

V Semester B.Sc. (Sp & Hg) Examination, Nov./Dec. 2007
(Scheme : ISS)
Speech and Hearing
Motor Speech Disorders in Children

Time: 2 Hours

Max. Marks: 50

Instruction: Answer all questions.

- I. 1) a) With a neat diagram, label the components of a "Motor Unit". Describe the disorders of a motor unit and their clinical features. 6
b) Explain the role of cerebellum in speech motor control. 4
- OR**
- 2) a) What are the functions of pyramidal and extrapyramidal pathways.? 4
b) Describe the role of frontal lobe in motor control for speech. 6
- II. 3) a) Compare and contrast the clinical features of UMN and LMN disorders quoting examples. 3
b) Suggest a therapy plan to improve the function of lips, tongue and jaw using facilitatory approach in a three year old CP child with spastic quadriplegia. 7
- OR**
- 4) a) In brief, highlight the subjective methods used to assess articulatory functions in a CP child. 5
b) What is the principle of "compensatory approach" in therapy for dysarthria ? Using this approach, how do you correct respiratory errors in a CP child ? 5
- III. 5) a) Describe the salient characteristics in the speech of a child with 'Developmental apraxia of speech'. 5
b) Highlight the principles of "Top-Down" and "Bottom-Up" approaches used in therapy for children with developmental apraxia of speech, quoting suitable examples. 5

OR

P.T.O.

OE010(Sp&Hg)

- 6) a) Suggest a protocol which helps in the early diagnosis of children with DAS." 5
- b) Describe in detail any one technique or program which is proposed for the treatment of DAS. 5
- IV. 7) a) Describe the clinical sign and symptoms of a metabolic disorder leading to mental retardation. 4
- b) Highlight the factors to be considered in therapy for improving speech skills in children with MR using programmed approach. 6
- 8) a) List the differences in clinical features seen in children with spastic CP and congenital supranuclear palsy. 4
- b) What are the features which aid in the early diagnosis of the following syndromes with motor speech disorders ? 6
- i) Duchenne's muscular dystrophy .
- ii) Guillian Barre syndrome.
- V. 9) a) What are the different methods used for selection of symbols in aided AAC intervention / 5
- b) Write a note on the following : 5
- i) ETRAN ii) Eye pointing devices.

OR

- 10) a) Describe any one technique used for assessment of candidates for AAC, specifically relevant to children with motor speech disorders. 5
- b) What factors need to be considered while selecting AAC intervention method for children with motor speech disorders ? 5
-

O E 020 (Sp & Hg)

V Semester B.Sc. Examination, Nov./Dec. 2007
(Integrated Semester Scheme)
Speech and **Hearing**
Child Language Disorders

Time: 2 Hours

Max. Marks; 50

- ***Instruction : All Units are compulsory.***

Unit-I 1. a) How does behaviour theory explain the acquisition of language in children ? 6

b) What are the major drawbacks of this theory ? 4

2. a) What are the pre-requisites for language development according to the cognitive theorists ? 4

b) Which theory or theories of language acquisition do you support and why? 6

Unit - II 3. Briefly explain the neurobiological correlates of language acquisition. 10

OR

4. What is the relationship between cerebral dominance, plasticity and language acquisition in children ? 10

Unit-III 5. a) Describe two syndromic conditions associated with mental retardation and their speech and language characteristics. 6

b) Define specific language impairment and describe its sub grouping. 4

OR-

6. a) How does language development proceed in a child with acquired dysphasia ? 6

b) Define learning disability. List the common features associated with it.

P.T.O.

OE020(Sp&Hg)

Unit-IV 7. What are the key diagnostic markers of autism ? Name two diagnostic tools used to identify autism and describe the areas they assess ? 10

OR

8. a) Describe the development of semantics. 6

b) Name some ways of assessing semantic development in children. 4

Unit - V 9. Describe some cognitive-linguistic strategies you would employ to treat the linguistic deficits in children with specific language impairment. 10

O R

10. a) What is the role of medication in the management of MBD/ attention deficit hyperactivity disorders, and autism? 4

b) How would you apply behavioural approaches to handle the behavioural issues in the above mentioned clients ? 6

V Semester B.Sc. (Sp & Hg) Examination, Nov./Dec. 2007

(Scheme : ISS)

Speech and Hearing

Scientific Enquiry in Speech and Hearing

Time : 2 Hours

Max. Marks : 50

Instruction : Answer all questions.

- I, 1) Discuss the need for scientific enquiry in speech language pathology and audiology, 10

OR

- 2) Describe criteria for selection of a research question. 10

- II. 3) a) What is data ? 2
b) Compare independent vs. dependent variables. 2
c) Comment on planning in scientific research. 6

OR

- 4) Describe various methods of data collection. 10

- III. 5) Discuss any two research designs used in the area of voice science with suitable example. 10

OR

- 6) a) Discuss the relevance of AB design in the field of Audiology. 4
b) Explain the importance of experimental studies in the field of speech and hearing. 6

- IV. 7) a) Describe inferential statistics with examples. 6
b) Describe the characteristics of Gaussian curve. 4

OR

- 8) Outline a research proposal with a suitable design to study incidence of speech and hearing disabilities in Karnataka. 10

OE 030 (Sp & Hg)

V, 9) What are the factors to be Considered in evaluating a research report ? 10

OR

10) Short notes on **any four** : (2x4=10)

- a) Explain the significance of ex-post facto study
- b) Split-half reliability
- c) APA guidelines
- d) Ethics of Research
- e) Role of scientific clinician.

O E O 5 0 (S p & H g)

V Semester B.Sc. (Sp. & Hg.) Examination, Nov./Dec. 2007
(Scheme : ISS)
Speech **and** Hearing
Hearing Aids

Time : 2 Hours

Max. Marks : 50

Instruction : Answer all the questions.

1. 1) a) What are the major developments in the hearing aids in the last two decades ? 6
. b) Write a note on directional microphones in hearing aids. 4

OR

- 2) Write notes on : 10
a) Class D amplifier
b) Acoustic chair
c) Zinc air battery
d) Volume control.

- II. 3) a) How do you convince a parent of a child with hearing loss to use Binaural hearing aids for the child ? 7
b) How does body baffle effect with a body level hearing aid affect the performance ? 3

OR

- 4) a) What guidelines would you provide to the head of a school for the deaf on purchase of the amplification system ? 7
b) Write short notes on candidacy for bone anchored hearing aids. 3

- III. 5) a) Write the need for incorporating an output limiting feature in a hearing aid. 6
b) What is frequency transposition ? Who are the candidates for such an amplification system ? 4

OR

- 6) a) Differentiate an IROS from a BTE. When is the former preferred compared to a BTE ? 5
b) Write a note on time constants in a compression hearing aid. 5

- IV. 7) a) What are the reasons for acoustic feedback with earmold ? How can they be overcome ? 6
- b) When and why is there a need for change of earmolds by a hearing aid user ? 4

OR

- 8) What earmold modifications can be made to modify the frequency response of a hearing aid ? Describe them. 10

- V. 9) a) Why should electroacoustic measurement of a hearing aid be carried out ? 8
- b) Write a note on digispeech. 2

OR

- 10) a) Write the procedure, specified in IS 10776 : 1984, for measurement of OSPL₉₀, frequency response, full-on-gain. 6
- b) How are the electroacoustic parameters different in a mild, moderate and strong category hearing aids ? Describe with a table. 4
-

V Semester B.Sc. Examination, Nov./Dec. 2007

(Integrated Semester Scheme)

Speech and Hearing

Paediatric Audiology

Time: 2 Hours

Max. Marks: 50

Instruction : Answer all the questions.

- I. 1) Discuss the need to use a high-risk register with reference to the Indian context. 10

OR

- 2) Justify the need to identify mild hearing losses in children, in view of the cost involved and the paucity of resources we face. 10

- II. 3) Discuss the methods that can be utilized to identify mild hearing losses in children of different ages. 10

OR

- 4) The use of ABR in hearing screening programs should be made mandatory. Justify the statement. 10

- III. 5) Write notes on the application of the knowledge of the development of the human auditory system. 10

OR

- 6) Describe the development of auditory behaviour in paediatric population. 10

- IV. 7) Write notes on :

a) TROCA . 5

b) Play audiometry. 5

OR

P.T.O.

P.T.O.

OE060(Sp&Hg)

- 8) a) Name the behavioural hearing tests that can be carried out on a two-year-old blind child. 4
- b) What modifications need to be made to behavioural hearing tests while testing the hearing of a blind child ? 6
- V. 9) a) How are speech audiometry tests for children different from those for adults? 8
- b) Name two speech identification tests developed in India for the paediatric population. Who developed these tests ? 2
- OR
- 10) What is the need to carry out speech identification testing in the paediatric population? 10
-