NBME Form 28 Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

Table of Contents

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. **A 6-week-old infant has an umbilical discharge containing intestinal fluid. Where is the fistula most likely connected?**

   A. Cecum

   B. Duodenum

   C. Jejunum

   D. Illeum

2. **What is the most likely diagnosis for a patient with preoccupation about multiple somatic symptoms disrupting their life?**

   A. Conversion disorder

   B. Factitious disorder

   C. Illness anxiety disorder

   D. Somatic symptom disorder

3. **A young woman presents with abdominal pain and cervical motion tenderness. What structure is likely affected?**

   A. Appendix

   B. Bladder

   C. Endometrium

   D. Uterine (fallopian) tube

4. **What nerve is most likely damaged in the patient who struggles to purse lips after a facial injury?**

   A. Buccal branch of the facial nerve

   B. Mandibular branch of the facial nerve

   C. Infraorbital branch of the maxillary nerve

   D. Inferior alveolar branch of the trigeminal nerve

5. **In the context of granulosa cell tumors, what feature is most indicative of their activity?**

   A. Excessive androgen production

   B. Estrogen production

   C. Progesterone production

   D. Testosterone production

6. A 3-year-old girl has a history of recurrent infections, and her neutrophils can phagocytose but not kill Staphylococcus aureus. Which enzyme is most likely deficient in this patient?

A. Catalase

B. Elastase

C. NADPH oxidase

D. Superoxide dismutase

7. What is the primary risk factor associated with the development of anal fissures?

A. Improper bowel movement techniques

B. Chronic diarrhea

C. Chronic constipation

D. Dietary fiber deficiency

8. A newborn dies three days after birth; an autopsy shows bilirubin deposition in the brain. What is the most likely cause of this condition?

A. Biliary atresia

B. Cyanotic congenital heart disease

C. Hemolytic disease of the newborn

D. Respiratory distress syndrome

9. What role does the spinothalamic tract play in sensation?

A. Proprioception

B. Light touch

C. Temperature and pain sensation

D. Deep pressure

10. Which conduction pathway has the longest conduction time in the heart?

A. Anterior left bundle branch

B. Intra-atrial

C. Low right atrium to bundle of His

D. Right bundle branch

Answers

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

Explanations

1. A 6-week-old infant has an umbilical discharge containing intestinal fluid. Where is the fistula most likely connected?

A. Cecum

B. Duodenum

C. Jejunum

D. Illeum

The presence of an umbilical discharge containing intestinal fluid in a 6-week-old infant is suggestive of a patent omphalomesenteric duct or Meckel's diverticulum. When the omphalomesenteric duct fails to close properly, it can lead to a connection between the intestine and the umbilicus. In this scenario, when the discharge contains intestinal fluid, it indicates that the fistula is most likely connected to a portion of the intestine. The distinction is important, as the omphalomesenteric duct typically connects to the distal ileum, which is the terminal segment of the small intestine before it empties into the large intestine. A specific connection to the ileum (the last part of the small intestine) explains the presence of intestinal fluid in the discharge. Such a connection would allow digestive contents to pass through the fistula, resulting in the observed symptoms. Other segments of the gastrointestinal tract, such as the cecum, duodenum, and jejunum, are either less commonly associated with omphalomesenteric fistulas or would not typically present with intestinal fluid in the umbilical discharge. Therefore, the most likely connection for the fistula in this scenario is to the ileum.

2. What is the most likely diagnosis for a patient with preoccupation about multiple somatic symptoms disrupting their life?

A. Conversion disorder

B. Factitious disorder

C. Illness anxiety disorder

D. Somatic symptom disorder

The scenario described points toward a diagnosis of somatic symptom disorder, characterized by an individual who experiences significant distress or disruption in daily life due to multiple somatic symptoms. This disorder involves an excessive focus on physical sensations, which can lead to considerable anxiety and impairment, reflecting a combination of somatic symptoms and emotional responses. In somatic symptom disorder, the patient may not be able to identify a clear medical causation for their symptoms, yet their concern and preoccupation are very real. The individual genuinely feels the symptoms and may seek medical care repeatedly, which further underscores the severity and impact of their condition. The emphasis here is on the disruption caused by the symptoms alongside the preoccupation with them, which aligns with the criteria for somatic symptom disorder. This distinguishes it from other disorders, such as illness anxiety disorder, where the primary concern is the fear of having a serious disease without prominent somatic symptoms.

3. A young woman presents with abdominal pain and cervical motion tenderness. What structure is likely affected?

A. Appendix

B. Bladder

C. Endometrium

D. Uterine (fallopian) tube

In the scenario presented, the combination of abdominal pain and cervical motion tenderness suggests the presence of a gynecological issue, likely related to the reproductive system. Cervical motion tenderness is particularly indicative of conditions such as pelvic inflammatory disease (PID), which often involves infection or inflammation of the uterine (fallopian) tubes. The uterine (fallopian) tubes are responsible for transporting eggs from the ovaries to the uterus and are closely associated with the processes of fertilization and early pregnancy. When there is an infection or inflammation in this area, it can lead to significant discomfort and pain radiating throughout the lower abdomen. This condition often presents alongside other symptoms, such as fever and abnormal vaginal discharge. While other structures like the appendix, bladder, and endometrium could be related to abdominal pain, they would not typically present with cervical motion tenderness, which points more directly to a gynecological origin of the symptoms. Thus, the uterine (fallopian) tube is the most likely structure affected in this clinical scenario.

4. What nerve is most likely damaged in the patient who struggles to purse lips after a facial injury?

A. Buccal branch of the facial nerve

B. Mandibular branch of the facial nerve

C. Infraorbital branch of the maxillary nerve

D. Inferior alveolar branch of the trigeminal nerve

The correct answer focuses on the buccal branch of the facial nerve, which is responsible for innervating the muscles of facial expression in the area around the mouth, including the ability to purse the lips. Damage to this specific branch can lead to difficulties in performing actions such as whistling, blowing, or forming a tight seal with the lips, as these functions require coordinated contraction of the orbicularis oris muscle, which is primarily innervated by the buccal branch. In the context of a facial injury, it's common for the buccal branch to be affected due to its superficial location and its pathway across the facial region. Consequently, when a patient presents with an inability to purse their lips, it strongly indicates that the buccal branch has been compromised. Other nerves mentioned do not primarily control the lip movements. For instance, the mandibular branch of the facial nerve primarily innervates the muscles of mastication and some of the facial muscles but is not directly responsible for lip movement. The infraorbital branch of the maxillary nerve provides sensation to the skin of the upper lip and does not control muscle action. The inferior alveolar branch of the trigeminal nerve is mainly responsible for sensation to the lower teeth

5. In the context of granulosa cell tumors, what feature is most indicative of their activity?

A. Excessive androgen production

B. Estrogen production

C. Progesterone production

D. Testosterone production

Granulosa cell tumors are a type of sex-cord stromal tumor of the ovary that are known for their ability to produce estrogen. One of the most significant indicators of their activity is the production of estrogen, which can lead to various clinical manifestations such as abnormal uterine bleeding, signs of estrogen excess, and changes in secondary sexual characteristics due to the hormonal influence. Estrogen production is critical because it serves as a useful marker for the tumor's functional status. Patients with granulosa cell tumors often exhibit elevated levels of estrogen in the serum, which is consistent with the tumor's origin from granulosa cells that normally participate in the synthesis of estrogen during follicle maturation. While other hormones like androgens and progesterone may be produced by different cells or tumors, granulosa cell tumors are more specifically characterized by their ability to produce estrogen. Therefore, recognizing estrogen levels as an indicator of activity in granulosa cell tumors is essential for diagnosis and management. The clinical implications of this activity highlight the importance of monitoring for estrogen-related symptoms in patients diagnosed with this type of tumor.

6. A 3-year-old girl has a history of recurrent infections, and her neutrophils can phagocytose but not kill Staphylococcus aureus. Which enzyme is most likely deficient in this patient?

A. Catalase

B. Elastase

C. NADPH oxidase

D. Superoxide dismutase

In this case, the clinical presentation suggests a problem with the respiratory burst function of neutrophils. Neutrophils are essential components of the immune system, and their ability to kill pathogens is dependent on their capacity to generate reactive oxygen species (ROS) through a process called the oxidative burst. This process requires the enzyme NADPH oxidase, which catalyzes the production of superoxide, a reactive molecule that is crucial for the killing of bacteria after they have been phagocytosed. The fact that the child can phagocytose Staphylococcus aureus but cannot effectively kill it indicates that the phagocytic process is functioning, but the subsequent killing mechanism is impaired. This aligns with conditions such as Chronic Granulomatous Disease (CGD), which is characterized by a deficiency in NADPH oxidase. In CGD, despite the ability of neutrophils to engulf bacteria, the inability to produce ROS results in recurrent infections, particularly with catalase-positive organisms like Staphylococcus aureus. The other enzymes listed—catalase, elastase, and superoxide dismutase—do not directly pertain to the oxidative burst mechanism that is critical for the innate immune response and the specific killing of pathogens. Therefore,

7. What is the primary risk factor associated with the development of anal fissures?

A. Improper bowel movement techniques

B. Chronic diarrhea

C. Chronic constipation

D. Dietary fiber deficiency

The primary risk factor associated with the development of anal fissures is chronic constipation. When an individual experiences chronic constipation, stool tends to be harder and larger, which can lead to increased straining during bowel movements. This excessive straining, coupled with the passage of hard stools, can cause trauma to the anal canal, resulting in fissures. Chronic constipation not only increases the likelihood of stool impaction but also contributes to an increased pressure in the anal area, making the skin more susceptible to tearing. The resulting fissures can be painful and may lead to a cycle of avoidance of bowel movements due to fear of pain, thereby worsening constipation. While other factors, such as improper bowel movement techniques, chronic diarrhea, and dietary fiber deficiency, can contribute to anal issues, chronic constipation is specifically recognized as a primary and direct cause of anal fissures. This connection underscores the importance of maintaining regular bowel habits and ensuring stool consistency through adequate hydration and dietary fiber intake.

8. A newborn dies three days after birth; an autopsy shows bilirubin deposition in the brain. What is the most likely cause of this condition?

A. Biliary atresia

B. Cyanotic congenital heart disease

C. Hemolytic disease of the newborn

D. Respiratory distress syndrome

The presence of bilirubin deposition in the brain of a newborn, particularly within a few days after birth, suggests a significant buildup of unconjugated bilirubin, leading to a condition known as kernicterus. This is often the result of hemolytic disease of the newborn, where an Rh or ABO incompatibility leads to increased hemolysis of red blood cells, causing elevated levels of bilirubin in the bloodstream. In this condition, the liver of the newborn may not be mature enough to handle the excess bilirubin, resulting in its accumulation. Eventually, this excess bilirubin can cross the blood-brain barrier and deposit in brain tissues, leading to serious neurological damage. This pathophysiological process aligns closely with hemolytic disease of the newborn, making it the most likely cause of bilirubin deposition in the brain in this scenario. The other options do not typically lead to bilirubin accumulation in the same manner. Biliary atresia involves an obstructive process of the bile ducts that usually results in conjugated hyperbilirubinemia, rather than the unconjugated form associated with hemolysis. Cyanotic congenital heart disease can cause hypoxia and other systemic issues but is not directly related to bilirubin deposition. Respir

9. What role does the spinothalamic tract play in sensation?

A. Proprioception

B. Light touch

C. Temperature and pain sensation

D. Deep pressure

The spinothalamic tract is primarily responsible for transmitting sensations of temperature and pain from the peripheral nervous system to the brain. It is a key pathway in the central nervous system that carries these modalities, allowing individuals to perceive potentially harmful stimuli and react accordingly. When a stimulus such as a sharp object or extreme heat is detected by peripheral receptors, the sensory neurons send this information to the spinal cord, where it synapses with second-order neurons in the dorsal horn. These neurons then ascend through the spinothalamic tract, which ultimately projects to the thalamus and then to the sensory cortex, where the brain can process the sensation and initiate a response. Other options, such as proprioception, light touch, and deep pressure, are mediated by different pathways. For instance, proprioception relies on pathways like the dorsal columns-medial lemniscal system, light touch is also conveyed via the same system, and deep pressure has its own distinct pathways. Therefore, the unique role of the spinothalamic tract in carrying temperature and pain sensations distinguishes it as a vital component in the sensory system, underscoring the importance of this tract in protecting the body from injury and facilitating appropriate responses to the environment.

10. Which conduction pathway has the longest conduction time in the heart?

A. Anterior left bundle branch

B. Intra-atrial

C. Low right atrium to bundle of His

D. Right bundle branch

The conduction pathway that has the longest conduction time in the heart is from the low right atrium to the bundle of His. This pathway involves the conduction of impulses through the specialized conduction tissues of the heart, particularly as the impulse travels from the atria to the ventricles. In this pathway, conduction occurs at a slower speed due to several factors, including the physiology of the atrial myocardium and the properties of the tissue through which the impulses are traveling. The atrial tissue is not designed for fast conduction compared to the specialized conduction systems like the His-Purkinje system. As a result, the conduction velocity is slower in this region, leading to a longer conduction time. Moreover, the intra-atrial pathways also experience some delay, but they are generally shorter in conduction time compared to the longer distance that impulses must travel from the low right atrium to reach the bundle of His. Other pathways such as the anterior left bundle branch and the right bundle branch are designed for faster conduction due to the rapid propagation characteristics of their specialized muscle fibers. Thus, while all pathways have specific roles in the conduction system of the heart, the low right atrium to bundle of His pathway demonstrates the longest conduction time due to the inherent characteristics of the atr

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://nbmeform28.examzify.com

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