2020 SLP KASA Standards: Audiology and Aural Rehabilitation (Hearing)

1. Describe in one to two paragraphs the role of the external ear, middle ear, and inner ear in sound transmission through the peripheral auditory system. (IV.B.1)

2. Describe in a paragraph the tonotopic organization of the human auditory system relative to the cochlea and central auditory systems. (IV.B.2)

3. Describe in one to two paragraphs the basic stages of embryological development of the auditory system. (IV.B.4)

4. Illustrate on a waveform the following aspects of sound: amplitude, frequency, wavelength, and period. (IV.B.3)

5. Using A (for air) and B (for bone) symbols, draw stick audiograms for each of the following conditions: (IV.C.1,2)

    a. Middle ear disease
    b. Inner ear hearing loss
    c. Combination of middle ear and inner ear difficulties

6. In one or two sentences each, describe the causes and characteristics of the following inner ear conditions: (IV.C.1,2,3)

    a. Presbycusis
    b. Noise exposure
    c. Meniere's disease
    d. Vestibular schwannomas

7. List two disorders of the central auditory system and describe in a paragraph the potential effects on an individual's communication function. (IV.C.4)

8. Describe the influence of each of the following on the validity and reliability of pure tone testing: (IV.D.1)

    a. Proper earphone placement
    b. Test instructions
    c. False positive and false negative responses

9. List three clues that might alert a classroom teacher that a student may have hearing loss, and briefly describe how you could guide the classroom teacher in identifying and helping these students. (IV.D.2)

10. In a brief paragraph, describe the role of the speech-language pathologist in making appropriate referrals for central auditory processing testing. (IV.D.4)

11. Briefly describe the role of the speech-language pathologist in troubleshooting hearing aids. What specific tools should the speech-language pathologist have available to carry out troubleshooting? (IV.D.5)

12. Define the term "auditory training" and briefly discuss the following four general methods of auditory training based on the fundamental strategy stressed in therapy. (IV.D.6)

    a. Analytic method
    b. Synthetic method
    c. Pragmatic method
    d. Eclectic method

13. Using the attached audiogram answer and discuss the following questions: (IV.D.3)

    a. What is the type (nature) and degree of hearing loss in each ear?
    b. What is the affected part of parts of the auditory system for each ear?
    c. Considering the entire audiogram, describe the potential effects of the hearing loss on the client's ability to understand conversational speech.
    d. Is the speech audiometric data consistent with the pure tone findings?

14. Case study. Please review the two audiograms, A and B provided and the article provided. Briefly describe what evidence-based research supports your answer for the case study listed below.

    Please provide answers to the questions based on two separate individuals:
    Scenario 1 (Audiogram A): Mr. J. Jones, an 81-year-old male, has suffered a stroke and is working with you to improve his speech. He has gone to a hearing aid provider, underwent an audiologic evaluation, and received an audiogram with the suggestion that he purchase hearing aids. Mr. Jones was given what he feels was a very high quote for hearing aids and was pressured to purchase hearing aids that day. He has come to you, his speech therapist, for your opinion concerning his need for hearing aids.

    Scenario 2 (Audiogram B): Mr. R. Smith, your neighbor, has gone to a hearing aid provider, underwent an audiologic evaluation, and received an audiogram with the suggestion that he purchase hearing aids. He is not sure how to interpret the results of his hearing test, but knows you have a background in speech and hearing. He is wondering if he needs hearing aids and how much benefit he can expect from hearing aids.

    Please provide a discussion for both audiogram A and B regarding the following:
    a. How can we tell if an individual really needs hearing aids based on their audiogram test results? (IV-F.1 & IV-F.2)
    b. Is there a way to quantify the actual acoustic information the individual is missing in conversational speech based on an audiogram? (IV-F.1 & IV-F.2)

    Please read and study the article provided to help you answer the questions posed.

- Killion, M.C. & Mueller, H.G. (2010). Twenty years later: A NEW Count-The-Dots method. *The Hearing Journal*, 63(1), 1-10.