

[LB 0212]

AUGUST 2012

Sub. Code: 2303

B.Sc. AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY

FIRST YEAR

PAPER III – INTRODUCTION TO HEARING

AND HEARING SCIENCES

Q.P. Code: 802303

Time : Three hours

Maximum : 100 marks

(180 Mins) Answer ALL questions in the same order.

I. Elaborate on:

Pages Time Marks  
(Max.)(Max.)(Max.)

- |  |   |    |    |
|--|---|----|----|
| 1. The three theories of bone conduction.  | 7 | 20 | 10 |
| 2. Anatomy of the inner ear with appropriate diagrams.                               | 7 | 20 | 10 |
| 3. Contents of paediatric case history and its relevance in audiological evaluation. | 7 | 20 | 10 |

II. Write Notes on:

- |   |   |    |   |
|---|---|----|---|
| 1. The various branches of audiology.   | 4 | 10 | 5 |
| 2. Merits, demerits and interpretation of Rinne test.   | 4 | 10 | 5 |
| 3. Inter aural attenuation and the different modes of crossover.  | 4 | 10 | 5 |
|   | 5 |    |   |
| 4. Different audiometric configurations associated with various pathologies.  | 4 | 10 | 5 |
| 5. Phons and Sones.   | 4 | 10 | 5 |
| 6. Free field testing.  | 4 | 10 | 5 |
| 7. Characteristics of binaural hearing. Explain the role of inter aural level and inter aural phase differences in binaural hearing.  | 4 | 10 | 5 |
| 8. What is the sound pressure level of a sound whose absolute pressure is $4 \times 10^4 \mu\text{Pa}$ (sound pressure reference- $2 \times 10^1 \mu\text{Pa}$ ) .[Given $\log 2 = .3, \log 3 = .47$ ]. | 4 | 10 | 5 |

III. Write Answers on:

- |   |   |   |   |
|---|---|---|---|
| 1. Cone of light.   | 2 | 4 | 3 |
| 2. The clinical features of any 3 syndromes associated with hearing loss and their type of inheritance. | 2 | 4 | 3 |
| 3. When masking should be done for air conduction and its purpose.                                      | 2 | 4 | 3 |
| 4. Remote masking and central masking.  | 2 | 4 | 3 |
| 5. Sound pressure and power.  | 2 | 4 | 3 |
| 6. Difference limen for intensity.  | 2 | 4 | 3 |
| 7. Types of masking noises.   | 2 | 4 | 3 |
| 8. Differences between echo and reverberation.  | 2 | 4 | 3 |
| 9. Draw and label the parts of the auricle.   | 2 | 4 | 3 |
| 10. Posterior wall of middle ear.   | 2 | 4 | 3 |

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