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MANIPAL UNIVERSITY

SECOND YEAR M.A.S.L.P. DEGREE EXAMINATION - MAY/JUNE 2012

SUBJECT: SH 203 – CLINICAL PHONOLOGY AND MOTOR SPEECH DISORDERS (NEW REGULATION)

Friday, June 01, 2012

Time: 10:00 - 13:00 Hrs.

Max. Marks: 80

- 1A. What are phonotactics and phonotactic probability? Describe their importance in phonological development.
- 1B. What are the types of phonological processes?

(12+4 = 16 marks)

OR

- 1. Discuss:
- 1A. Feature based model of coarticulation
- 1B. Physiological studies on coarticulation

 $(8 \times 2 = 16 \text{ marks})$

2. Describe any two nonlinear theories of phonology and elaborate on their application in the assessment of phonological disorders.

(16 marks)

OR

2. Give evidences to support the role of natural theory of phonology in the treatment of phonological disorders.

(16 marks)

- 3A. What is the role of sensory information in speech motor control? Support with literature.
- 3B. Explain the relation between neural maturation and motor control.

(10+6 = 16 marks)

OR

- 3A. How do you justify speech as a sensory motor skill?
- 3B. Neural substrate of ideational apraxia.

(14+2 = 16 marks)

- 4A. Elaborate on recent developments in the management of hypokinetic dysarthria. Mention any one specific therapy technique used in speech rehabilitation.
- 4B. Write a note on latest version of FDA.

(12+4 = 16 marks)

OR

- 4. Write short notes:
- 4A. Touch cue method
- 4B. Apraxia Battery for Adults
- 4C. Functional imaging relevance in apraxia
- 4D. Respiration management in dysarthria

 $(4\times4 = 16 \text{ marks})$

- 5A. What are the issues and concerns in the management of dysphagia?
- 5B. Briefly describe the maneuvers used in airway management of dysphagia.

(8+8 = 16 marks)

OR

5. Describe the videoflouroscopic findings of dysphagia. What are the merits and demerits of such procedures?

(10+6 = 16 marks)

Page 1 of 1

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SECOND YEAR M.A.S.L.P. DEGREE EXAMINATION - MAY/JUNE 2012

SUBJECT: SH 204 – SPEECH PERCEPTION AND ITS DISORDERS (NEW REGULATION)

Monday, June 04, 2012

Time: 10:00 - 13:00 Hrs.

Max. Marks: 80

Answer all questions.

1. Discuss the analysis of speech in human auditory system.

(16 marks)

OR

- 1A. Discuss neurobiological theory of speech perception.
- 1B. Critically evaluate neurobiological theory of speech perception.

(10+6 = 16 marks)

- 2A. Subjective methods of measuring speech intelligibility.
- 2B. Suprasegmental features perception through visual modality.

(8+8 = 16 marks)

OR

2. Enumerate on the objective methods of assessing speech intelligibility.

(16 marks)

3. With literature support discuss the issues related to perception of vowels in individuals with hearing impairment.

(16 marks)

OR

- 3A. Dichotic listening.
- 3B. Compare adult and infant perception.

(8+8 = 16 marks)

- 4A. Influence of number of channels on speech perception in Cochlear Implantees.
- 4B. Perception of speech through BAHA.

(8+8 = 16 marks)

OR

- 4A. Discuss recent developments in Brainstem implant in processing speech.
- 4B. Discuss the influence of channel vs electrodes in speech perception.

(8+8 = 16 marks)

5. Discuss the influence of types and degree of hearing loss on perception of speech.

(16 marks)

OR

- 5A. Different types of memories.
- 5B. Animal Vs human perception.

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SECOND YEAR M.A.S.L.P. DEGREE EXAMINATION – MAY/JUNE 2012

SUBJECT: CLINICAL PHONOLOGY AND NEUROMOTOR SPEECH DISORDERS (M.2.1.5) (OLD REGULATION)

Monday, June 04, 2012

Time: 10:00 - 13:00 Hrs.

Max. Marks: 80

- 1. Long Answers (Answer any TWO from the following questions):
- 1A. How important are phonological awareness skills for children?
- 1B. Describe DIVA model.

(8+12 = 20 marks)

- 2A. Are the treatment approaches for disorders of articulation and phonology similar or different? Comment.
- 2B. Discuss the objective assessment procedures for swallowing disorders.

(12+8 = 20 marks)

- 3A. Describe the treatment goals for an individual with Flaccid Dysarthria.
- 3B. Comment on the errors in co-articulation in such individuals.

(15+5 = 20 marks)

- 4. Answer any EIGHT from the following:
- 4A. Motor equivalence
- 4B. Apraxia of speech
- 4C. Phases of swallow
- 4D. Metaphonological skills
- 4E. Autosegmental phonology
- 4F. Aerodynamic assessment of respiration
- 4G. Parkinson's disease
- 4H. Pyramidal tracts
- 4I. Maximal opposition therapy
- 4J. Imaging techniques

 $(5 \times 8 = 40 \text{ marks})$

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SECOND YEAR M.A.S.L.P. DEGREE EXAMINATION - MAY/JUNE 2012

SUBJECT: SPEECH PERCEPTION (M.2.2.3) (OLD REGULATION)

Wednesday, June 06, 2012

Time: 10:00 - 13:00 Hrs.

Max. Marks: 80

- Answer any THREE questions. Question No. 1 is compulsory.
- 1. Write short notes on:
- 1A. Methods to assess speech intelligibility
- 1B. Kryter Method
- 1C. Different stages of memory
- 1D. Range of auditory abilities in cochlear implantees
- 1E. Working memory in speech perception
- 1F. Vowel perception in normals
- 1G. Cues of stops in speech perception
- 1H. Role of cortex in speech perception

 $(5 \times 8 = 40 \text{ marks})$

2. What are the factors affecting speech intelligibility? Can the test material play significant role in the intelligibility assessment? If so, discuss.

(20 marks)

3. What are methods to study visual perception? Discuss in detail any one method to study visual perception.

(20 marks)

4. Describe various components in the cochlear implant which can play a significant role in improving speech perception in cochlear implantees.

(20 marks)

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SECOND YEAR M.A.S.L.P. DEGREE EXAMINATION - MAY/JUNE 2012

SUBJECT: SH 205 – DIAGNOSTIC AUDIOLOGY (NEW REGULATION)

Wednesday, June 06, 2012

Time: 10:00 - 13:00 Hrs.

Max. Marks: 80

- 1A. Describe the principles of generation and calibration of pure tones and filtered clicks.
- 1B. List and describe the various transducers used in audiological practice.

(8+8 = 16 marks)

OR

- 1A. Explain the signal processing techniques applicable to audiological instrumentation.
- 1B. Describe the procedure of calibration of electrophysiological equipment in an audiology set up.

(8+8 = 16 marks)

- 2A. Write in detail on pedigree analysis with reference to hearing impairment and its relevance to genetic counseling.
- 2B. How would you enhance the public awareness of hearing impairment in a rural set up?

(10+6 = 16 marks)

OR

- 2A. Differentiate the protocols of OAE evaluation of adults from children.
- 2B. Describe the factors affecting OAEs and their relevance in diagnosis.

(8+8 = 16 marks)

3. Trace the evolution of aural acoustic immittance measurements and their corresponding clinical applications.

(16 marks)

OR

3. Comment on the clinical applications of ECochG, ABR, SN 10, ASSR with appropriate published studies.

(16 marks)

4. Write on the various causes of vestibular disorders and their association with auditory disorders.

(16 marks)

OR

4. Explain the instrumentation and recording procedures for MLR and LLR. Add a note on the clinical relevance of P300 and MMN.

(16 marks)

- 5A. Describe the histopathological findings and audiological correlates in otospongiosis.
- 5B. Discuss the practice of audiology in rural sites.

(8+8 = 16 marks)

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- 5A. Discuss the role of an Audiologist in medico legal aspects and the caution to be exercised in testifying.
- 5B. Comment on the non-audiological tests in the diagnosis of auditory disorders.

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SECOND YEAR M.A.S.L.P. DEGREE EXAMINATION - MAY/JUNE 2012

SUBJECT: SH 206 – HEARING DEVICES

(NEW REGULATION)

Friday, June 08, 2012

Time: 10:00 - 13:00 Hrs.

Max. Marks: 80

- 1A. Write notes on IIR and FIR filter and its application in Speech and Hearing.
- 1B. Explain the FM transmission and reception and its application in FM hearing aids.

(8+8 = 16 marks)

OR

- 1A. Explain how does the channel separation is achieved using DSP.
- 1B. Elaborate on analogue to digital and digital to analogue converter.

(8+8 = 16 marks)

- 2A. Explain step wise procedure of carrying out probe microphone measurement pediatric population.
- 2B. Write a note on noise reduction using microphone technology.

(10+6 = 16 marks)

OR

- 2A. Briefly explain the signal processing in hearing aids.
- 2B. Describe the electro acoustic measurement and interpretation of following parameters. Write with reference to any one standard.
 - i) OSPL90
 - ii) Full on gain
 - iii) Total harmonic distortion

(4+12 = 16 marks)

- 3A. Describe various assistive listening devices (ALD) that can be used in classroom.
- 3B. Discuss the factors that influence selection of ALD.

(10+6 = 16 marks)

OR

- 3A. Elaborate on Candidacy for Assistive Listening Device.
- 3B. Classify ALD's with examples.

(6+10 = 16 marks)

- 4A. Briefly discuss on outcomes in Cochlear implant in relation to psychophysics.
- 4B. Discuss the current understanding on candidacy for cochlear Implant.

(8+8 = 16 marks)

OR

- 4A. Compare and contrast CIS and ACE speech coding Strategies.
- 4B. Write a short note on NRT.

(10+6 = 16 marks)

Page 1 of 2

- 5A. How do you determine the candidacy for BAHA.
- 5B. Discuss the benefits of BAHA over conventional BC hearing aids.

(8+8 = 16 marks)

OR

- 5A. Describe the components of middle ear implant.
- 5B. Discuss the various test procedures employed in determining candidacy for Brainstem implant.

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SECOND YEAR M.A.S.L.P. DEGREE EXAMINATION - MAY/JUNE 2012

SUBJECT: SEMINARS IN DIAGNOSTIC AUDIOLOGY (M.2.2.4) (OLD REGULATION)

Friday, June 08, 2012

Time: 10:00 - 13:00 Hrs.

Max. Marks: 80

Answer any TWO from the following questions:

1. Discuss the "Hearing Screening Program" with reference to its justification, techniques and its relevance to the Indian context.

(20 marks)

2. Describe the procedures involved in the purchase and calibration of Immittance and Electrophysiological instruments used for audiological evaluations.

(20 marks)

3. Describe the relevant audiological and histopathological findings in systemic diseases and sudden hearing loss.

(20 marks)

4. Write short notes on:

- 4A. Head start program
- 4B. Forensic audiologist and his role in medico legal cases
- 4C. Brain maps
- 4D. Principles underlying ENG
- 4E. Genetic evaluation and counseling
- 4F. Usher syndrome
- 4G. Comprehensive reporting of audiological aspects
- 4H. MLD

 $(5 \times 8 = 40 \text{ marks})$

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SECOND YEAR M.A.S.L.P. DEGREE EXAMINATION - MAY/JUNE 2012

SUBJECT: SH 207 – ADVANCES IN MANAGEMENT OF PERSONS WITH HEARING DISORDERS (NEW REGULATION)

Monday, June 11, 2012

Time: 10:00 - 13:00 Hrs.

Max. Marks: 80

- 1A. "Distant mode intervention for hearing impaired is essential in India". Critically evaluate the statement.
- 1B. Describe the various facilities provided by the Government of India for individuals with hearing impairment.

(8+8 = 16 marks)

OR

- 1A. What are the challenges faced by teachers in management of hearing impairment in India.
- 1B. Differentiate integrated versus segregated educational setups.

(8+8 = 16 marks)

2. How would your management vary in pre lingual and post lingual child with hearing impairment?

(16 marks)

OR

2. Discuss the role of audiologist and caregivers in the management of children with multiple handicap.

(16 marks)

3. Discuss the various management options for individuals experiencing tinnitus with associated hearing loss.

(16 marks)

OR

- 3A. Add a note on use of maskers as a management options for tinnitus.
- 3B. List the counselling tips for hyperacusis.

(10+6 = 16 marks)

4. Why the knowledge of acts and policies related to disability is important for audiologists? Discuss any two acts relevant to educational issues of individuals with hearing impairment.

(6+10 = 16 marks)

OR

4. Discuss the various facilities provided to individuals with disability provided by the Government of India.

(16 marks)

- 5A. Explain meta-linguistic and meta-cognitive approach.
- 5B. Discuss the various communication strategies for CAPD cases.

(8+8 = 16 marks)

OR

- 5A. Explain different steps and activities for phoneme synthesis training.
- 5B. Discuss the various environmental modifications in a classroom for a child with CAPD.

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SECOND YEAR M.A.S.L.P. DEGREE EXAMINATION – MAY/JUNE 2012

SUBJECT: SEMINARS IN MANAGEMENT OF THE HEARING IMPAIRED (M.2.2.5) (OLD REGULATION)

Monday, June 11, 2012

Time: 10:00 – 13:00 Hrs.

Max. Marks: 80

- Z Question no. 4 is compulsory. Answer any TWO from the rest.
- 1. Differentiate:
- 1A. Brainstem implant V/s Cochlear implant
- 1B. BAHA V/s BC hearing aid

 $(8 \times 2 = 16 \text{ marks})$

2. Describe the recent technology in the hearing aids to improve the SN ratio.

(16 marks)

3. Describe the acoustics and architectural design for the classroom of HI.

(16 marks)

- 4. Write short notes on any EIGHT of the following:
- 4A. AAOO method of calculating disability
- 4B. Device to assist in telephone communication
- 4C. Signal processing in tactile aids
- 4D. Factors affecting speech reading
- 4E. IEP
- 4F. Ear hook
- 4G. LGOB
- 4H. Acoustic transformation in REM
- 4I. Oral Aural method

 $(6 \times 8 = 48 \text{ marks})$

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SECOND YEAR M.A.S.L.P. DEGREE EXAMINATION – MAY/JUNE 2012

SUBJECT: ADVANCES IN LANGUAGE ACQUISITION AND DEVELOPMENTAL LANGUAGE DISORDERS (M.2.1.3) (OLD REGULATION)

Monday, May 28, 2012

Time: 10:00 - 13:00 Hrs.

Max. Marks: 80

Question number FOUR is compulsory. Answer any two from the rest:

- 1A. What are theories of language acquisition? Critically evaluate linguistic theory of language acquisition.
- 1B. Describe its contribution towards assessment and management of communication disorders.

(12+8 = 20 marks)

2. Write an essay on contemporary issues on assessment and management of children with Specific Language Impairment.

(20 marks)

3. Explain the general assessment processes for childhood language disorders. How autism is differentially diagnosed from ADHD?

(20 marks)

4. Write short notes on:

- 4A. Role of memory in language learning
- 4B. Dyslexia assessment
- 4C. Bilingualism and language development
- 4D. Spoken word recognition
- 4E. Lovas approach
- 4F. REELS
- 4G. Group therapy for developmental language disorders
- 4H. Language assessment of culturally diverse children

 $(5 \times 8 = 40 \text{ marks})$

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SECOND YEAR M.A.S.L.P. DEGREE EXAMINATION – MAY/JUNE 2012 SUBJECT: SH 201 - LANGUAGE ACQUISITION AND LANGUAGE DISORDERS IN CHILDREN (NEW REGULATION)

Monday, May 28, 2012

Time: 10:00 - 13:00 Hrs.

Max. Marks: 80

1. Describe any one of the comprehensive theories of language acquisition.

(16 marks)

OR

1. Discuss the neuroanatomical and neurophysiological correlates of language acquisition.

(16 marks)

- 2A. Describe the different types bilinguals.
- 2B. Discuss the language development in children with bilingual language exposure with supporting studies.

(6+10 = 16 marks)

OR

2. Discuss the clinical features, language problems and recovery pattern seen in children with Landau Kleffner's syndrome.

(16 marks)

3. Discuss the speech and language characteristics of children with Autism Spectrum Disorder. Quote evidences from the recent researches.

(16 marks)

OR

3. Discuss the communication problems in Specific language impairment.

(16 marks)

- 4A. Describe the assessment protocol used for children with Intellectual disability.
- 4B. Describe the cross cultural considerations in the assessment and management of developmental language disorders.

(8+8 = 16 marks)

OR

- 4A. Describe the specific assessment procedures for children with Autism.
- 4B. Describe scaffolding and milieu teaching with suitable examples.

(10+6 = 16 marks)

- 5A. Discuss the neurobiology of reading and writing.
- 5B. Describe formal assessment tools for reading and writing disorders.

(8+8 = 16 marks)

OR

5. Discuss the recent trends in the treatment of reading, spelling and writing disorders in children.

(16 marks)

SH 201

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SECOND YEAR M.A.S.L.P. DEGREE EXAMINATION - MAY/JUNE 2012

SUBJECT: SH 202 – ADULT LANGUAGE DISORDERS (NEW REGULATION)

Wednesday, May 30, 2012

Time: 10:00 - 13:00 Hrs.

Max. Marks: 80

Answer all questions.

- 1A. Elucidate the structural and functional asymmetry of cerebral hemisphere.
- 1B. Write short notes on cerebral maturation.

(12+4 = 16 marks)

OR

- 1A. Discuss in detail the role of subcortical structures in language processing.
- 1B. Explain the role of important neurotransmitters in speech and language functions.

(10+6 = 16 marks)

- 2A. Discuss in detail, any one tool to evaluate right hemisphere damage.
- 2B. Write a short note on language and cerebral dominance.

(10+6 = 16 marks)

OR

- 2. Write short notes:
- 2A. Lichthiem's model
- 2B. Pragmatic and aphasia
- 2C. Phonological awareness and reading
- 2D. Cortical quotient

 $(4\times4 = 16 \text{ marks})$

- 3A. Explain various reading disorders associated with aphasia.
- 3B. Explain the role of computers in aphasia rehabilitation.

(8+8 = 16 marks)

OR

- 3A. Describe the linguistics approaches of rehabilitation in expressive aphasics.
- 3B. Write a short note on acalculia.

(12+4 = 16 marks)

- 4A. Describe the neurophysiological changes associated with normal ageing.
- 4B. Describe the role of memory in language processing.

(8+8 = 16 marks)

OR

4. Critically evaluate any one neurocognitive model and elaborate on its application in understanding adult language disorders.

(16 marks)

5. Describe the different types of dementia. How would you assess dementia and suggest the treatment procedures.

(16 marks)

OR

5. Describe the evaluation and intervention in RHD.

(16 marks)

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SECOND YEAR M.A.S.L.P. DEGREE EXAMINATION - MAY/JUNE 2012

SUBJECT: ADVANCES IN ADULT LANGUAGE DISORDERS (M.2.1.4) (OLD REGULATION)

Thursday, May 31, 2012

Time: 10:00 - 13:00 Hrs.

Max. Marks: 80

- 1. Discuss the relevance of cognitive examination in subjects with aphasia.

(20 marks)

2. Write a brief essay on the post-stroke language reorganization with the recent literature evidences.

(20 marks)

3. Compare and contrast agrammatism and paragrmmatism with case examples and discuss the management strategies.

(20 marks)

- 4. Short notes on:
- 4A. Strengths and limitations of Lichtheim's model of language processing
- 4B. RHLB
- 4C. Semantic dementia
- 4D. Atypical aphasia
- 4E. Progress evaluation in aphasia
- 4F. Paraphasia
- 4G. Visual field and tachiestoscopic studies in linguistic research
- 4H. Mental lexicon

 $(5 \times 8 = 40 \text{ marks})$

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SECOND YEAR M.A.S.L.P. DEGREE EXAMINATION – DECEMBER 2012

SUBJECT: SH 202 – ADULT LANGUAGE DISORDERS

(NEW REGULATION)

Monday, December 17, 2012

Time: 10:00 - 13:00 Hrs.

Max. Marks: 80

Answer ALL questions.

1. The Broca's and Wernicke's areas are anatomically tuned to process language. Critically evaluate this statement.

(16 marks)

OR

2. The two languages in bilinguals are processed in anatomically distinct areas in the brain. Critically evaluate this statement with supportive and contradictory evidence.

(16 marks)

- 3A. Describe the relevance of assessing non-verbal skills in people with aphasia.
- 3B. Write a brief essay on bilingualism and its relevance to aphasiology.

(8+8 = 16 marks)

OR

4. Discuss the communication deficits in people with right hemisphere damage.

(16 marks)

5. Describe the complexity account of treatment effectiveness (CATE) and semantic feature based therapy for aphasia.

(8+8 = 16 marks)

OR

6. Write an essay on the alexias.

(16 marks)

7. Delineate the age-related microscopic and neurochemical changes in the brain.

(16 marks)

OR

- 8A. Describe the organization of working memory.
- 8B. Write briefly on Bottleneck theories of attention.

(8+8 = 16 marks)

9. Short notes:

- 9A. Primary progressive non-fluent aphasia
- 9B. Schizophasia
- 9C. Subcortical aphasia
- 9D. Vascular dementia

 $(4\times4 = 16 \text{ marks})$

OR

10. Discuss the communication deficits seen in people with TBI.

(16 marks)

SH 202

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SECOND YEAR M.A.S.L.P. DEGREE EXAMINATION – DECEMBER 2012

SUBJECT: SH 206 – HEARING DEVICES

(NEW REGULATION)

Tuesday, December 18, 2012

Time: 10:00 - 13:00 Hrs.

Max. Marks: 80

1. Draw a neat block diagram of FM transmitter and discuss its working principle.

(4+12 = 16 marks)

OR

- 2A. Compare and contrast IIR Vs FIR filter.
- 2B. Tele rehabilitation and its application in speech and hearing.

(4+12 = 16 marks)

- 3A. Elaborate on real ear insertion gain measurement and its clinical application.
- 3B. Discuss the technique of nonlinear amplification.

(8+8 = 16 marks)

OR

- 4A. Elaborate on the electro acoustic measurements of hearing aid with reference to any one standards.
- 4B. Describe working principal of analogue hearing aids.

(10+6 = 16 marks)

5. Write short notes on:

- 5A. Hardwire system
- 5B. FM system
- 5C. Induction loop system
- 5D. Infra-red system

 $(4 \times 4 = 16 \text{ marks})$

OR

- 6A. Elaborate on assistive listening device for Deaf and Blind.
- 6B. Write a note on tinnitus masker and their utility.

(8+8 = 16 marks)

7A. Discuss the contraindication in cochlear implant. Add a note on biosafety.

- 7B. Write short notes:
 - i) MPEAK Vs ACE
 - ii) Single channel Vs Multichannel CI

 $(8+(4\times2) = 16 \text{ marks})$

OR

- 8A. Elaborate on intra operative measurement in cochlear implantation.
- 8B. Discuss the role of team members involved in candidacy selection for cochlear implantation.

(6+10 = 16 marks)

- 9A. Elaborate on outcomes of middle ear implant with appropriate literature evidences.
- 9B. Explain the component and speech coding strategies of brainstem implant.

(8+8 = 16 marks)

OR

- 10A. Explain the post-operative measurements in brainstem implant.
- 10B. Discuss on the candidacy of BAHA for children and adults.