ONS CHEMOTHERAPY IMMUNOTHERAPY CERTIFICATE PRACTICE TEST (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR THE FULL VERSION STUDY GUIDE

https://
onschemotherapyimmunotherapy.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 stomatitis?

A. Dryness of the mouth

B. Inflammation of the mouth

C. Nausea and vomiting

D. Inflammation of the sinuses

2. Which agents could potentially lower testosterone levels in prostate cancer treatment?

A. Estrogen receptor antagonists

B. LHRH agonists

C. Aromatase inhibitors

D. Both B and C

3. What is the normal range for white blood cell (WBC) count?

A. 3,500-8,500/mm^3

B. 4,500-10,000/mm^3

C. 5,000-12,000/mm^3

D. 6,000-15,000/mm^3

4. Which cutaneous reaction is most commonly seen with 5-FU and Capecitabine?

A. Rash

B. Palmar-plantar erythrodysesthesia

C. Pruritus

D. Dermatitis

5. Which complication may result from the unintentional administration of vesicants?

A. Tissue death

B. Swelling and redness

C. Increased circulation

D. Reduced pain perception

SAMPLE

6. Which is the first step in the hierarchy of controls for managing workplace hazards?

A. Substitution

B. Administrative controls

C. Engineering controls

D. Elimination

7. Monoclonal antibodies that end with "-zumab" are derived from which source?

A. Fully human

B. Chimeric human-mouse

C. Humanized mouse

D. Murine mouse

8. What is the mechanism of action of CYP17 inhibitors?

A. Preventing androgens from binding

B. Inhibiting the key enzyme for androgen biosynthesis

C. Blocking estrogen receptor activity

D. Enhancing androgen production

9. What has been described as a method to enhance the immune system's response to cancer?

A. Chemotherapy

B. Radiation therapy

C. Immunotherapy

D. Hormonal therapy

10. Which neurotransmitter is primarily involved in the vomiting pathway of CINV?

A. Dopamine

B. Acetylcholine

C. Serotonin

D. Norepinephrine

SAMPLE

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What is stomatitis?

A. Dryness of the mouth

B. Inflammation of the mouth

C. Nausea and vomiting

D. Inflammation of the sinuses

Stomatitis refers to inflammation of the mucous membranes in the mouth. This condition can manifest as swelling, redness, soreness, and the presence of ulcers, making it painful and uncomfortable. It is often seen as a side effect of treatments like chemotherapy and radiation therapy, which can damage cells in the oral cavity. Stomatitis can impact a patient's ability to eat and maintain proper oral hygiene, leading to further complications. The other options do not accurately describe stomatitis, as they refer to different conditions such as xerostomia for dryness of the mouth, and nausea and vomiting are symptoms unrelated to oral inflammation. Inflammation of the sinuses pertains to sinusitis, which is also distinct from stomatitis.

2. Which agents could potentially lower testosterone levels in prostate cancer treatment?

A. Estrogen receptor antagonists

B. LHRH agonists

C. Aromatase inhibitors

D. Both B and C

In the context of prostate cancer treatment, lowering testosterone levels is crucial because testosterone can promote the growth of prostate cancer cells. LHRH agonists, such as leuprolide or goserelin, work by reducing the production of testosterone from the testes. They do this by initially stimulating the release of luteinizing hormone (LH) and follicle-stimulating hormone (FSH) from the pituitary gland, which leads to a temporary increase in testosterone production followed by a feedback inhibition that ultimately lowers testosterone levels to castrate levels. Aromatase inhibitors also contribute to reducing estrogen levels, which can lead to a decrease in testosterone levels indirectly. Estrogen has a feedback effect on the hypothalamus and pituitary, and by reducing estrogen levels, aromatase inhibitors can also lower the levels of testosterone. Therefore, both LHRH agonists and aromatase inhibitors are effective in potentially lowering testosterone levels as part of prostate cancer treatment strategies, making the option stating that both of these agents could lower testosterone the most appropriate choice.

3. What is the normal range for white blood cell (WBC) count?

A. 3,500-8,500/mm^3

B. 4,500-10,000/mm^3

C. 5,000-12,000/mm^3

D. 6,000-15,000/mm^3

The normal range for white blood cell (WBC) count is commonly cited as 4,500 to 10,000 cells per microliter of blood, which corresponds to the choice provided. This range is important in clinical practice because it helps healthcare providers assess an individual's immune status and overall health. A WBC count within this range indicates normal immune function, while counts outside of this range could suggest various medical conditions such as infections, inflammation, or hematological disorders. Other ranges presented in the choices extend beyond the established normal limits. These variations might indicate conditions affecting bone marrow function or systemic diseases that could lead to elevated or decreased WBC counts. Understanding the correct normal range aids clinicians in making informed decisions about further testing or treatments needed for patients presenting with abnormal WBC levels.

EXAMPLE

4. Which cutaneous reaction is most commonly seen with 5-FU and Capecitabine?

A. Rash

B. Palmar-plantar erythrodysesthesia

C. Pruritus

D. Dermatitis

Palmar-plantar erythrodysesthesia, also known as hand-foot syndrome, is a common cutaneous reaction associated with the use of 5-fluorouracil (5-FU) and its oral prodrug, capecitabine. This condition manifests as redness, swelling, and peeling of the skin on the palms of the hands and the soles of the feet. The symptoms occur due to the accumulation of the chemotherapy agents in the superficial vascular and epithelial tissues, leading to localized inflammation and discomfort. The unique nature of this syndrome, specifically its localization to the palms and soles, distinguishes it from other cutaneous reactions. Patients may experience significant discomfort or pain, which can interfere with daily activities. Understanding this reaction is critical in the management of patients undergoing treatment with these agents, as it requires monitoring and potential intervention to alleviate symptoms. While other cutaneous reactions, such as rash, pruritus, and dermatitis, can occur with various chemotherapy agents, they are less specifically associated with 5-FU and capecitabine compared to palmar-plantar erythrodysesthesia. Recognizing this condition helps in promptly identifying the cause of skin toxicity and in advancing patient care through early intervention and supportive measures.

5. Which complication may result from the unintentional administration of vesicants?

A. Tissue death

B. Swelling and redness

C. Increased circulation

D. Reduced pain perception

The complication resulting from the unintentional administration of vesicants is tissue death. Vesicants are agents that can cause severe tissue damage when they extravasate, meaning they leak out of the vein into surrounding tissue. This can lead to necrosis of the affected area, resulting in permanent damage that may necessitate surgical intervention. Tissue death occurs because these agents cause a severe inflammatory response and can directly damage cellular structures, leading to cell death and compromised tissue integrity. While swelling and redness are common symptoms associated with inflammation and irritation caused by vesicants, they do not accurately capture the severity of the potential damage, which can advance to tissue necrosis. Increased circulation and reduced pain perception are not relevant complications of vesicant administration; rather, these options do not reflect the primary risks associated with extravasation.

SAMPLE

6. Which is the first step in the hierarchy of controls for managing workplace hazards?

A. Substitution

B. Administrative controls

C. Engineering controls

D. Elimination

The first step in the hierarchy of controls for managing workplace hazards is elimination. This approach focuses on completely removing the hazard from the workplace, thereby preventing any risk of exposure to it. By eliminating a hazard, you effectively protect employees without relying on other methods that might only reduce risk rather than eliminate it entirely. This strategy is the most effective because it addresses the root of the problem, ensuring that incidents cannot occur. If an hazard can be removed, there is no need for additional controls, such as substituting with a less hazardous material or implementing administrative and engineering controls to mitigate the remaining risk. In the hierarchy of controls, elimination is prioritized because it fundamentally changes the environment in which workers operate, creating a safer workplace without imposing behavioral changes or reliance on safety equipment. Once elimination is deemed impossible, other methods can be considered, but they are inherently less effective than removing the hazard altogether.

7. Monoclonal antibodies that end with "-zumab" are derived from which source?

A. Fully human

B. Chimeric human-mouse

C. Humanized mouse

D. Murine mouse

Monoclonal antibodies with names that end in "-zumab" are categorized as "humanized" antibodies. This classification means they are primarily derived from human sources but contain some components from murine (mouse) antibodies. The humanization process involves taking a mouse antibody that recognizes a specific target and modifying it to enhance its compatibility with human immune systems. This often includes replacing significant portions of the mouse antibody's structure with human antibody sequences, thus minimizing the risk of immune response against the therapeutic agent in patients. This characteristic of being primarily human, but not fully so, distinguishes "-zumab" antibodies from others, such as fully human antibodies, which would end in "-umab," or chimeric antibodies, which combine parts of both human and murine sources. Understanding these terminologies is crucial for recognizing the potential immunogenicity and effectiveness of various monoclonal antibody therapies.

SAMPLE

8. What is the mechanism of action of CYP17 inhibitors?

A. Preventing androgens from binding

B. Inhibiting the key enzyme for androgen biosynthesis

C. Blocking estrogen receptor activity

D. Enhancing androgen production

CYP17 inhibitors function by inhibiting the enzyme CYP17, which is crucial for the biosynthesis of androgens such as testosterone and dehydroepiandrosterone (DHEA). This enzyme plays a pivotal role in the production pathway of these hormones, which are implicated in conditions like prostate cancer. By blocking CYP17, these inhibitors effectively decrease the levels of circulating androgens, thereby reducing androgen receptor activation, which is necessary for the growth and survival of androgen-dependent tumors. This targeted approach is significant because it disrupts the hormonal support that some cancers rely on, leading to a reduction in tumor growth. The other options do not accurately describe the action of CYP17 inhibitors, as they do not prevent androgen binding, block estrogen receptors, or enhance androgen production. Instead, they specifically inhibit the synthesis of androgens at the enzymatic level, making option B the correct choice.

9. What has been described as a method to enhance the immune system's response to cancer?

A. Chemotherapy

B. Radiation therapy

C. Immunotherapy

D. Hormonal therapy

Immunotherapy is recognized as a method to enhance the immune system's response to cancer because it specifically focuses on boosting the body's natural defenses to fight the disease. This type of therapy involves the use of substances that can stimulate or restore the immune system's ability to recognize and attack cancer cells more effectively. There are various forms of immunotherapy, including checkpoint inhibitors, monoclonal antibodies, cancer vaccines, and adoptive cell transfer. By essentially teaching the immune system to better identify cancer cells as threats, immunotherapy can lead to more effective and targeted destruction of tumors, improving patient outcomes. Chemotherapy, while a mainstay in cancer treatment, primarily works by directly attacking rapidly dividing cancer cells, rather than leveraging or enhancing the immune response. Likewise, radiation therapy aims to destroy cancer cells through targeted radiation but does not inherently modify the immune response. Hormonal therapy seeks to block hormones that fuel certain cancers, but it does not directly enhance immune function.

SAMPLE

10. Which neurotransmitter is primarily involved in the vomiting pathway of CINV?

A. Dopamine

B. Acetylcholine

C. Serotonin

D. Norepinephrine

Serotonin is primarily involved in the vomiting pathway of chemotherapy-induced nausea and vomiting (CINV). When chemotherapy agents are administered, they can trigger the release of serotonin from the enterochromaffin cells in the gastrointestinal tract. This released serotonin then acts on the 5-HT3 receptors in the central nervous system and the gastrointestinal system, which significantly contributes to the emetic response. This pathway is crucial because it highlights the role of serotonin in mediating the effects of various chemotherapeutic agents, establishing it as a key target for antiemetic therapies. Medications that block the action of serotonin at these receptors are commonly used to prevent and manage nausea and vomiting in patients undergoing chemotherapy. This understanding underlines the importance of serotonin in the neurochemical signaling involved in CINV.

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://onschemotherapyimmunotherapy.examzify.com

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

SAMPLE