UWorld Pediatrics 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. What is the underlying pathophysiology of anemia in Diamond-Blackfan syndrome?

A. Increased hemolysis

B. Intrinsic defect of erythroid progenitor cells

C. Iron deficiency

D. Chronic infection

2. What condition is characterized by recurrent hematuria, sensorineural deafness, and a family history of renal failure?

A. Alport's syndrome

B. Nephrotic syndrome

C. Focal segmental glomerulosclerosis

D. Minimal change disease

3. What is the typical treatment for a torus fracture in a child?

A. Surgical intervention

B. Physical therapy

C. Cast immobilization

D. Observation only

4. Which of the following conditions is associated with fatigue, periorbital edema, and abdominal distention?

A. Asthma

B. Acute glomerulonephritis

C. Bronchiolitis

D. Allergic reaction

5. Which physiological effect is associated with squatting from a standing position?

A. Increases preload

B. Decreases afterload

C. Decreases preload

D. No effect on hemodynamics

6. What is the most likely diagnosis for a 6-year-old girl with Down syndrome who presents with ataxic gait, dizziness, and positive Babinski reflex?

A. Spinal stenosis

B. Atlantoaxial instability

C. Multiple sclerosis

D. Psychogenic factors

7. In a case of septic arthritis, which of the following organisms is most commonly associated with this condition?

A. Escherichia coli

B. Haemophilus influenzae

C. Staphylococcus aureus

D. Streptococcus pneumoniae

8. What is the primary predisposing factor for developing acute bacterial rhinosinusitis?

A. Allergic rhinitis

B. Cigarette smoke exposure

C. Viral upper respiratory infection

D. Formula feeding

9. At what average age does puberty typically begin for girls?

A. 9.5 years

B. 10.5 years

C. 11.5 years

D. 12.5 years

10. What is the diagnosis for a newborn with omphalitis and delayed separation of the umbilical cord without pus?

A. Leukocyte adhesion deficiency

B. Transient hypogammaglobulinemia

C. Cystic fibrosis

D. Congenital adrenal hyperplasia

Answers

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

Explanations

1. What is the underlying pathophysiology of anemia in Diamond-Blackfan syndrome?

A. Increased hemolysis

B. Intrinsic defect of erythroid progenitor cells

C. Iron deficiency

D. Chronic infection

Diamond-Blackfan syndrome (DBS) is primarily characterized by a selective failure of erythroid progenitor cells in the bone marrow to properly mature and produce red blood cells, leading to anemia. The underlying pathophysiology involves an intrinsic defect in these progenitor cells, which are supposed to differentiate into erythrocytes. This defect is often due to mutations in genes that are crucial for ribosome biogenesis. As a result, individuals with this condition have a reduced number of red blood cells and often exhibit macrocytic anemia due to the impaired production. In contrast, conditions such as increased hemolysis, iron deficiency, or chronic infection do not explain the specific maturation failure of erythroid progenitor cells seen in Diamond-Blackfan syndrome, highlighting why the correct answer reflects the intrinsic cellular defect specific to this disorder. Understanding the unique developmental aspect of Diamond-Blackfan syndrome helps distinguish it from other forms of anemia, which may stem from different pathophysiological mechanisms.

2. What condition is characterized by recurrent hematuria, sensorineural deafness, and a family history of renal failure?

A. Alport's syndrome

B. Nephrotic syndrome

C. Focal segmental glomerulosclerosis

D. Minimal change disease

Alport's syndrome is characterized by a triad of symptoms that includes recurrent hematuria (blood in urine), sensorineural deafness (hearing loss), and a family history of renal failure. This genetic condition primarily affects the kidneys and the ears due to mutations affecting type IV collagen, which is a crucial component of the basement membranes in these tissues. In individuals with Alport's syndrome, the kidney's filtering units—the glomeruli—sustain damage over time, leading to hematuria and eventually progressing to chronic kidney disease or renal failure. The associated sensorineural hearing loss may appear in childhood or adolescence and is often one of the more prominent features that prompt diagnosis, especially when there is a hereditary pattern, as it is often inherited in an X-linked manner, although autosomal recessive and dominant forms exist as well. Conditions like nephrotic syndrome, focal segmental glomerulosclerosis, and minimal change disease primarily involve proteinuria and edema, with hematuria not being a classic feature. They also do not typically present with hearing loss or a direct familial link to renal failure in the same manner as Alport's syndrome. This distinct combination of symptoms is what makes Alport's syndrome the correct answer.

3. What is the typical treatment for a torus fracture in a child?

A. Surgical intervention

B. Physical therapy

C. Cast immobilization

D. Observation only

A torus fracture, also known as a greenstick fracture, is a type of bone fracture that is commonly seen in children due to their softer and more pliable bones. The characteristic of a torus fracture is that the bone bends and causes a bulging of the cortex, rather than breaking completely. The typical treatment for a torus fracture is cast immobilization. This approach is effective because it allows the fractured bone to heal properly while ensuring minimal movement. Cast immobilization provides the necessary support to the affected area and promotes proper alignment during the healing process. In children, these types of fractures generally heal well and respond favorably to conservative management. Since torus fractures are stable injuries and often occur in non-displaced situations, they rarely require surgical intervention. Physical therapy may be considered after the cast removal, but it is not a primary treatment for a torus fracture itself. Similarly, observation may be appropriate in certain contexts, but it is typically not sufficient alone for managing these fractures, as immobilization is needed for optimal healing.

4. Which of the following conditions is associated with fatigue, periorbital edema, and abdominal distention?

A. Asthma

B. Acute glomerulonephritis

C. Bronchiolitis

D. Allergic reaction

The condition associated with fatigue, periorbital edema, and abdominal distention is acute glomerulonephritis. This condition can result from various causes, including infections, autoimmune diseases, or certain systemic illnesses. In acute glomerulonephritis, the inflammation of the glomeruli in the kidneys interferes with their ability to filter waste and excess fluid from the blood effectively. As a result, patients may develop symptoms such as fatigue due to a buildup of metabolic waste in the body, periorbital edema (swelling around the eyes) because of fluid retention, and abdominal distention, which can occur from fluid accumulation in the abdominal cavity related to nephrotic syndrome or general fluid overload. Understanding the interconnectedness of these symptoms helps in identifying acute glomerulonephritis as the underlying condition, as fatigue often accompanies decreased kidney function, and edema is a classic manifestation of fluid imbalance, particularly in the context of renal conditions.

5. Which physiological effect is associated with squatting from a standing position?

A. Increases preload

B. Decreases afterload

C. Decreases preload

D. No effect on hemodynamics

Squatting from a standing position significantly affects hemodynamics by increasing preload. When an individual squats, there is a change in venous return to the heart due to the compression of veins in the lower extremities and abdominal cavity. This compression enhances blood return to the heart, effectively raising the end-diastolic volume or preload. This increase in preload is critical for understanding cardiovascular physiology, especially in conditions such as congenital heart defects and during different forms of physical exertion. By improving venous return and, consequently, the volume of blood entering the heart, squatting can lead to an increase in stroke volume and cardiac output. In contrast, other options may misinterpret the physiological changes occurring during squatting. The action does not decrease afterload (the resistance the heart must work against) or preload; rather, it actively promotes an increase. Furthermore, stating that there is no effect on hemodynamics overlooks the significant changes in blood flow dynamics that result from the squatting position.

6. What is the most likely diagnosis for a 6-year-old girl with Down syndrome who presents with ataxic gait, dizziness, and positive Babinski reflex?

A. Spinal stenosis

B. Atlantoaxial instability

C. Multiple sclerosis

D. Psychogenic factors

The diagnosis of atlantoaxial instability in a 6-year-old girl with Down syndrome presenting with ataxic gait, dizziness, and a positive Babinski reflex is particularly relevant due to the anatomical and physiological considerations associated with Down syndrome. Children with Down syndrome are predisposed to atlantoaxial instability due to bony abnormalities of the cervical spine that may occur, primarily affecting the first and second cervical vertebrae (the Atlas and Axis). Ataxic gait and dizziness are indicative of neurological compromise, which can arise from compression of the spinal cord or brainstem in the context of atlantoaxial instability. The presence of a positive Babinski reflex suggests upper motor neuron involvement, which can occur if there is cord compression. In this case, the symptoms align well with the potential neurological consequences of the instability, making atlantoaxial instability the most likely diagnosis. Spinal stenosis is less common in this age group, particularly in the context of Down syndrome, and it would typically present with different symptoms. Multiple sclerosis, while possible in older children, is unlikely in a young child and particularly in one with known Down syndrome. Psychogenic factors could contribute to similar symptoms but would not typically be the primary diagnosis in the context of clear neuro

7. In a case of septic arthritis, which of the following organisms is most commonly associated with this condition?

A. Escherichia coli

B. Haemophilus influenzae

C. Staphylococcus aureus

D. Streptococcus pneumoniae

Septic arthritis is most commonly caused by Staphylococcus aureus, which is a type of bacteria that frequently infects joints, especially in both adults and children. This organism is particularly associated with both acute and chronic forms of septic arthritis due to its ability to produce virulence factors that facilitate tissue invasion, as well as its prevalence as a skin commensal that can gain access to the bloodstream and joints through breaks in the skin. In pediatric patients, Staphylococcus aureus has emerged as the leading cause of septic arthritis, particularly among those who are not vaccinated against strains like Streptococcus pneumoniae or in those with underlying health issues. The organism's ability to form biofilms and resist certain antibiotics further complicates treatment, making it critical to identify cases early and provide appropriate antibiotic therapy. Other organisms listed may also cause septic arthritis, but they are less common. For instance, Escherichia coli is typically associated with urinary tract infections and can cause septic arthritis primarily in specific contexts, such as in immunocompromised patients. Haemophilus influenzae was once a common cause of septic arthritis in children before the widespread use of the Hib vaccine, and Streptococcus pneumoniae can cause septic arthritis though it is more often associated with

8. What is the primary predisposing factor for developing acute bacterial rhinosinusitis?

A. Allergic rhinitis

B. Cigarette smoke exposure

C. Viral upper respiratory infection

D. Formula feeding

Acute bacterial rhinosinusitis typically occurs as a complication following a viral upper respiratory infection (URI). The significance of the viral URI lies in the fact that it can lead to mucosal inflammation and resultant obstruction of the sinus ostia. This obstruction prevents effective drainage of mucus from the sinuses, creating an environment conducive to bacterial growth. In the context of pediatric patients, a common scenario is that after experiencing symptoms of a common cold, a child may develop signs of sinusitis characterized by nasal obstruction, purulent nasal discharge, cough, and possibly facial pain or tenderness. While factors such as allergic rhinitis or cigarette smoke exposure can exacerbate sinus issues or contribute to overall nasal congestion, they are not the primary initiators of acute bacterial rhinosinusitis in the same direct manner that a preceding viral infection is. Formula feeding, on the other hand, is not directly related to the development of acute bacterial rhinosinusitis but rather concerns other health aspects in infants. Thus, understanding that a viral upper respiratory infection disrupts normal sinus function and sets the stage for bacterial infection is key to grasping why it is identified as the main predisposing factor for acute bacterial rhinosinusitis.

9. At what average age does puberty typically begin for girls?

A. 9.5 years

B. 10.5 years

C. 11.5 years

D. 12.5 years

Puberty typically begins for girls around the age of 10.5 years. This average age can vary between individuals but most commonly, the onset occurs between 8 and 13 years of age. Factors contributing to the variation in the onset of puberty include genetics, body composition, nutrition, and environmental influences. The process of puberty is marked by several physical changes, including the development of breast tissue, the growth of pubic hair, and the onset of menstruation, starting with thelarche (breast development). The significance of this age range reflects a broader understanding of child development and the timing of hormonal changes that signal the beginning of adolescence. Knowing the average age of puberty onset helps healthcare providers screen for potential early or delayed puberty, which can have implications for further physical and emotional health.

10. What is the diagnosis for a newborn with omphalitis and delayed separation of the umbilical cord without pus?

A. Leukocyte adhesion deficiency

B. Transient hypogammaglobulinemia

C. Cystic fibrosis

D. Congenital adrenal hyperplasia

The diagnosis of leukocyte adhesion deficiency (LAD) is appropriate for a newborn with omphalitis and delayed separation of the umbilical cord without pus. LAD is a primary immunodeficiency that affects the ability of leukocytes (white blood cells) to adhere to the endothelium and migrate out of the bloodstream to sites of infection or inflammation. This impaired adhesion leads to an increased susceptibility to infections, particularly in the neonatal period. In this context, the characteristic symptoms of omphalitis (infection of the umbilical stump) and delayed separation of the umbilical cord imply a problem with immune function that prevents the effective response to common bacteria in the environment. The absence of pus further suggests that the neutrophilic response is inadequate, which is a hallmark of LAD since the inflammatory cells cannot properly respond to infection. In newborns, delayed cord separation typically occurs when there is an underlying issue with the immune system, and in the absence of signs of bacterial infection (such as pus), LAD becomes a likely diagnosis. The combination of omphalitis and delayed cord separation without the expected inflammatory response aligns with this immunodeficient state. Other conditions listed, such as transient hypogammaglobulinemia, cystic fibrosis,

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://uworldpediatrics.examzify.com

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