

## OE 010 (Sp & Hg)

V Semester B.Sc (Sp. & Hg.) Examination, December 2008  
(Scheme : ISS)  
Speech and Hearing  
Motor Speech Disorders in Children

Time : 2 Hours

Max. Marks : 50

*Instructions .-Attempt all questions. All questions carry equal marks.*

1. 1) a) Draw a neat diagram to represent the components of 'Lower Motor Neurone Unit'. Describe the characteristic features when there is lesion at various levels in the motor neuron. 5
- b) Describe the importance of frontal and parietal lobe in sensorimotor control of speech. 5

OR

- 2) a) Describe the following in **not** more than 2 or 3 sentences : 6
- |                           |                                 |
|---------------------------|---------------------------------|
| i) Saltatory conduction   | ii) Bulbar region               |
| iii) Ventrolateral nuclei | iv) Globus pallidus             |
| v) Pyramidal cells        | vi) Supplementary motor cortex. |
- b) Write a neat diagram of the following and label the parts. 4
- |           |         |
|-----------|---------|
| i) Tongue | ii) Jaw |
|-----------|---------|

- II. 3) a) What are the characteristic features of hyperkinetic and hypokinetic disorders ? As a speech pathologist how do you distinguish these conditions based on behavioral and speech characteristics ? 6
- b) Define and explain the usefulness of reflex profile in the identification of neuromotor disability in children. 4

OR

- 4) a) Suggest a therapy plan for a severe quadriplegic child with average intelligence and good receptive language. Describe how you would execute the plan. 6
- b) What are the subjective methods of assessing articulation in a child with neuromotor disability ? 4

P.T.O

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- III. 5) a) Differentiate between verbal and non-verbal apraxia in children. 5  
b) Explain where and how the processing of speech breaks down in case of developmental apraxia of speech. 5

OR

- 6) Give a detailed account of the management strategies for treatment of developmental apraxia of speech in children. 10

- IV. 7) a) Describe any two conditions of cranial anomaly which lead to mental retardation in children. 4  
b) Give one example each for reversible and irreversible conditions of mental retardation. Suggest a clinical protocol for differential diagnosis of the two conditions. 6

OR

- 8) a) Describe the characteristics of Moebius syndrome. Suggest a general outline of treatment for speech problems. 5  
b) Highlight the characteristics and management plan for speech problems in children with progressive bulbar palsy. 5

- V. 9) a) Differentiate the following in AAC : 3  
i) Symbol v/s Sign  
ii) Aided v/s Unaided communication system  
iii) Iconic v/s Abstract symbols.  
b) How do you assess the cognitive and linguistic skills of a child who is recommended for AAC rehabilitation ? 7

OR

- 10) a) Describe when and in what conditions AAC rehabilitation is considered in children with motor speech disorders. 5  
b) How and on what aspects will you counsel the parents/caregivers of a child who is recommended an aided communication systems in AAC ? 5

# OE020(Sp&Hg)

5<sup>th</sup> Semester B.Sc. (Sp & Hg) Examination, Dec. 2008

(Scheme : ISS)

## Speech and Hearing Child Language Disorders

Time : 2 Hours

Max. Marks : 50

*Instruction : AH Units are compulsory.*

Unit I 1) Compare and contrast the biological maturation theory and behavioural theory of language acquisition in children. 10

OR

2) Explain the information processing theory of language acquisition. 10

.. Unit II 3) a) What are neurotransmitters ? 2

b) Discuss the functions of serotonin and dopamine, 8

OR

4) Discuss the neurophysiological correlates of language acquisition. 10

Unit III 5) a) Describe the speech and language characteristics in children with developmental dysphasia. 6

b) Define mental retardation. Give any one classification of mental retardation. 4

OR

6) a) What are the core impairments in autism ? 3

b) Highlight the classification of autism spectrum disorders. 7

Unit IV 7) a) Compare and contrast specific language impairment and learning disability. 6

b) Discuss the main principles in management of autism spectrum disorders. 4

OR

P.T.O.

- 8) Describe any two language tests used in the assessment of school age children between 7-10 years. 10
- Unit V 9) a) Discuss the principles of management in mental retardation. 7
- b) Write a short note on Down's syndrome. 3
- OR
- 10) a) Discuss the approach to early intervention for children diagnosed with Dyslexia. 6
- b) Discuss role of medication for children diagnosed with ADHD. 4

# OE 030 (Sp & Hg)

V Semester B.Sc. (Sp. & Hg.) Examination, Dec. 2008  
(Scheme : ISS)

## Speech and Hearing Scientific Enquiry in Speech and Hearing

Time: 2 Hours

Max. Marks: 50

*Instruction : Attempt 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**
- V. 9. What are the factors to be considered in evaluating a research report ? **10**  
OR  
10. Short notes on the following: **(2 1/2x4=10)**  
a) Explain the significance of ex-post factor study.  
b) Split-half reliability.  
c) APA guidelines.  
d) Ethics of research.

OE 040 (Sp & Hg)

**V Semester B.Sc. (Sp. & Hg.) Examination, December 2008**  
**(Integrated Semester Scheme)**  
**Speech and Hearing**  
**Organization and Administration of Speech and Hearing Center**

Time : 2 Hours

Max. Marks : 50

*Instruction : Answer all questions.*

- I. 1. a) Differentiate between conservation and rehabilitation with suitable examples. 4
- b) Describe the role of NGO's in the rehabilitation services in a developing country like India, 6
- OR
2. a) Compare and contrast the functions of speech and hearing center in a medical set-up Vs. a regular school set-up. 5
- b) Evidence based practice is the key to the success of outcome in rehabilitation services. Comment. 5
- II. 3, Describe, in detail, any two acts related to disability in the Indian context. Suggest your views on the need for amendments of the Acts. 10
- OR
4. 'The Rehabilitation Council of India plays a key role in the standardization of rehabilitation services in the country'. Discuss the statement with reference to the objectives and functions of the RCI. 10
- III. 5. a) Propose a schematic plan for setting up a speech and hearing center in an industry. 6
- b) List the factors to be considered in setting-up the above center. 4

OR

P.T.O.

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6. a) Describe the procedures followed for recruitment of personnel in a government organization. 8
- b) Differentiate between salary and pay scale with examples. 2
- IV. 7. a) Define budget. List the possible sources of budget for a Government and private organization. 5
- b) What are records ? Explain the different types of records that are maintained in a speech and hearing clinic. 5
- OR
8. a) Describe, in brief, the official formalities to be followed in the purchase of software from abroad. 8
- b) Expand the terms; CL, EL, ML, RH and LND. 2
- V. 9. 'The students of speech and hearing courses should be trained on the strategies to market their professional skills'. Comment. 10
- OR
10. 'Organization of camps, seminars and conferences serves as a method of public education in addition to professional development. Support the statement with relevant examples. 10

# OE050(Sp&Hg)

**V Semester B.Sc. (Sp. & Hg.) Examination, December 2008**  
**(Scheme : ISS)**  
**Hearing Aids**

Time : 2 Hours

Max. Marks : 50

*Instruction : Answer all the questions.*

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

P.T.O.



- 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 over a BTE ? 5
- b) Write a note on time constants in a compression hearing aid. 5
- VI. 7. a) What are the reasons for acoustic feedback with earmolds ? How can they be overcome ? 6
- b) When and why is there a need for change of earmolds by a 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 hearing aids 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 OSPL<sub>90</sub> 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

# OE 060 (Sp & Hg)

V Semester B.Sc. (Speech & Hearing) Examination, December 2008

Integrated Semester Scheme

Paediatric Audiology

Time : 2 Hours

Max. Marks : 50

I. Answer **any five** questions :

- 1) Discuss the pros and cons of conducting a universal hearing screening program in India. 10

OR

- 2) a) Justify the need to identify fluctuating hearing loss in children. 5  
b) Briefly describe an effective method that can be used to identify fluctuating hearing loss in children in India. Justify your choice of method. 5

- II. 3) Write a proposal regarding an infant screening program in Mysore which should include the personnel involved, duties of the personnel and the method of identification. 10

OR

- 4) What are the advantages and disadvantages of conducting a universal hearing screening program for infants in India ? 10

- III. 5) Write notes on how information on development of hearing can be used in the hearing evaluation of the paediatric population. 10

OR

- 6) a) Describe the structures of the ear that develop from the 1<sup>st</sup> and 2<sup>nd</sup> branchial arches. 5  
b) How would you use information regarding development of the auditory system in counselling parents ? 5

P.T.O.

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- IV. 7) a) Based on what criteria -.would you decide to carry out VRA or play audiometry. 5
- b) What are the advantages and disadvantages of each of the above tests ? 5

OR

- 8) What modifications would you make conditioned play audiometry and VRA while testing :
- a) A blind child 5
- b) A child with cerebral palsy 5

- V. 9) a) Describe any speech identification test designed to be administered on young children with profound hearing loss. 5
- b) Mention atleast five points that should be considered while constructing a speech identification test for the paediatric population. 5

OR

- 10) a) Write notes regarding the need to carry speech audiometry on children with hearing impairment aged about two years. 6
- b) Briefly describe a speech identification test that can be carried out on children below the age of one year. , 4