Emergency Medicine In-Training Examination (EM-ITE) 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. **Which of the following symptoms is associated with Wallenburg syndrome?**

   A. Hyperreflexia

   B. Loss of pain and temperature sensation

   C. Loss of proprioception

   D. Severe headaches

2. **What characterizes a hangman fracture?**

   A. A C1 burst fracture

   B. A fracture of the C2 vertebra

   C. A fracture involving odontoid type I

   D. A fracture that is always stable

3. **What is the responsibility of an independent contractor regarding taxes?**

   A. The company withholds all taxes

   B. No taxes are due

   C. The worker is responsible for all federal and state income tax

   D. The worker is exempt from self-employment tax

4. **What EKG changes are typically seen in a patient with a left ventricular aneurysm following a myocardial infarction?**

   A. Normal sinus rhythm

   B. QS wave and persistent ST elevation

   C. Disorganized conduction

   D. Prolonged QT interval

5. **For a child presenting with cough and a normal physical examination, what is the most common cause of chronic cough?**

   A. Protracted bacterial bronchitis

   B. Asthma

   C. Post-nasal drip

   D. Gastroesophageal reflux disease

6. What is the first-line outpatient treatment for atypical pneumonia?

A. Doxycycline

B. Amoxicillin

C. Azithromycin

D. Ciprofloxacin

7. What congenital syndromes can be exacerbated by cold water immersion leading to fatal dysrhythmias?

A. Marfan syndrome

B. Down syndrome

C. Prolonged QT syndrome

D. Muscular dystrophy

8. What is the pathophysiology of Legg-Calve-Perthes disease?

A. Acquired vascular necrosis of the femoral head

B. Idiopathic avascular necrosis due to ischemia

C. Congenital hip dysplasia

D. Inflammatory arthritis

9. What condition is indicated by a dilated common bile duct with gallbladder stones but no wall thickening?

A. Cholecystitis

B. Choledocholithiasis

C. Pancreatitis

D. Gallbladder cancer

10. What organism is commonly associated with atypical pneumonia characterized by dry cough, dyspnea, and gastrointestinal symptoms?

A. Mycoplasma pneumoniae

B. Legionella pneumophila

C. Chlamydia pneumoniae

D. Streptococcus pneumoniae

Answers

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

Explanations

1. Which of the following symptoms is associated with Wallenburg syndrome?

A. Hyperreflexia

B. Loss of pain and temperature sensation

C. Loss of proprioception

D. Severe headaches

Wallenburg syndrome, also known as lateral medullary syndrome, is primarily characterized by the loss of pain and temperature sensation on one side of the body. This occurs due to a lesion in the lateral medulla oblongata, often resulting from an infarction typically related to vertebral artery occlusion. The affected pathways include the spinothalamic tract, which conveys pain and temperature sensations, and damage to this area leads to contralateral loss of these sensations. Furthermore, Wallenburg syndrome can present additional symptoms, such as dysphagia, dysarthria, and ataxia due to involvement of other neural structures, but the hallmark feature remains the loss of pain and temperature sensation. This symptom aligns with the process by which the neural pathways are affected following the localized vascular impairment in the medulla.

2. What characterizes a hangman fracture?

A. A C1 burst fracture

B. A fracture of the C2 vertebra

C. A fracture involving odontoid type I

D. A fracture that is always stable

A hangman fracture is specifically characterized as a fracture of the C2 vertebra, also known as the axis. This injury typically occurs due to hyperextension of the neck, often as a result of mechanisms such as hanging or whiplash. The fracture is situated in the area of the pars interarticularis of the C2 vertebra and can lead to significant spinal instability and potential neurological complications. In clinical practice, recognizing this type of fracture is crucial because it often involves not only the osseous structure but also the potential for associated injury to the spinal cord. Prompt identification and management are essential to mitigate the risk of further complications that may arise from the injury. The other choices reference different types of spinal injuries that do not define a hangman fracture. For instance, a C1 burst fracture involves the first cervical vertebra and is unrelated to the mechanics or specific location of the hangman fracture. Similarly, odontoid fractures, which pertain to the dens of C2, vary in classification and stability, but they are distinct injuries from the hangman fracture. Lastly, not all hangman fractures are classified as stable; many often present with instability, making careful evaluation and management imperative.

3. What is the responsibility of an independent contractor regarding taxes?

A. The company withholds all taxes

B. No taxes are due

C. The worker is responsible for all federal and state income tax

D. The worker is exempt from self-employment tax

An independent contractor is responsible for all federal and state income tax obligations related to their earnings. Unlike employees, for whom employers withhold and remit taxes, independent contractors receive their full payment without any deductions. This means that it is up to the contractor to set aside money for income taxes and pay them directly to the IRS and state tax authorities. Additionally, independent contractors are often subject to self-employment tax, which covers Social Security and Medicare taxes, further emphasizing their responsibility for all tax liabilities. This self-sufficiency in managing taxes is a crucial aspect of being an independent contractor, distinguishing them clearly from traditional employee roles where tax withholding occurs through employer payroll practices.

4. What EKG changes are typically seen in a patient with a left ventricular aneurysm following a myocardial infarction?

A. Normal sinus rhythm

B. QS wave and persistent ST elevation

C. Disorganized conduction

D. Prolonged QT interval

In patients with a left ventricular aneurysm following a myocardial infarction, the typical EKG changes include the presence of QS waves and persistent ST elevation. The development of a left ventricular aneurysm often occurs after a significant and prolonged ischemic event, like a myocardial infarction, when the heart muscle becomes weakened and bulges during contraction. The QS wave represents a lack of electrical activity in the affected area of the myocardium, and the persistent ST elevation reflects ongoing pathology in that region, indicating that the necrotic myocardial tissue has not healed adequately. This pattern is distinctive and contrasts with normal EKG findings or changes associated with other cardiac conditions. While normal sinus rhythm is certainly possible, it does not specifically indicate the presence of a left ventricular aneurysm. Disorganized conduction and prolonged QT interval can be associated with other cardiac conditions or electrolyte imbalances but are not characteristic of a left ventricular aneurysm. Therefore, the combination of QS waves and persistent ST elevation is a hallmark of this condition following myocardial infarction.

5. For a child presenting with cough and a normal physical examination, what is the most common cause of chronic cough?

A. Protracted bacterial bronchitis

B. Asthma

C. Post-nasal drip

D. Gastroesophageal reflux disease

A chronic cough in children with an otherwise normal physical examination can have several potential causes, but the most common is asthma. Asthma is characterized by chronic airway inflammation and hyperreactivity, which can lead to episodes of coughing, particularly at night or during physical exertion. Many children with asthma may not exhibit wheezing or other physical signs during periods of symptom-free intervals, making it difficult to diagnose based solely on a physical examination. In the context of chronic cough, asthma often presents as a recurrent or persistent cough that is notably dry and can be triggered by allergens or respiratory infections. Its prevalence in the pediatric population also supports its classification as a common cause of chronic cough in children. This aligns with the understanding of the condition's pathophysiology, as well as epidemiological data indicating asthma is one of the leading causes of chronic cough in the pediatric demographic. Other conditions such as post-nasal drip, gastroesophageal reflux disease, and protracted bacterial bronchitis are indeed also causes of chronic cough but are less commonly identified in children with a normal physical examination compared to asthma. For instance, post-nasal drip might cause cough but is generally accompanied by other signs of upper respiratory tract involvement, which may not be present in a simply cough without

6. What is the first-line outpatient treatment for atypical pneumonia?

A. Doxycycline

B. Amoxicillin

C. Azithromycin

D. Ciprofloxacin

The first-line outpatient treatment for atypical pneumonia is doxycycline. Atypical pneumonia, often caused by pathogens like Mycoplasma pneumoniae or Chlamydia pneumoniae, typically presents with a different clinical picture than typical bacterial pneumonia. Doxycycline is effective against the common atypical pathogens and has the advantage of a convenient dosing schedule, good oral bioavailability, and a side effect profile that is generally manageable in outpatient settings. In comparison, azithromycin is also a commonly used option for atypical pneumonia; however, doxycycline is frequently preferred due to its broader coverage against certain resistant strains of organisms and is recommended in certain treatment guidelines. Amoxicillin, while effective for typical pneumonia caused by Streptococcus pneumoniae, is not typically effective against the atypical pathogens. Ciprofloxacin, primarily active against gram-negative bacteria, does not target the common causes of atypical pneumonia effectively and is not used as a first-line treatment for this condition. Understanding the specific pathogens associated with atypical pneumonia and the antibiotic susceptibilities is crucial for selecting the most appropriate treatment, making doxycycline the choice in this context.

7. What congenital syndromes can be exacerbated by cold water immersion leading to fatal dysrhythmias?

A. Marfan syndrome

B. Down syndrome

C. Prolonged QT syndrome

D. Muscular dystrophy

Cold water immersion can lead to fatal dysrhythmias primarily due to the physiological stress it places on the cardiovascular system. Individuals with prolonged QT syndrome are particularly vulnerable in this scenario. This condition is characterized by an extended QT interval on an electrocardiogram, which represents the time it takes for the heart's electrical system to reset after each heartbeat. When such individuals are exposed to extreme cold, their heart may not respond appropriately to the sudden stress, resulting in life-threatening arrhythmias like torsades de pointes. The mechanism of cold water immersion can trigger an autonomic response, usually leading to bradycardia and increased vagal tone, which can further exacerbate the already prolonged QT interval. The combination of these factors puts individuals with prolonged QT syndrome at a significantly higher risk for cardiac events compared to the general population. In contrast, while other congenital syndromes may have cardiovascular implications, they do not show the same consistent vulnerability to cold water immersion leading to fatal dysrhythmias. For example, Marfan syndrome is associated with cardiovascular complications such as aortic dissection but is not directly linked to dysrhythmias triggered by temperature changes. Down syndrome has various associated health issues but similarly lacks a specific connection to dysrhythmias exacerb

8. What is the pathophysiology of Legg-Calve-Perthes disease?

A. Acquired vascular necrosis of the femoral head

B. Idiopathic avascular necrosis due to ischemia

C. Congenital hip dysplasia

D. Inflammatory arthritis

Legg-Calve-Perthes disease is characterized by idiopathic avascular necrosis of the femoral head, which occurs due to temporary disruption of blood supply leading to ischemia. This condition most commonly affects children between the ages of 4 and 10 and presents with symptoms such as hip pain, limping, and decreased range of motion. The term "idiopathic" is important here, as it indicates that the exact cause of the avascular necrosis is unknown, but it is associated with multiple factors, including genetics and environmental influences. The ischemia leads to bone cell death in the femoral head, which subsequently results in bone deformity and potential joint dysfunction if not addressed appropriately. Over time, the body attempts to repair the necrotic area, often leading to a process of revascularization and remodeling, but the nature of this recuperative process can greatly vary from patient to patient. Understanding this pathophysiology is crucial for recognizing the symptoms and potential long-term consequences of the disease, as timely intervention can help improve outcomes for affected children. This information underlines the significance of early diagnosis and management in preventing complications such as osteoarthritis and femoral head deformity later in life.

9. What condition is indicated by a dilated common bile duct with gallbladder stones but no wall thickening?

A. Cholecystitis

B. Choledocholithiasis

C. Pancreatitis

D. Gallbladder cancer

A dilated common bile duct alongside the presence of gallbladder stones, without any wall thickening of the gallbladder itself, strongly points towards choledocholithiasis. This condition occurs when one or more gallstones obstruct the common bile duct, leading to bile duct dilation due to the accumulation of bile upstream from the obstruction. In this scenario, the absence of wall thickening indicates that there is likely no inflammation or infection of the gallbladder itself, which would be typical in cases such as cholecystitis. In acute cholecystitis, you would generally expect to see gallbladder wall thickening due to inflammation. Pancreatitis, while it can sometimes be associated with bile duct obstruction, would typically present with more severe abdominal symptoms and may also show additional laboratory signs, such as elevated amylase or lipase levels, but it would not directly indicate a specific dilation of the bile duct without involving the gallbladder walls. Gallbladder cancer, while a possibility, is usually associated with more distinct imaging findings and clinical presentation, including wall thickening, masses, or other abnormalities beyond just a dilated common bile duct. Therefore, the combination of a dilated common bile duct, the presence of

10. What organism is commonly associated with atypical pneumonia characterized by dry cough, dyspnea, and gastrointestinal symptoms?

A. Mycoplasma pneumoniae

B. Legionella pneumophila

C. Chlamydia pneumoniae

D. Streptococcus pneumoniae

The organism commonly associated with atypical pneumonia, especially characterized by dry cough, dyspnea, and gastrointestinal symptoms, is Legionella pneumophila. This pathogen is known to cause a distinct clinical picture with symptoms that extend beyond the respiratory system, including diarrhea and abdominal pain, unlike many other types of pneumonia. Legionella infections can manifest as Legionnaires' disease, which typically presents with severe pneumonia along with gastrointestinal symptoms, making it crucial to recognize in the context of an atypical pneumonia presentation. The dry cough and dyspnea are typical respiratory symptoms of pneumonia in general, but the incorporation of gastrointestinal symptoms is particularly indicative of an infection with Legionella. Other organisms listed can also cause pneumonia, but their symptom profiles differ. For instance, Mycoplasma pneumoniae often leads to a more classic presentation of atypical pneumonia but is less associated with gastrointestinal symptoms than Legionella. Chlamydia pneumoniae can also cause atypical pneumonia, though it frequently presents with milder respiratory symptoms and fewer systemic signs. Streptococcus pneumoniae typically causes lobar pneumonia with a productive cough and is not considered atypical. Thus, Legionella pneumophila stands out due to its unique clinical manifestation, aligning closely with the symptoms described in the question.

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://emergencymedicineite.examzify.com

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