

# MSCSP/LB010

II M.Sc. Examination, May/June 2004  
(Semester Scheme)  
Speech and Hearing (Pathology)  
Speech Production

Time: 3 Hours

Max. Marks: 80

*Instruction : Answer all questions.*

- Unit 1 1. a) What are P, S and T in the formula  $P = S - T$  ? Describe each of them. 10  
b) Discuss the acoustic characteristics of voicing in plosives. 6
- OR
2. a) Describe the acoustic properties of vowels, semivowels, and diphthongs. 8  
b) Discuss the discrete time model of speech production. 8
- Unit 2 3. a) Discuss clinical applications of spectrography. Bring out the shortcomings of spectrographic analysis. 10  
b) How do you identify voicing, frication, and aspiration on a spectrogram ? 6
- OR
4. a) Describe how speaker verification can be done using spectrograms. 10  
b) Write spectrograms of 4 vowels and the values of the first three formants of these vowels in adult male, adult female and children. 6
- Unit 3 5. a) Discuss the acoustics of laughter.  
b) Discuss the predictive value of acoustic analysis of infant cries. Discuss at least two studies in this area. 8
- OR
6. a) Discuss at least two studies on the acoustic aspects of cries of glottal and supraglottal origin. 10  
b) What are the implications of infant cry analysis for diagnostics in speech pathology? 6
- Unit 4 7. a) Describe the action of infrahyoid muscles. 6  
b) Describe the different methods of respiratory analyses and their usefulness in diagnostic speech pathology. 10
8. a) Discuss the intensity changing mechanism. 8  
b) Describe the physiology of vocal fold vibration. 8
- Unit 5 9. a) Discuss the types of airflow used in the production of vowels, fricatives and nasal continuants. 8  
b) Describe the usefulness of at least two instruments used for respiratory measurements 8
- OR
10. a) Describe glottal resistance as in the production of stops, fricatives, vowels and whisper ? Illustrate with figures. 8  
b) Describe lower airway and upper airway interaction in the production of vowels. 8

# MSCSP/LB 020

M.Sc. (II Semester) Examination, May/June 2004  
(Semester Scheme)  
Sp. Language Pathology  
Maxillofacial Anomalies and Phonological Disorders

Time: 3 Hours

Max. Marks: 80

*Instruction: Answer all questions.*

- I. 1) a) Define coarticulation and discuss the functions of coarticulation. 8  
b) Discuss physiological methods of measuring coarticulation. 8  
2 OR
- 2) a) Discuss 'Direction effect' of lip rounding and nasalization with examples. 8  
b) Comment on the target based model of coarticulation. 8
- II. 3) a) Discuss on the application of any one theory of phonological development in the evaluation of phonological disorders. 8  
b) Explain metaphon therapy. 8  
OR
- 4) Discuss the application of metaphon theory in the management of phonological disorders. 16
- III. 5) a) Describe any four phonological processes with examples. 8  
b) Discuss the development of phonological processes. 8  
OR
- 6) Describe analysis of phonological processes. 16
- IV. 7) a) Describe the origin, insertion and action of facial muscles. 8  
b) Discuss maxillo facial anomalies. 8  
OR
- 8) a) Delineate subjective and objective methods of assessing velopharyngeal function. 8  
b) Describe the anatomy of the maxillofacial region. 8
- V. 9) a) Describe speech therapy methods for the management of maxillofacial anomalies. 8  
b) Discuss the acoustical aspects of speech of a patient with unrepaired bilateral cleft of soft palate. 8  
OR
- 10) a) Describe coarticulation of plosive + vowel in a patient with cleft of soft palate. 8  
b) Describe the phonological disorders associated with maxillofacial anomalies. 8
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# MSCSP/LB 030

## M.Sc. (Sp. Lang. Pathology) II Semester Examination, May/June 2004 (Semester Scheme) Language, Cognition and Brain

Time: 3 Hours

Max.Marks: 80

*Instruction: All Sections are compulsory. Give brief descriptions with illustrations.*

Briefly describe the following with illustrations;

- I. 1) a) Neurolinguistics and psycholinguistics. 8  
b) Cognition and Localization. 8  
OR
- 2) a) Language processing and Neural models. 8  
b) Brain and language behaviour. 8
- II. 3) a) Attention and concentration. 8  
b) Short term and long term memory. 8  
OR
- 4) a) Metacognition and metalinguistics. 8  
b) Verbal reasoning and grammaticality judgement. 8
- III. 5) a) Language performance and normal Aging. 8  
b) Metacognition in children and adults. 8,  
OR
- 6) a) Mental Retardation and language processing. 8  
b) Dementia and language impairment 8
- IV. 7) a) Assessment of cognition and language. 8  
b) Assessment of metacognition in normals ' 8  
OR
- 8) a) Assessment of cognitive-linguistic deficits. 8  
b) Assessment of deficits of metacognition. 8,
- V. 9) a) Cognitive-linguistic intervention program. 8  
b) Medical and non-medical intervention in cognitive disorders. 8  
OR
- 10) a) Team approach in cognitive-communicative impairments. 8  
b) Therapeutic procedures in cognitive-communicative Impairment. 8

# MSCSP/LB040

M.Sc. (Secoad Semester) (Sp. Lang, Pathology  
Examination, May /June 2004  
(Semester Scheme)

Child Language Disorders

Time: 3 Hours

Max. Marks: 80

*Instruction: Answer one question from each Unit.*

- Unit I. 1. a) Explain a limited capacity information model. 8  
b) How does it help in understanding disordered language ? 8  
OR  
2. a) How has the knowledge of psycholinguistics helped in understanding normal language processing ? 10  
b) What are its implications in understanding disordered language ? 6
- Unit II. 3. a) Quoting from research studies, discuss in detail the linguistic and literacy characteristics of children with hearing impairment. 12  
b) What can be done in Indian context to improve literacy among hearing impaired population ? 4  
4. a) How do auditory processing deficits affect language abilities in SLI children? quote relevant research studies, 12  
b) Write a note on pragmatic deficits seen in children with mental retardation. 4
- Unit III. 5. a) Write a protocol for assessment of reading disabilities in children. 10  
b) Write a note on computerised tests that are available for the same. 6  
OR  
6. a) What is the significance of differential diagnosis with reference to language disorders? 10  
b) What are the factors that interfere language in the differential diagnosis of any disorder ? 6
- Unit IV. 7. Write notes on play therapy, pre-requisites of a counsellor, role of physiotherapist and occupational therapist in the management of children with language disorders. 16  
OR  
8. Explain the various treatment approaches used in children with SLI. , 16
- Unit V. 9. What are the recent advances in assessment of language disorders? 16  
OR ....  
10. What are the opportunities and infrastructure available for integration of learning disabled children in the Indian context ? 16
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