APEA Neurology 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. The Glasgow Coma Scale primarily assesses which aspect of brain function?

A. Cranial nerve response

B. Pupillary response

C. Auditory response

D. Motor response

2. Loss of anal reflex suggests a lesion at which spinal segment levels?

A. Thoracic 8, 9, and 10

B. Thoracic 10, 11, and 12

C. Lumbar 5 and Sacral 1

D. Sacral 2, 3, and 4

3. In a teenager with low blood pressure, constricted pupils, slurred speech, and drowsiness, which intoxication is most consistent?

A. opioid intoxication

B. an amphetamine overdose

C. an overdose of benzodiazepines

D. marijuana usage

4. Which symptom may be associated with a tumor of the eighth cranial nerve?

A. Dizziness

B. Inability to Close the Eyes

C. Loss of Smell

D. Inability to Taste Sour Things

5. Which sign is used to assess meningeal irritation?

A. Kernig's sign

B. Brudzinski's sign

C. Nuchal rigidity sign

D. All of the above

6. Which of the following is least likely to present as asymmetric weakness?

A. The right shoulder

B. One the right side of the face

C. The right hand

D. Both arms

7. At what age is it considered normal for a child to pick up objects using the palm of the hand only?

A. At 2 months of age

B. At 6 months of age

C. At 12 months of age

D. At 18 months of age

8. Which sign is most specifically associated with meningeal irritation in adults?

A. Kernig's sign

B. Brudzinski's sign

C. Nuchal rigidity sign

D. Babinski sign

9. Absence of gag reflex is most directly associated with damage to which nerve?

A. Glossopharyngeal Nerve (IX)

B. Vagus Nerve (X)

C. Hypoglossal Nerve (XII)

D. Trigeminal Nerve (V)

10. Which condition is most likely associated with nausea, diaphoresis, and pallor triggered by fear or an unpleasant event?

A. Subarachnoid hemorrhage

B. Stroke

C. Vasovagal syncope

D. Neurocardiogenic syncope

Answers

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

Explanations

1. The Glasgow Coma Scale primarily assesses which aspect of brain function?

A. Cranial nerve response

B. Pupillary response

C. Auditory response

D. Motor response

The Glasgow Coma Scale gauges level of consciousness by looking at three observable responses: eye opening, verbal response, and motor response. Among these, the motor response most directly reflects the brain's ability to generate purposeful movement and integrates the function of cortical and subcortical pathways with brainstem control. Because intact motor responses require coordinated neural activity across several brain regions, this domain is the strongest indicator of overall brain function and prognosis. The motor score ranges from obeys commands to no motor response, with intermediate levels describing localization to pain, withdrawal, or abnormal posturing. While eye opening assesses arousal and verbal response assesses language/cognition, the motor component provides the clearest window into functional neural integrity. In practice, it remains a crucial measure even when language or arousal may be affected by other factors.

2. Loss of anal reflex suggests a lesion at which spinal segment levels?

A. Thoracic 8, 9, and 10

B. Thoracic 10, 11, and 12

C. Lumbar 5 and Sacral 1

D. Sacral 2, 3, and 4

The anal reflex (anal wink) is a sacral reflex arc controlled by the spinal cord segments S2–S4 via the pudendal nerve to the external anal sphincter. Sensory input from the perianal skin travels to these sacral segments, and motor output goes from Onuf's nucleus in S2–S4 through the pudendal nerve to cause contraction of the external anal sphincter. If these sacral levels are damaged or the pudendal pathways are affected, the reflex is lost. Lesions higher up in the thoracic region would not abolish this reflex because the reflex arc is localized to the sacral cord and its nerves. Among the options, only the sacral segments 2 through 4 encompass the necessary components of the reflex arc, so loss of the anal reflex points to involvement of those sacral levels.

3. In a teenager with low blood pressure, constricted pupils, slurred speech, and drowsiness, which intoxication is most consistent?

A. opioid intoxication

B. an amphetamine overdose

C. an overdose of benzodiazepines

D. marijuana usage

Pupil constriction with drowsiness and slurred speech points most strongly to opioid toxicity. Opioids activate μ receptors in the brainstem, which slows respiration and increases parasympathetic effects, producing pinpoint pupils, sedation, and slowed speech. Low blood pressure can accompany overdose as respiratory depression and vasodilation reduce perfusion. Amphetamine overdose would typically cause dilated pupils, hyperactivity, agitation, and hypertension rather than sedation. Benzodiazepine overdose can cause slurred speech and drowsiness, but pupils are usually not constricted. Marijuana use can cause drowsiness, but pupil constriction is not a defining feature and signs differ. Thus, the constellation of pinpoint pupils plus sedation best fits opioid intoxication.

4. Which symptom may be associated with a tumor of the eighth cranial nerve?

A. Dizziness

B. Inability to Close the Eyes

C. Loss of Smell

D. Inability to Taste Sour Things

The eighth cranial nerve carries both hearing and balance information from the inner ear. A tumor arising from this nerve, such as a vestibular schwannoma, often disrupts the vestibular (balance) component, leading to dizziness or vertigo and imbalance, sometimes with concurrent hearing loss or tinnitus. The other options point to different nerves: inability to close the eyes reflects facial nerve problems, loss of smell involves the olfactory nerve, and trouble tasting sour relates to taste pathways (facial or glossopharyngeal nerves), not the eighth. Thus dizziness is the symptom most characteristic of an eighth-nerve tumor.

5. Which sign is used to assess meningeal irritation?

A. Kernig's sign

B. Brudzinski's sign

C. Nuchal rigidity sign

D. All of the above

Meningeal irritation shows up as specific signs when the coverings around the brain and spinal cord are inflamed, such as in meningitis or subarachnoid hemorrhage. Kernig's sign is tested by having the patient lie supine, flexing the hip and knee to 90 degrees, then attempting to straighten the knee; pain or resistance during extension suggests a positive sign. Brudzinski's sign involves passively flexing the neck; if this causes involuntary flexion of the hips and knees, it's positive. Nuchal rigidity refers to stiff neck with limited ability to passively flex the neck. Each of these signs points to irritation of the meninges, and because a patient may show one sign but not another, clinicians assess all of them. That's why the best answer is that all of these signs are used to assess meningeal irritation.

6. Which of the following is least likely to present as asymmetric weakness?

A. The right shoulder

B. One the right side of the face

C. The right hand

D. Both arms

Asymmetric weakness points to a focal problem in the motor system that impacts one side of the body. When a lesion affects the corticospinal tract or a single peripheral nerve or facial nerve on one side, you see weakness limited to that side—such as one arm, one face, or one leg. Weakness confined to the right shoulder, or the right side of the face, or the right hand all reflect this kind of unilateral, asymmetric deficit. Weakness involving both arms, however, suggests a nonfocal or bilateral process rather than a single focal lesion. It implies either a diffuse or central issue affecting both sides (or a lesion high enough to influence both hemispheres) rather than a localized one-side problem. Therefore, weakness in both arms is least likely to present as asymmetric weakness.

7. At what age is it considered normal for a child to pick up objects using the palm of the hand only?

A. At 2 months of age

B. At 6 months of age

C. At 12 months of age

D. At 18 months of age

The ability to pick up objects using the palm of the hand reflects the palmar grasp that emerges as infants gain voluntary hand control. Early on there is a reflexive grasp when an object touches the palm, but that isn't a mature, voluntary action. As the nervous system matures, a palm-based grip appears around the age of 4 to 6 months, where the object is held in the palm with the fingers wrapping around it and the thumb not yet opposing the object. This stage comes before the more precise grasps that use the thumb and fingers together, which develop later (around 9–12 months). So, around 6 months is the normal time to see the palm-alone grasp appear.

8. Which sign is most specifically associated with meningeal irritation in adults?

A. Kernig's sign

B. Brudzinski's sign

C. Nuchal rigidity sign

D. Babinski sign

Brudzinski's sign is the most specific indicator of meningeal irritation in adults. When you passively flex the neck, the hips and knees reflexively bend. This linked movement happens because irritation of the meninges heightens the spinal reflexes in response to neck flexion, signaling meningeal inflammation such as meningitis. Nuchal rigidity simply means neck stiffness and can occur with various conditions, not all of which involve meninges. Kernig's sign also points to meningeal irritation but can be less consistently elicited. Babinski sign reflects corticospinal tract involvement rather than meningeal irritation. So the distinctive, reflexive hip and knee flexion with neck flexion makes Brudzinski's sign the most specific for meningeal irritation.

9. Absence of gag reflex is most directly associated with damage to which nerve?

A. Glossopharyngeal Nerve (IX)

B. Vagus Nerve (X)

C. Hypoglossal Nerve (XII)

D. Trigeminal Nerve (V)

The gag reflex is a two-part arc: sensory input from the oropharynx travels through the glossopharyngeal nerve to the brainstem, and a motor response is carried from the brainstem by the vagus nerve to pharyngeal muscles. If the glossopharyngeal nerve is damaged, the sensory signal cannot reach the brainstem, so the reflex cannot be triggered, leading to an absent gag reflex. While the vagus nerve can also be involved in the motor portion, the afferent limb provided by the glossopharyngeal nerve is the part most directly responsible for initiating the reflex, which is why its injury is most closely associated with the absence of the gag reflex.

10. Which condition is most likely associated with nausea, diaphoresis, and pallor triggered by fear or an unpleasant event?

A. Subarachnoid hemorrhage

B. Stroke

C. Vasovagal syncope

D. Neurocardiogenic syncope

Nausea, diaphoresis, and pallor triggered by fear or an unpleasant event point to a neurally mediated reflex that causes fainting. This is a vasovagal (neurocardiogenic) response: an emotional trigger sets off an autonomic surge followed by a rapid shift toward parasympathetic activity and reduced sympathetic tone. The result is vasodilation and often bradycardia, which lowers blood pressure and cerebral perfusion enough to cause a brief loss of consciousness. The prodromal signs—nausea, sweating, and pallor—reflect this autonomic warning phase before the fainting spell. Lying flat helps by improving venous return and restoring cerebral blood flow, and recovery is typically swift with no lasting deficits. While neurocardiogenic syncope describes a similar reflex mechanism, the scenario described is classically vasovagal syncope given the fear-triggered prodrome. Subarachnoid hemorrhage or stroke would present with different features such as sudden severe headache or focal neurologic deficits, not a fear-induced prodrome.

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://apeaneurology.examzify.com

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