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)
Re-accredited with 'A++' Grade by NAAC. Recognized by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment Test I – Feb 2025
IV SEMESTER

Class : II UG **Time: 2 hours**
Major: BASLP **Maximum Marks: 60**

22BASC21 Diagnostic Audiology-Physiological Tests

Part-A **6x1=6**
Choose the correct answer

1. The presentation level for Reflex Decay test is CO1K1
   a. 10 dBSL of ART b. 10 dBSL of PTT c. 20 dBSL of ART d. 10 dBSL of PTT
2. Fitzland and Balkany (1974) gave a formula for determining the amount of recruitment which was termed as CO2K2
   a. DRQ = $\frac{(A-X)-(B-Y)}{X-Y}$ b. DRQ = $\frac{(X-A)-(Y-B)}{X-Y}$ c. DRQ = $\frac{(A-X)-(B-Y)}{Y-X}$ d. DRQ = $\frac{(A-X)+(B-Y)}{Y+X}$
3. The opposition of the flow of sound through the middle ear system is called CO1K1
   a. Acoustic impedance b. Impedance
   c. Acoustic Admitance d. Acoustic Resistance
4. Probe tone frequency used for tympanometry in testing Infants (<6 months) CO2K2
   a. 226 Hz b. 100Hz
   c. 1000Hz d. 678 Hz
5. Patulous Eustachian tube test is done for patients with CO3K2
   a. Mechanical obstruction ET b. Functional Obstruction ET
   c. Open ET d. Cleft lip and Palate frequency
6. The stiffness susceptance(Bc) component is _____ to frequency, Mass reactance (Xm) is _____to frequency and resistance component is _____ to frequency CO1K1
   a. directly proportional, indirectly proportional, no relation
   b. indirectly proportional, indirectly proportional, no relation
   c. directly proportional, directly proportional, no relation
   d. directly proportional, directly proportional, indirectly proportional

Part- B **3x6=18**
Answer ALL Questions
Each answer should not exceed 400 words or two pages

7. a. Explain the clinical significance of including Physiological tests in Audiology. (or) CO1K2
   b. Explain multi component tympanometry using Vanhuyse model and its significance in differential diagnoses of Middle ear Disorders CO1K2
8. a. Explain how to predict Hearing loss from acoustic reflex threshold in Pseudohypacusis (or) CO3K2
   b. With diagram explain the tympanogram types in different middle ear conditions CO2K1
9. a. A middle-aged woman experiencing gradual, progressive hearing loss in both ears, PTA revealed conductive hearing loss with a large air-bone gap, and ultimately confirmed by CT scan showing abnormal bone growth on the stapes footplate. Predict the Tympanogram and acoustic reflex findings in this case and explain the reason (or) CO2K5
   b. Elaborate the mass, stiffness and frictional components of the Middle ear CO1K3

Part-C **3x12=36**
Answer ALL questions
Each answer should not exceed 800 words or four pages

10. a. Explain the principle of Immittance evaluation and its components using the analogy by Newman and Fanger's. (or) CO1K1
    b. Elaborate the acoustic reflex pathway and construct the Jerger box patterns based on the presence and absence of acoustic reflexes. CO3K6
11. a. In detail, explain the measurement procedure of conducting Tympanometry and Acoustic reflexes (or)
    b. Discuss the Quantitative measurement analysis of tympanometry measure CO1K1
12. a. Explain the different eustachian tube functioning tests \with steps for intact TM (or) CO2K1
    b. Write down the resonant frequency of Pinna, Middle ear, and Ossicles. Also discuss different methods to calculate resonant frequency of the middle ear using multi component and multi frequency tympanometry CO2K1

No. of Copies: 18 ********** **Staff in-charge: Mrs Preeta Singh**