

AD 010

M.Sc. (IV Semester) Examination, May/June 2005
(Semester Scheme)
Audiology
Assessment and Management of Central Auditory
Processing Disorders

Time : 3 Hours

Max. Marks: 80

Instruction : Answer all questions.

- I. 1) a) Define auditory processing disorder. (4+12)
b) Describe one of the classifications of auditory processing disorders and the disadvantages associated with this classification system.
OR
2) a) Prepare a questionnaire to identify an auditory processing disorder in school children. (10+6)
b) Describe the populations in whom APD is observed.
- II. 3) Compare and contrast: (8+8)
a) Dichotic CV test and competing sentence test
b) SSI-ICM and SSI-CCM.
OR
4) Describe the construction, administration and interpretation of the following tests: (8+8)
a) Rapidly alternating speech perception test
b) SSW
- III. 5) Critically evaluate the statement "Objective tests are preferred to behavioral tests in assessment of auditory processing disorder". 16
OR
6) What tests would you recommend for identifying children at risk for auditory processing disorder ? Justify your answer. 16
- IV. 7) Discuss the factors that influence the management of auditory processing disorder. 16
OR
8) Discuss the audiological results expected in a subject with lesion in the left temporal lobe. Explain the bases of each of these results. 16
- V. 9) Plan an auditory learning program for a 7 yr. old child who has poor scores on pitch pattern and time compressed speech tests. 16
OR
10) When would you recommended and how would you implement, the following to a child with auditory processing disorder ? (8+8)
a) Modification of the environment
b) Communication strategies.

AD 020

M.Sc. (IV Semester) Examination, May/June 2005
(Semester Scheme)
Audiology
Seminars in Rehabilitative Audiology

Time: 3 Hours

Max. Marks : 80

Instructions :1) Answer *all* questions.
2) *All* questions carry *equal* marks,

- I. 1. a) Explain, with block diagram, an analog and a digital hearing aid. 8
b) Describe the additional specifications of digital hearing aid which would indicate its audio quality and processing capabilities. 8

OR

2. a) Explain the concept of frequency modulation. 2
b) Describe the components of EM system. 8
c) In view of current technology in digital hearing aids, discuss the need for EM systems for different populations. 6

- II. 3. Compare and contrast: (4x4 = 16)

- a) Couplers and ear stimulators
b) REAG and REIG
c) Gain frequency response and OS PC 90 frequency response
d) THD and EIN.

OR

4. a) Describe the electro acoustic characteristics of 'strong' category hearing aid as per B/S standards. 4
b) How are they measured ? Discuss. 4
c) What are the B/S standards for tele coil output of body level hearing aid ? Describe the procedure followed in evaluating the same. 8

- III. 5. Critically evaluate the prescriptive approaches used to fit hearing instruments. 16

OR

6. a) What ALDS would you recommend to a 8 year old child with bilateral profound hearing loss ? Give reasons. 8
b) How would you evaluate the benefits of ALDS in such a child ? 8

P.T.O.

- IV. 7. a) Explain the differences between 'inclusive' and 'integrated' education. 4
b) Discuss the status of education of children with hearing impairment in India. 12

OR

8. Discuss the measures recommended for rehabilitation of hearing impaired children in "Persons with Disability Act, 1995". 16

- V. 9. a) How is tinnitus assessed ? Discuss. 8
b) Critically evaluate the use of TRT in the management of clients with tinnitus. 8

OR

10. a) Discuss the prerequisites for undertaking counselling on genetic hearing loss. 8
b) Propose a strategy to prevent genetic hearing loss in India. 8

AD 030

M.Sc. (IV Semester) Examination, May/June 2005
(Semester Scheme)
Audiology
Implantable Devices for the Hearing Impaired

Time : 3 Hours

Max. Marks: 80

Instruction: Answer all questions,

- I. 1) a) Draw a questionnaire to study the benefits derived from BAHA and change in quality of life, after surgery. 12
b) The Rion device E-type 4
OR
- 2) a) Give a brief description of the surgical procedure of fitting a BAHA. 8
b) What advantages a middle ear implant has over air conduction hearing aids ? Add a short note on disadvantages of middle ear implants. 8
- II. 3) a) Compare and contrast any two commercially available cochlear implants using the CIS strategy. Focus on the relative benefit obtained by implant type. 11
b) What is the importance of electrophysiological tests in determining candidacy for cochlear implant ? 5
OR
- 4) a) Early detection of and intervention for, hearing impairment in a child is more important than later fitment of cochlear implant. Discuss and justify your answer. 12
b) How would you coordinate with the surgeon in preparing the child and the family for cochlear implant surgery ? 4
- III. 5) a) What are SPEAK, CIS and ACE strategies ? Why are they necessary ? What type of information is transmitted through these strategies to a person fitted with an implant ? 16
OR
- 6) a) How would you select a particular speech processing strategy for a given cochlear implantee ? Would change of strategy be possible after surgery? Justify your answer. 12
b) Write a short note on feature extraction strategies. 4

P.T.O.

- IV. 7) a) How would you justify the high cost of cochlear implant for a hearing impaired child whose parents cannot really afford the cost, but are willing to sacrifice for the sake of their child ? 16

OR

- 8) a) How would you enhance perception of music in adult postlingual deaf fitted with cochlear implants ? 5

b) What role do you envisage for parents of hearing impaired children fitted with cochlear implant ? 5

c) What are analytic and synthetic methods of speech-perception training? Write a note on the structure of analytic training. 6

- V. 9) a) How would you find the optimal location for placement of electrode on cochlear nucleus in brain stem implantation ? 8

b) Who are the candidates for brainstem implant ? How would you identify them? 8

OR

- 10) a) What are the side effects of cochlear and brainstem implants - auditory and non-auditory ? 8

b) What is the role of audiologists in the development of devices like BAHA, cochlear, brainstem and other implants that partially restore hearing ? 8