

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0321]

MARCH 2021

Sub. Code: 3003

(OCTOBER 2020 EXAM SESSION)

MASTER OF AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY

FIRST YEAR (From 2010-2011 onwards)

PAPER III - SPEECH SCIENCE AND PRODUCTION

Q.P. Code : 433003

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on :

(2x20=40)

1. Explain the coordination of respiratory and laryngeal systems in phonation. What are the sources of fluctuations in voice signal ? Briefly explain the functions of interarytenoids.
2. What are spectrographic features for laughter analysis and justify this analysis for understanding laryngeal physiology.

II. Write notes on :

(10x6=60)

1. Vocal fold physiology.
2. Infant cry analysis.
3. Aerodynamics of fricatives and nasals.
4. Speech analysis in forensic sciences.
5. Application of spectrogram in infant cry analysis.
6. Define turbulent and laminar airflow. How does these relate to speech sound production.
7. Spectrographic patterns of laughter.
8. Role of spectrogram in identifying place and manner of articulation.
9. Methods of respiratory analysis.
10. Influence of phonetic context and speaker variability on acoustic pattern of speech.
