Reg. No. | | | | | | | | |

SLPH101

Credit Based I Semester M. Sc. Speech Language Pathology/Audiology Degree Examination, June 2022

(Semester Scheme 2020-22 Batch Onwards)

Research Methods, Epidemiology and Statistics

Time: 3 Hours Max. Marks: 70

UNIT - 1

1. Do research strategies in SLP and audiology differ? Justify your answer by taking examples in these 2 areas. (14X1=14)

OR

2. a. What is an experimental design? Explain various types of single subject research designs used in speech and hearing research. (10X1=10)
   b. Write the significance of observational research. (4X1=4)

UNIT - 2

3.Define epidemiology. Highlight the various measures used in the field of speech and hearing. (14X1=14)

OR

4.a. Explain causality of association and describe its criteria in epidemiological research (10X1=10)
   b. Compare and contrast cross sectional and cohort study (4X1=4)

UNIT – 3

5.a. Test if there is any significant difference in average blood pressure between males and females (Table value= 2.145) (10X1=10)

Males	120	122	124	122	136	121	124	126
Females	132	139	138	140	145	129	132	131

b. Write a short note on kappa statistics (4X1=4)

OR

6.Write short notes on the following
a. Null and Alternative hypothesis (5X1=5)
b. Type I and Type II error (5X1=5)

c. Level of significance and Power of the test (4X1=4)

UNIT - 4

7. a. Calculate correlation coefficient between birth weight of babies and weight of mothers and interpret the result. (8X1=8)

Mother's weight in kg	65	63	58	79	78	68
Birth weight in kg	2.1	2	2.3	3.4	3.2	3

b. Write a short note on ANOVA and ANCOVA (6X1=6)

OR

8.Explain the following

a) Correlation and regression (4X1=4)
b) Principal component analysis (4X1=4)
c) ANOVA and MANOVA (6X1=6)

UNIT – 5

9. Elaborate on the level of evidence. Explain in detail how it varies for experimental and non- experimental designs (14X1=14)

OR

10. a. State the difference between systematic review and meta-analysis, and its role in the level of evidence (10X1=10)
b. Write a short note on confidence interval. (4X1=4)

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Reg. No. | | | | | | | | |

SLPH102

Credit Based I Semester M. Sc. Speech Language Pathology Degree Examination, June 2022

(Semester Scheme) (2020-22 Batch Onwards)

Neurobiology of Speech –Language and Cognition

Time: 3 Hours Max. Marks: 70

UNIT - 1

1. "Neuropathologies of Speech and Language invariably have dysfunctions in neurotransmission". Justify the statement with a detailed illustration of a clinical condition (14X1=14)

OR

2. Elaborate on the functional organization of brain and lateralization function related to speech and language production (14X1=14)

UNIT - 2

3. Discuss about the clinical examination of cranial nerves responsible for speech and language production (14X1=14)

OR

4. Elaborate on the following (7X2=14)
   a. Neurolinguistic assessment
   b. Priming and reaction time

UNIT - 3

5. Explain cognitive linguistic processes related to attention and memory development of speech and language (14X1=14)

OR

6. What is attention? Explain types of attention and factors affecting attention (14X1=14)

UNIT - 4

7. Discuss in detail the representation of languages in brain among monolinguals and multilinguals? (14X1=14)

OR

8. Elaborate on the following: (7X2=14)
   a. Visual word recognition
   b. Discourse comprehension

UNIT - 5

9. Write a note on the association of ageing, working memory and language processing (14X1=14)

OR

10. Explain aging with the help of TWO theories (14X1=14)

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Reg. No. | | | | | | | | |

SLPH103

Credit Based I Semester M. Sc. Speech Language Pathology Degree Examination, June 2022

(Semester Scheme) (2020-22 Batch Onwards)

Speech Science and Speech Production

Time: 3 Hours Max. Marks: 70

UNIT - 1

1. a) Elaborate the aerodynamics for oral and nasal sounds (10X1=10)
   b) Compare the glottal resistance for vowels and plosives (4X1=4)

OR

2. Explain in detail the physiological aspects involved in speech production with relevance to various subsystems. (14X1=14)

UNIT - 2

3. a) Describe the different sources and their characteristics in speech production. (8X1=8)
   b) Explain the upper airway dynamics for pressure consonants. (6X1=6)

OR

4. a) What is prosody? Explain the different components of prosody? (10X1=10)
   b) Write a note on format frequency? (4X1=4)

UNIT - 3

5. Delineate the advantages and disadvantages of:
   a. Spectrography (5X1=5)
   b. Cepstral analysis (5X1=5)
   c. Linear prediction coding (4X1=4)

OR

6. a) Why spectrography is considered as a valid tool for analysis of speech in communication disorders (10X1=10)
   b) Write a short note on ultra sound. (4X1=4)

UNIT - 4

7. Compare and contrast the acoustic and aerodynamic features of the following:
   a. Vowels and laterals (5X1=5)
   b. Glides and diphthongs (5X1=5)
   c. Plosives and affricates (4X1=4)

OR

8. Describe the role of acoustic analysis in the following: (7X2=14)
   a. Identification of communication disorders.
   b. Speaker verification

UNIT – 5

9. a) Discuss the acoustic characteristics of normal infant cries. (7X1=7)
   b) "Infant cry analysis as a quick tool for identification of high risk babies". Critically evaluate the given statement. (7X1=7)

OR

10. Describe the role of speech synthesis in understanding the normal speech production. (14X1=14)

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Reg. No. | | | | | | | | |

SLPS104

Credit Based I Semester M. Sc. Speech Language Pathology Degree Examination, June 2022

(Semester Scheme) (2020-22 Batch Onwards)

Clinical Linguistics and Multilingual Issues

Time: 3 Hours Max. Marks: 70

UNIT - 1

1. Define Clinical Linguistics. Explain the scope of linguistics in the clinical field. (14X1=14)

OR

2. Describe the phonological acquisition and briefly describe phonologicaldisorders in children. (14X1=14)

UNIT-2

3. Explain the following with suitable examples: (7x2=14)
   a) Truth relations
   b) Language Deficiency

OR

4. Discuss pragmatic deficits with respect to some clinical disorders. (14X1=14)

UNIT-3

5. Elaborate on any TWO psycholinguistic models of language pathology.(14X1=14)

OR

6. Explore the significance of proficiency, native language and dominance when making a rehabilitation plan for multilingual individuals. (14X1=14)

UNIT-4

7. What is neurolinguistics? Discuss its scope. (14x1=14)

OR

8. How are hemispheric differences critical to language processing? Explain with evidence. (14x1=14)

UNIT-5

9. Describe the major language families that contribute to the linguistic diversity in India. (14X1=14)

OR

10. a) Discuss the cultural issues in verbal and non-verbal communication. (7X2=14)
    b) Elaborate on characteristics of Dravidian language family

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Reg. No. | | | | | | | | |

SLPS106

Credit Based I Semester M. Sc. Speech Language Pathology Degree Examination, June 2022

(Semester Scheme) (2020-22 Batch Onwards)

Language and Literacy Disorders

Time: 3 Hours Max. Marks: 70

UNIT - 1

1. a. Explain the stages of reading and writing development (7X1=7)
   b. Discuss the development of reading across different writing systems (7X1=7)

OR

2. Discuss different writing systems of languages with suitable illustrations. Justify your answers with recent research evidence (14X1=14)

UNIT - 2

3. Write short notes on the following
   a) Dyslexia and Dysgraphia (5X1=5)
   b) Language Learning Disability (5X1=5)
   c) Specific Language Impairment (4X1=4)

OR

4. a. Explain the relationship between genetics and literacy disorders (7X1=7)
   b. Compare and Contrast learning disability versus Specific language impairment (7X1=7)

UNIT - 3

5. Describe the available assessment tools to diagnose learning disability in the Indian context with merits and demerits (14X1=14)

OR

6. Explain various ways to carry out informal assessment to assess phonological awareness, orthographic skills, and oral language skills, support your answer with examples (14X1=14)

UNIT - 4

7. Critically evaluate intervention approaches used to promote emergent literacy (14x1=14)

OR

8. Discuss the intervention approaches used to promote spelling and written language output. Also, justify your answers with recent research evidence
(14x1=14)

UNIT - 5

9. Highlight the importance of team members in treating literacy disorders. Justify the statement with suitable illustrations (14x1=14)

OR

10. Explain the different modes of service delivery for school-aged children. Elaborate on one mode which you believe suits best for schoolchildren (14x1=14)

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