Audiology Health Technician Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

Questions

1. Normal hearing typically falls within what range of decibels?

A. 0-10 dB

B. 0-25 dB

C. 25-50 dB

D. 50-70 dB

2. Which log must an OSHA recordable incident be entered into?

A. OSHA 100 log

B. OSHA 200 log

C. OSHA 300 log

D. OSHA 400 log

3. What is the three-part classification of hearing loss?

A. Conductive, acoustic, and mixed

B. Conductive, sensorineural, and noise-induced

C. Conductive, sensorineural, and mixed

D. Sensorineural, permanent, and transient

4. On a graph, intensity level is represented on which axis?

A. Horizontal axis

B. Vertical axis

C. Diagonal axis

D. Magnitude axis

5. How often should an acoustical calibration be performed?

A. Monthly

B. Annually

C. Biannually

D. Quarterly

6. What is the duration of the CAOHC Certification period?

A. 2 years

B. 3 years

C. 4 years

D. 5 years

7. What does HL stand for in audiology measurements?

- **A. Hearing Level**
- **B. High Level**
- **C. Harmonic Level**
- **D. Harmonic Loss**

8. The risk of noise exposure is determined by the level of noise and what other factor?

- **A. Duration of exposure**
- **B. Frequency of noise**
- **C. Type of noise**
- **D. Distance from the source**

9. A conductive hearing loss typically shows which of the following frequency patterns?

- **A. Flat**
- **B. Rising**
- **C. Descending**
- **D. Notched**

10. What does the acronym CAOHC stand for?

- **A. Council for Accreditation in Occupational Hearing Conservation**
- **B. Committee for Assessment of Occupational Health and Care**
- **C. Center for Audiological and Occupational Health Certification**
- **D. Commission for Auditory Occupational College Health**

Answers

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

Explanations

1. Normal hearing typically falls within what range of decibels?

A. 0-10 dB

B. 0-25 dB

C. 25-50 dB

D. 50-70 dB

Normal hearing is generally defined as the ability to perceive sounds within the range of 0 to 25 decibels (dB). This range reflects the threshold of hearing for most individuals, where sounds at or above 0 dB can be heard, and up to 25 dB is considered normal variation among different individuals. Some sounds in quiet environments might be at 0 dB, which corresponds to the quietest sounds humans can typically hear. Those within the 0-25 dB range are generally able to hear most conversational speech and environmental sounds without difficulty, indicating healthy hearing sensitivity. Ranges above this, such as 25-50 dB, may indicate mild hearing loss, where individuals might begin to have difficulty hearing softer sounds or understanding speech in noisy environments. Therefore, recognizing that normal hearing typically falls within the 0-25 dB range is essential for audiologists and health technicians in assessing hearing health.

2. Which log must an OSHA recordable incident be entered into?

A. OSHA 100 log

B. OSHA 200 log

C. OSHA 300 log

D. OSHA 400 log

An OSHA recordable incident must be entered into the OSHA 300 log, which is specifically designed to document work-related injuries and illnesses. This log allows employers to keep a systematic record of incidents that employees have experienced while on the job, including details such as the nature of the injury or illness, how it occurred, and the employee's job title. The OSHA 300 log is essential for compliance with federal regulations, as it helps ensure that the workplace is safe and that employers take necessary actions to mitigate risks. The significance of the OSHA 300 log also lies in its role in tracking workplace safety trends over time, helpful for both employers and regulatory agencies to assess the overall safety performance of an organization. Entries in this log must be made for incidents meeting specific criteria, which reinforces the importance of prompt and accurate reporting. In contrast, the other logs mentioned, such as the OSHA 100 and OSHA 400, do not serve the same purpose of documenting recordable injuries and illnesses under OSHA regulations.

3. What is the three-part classification of hearing loss?

A. Conductive, acoustic, and mixed

B. Conductive, sensorineural, and noise-induced

C. Conductive, sensorineural, and mixed

D. Sensorineural, permanent, and transient

The three-part classification of hearing loss includes conductive, sensorineural, and mixed types. Conductive hearing loss occurs when sound is not conducted efficiently through the outer ear canal to the eardrum and the tiny bones of the middle ear. This can result from obstructions, infections, or damage to the ear structures. Sensorineural hearing loss is due to problems within the inner ear or the auditory nerve pathways to the brain. This type includes issues stemming from hair cell damage in the cochlea or from neural deficits. Mixed hearing loss is a combination of both conductive and sensorineural loss, indicating that there is both a problem in the outer or middle ear as well as in the inner ear or auditory nerve. Understanding these classifications is essential for audiologists and health technicians as it guides diagnosis, management, and treatment options for individuals experiencing hearing loss.

4. On a graph, intensity level is represented on which axis?

A. Horizontal axis

B. Vertical axis

C. Diagonal axis

D. Magnitude axis

Intensity level in sound measurement is typically represented on the vertical axis of a graph. This convention allows for a clear representation of sound levels, often measured in decibels (dB). When plotting sound intensity against frequency or time, placing the intensity level on the vertical axis provides a visual representation that effectively illustrates how sound intensity changes in relation to the other variable being measured. The use of the vertical axis for intensity level is rooted in standard practices in various fields, including audiology and acoustics, where it is critical to visually communicate the strength of sound in relation to the parameters of interest. This convention ensures clarity and consistency in the presentation of data, making it easier for practitioners and researchers to interpret sound levels accurately.

5. How often should an acoustical calibration be performed?

A. Monthly

B. Annually

C. Biannually

D. Quarterly

Acoustical calibration should be performed annually to ensure that the equipment used in audiology maintains accurate performance and reliability. Routine calibration is essential because it verifies that the measuring devices are providing valid results in assessing hearing and sound levels. This yearly schedule allows for regular checks and adjustments, which help in identifying any drift in measurements that may occur over time due to equipment wear or environmental changes. Regular calibration supports the quality of patient care by ensuring that audiological evaluations are based on precise and accurate sound measurements. More frequent calibrations, such as monthly or quarterly, may not be necessary for most settings unless specific circumstances—like high usage or known issues with equipment—indicate otherwise. Biannual calibrations may also suffice for certain environments but do not provide the same assurance that an annual schedule offers, as annual checks provide comprehensive oversight of equipment performance over a longer period.

6. What is the duration of the CAOHC Certification period?

A. 2 years

B. 3 years

C. 4 years

D. 5 years

The duration of the CAOHC (Council for Accreditation in Occupational Hearing Conservation) Certification period is indeed five years. This means that once individuals obtain their certification, they are recognized as qualified in their field for a span of five years. During this time, they are expected to stay updated with ongoing education and training to maintain their competence and knowledge in occupational hearing conservation practices. After five years, they must renew their certification, ensuring that practices reflect the most current standards and guidelines in audiology and hearing conservation. This renewal process reinforces the importance of continuous learning and adaptation in the evolving field of audiology health.

7. What does HL stand for in audiology measurements?

A. Hearing Level

B. High Level

C. Harmonic Level

D. Harmonic Loss

In the context of audiology measurements, HL specifically stands for Hearing Level. This term is used to quantify the intensity of sound that a person is able to hear and is measured in decibels (dB). Hearing Level provides a standard reference point for assessing an individual's hearing sensitivity across various frequencies. Typically, audiometric tests are conducted to determine HL, which helps audiologists identify the degree of hearing impairment and facilitate appropriate interventions or treatments. While other terms may seem related, they do not accurately represent the standardized measurement used in audiology. Understanding the concept of Hearing Level is crucial, as it forms the basis for audiometric evaluations and contributes to the effective diagnosis and management of hearing loss.

8. The risk of noise exposure is determined by the level of noise and what other factor?

A. Duration of exposure

B. Frequency of noise

C. Type of noise

D. Distance from the source

The risk of noise exposure is significantly influenced by the level of noise and the duration of exposure. The intensity of noise, measured in decibels, can be harmful, but its impact increases with the length of time a person is exposed to it. For instance, short bursts of loud noise may not pose a significant risk, while prolonged exposure to moderate levels can lead to hearing loss and other auditory issues. Understanding this relationship is crucial in audiology, as it helps in developing guidelines for safe listening practices and workplace regulations regarding permissible noise levels. Ensuring individuals limit their exposure time to high noise levels is essential in preventing noise-induced hearing loss, highlighting the importance of both the level and duration of the noise exposure in assessing overall risk.

9. A conductive hearing loss typically shows which of the following frequency patterns?

A. Flat

B. Rising

C. Descending

D. Notched

A conductive hearing loss typically displays a flat frequency pattern. This means that the hearing loss is generally consistent across different frequencies, indicating that the problem lies in the outer or middle ear, such as issues with the ear canal, eardrum, or ossicles. In these cases, sound transmission is impeded, leading to a similar level of hearing loss across the frequencies tested. The flat pattern contrasts with other potential hearing loss types which may show more variability across frequencies. For instance, a rising pattern often suggests a sensorineural hearing loss where higher frequencies are affected less than lower frequencies, while descending patterns might indicate various conditions affecting primarily the lower frequencies. A notched pattern, which can be associated with certain types of noise-induced hearing loss, showcases a specific frequency that is more affected than others.

10. What does the acronym CAOHC stand for?

A. Council for Accreditation in Occupational Hearing Conservation

B. Committee for Assessment of Occupational Health and Care

C. Center for Audiological and Occupational Health Certification

D. Commission for Auditory Occupational College Health

The acronym CAOHC stands for the Council for Accreditation in Occupational Hearing Conservation. This organization is essential in promoting hearing conservation programs and providing accreditation for professionals in the field of occupational hearing conservation. The CAOHC sets standards, guidelines, and educational requirements to ensure that individuals working in environments where hearing loss could be a risk are educated and certified appropriately. This helps to protect the hearing of workers by ensuring that their employers implement effective hearing conservation strategies and that trained professionals are overseeing these efforts. The focus on accreditation underscores the importance of maintaining high standards within the audiology and occupational health fields.