level of alkalinity in water is significant because it relates to the water's ability to neutralize acids and support aquatic life. A level of 30 to 100 mg/l is generally ideal for maintaining a stable pH and effective buffering capacity, which is crucial for the health of aquatic ecosystems. This range also helps in preventing harmful fluctuations in pH caused by runoff or other environmental impacts. Alkalinity is essential for various biological processes and helps to ensure safe drinking water. When alkalinity is within the specified range, it aids in the prevention of corrosion in plumbing systems, supports fish and plant life in bodies of water, and enhances the overall quality of the water.

SAMPLE

10. According to the Safe Drinking Water Act, what is the minimum number of water supply sources determined by?

A. Daily population served

B. Population served

C. Area of the raw water supply

D. Amount of water treated

The minimum number of water supply sources under the Safe Drinking Water Act is determined by the population served. This regulation ensures that communities have sufficient and reliable access to safe drinking water, taking into account the number of residents who rely on the water supply. Establishing a minimum number of sources helps to manage risk and maintain service, especially during emergencies or maintenance activities. By focusing on the population served, the regulatory framework aims to provide protective measures that safeguard public health through the availability of multiple sources, reducing dependency on a single source that could be compromised. This approach aligns with public health principles, ensuring resilience in the water supply system.

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://ohiosanitarian.examzify.com

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

SAMPLE