NBRC Sleep Disorders Specialty (SDS) 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. 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 defines obstructive sleep apnea in terms of the Apnea-Hypopnea Index (AHI)?**

   A. AHI greater than 5

   B. AHI greater than 15

   C. AHI greater than 30

   D. AHI less than 5

2. **What are the settings for the Chin channel in LFF, HFF, sensitivity, and sampling rate?**

   A. 10 - 100Hz 2uv/mm 500Hz

   B. 0.3 - 35Hz 7uv/mm 500Hz

   C. 0.1 - 15Hz 7uv/mm 100Hz

   D. 0.3 - 70Hz 20uv/mm 500Hz

3. **When a patient falls asleep while being prepared for a sleep study, what is the sleep technician's most appropriate action?**

   A. Perform biocals in the morning

   B. Continue study without biocals

   C. Wake the patient to perform biocals

   D. Perform biocals if the patient spontaneously awakens

4. **How is N3 sleep primarily characterized in terms of brain activity?**

   A. High activity with beta waves

   B. Moderate activity with alpha waves

   C. Slow activity with delta waves

   D. Low activity with theta waves

5. **What does a high PLMS index indicate?**

   A. Increased sleep efficiency

   B. Normal levels of agitation during sleep

   C. Increased limb movement during sleep

   D. Improved sleep quality

6. What condition could be suspected if a sleep study reveals significant daytime sleepiness and sudden muscle weakness?

A. Obstructive Sleep Apnea

B. Narcolepsy

C. Insomnia

D. Restless Legs Syndrome

7. When a patient with sleep apnea returns with a new prescription for CPAP settings, what should the sleep technician do?

A. Replace CPAP machine

B. Call the physician to verify prescription

C. Adjust CPAP accordingly

D. Advise the patient that a new sleep study is required

8. Which of the following conditions is associated with sleep paralysis?

A. Sleep Apnea

B. Hypersomnia

C. Narcolepsy

D. Insomnia

9. What characterizes a 2nd degree AV block Mobitz I (Wenckebach)?

A. Constant PR interval with a dropped QRS

B. Increasingly longer PR interval with a dropped QRS

C. Sudden drop of a QRS without elongation of PR

D. Normal PR interval with dropped beats

10. What are the two required criteria to score a hypopnea with a 3% SpO2 desaturation?

A. 50% reduction in airflow and 10 seconds duration

B. 30% reduction in airflow and 10 seconds duration

C. 50% reduction in airflow and 90% duration

D. 30% reduction in airflow and 90% duration

Answers

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

Explanations

1. What defines obstructive sleep apnea in terms of the Apnea-Hypopnea Index (AHI)?

A. AHI greater than 5

B. AHI greater than 15

C. AHI greater than 30

D. AHI less than 5

Obstructive sleep apnea (OSA) is defined clinically by the presence of obstructive respiratory events during sleep, characterized by the Apnea-Hypopnea Index (AHI). The AHI measures the number of apneas (complete cessations of breathing) and hypopneas (partial obstructions leading to reduced airflow) that occur per hour of sleep. An AHI greater than 5 signifies that the individual experiences more than five such episodes per hour, which meets the clinical criteria for diagnosing obstructive sleep apnea. In a clinical context, an AHI of 5 or more is considered indicative of mild OSA, while higher thresholds, such as an AHI greater than 15 or 30, indicate moderate to severe forms of the condition. However, the threshold of 5 is the minimum required to establish the diagnosis of OSA. Understanding this framework is essential for recognizing how sleep apnea is categorized and the severity of the disorder, as it informs treatment options and management strategies for affected individuals. This makes the AHI a crucial metric in both diagnosis and ongoing evaluation of obstructive sleep apnea.

2. What are the settings for the Chin channel in LFF, HFF, sensitivity, and sampling rate?

A. 10 - 100Hz 2uv/mm 500Hz

B. 0.3 - 35Hz 7uv/mm 500Hz

C. 0.1 - 15Hz 7uv/mm 100Hz

D. 0.3 - 70Hz 20uv/mm 500Hz

The Chin channel is used primarily in polysomnography to assess muscle tone, particularly in the submental area, which provides important information on sleep stages and potential sleep-disordered breathing. The appropriate settings for this configuration often balance the need to capture the relevant electromyographic (EMG) signals without distortion from extraneous noise. For the Chin channel: - A low-frequency filter (LFF) of 10 Hz is adequate to prevent slow waves that might be due to drift, while still allowing for the capture of the relevant muscle activity. - A high-frequency filter (HFF) set at 100 Hz helps in removing any high-frequency artifacts and allows for better clarity of the signal. - A sensitivity of 2 µV/mm is optimal for ensuring that the EMG signals are amplified correctly to a readable level on the polysomnograph. - A sampling rate of 500 Hz is standard and ensures that there is sufficient resolution in the captures to analyze the frequency of the muscle activity accurately. These settings are designed specifically to optimize the clarity and quality of the signal that's recorded during sleep studies. While the other options may present different configurations, the combination in the correct choice strikes the right balance for clinical sleep studies focusing on chin EMG

3. When a patient falls asleep while being prepared for a sleep study, what is the sleep technician's most appropriate action?

A. Perform biocals in the morning

B. Continue study without biocals

C. Wake the patient to perform biocals

D. Perform biocals if the patient spontaneously awakens

In the context of conducting a sleep study, it is important to gather accurate baseline data that reflects the patient's sleep patterns and physiological responses. Biocals, or biocalibrations, refer to preliminary calibration procedures that ensure that the equipment is appropriately adjusted to capture the patient's sleep data accurately. When a patient falls asleep during the preparation phase of a sleep study, it is critical for the technician to wake the patient in order to perform the necessary biocals. This step is essential because if calibration is not performed properly, the data collected during the study may be compromised, leading to inaccurate interpretations of the patient's sleep architecture and potential sleep disorders. Waking the patient allows the technician to ensure that all electrodes and monitoring devices are correctly placed and functioning well before the patient transitions into deeper sleep stages. This can help in minimizing artifacts and obtaining reliable polysomnographic data, which are crucial for making an accurate diagnosis. While it may seem counterintuitive to wake a sleeping patient, it is important from a technical standpoint to maintain the integrity of the sleep study. Thus, performing biocals before allowing the patient to continue sleeping is the most appropriate action for the sleep technician.

4. How is N3 sleep primarily characterized in terms of brain activity?

A. High activity with beta waves

B. Moderate activity with alpha waves

C. Slow activity with delta waves

D. Low activity with theta waves

N3 sleep, also known as slow-wave sleep or deep sleep, is primarily characterized by slow brain activity dominated by delta waves. Delta waves have a frequency of 0.5 to 4 Hz and are associated with the deepest stages of sleep, where the body is in a state of rest and rejuvenation. During N3 sleep, the body undergoes important processes such as physical recovery, hormone release, and memory consolidation. The presence of delta waves indicates significant synchrony in brain activity, which contributes to the restorative aspects of this sleep stage. Therefore, the correct characterization of N3 sleep reflects the slow activity marked by delta waves, highlighting the physiological significance of this phase in the sleep cycle.

5. What does a high PLMS index indicate?

A. Increased sleep efficiency

B. Normal levels of agitation during sleep

C. Increased limb movement during sleep

D. Improved sleep quality

A high PLMS (Periodic Limb Movement Sleep) index indicates a heightened frequency of involuntary limb movements that typically occur during sleep. These movements are characterized by repetitive episodes of extension or flexion of the legs, which can disrupt sleep and be associated with certain sleep disorders, such as Restless Legs Syndrome (RLS) or PLMD (Periodic Limb Movement Disorder). The PLMS index quantifies the number of these movements per hour of sleep, and an elevated index suggests that there is a significant increase in such movements. This can lead to sleep fragmentation and may contribute to poor overall sleep quality, which is often reflected in increased daytime sleepiness and fatigue. In contrast, high levels of sleep efficiency, normal agitation levels, and improved sleep quality would not be characterized by a high PLMS index. Therefore, the indication of increased limb movement during sleep is the direct consequence of a high PLMS index, making it the correct interpretation of this phenomenon.

6. What condition could be suspected if a sleep study reveals significant daytime sleepiness and sudden muscle weakness?

A. Obstructive Sleep Apnea

B. Narcolepsy

C. Insomnia

D. Restless Legs Syndrome

The symptoms of significant daytime sleepiness and sudden muscle weakness strongly indicate narcolepsy. This neurological disorder is characterized by excessive daytime sleepiness and can include episodes of cataplexy, which is a sudden loss of muscle tone triggered by strong emotions. During these episodes, individuals may experience weakness in their legs, or even a complete collapse, while being fully aware of their surroundings. Narcolepsy is also associated with disrupted sleep patterns, where individuals may fall asleep during the day at inappropriate times. This condition contrasts significantly with obstructive sleep apnea, insomnia, and restless legs syndrome. While obstructive sleep apnea may contribute to daytime sleepiness due to disrupted nighttime breathing, it does not typically present with the sudden muscle weakness seen in narcolepsy. Insomnia primarily involves difficulty falling or staying asleep, leading to daytime fatigue but not to the same extent of cataplexy. Restless legs syndrome causes uncomfortable sensations in the legs, often leading to difficulty falling asleep, but does not involve marked sleepiness or muscle weakness. Thus, the combination of excessive daytime sleepiness and episodes of muscle weakness is most indicative of narcolepsy.

7. When a patient with sleep apnea returns with a new prescription for CPAP settings, what should the sleep technician do?

A. Replace CPAP machine

B. Call the physician to verify prescription

C. Adjust CPAP accordingly

D. Advise the patient that a new sleep study is required

When a patient returns with a new prescription for CPAP settings, the appropriate action for the sleep technician is to adjust the CPAP machine accordingly. This is crucial because the prescribed settings are tailored to the individual's current needs based on their sleep apnea diagnosis and any changes in their condition. Implementing the new settings ensures that the patient receives optimal therapy to effectively manage their sleep apnea, improving their overall health and quality of sleep. Adjusting the CPAP settings is vital for ensuring that the prescribed pressure levels are delivered effectively, which can mitigate the symptoms associated with sleep apnea, such as excessive daytime sleepiness, and improve night-time breathing. Thus, following the updated prescription directly addresses the patient's treatment needs. The other options are less appropriate in this context. Replacing the CPAP machine or advising a new sleep study may not be necessary unless significant issues are present with the current machine or if there are substantial concerns that the current settings may not be effective. Verifying the prescription with the physician could be a prudent step if there's uncertainty about the prescription details or if adjustments raise questions, but it typically isn't the first necessary action when clear updated settings have been provided.

8. Which of the following conditions is associated with sleep paralysis?

A. Sleep Apnea

B. Hypersomnia

C. Narcolepsy

D. Insomnia

Sleep paralysis is most commonly associated with narcolepsy, which is a neurological sleep disorder characterized by excessive daytime sleepiness, sudden sleep attacks, and disturbances in the regulation of sleep-wake cycles. In individuals with narcolepsy, sleep paralysis occurs when a person is either falling asleep or waking up, leading to an inability to move or speak temporarily. This phenomenon can occur alongside other symptoms of narcolepsy, such as cataplexy, which is a sudden loss of muscle tone, often triggered by strong emotions. The other conditions listed do not have a direct or prominent association with sleep paralysis. For example, sleep apnea involves repeated interruptions in breathing during sleep, hypersomnia refers to excessive daytime sleepiness without the sudden sleep attacks seen in narcolepsy, and insomnia is characterized primarily by difficulty falling or staying asleep. While all of these conditions can disrupt sleep quality, they do not typically present with the specific occurrence of sleep paralysis as seen in narcolepsy.

9. What characterizes a 2nd degree AV block Mobitz I (Wenckebach)?

A. Constant PR interval with a dropped QRS

B. Increasingly longer PR interval with a dropped QRS

C. Sudden drop of a QRS without elongation of PR

D. Normal PR interval with dropped beats

A 2nd degree AV block Mobitz I, also known as Wenckebach, is characterized by a specific pattern in the PR intervals on an electrocardiogram (ECG). In this type of block, the PR interval progressively lengthens with each heartbeat until a QRS complex is dropped. This means that during the series of heartbeats, the time between the P wave and the QRS complex gradually increases until a QRS is missed entirely. After the dropped QRS, the cycle usually resets, and the PR interval starts again from a shorter duration. This unique behavior distinguishes Mobitz I from other types of AV block. It reveals underlying issues in the conduction system, typically occurring at the level of the AV node, but with less clinical significance compared to other blocks. The increasing length of the PR interval is a key feature that aids in both identifying the condition and understanding its mechanism.

10. What are the two required criteria to score a hypopnea with a 3% SpO2 desaturation?

A. 50% reduction in airflow and 10 seconds duration

B. 30% reduction in airflow and 10 seconds duration

C. 50% reduction in airflow and 90% duration

D. 30% reduction in airflow and 90% duration

To score a hypopnea, the criteria established include a specified reduction in airflow and a minimum duration for which this reduction is sustained. The correct answer underscores the requirement of a 50% reduction in airflow, which is essential to classify an event as a hypopnea, ensuring that the event is significant enough to impact ventilation. Additionally, the duration of 10 seconds is crucial as it establishes that the event is not a transient change but rather a sustained period that can contribute to sleep-disordered breathing. Events shorter than 10 seconds may not be clinically relevant and thus fail to meet the diagnostic criteria for a hypopnea. In summary, the combination of a 50% reduction in airflow and a minimum of 10 seconds in duration aligns with the established definitions and guidelines in sleep medicine for scoring hypopneas, making this answer correct. Understanding these criteria is vital for accurately diagnosing and managing sleep-related breathing disorders.

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://nbrcsds.examzify.com

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