

# Question Paper

Exam Date & Time: 11-Feb-2020 (02:00 PM - 05:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER MASTER OF SCIENCE (SPEECH - LANGUAGE PATHOLOGY) DEGREE EXAMINATION - FEBRUARY  
2020  
SUBJECT: MSL 601 - SPEECH SCIENCE AND SPEECH PRODUCTION  
(2018 SCHEME)

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1) Explain the various measures of respiratory analysis and briefly mention the instruments used for respiratory evaluation in relevance to speech production. (20)
- 2) Describe the role of acoustic analysis of speech in forensic applications. Explain the various methods used in forensic speech analysis. (20)
- 3A) Critically evaluate perturbation theory of speech production. (10)
- 3B) Describe the aerodynamic characteristics of fricatives and vowels. (10)
- 3C) Explain various aspects of prosody and their realization. (10)
- 3D) Explain any two methods used in speech synthesis. (10)

4. Short Answer:

- 4A) Ultrasound technique in speech analysis. (5)
- 4B) Aeroview (5)
- 4C) Applications of acoustic analysis in speech disorders. (5)
- 4D) Long term average spectrum. (5)

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# Question Paper

Exam Date & Time: 13-Feb-2020 (02:00 PM - 05:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER MASTER OF SCIENCE (SPEECH - LANGUAGE PATHOLOGY) DEGREE EXAMINATION - FEBRUARY  
2020  
SUBJECT: MSL 605 - NEUROBIOLOGY OF SPEECH LANGUAGE AND COGNITION  
(2018 SCHEME)

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1) Discuss the neural basis of speech production. (20)
- 2) Differentiate the types of declarative from non-declarative memories. (20)
- 3A) Discuss the advantages and disadvantages of fMRI and ERPs in cognitive research. Elaborate on a potential way to overcome their limitations. (10)
- 3B) Elaborate on any two behavioral techniques to explore the hemispheric lateralization of language processing. (10)
- 3C) Write on the association among ageing, working memory and language processing. (10)
- 3D) The two languages in bilinguals are stored in distinct neural substrates. Critically evaluate this statement. (10)

4. Short Answer:

- 4A) MEG vs. EEG (5)
- 4B) Primary versus secondary ageing. (5)
- 4C) Application of eye-tracking in cognitive science. (5)
- 4D) Deutsch and Deutsch model of attention. (5)

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