USMLE Step 2 Clinical Knowledge (CK) Practice Exam (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. 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!

Questions

1. What is the causative agent of roseola infantum, also known as sixth disease?

A. HHV6

B. Parvovirus B19

C. HPV

D. HSV

2. In bacterial vaginosis, what type of cells are commonly identified on wet mount?

A. Clue cells

B. Endometrial cells

C. Leukocytes

D. Vaginal epithelial cells

3. What organism causes tinea versicolor?

A. Candida albicans

B. Malassezia furfur

C. Trichophyton rubrum

D. Aspergillus niger

4. What class of drug is phenelzine?

A. SSRI antidepressant

B. Tricyclic antidepressant

C. MAO inhibitor

D. SNRI antidepressant

5. What laboratory findings are characteristic of polycythemia vera?

A. Elevated erythropoietin levels

B. Hypervolemia

C. Leukocytosis and thrombocytosis

D. Decreased hemoglobin

6. Which factors does warfarin inhibit in the coagulation cascade?

A. Factors 5, 7, 8, 10

B. Factors 2, 7, 9, 10, C, S

C. Factors 1, 3, 6, 15

D. Factors 3, 5, 8, 10, 11

7. What is the primary treatment approach for rheumatoid arthritis?

A. NSAIDs only

B. Steroids primarily

C. Methotrexate and TNF inhibitors

D. Antibiotics

8. What is the primary cause of hypotension in a labor epidural block?

A. Fluid overload

B. Sympathetic block leading to vasodilation

C. Intravascular volume depletion

D. Neurogenic shock

9. What is the primary preventative measure for patients with HIV at a CD4 count below 100?

A. Regular blood transfusions

B. Prophylaxis with Bactrim

C. Vaccination for pneumonia

D. Frequent imaging studies

10. What sign is observed in cases of Staphylococcal scalded skin syndrome?

A. Bullae formation

B. Rash spreading rapidly

C. Nikolsky sign

D. Fever and chills

Answers

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

Explanations

1. What is the causative agent of roseola infantum, also known as sixth disease?

A. HHV6

B. Parvovirus B19

C. HPV

D. HSV

The causative agent of roseola infantum, or sixth disease, is human herpesvirus 6 (HHV-6). This virus is a member of the herpesvirus family and is particularly known for causing a high fever followed by a characteristic rash in young children, typically between the ages of 6 months and 2 years. Roseola commonly presents with several days of high fever often exceeding 39°C (102°F), after which the fever subsides, and a pinkish-red rash appears, starting on the trunk and then spreading to the extremities. The connection of HHV-6 to roseola infantum has been well established through clinical studies and observations, reinforcing its role as the primary etiological agent for this disease. Other viruses mentioned, such as Parvovirus B19, HPV, and HSV, are associated with different illnesses. Parvovirus B19 typically causes "fifth disease," characterized by a "slapped cheek" rash in children. HPV is primarily known for its role in warts and potential cancer. HSV is associated with conditions such as oral and genital herpes, and while it can be linked to febrile illnesses in some cases, it does not cause roseola. Therefore, HHV-

2. In bacterial vaginosis, what type of cells are commonly identified on wet mount?

A. Clue cells

B. Endometrial cells

C. Leukocytes

D. Vaginal epithelial cells

In bacterial vaginosis, the presence of clue cells is a key feature observed during a wet mount examination. Clue cells are vaginal epithelial cells that have a stippled appearance due to the presence of bacterial overgrowth, which obscures the cell's borders. This morphological change occurs because of the alteration of the normal vaginal flora, where there is an overgrowth of anaerobic bacteria, displacing the usual lactobacilli. The identification of clue cells is significant because it helps differentiate bacterial vaginosis from other conditions such as vulvovaginal candidiasis and trichomoniasis. Their presence, along with a fishy odor and a homogeneous vaginal discharge, contributes to the clinical diagnosis of this condition. Other cell types that may be observed, such as leukocytes or vaginal epithelial cells, do not provide the same diagnostic specificity for bacterial vaginosis. Endometrial cells are not typically relevant in the context of a wet mount for vaginal infections, making clue cells the correct answer in this scenario.

3. What organism causes tinea versicolor?

A. Candida albicans

B. Malassezia furfur

C. Trichophyton rubrum

D. Aspergillus niger

Tinea versicolor, also known as pityriasis versicolor, is caused by the organism Malassezia furfur, which is a species of yeast that is part of the normal flora of the skin. This condition manifests as hypopigmented or hyperpigmented macules and patches on the skin, often affecting the trunk, neck, and upper arms. Malassezia furfur is lipophilic and thrives in areas with high sebaceous gland activity, which is why it is commonly found on the skin. The organism alters the production of melanin in the skin, leading to the characteristic discolored patches. The diagnosis can often be made based on the appearance of the skin lesions and may be confirmed with a microscopic examination of skin scrapings, showing the characteristic 'spaghetti and meatballs' appearance of the hyphae and yeast forms. The other organisms listed are associated with different infections or conditions. Candida albicans primarily causes thrush and various types of candidiasis, Trichophyton rubrum is a fungus commonly associated with dermatophyte infections like athlete's foot and ringworm, and Aspergillus niger is a mold that may cause respiratory infections or other conditions but is not related to skin pigmentation issues like tinea

4. What class of drug is phenelzine?

A. SSRI antidepressant

B. Tricyclic antidepressant

C. MAO inhibitor

D. SNRI antidepressant

Phenelzine belongs to the class of drugs known as monoamine oxidase inhibitors (MAOIs). MAOIs function by inhibiting the enzyme monoamine oxidase, which is responsible for the breakdown of neurotransmitters such as serotonin, norepinephrine, and dopamine in the brain. By preventing the degradation of these neurotransmitters, phenelzine enhances their availability, which can lead to improved mood and alleviation of depressive symptoms. MAOIs are particularly used in treating various mood disorders, especially in patients who have not responded to other treatments. They are noted for their efficacy but also come with dietary restrictions and potential drug interactions due to the risk of hypertensive crises when consuming certain tyramine-rich foods or interacting with other medications. Since phenelzine does not fall under the categories of selective serotonin reuptake inhibitors (SSRIs), tricyclic antidepressants (TCAs), or serotonin-norepinephrine reuptake inhibitors (SNRIs), the classification as a monoamine oxidase inhibitor is correct and highlights its unique mechanism of action among antidepressants.

5. What laboratory findings are characteristic of polycythemia vera?

A. Elevated erythropoietin levels

B. Hypervolemia

C. Leukocytosis and thrombocytosis

D. Decreased hemoglobin

Polycythemia vera (PV) is a myeloproliferative neoplasm characterized by the overproduction of red blood cells, which can also include increased production of white blood cells and platelets. The correct choice highlights that leukocytosis (elevated white blood cell count) and thrombocytosis (elevated platelet count) are often observed in patients with PV. In PV, the bone marrow is stimulated to produce more of not just red blood cells, but also leukocytes and platelets. This is attributed to a neoplastic change, primarily due to mutations in the JAK2 gene in many patients. Consequently, it is common for patients to present with both elevated leukocyte and platelet counts, reflecting the hyperproliferative nature of the disease. The other choices do not accurately characterize PV. In PV, erythropoietin levels are usually low, not elevated, because the excessive red blood cell production leads to feedback inhibition on erythropoietin synthesis. Hypervolemia (increased blood volume) could occur due to increased red cell mass causing increased viscosity, but it is not a defining laboratory finding. Lastly, a decrease in hemoglobin would not be characteristic of PV, as the condition

6. Which factors does warfarin inhibit in the coagulation cascade?

A. Factors 5, 7, 8, 10

B. Factors 2, 7, 9, 10, C, S

C. Factors 1, 3, 6, 15

D. Factors 3, 5, 8, 10, 11

Warfarin primarily inhibits the synthesis of vitamin K-dependent clotting factors in the liver. These factors include prothrombin (factor II), factor VII, factor IX, and factor X. Additionally, warfarin also inhibits the vitamin K-dependent proteins C and S, which play a crucial role in the regulation of coagulation and the prevention of thrombosis. The rationale for warfarin's mechanism of action involves the interference with the enzyme epoxide reductase, which is necessary for reducing vitamin K to its active form. This reduction process is essential for the gamma-carboxylation of certain glutamic acid residues on these clotting factors, which is a critical modification for their functional activity. Without this carboxylation, the clotting factors cannot effectively participate in the coagulation cascade. Therefore, the correct answer emphasizes warfarin's comprehensive inhibition of the aforementioned factors, demonstrating its role in anticoagulation therapy. Understanding this mechanism is pivotal for managing conditions such as atrial fibrillation and preventing venous thromboembolism.

7. What is the primary treatment approach for rheumatoid arthritis?

A. NSAIDs only

B. Steroids primarily

C. Methotrexate and TNF inhibitors

D. Antibiotics

The primary treatment approach for rheumatoid arthritis involves the use of disease-modifying antirheumatic drugs (DMARDs), with methotrexate being one of the most commonly used and effective agents. Methotrexate works by inhibiting the proliferation of lymphocytes and suppressing the immune response, thereby reducing inflammation and slowing disease progression. In addition to methotrexate, tumor necrosis factor (TNF) inhibitors are also used as part of the treatment regimen. These biologic agents target specific components of the immune system involved in the inflammatory process of rheumatoid arthritis, leading to significant improvements in symptoms and function for many patients. The combination of methotrexate and TNF inhibitors allows for a more comprehensive approach to managing the disease, particularly in patients who have not responded adequately to methotrexate alone. This approach can help achieve better control of disease activity, reduce joint damage, and improve patients' quality of life. Other treatment options, such as NSAIDs and corticosteroids, may provide symptomatic relief for inflammation and pain but do not address the underlying disease process in the same way that DMARDs do. Antibiotics are not relevant to the treatment of rheumatoid arthritis, as this condition is not caused by an infection.

8. What is the primary cause of hypotension in a labor epidural block?

A. Fluid overload

B. Sympathetic block leading to vasodilation

C. Intravascular volume depletion

D. Neurogenic shock

The primary cause of hypotension in a labor epidural block is the sympathetic block leading to vasodilation. When an epidural anesthetic is administered, it affects the sympathetic nervous system, which innervates the blood vessels. This sympathetic blockade results in vasodilation, or the widening of blood vessels, particularly in the lower half of the body. As the blood vessels dilate, there is a decrease in systemic vascular resistance, which can lead to a significant reduction in blood pressure. This effect is more pronounced in the pregnant patient due to the increased blood volume and cardiovascular changes that occur during pregnancy. The reduction in vascular resistance from the sympathetic block can result in hypotension, especially if the patient is not adequately hydrated beforehand. Maintaining adequate blood volume with proper fluid management is important to mitigate this side effect of epidural anesthesia. However, the direct causative factor underlying the hypotension during an epidural block primarily relates to the vasodilatory effects resulting from sympathetic nerve fiber blockade.

9. What is the primary preventative measure for patients with HIV at a CD4 count below 100?

A. Regular blood transfusions

B. Prophylaxis with Bactrim

C. Vaccination for pneumonia

D. Frequent imaging studies

For patients with HIV and a CD4 count below 100 cells/mm³, the primary preventative measure is prophylaxis with Bactrim (sulfamethoxazole/trimethoprim), which is crucial for preventing Pneumocystis jirovecii pneumonia (PCP). This opportunistic infection is a significant concern in immunocompromised individuals, particularly those with advanced HIV disease. A CD4 count below 200 indicates a higher risk of various opportunistic infections, and when the count falls below 100, the risk for PCP substantially increases, making prophylactic treatment with Bactrim necessary. Bactrim is effective in not only preventing PCP but also in providing coverage against other infections, such as toxoplasmosis. Therefore, its administration is a critical component of the management of HIV patients with low CD4 counts. While frequent imaging studies and vaccinations may be part of the overall care for HIV patients, they do not directly address the urgent need for prophylaxis against serious infections like PCP in those with a CD4 count below 100. Regular blood transfusions are not indicated and could pose additional health risks. Vaccination for pneumonia may be beneficial but does not sufficiently replace the need for PCP prophylaxis in this particular population.

10. What sign is observed in cases of Staphylococcal scalded skin syndrome?

A. Bullae formation

B. Rash spreading rapidly

C. Nikolsky sign

D. Fever and chills

Staphylococcal scalded skin syndrome (SSSS) is a condition primarily caused by certain strains of Staphylococcus aureus that produce exfoliative toxins. One of the hallmark signs observed in SSSS is the presence of Nikolsky sign, which is characterized by the epidermis slipping off easily when slight lateral pressure is applied to the skin. This is due to the disruption of the connections between the keratinocytes, leading to a superficial separation of the epidermis from the dermis. In SSSS, this sign becomes evident as the disease progresses, particularly in young children and neonates, who are more susceptible to the effects of these toxins. The presence of Nikolsky sign indicates the integrity of the epidermis is compromised, reflecting the pathophysiological effects of the exfoliative toxins. While bullae formation and rapid spread of rash can be associated with various skin conditions, it is the Nikolsky sign that specifically indicates the epidermal fragility due to the action of the exfoliative toxins in Staphylococcal scalded skin syndrome. Fever and chills may accompany the infection but are not diagnostic signs of SSSS itself.

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://usmlestep2ck.examzify.com

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