Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD (now MoE)
Re-accredited with 'A++' Grade by NAAC. CGPA 3.65/4, Category I by UGC
Coimbatore - 641 043, Tamil Nadu, India

Bachelor's Degree Examination – May 2025
II Semester

Class : I UG **Time: 3 Hours**
Major : Audiology and Speech Language Pathology **Max. Marks: 100**

22BASC11 Audiology

Course outcomes: On the successful completion of the course, students will be able to

1. To understand the basic concepts of differential sensitivity, discriminations in intensity and speech
2. To obtain knowledge about the need, essential factors to be included in the case history and tuning fork test procedures and interpretations in Rinne, Weber, Bing, Schwabach
3. To know about the audiometer, its parts, characteristics, procedures and factors affecting the threshold estimation
4. To know about the purpose and importance of the speech audiometer, its procedures, applications and factors affecting speech audiometry
5. Acquire knowledge about the purpose, rationale, type, procedure for masking. And also about the subjective and objective calibration, its purpose.

Part A **10 x 1 = 10**
Choose the Correct Answer

1. The psychological correlate of frequency is called as CO1 K1
   a. Intensity b. Pitch c. Loudness d. Timbre

2. The ability to detect small changes in stimuli is called CO1 K1
   a. Difference limen b. Contours c. Strenger principle d. Sone.

3. Tuning fork test that uses strenger principle is called as CO2 K3
   a. Rinne b. Schwabach c. Bing d. Weber

4. Perception of sound in ears in the absence of external stimuli is called as CO2 K1
   a. Tinnitus b. Hyperacusis c. Vertigo d. Misophonia

5. The sound from the audiometer is produced by _____ CO3 K1
   a. Microphone b. Potentiometer c. Oscillator d. Amplifier

6. In Pure tone audiometry air conduction thresholds are initially tested at ____ frequency CO3 K2
   a. 500Hz b. 1KHz c. 2KHz d. 4KHz

7. The bi-syllabic words used in speech audiometry, which have equal stress on both syllables, are called _____Words CO4 K1
   a. Iambic b. Phonetically balanced c. Trochee d. Spondee

8. In the PIPB function test,a rollover index above 0.45 in PAL -50 wordlist is suggestive of _____Pathology CO4 K3
   a. Conductive b. Cochlear c. Retro-cochlear d. Middle ear

9. In clinical masking, masking noise is presented in the _____ear CO5 K3
   a. Test b.non-test c. Both d. Ipsilateral

10. In the calibration of the Bone vibrator _____ is used to measure the output CO5 K1
    a.Noise dosimeter b.Artificial ear c. Artificial mastoid d. HA 2 coupler

Part B **5 x 6 = 30**

Answer ALL questions

Each answer should not exceed 400 words or two pages

11.a. Explain equal loudness counter and its applications.	CO1 K3
(or)	
11.b. Define Temporal resolution and methods to evaluate them in normals.	CO1 K1
12.a. Compare the advantages and disadvantages of each tuning fork test.	CO2 K4
(or)	
12.b. Construct a case history to assess hearing loss in children.	CO2 K6
13.a. Write a note on different types of audiometers and their classification.	CO3 K2
(or)	
13.b. Draw an audiogram with symbols and describe them.	CO3 K1
14.a. Enumerate the procedure of PIPB function and evaluate its clinical application.	CO4 K3
(or)	
14.b. Compare various test materials used for speech audiometry in Indian and western languages in detail.	CO4 K4
15.a. How do you perform speech audiometry with masking for a patient with unilateral profound sensory neural hearing loss?	CO5 K6
(or)	
15.b. Illustrate procedures to Carry out daily listening checks for audiometers.	CO5 K3

Part C **5 x 12 = 60**

Answer ALL questions

Each answer should not exceed 800 words or four pages

16.a. Summarize the concept of differential sensitivity in various parameters of sound and explain its clinical application in detail.	CO1 K5
(or)	
16.b. Define pitch, explain scales for pitch and pitch perceptionfor simple and complex tones in detail.	CO1 K2
17.a. Enumerate on factors need to be considered in case histories to identify the cause of hearing loss?	CO2 K4
(or)	
17.b. Explain various tuning fork tests with their audiometric versions in detail.	CO2 K2
18.a. Draw a neat diagram of the audiometer and explain its parts and functions in detail.	CO3 K1
(or)	
18.b. Describe various factors affecting pure tone audiometry in detail.	CO3 K2
19.a. Construct a protocol to carry out speech audiometry in your clinics. Explain its procedure, interpretation and clinical application in detail.	CO4 K6
(or)	
19.b. Explain various factors affecting speech audiometry in detail.	CO4 K2
20.a. Explain the Objective calibration for air conduction transducers in detail.	CO5 K2
(or)	
20.b. Critically analyse the purpose and rationale of clinical masking and explain the Procedure involved in calculating masking noise levels.	CO5 K4

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