

[KZ 1011]

Sub. Code: 3003

**MASTER OF AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY
(MASLP) DEGREE EXAMINATION**

FIRST YEAR

PAPER III – SPEECH SCIENCE AND PRODUCTION

Q.P. Code : 433003

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. Describe acoustic theory of speech production	17	40	20
2. Explain different vibratory modes of vocal fold and describe single mass model of vocal fold vibration	17	40	20

II. Write notes on :

1. Explain the physiology of respiration	4	10	6
2. Write short note on forensic speech analysis	4	10	6
3. Describe neuromotor mechanism of speech system	4	10	6
4. Explain the terms Formants, Antiformants and Nasal murmur	4	10	6
5. Write short note on development of vocal fold	4	10	6
6. Explain intensity changing mechanism	4	10	6
7. Write short note on acoustic cues of vowels	4	10	6
8. Explain the application of spectrograms	4	10	6
9. Write short note on objective measurement of airflow	4	10	6
10. Write short note on acoustic characteristics of laughter	4	10	6

[LA 0412]

Sub. Code: 3003

**MASTER OF AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY
(MASLP) DEGREE EXAMINATION**

FIRST YEAR

PAPER III – SPEECH SCIENCE AND PRODUCTION

Q.P. Code : 433003

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

**Pages Time Marks
(Max.) (Max.) (Max.)**

- | | | | |
|--|----|----|----|
| 1. Describe in detail the objective assessment of respiratory, phonatory, articulatory and resonatory systems of speech production | 17 | 40 | 20 |
| 2. Discuss the studies on Infant cry analysis and explain the spectrographic pattern of cry in clinical population | 17 | 40 | 20 |

II. Write notes on :

- | | | | |
|---|---|----|---|
| 1. Define lung volumes and lung capacities | 4 | 10 | 6 |
| 2. Write short note on speaker recognition system | 4 | 10 | 6 |
| 3. Explain the physiology of muscles of larynx | 4 | 10 | 6 |
| 4. Explain the brain areas involved in speech production | 4 | 10 | 6 |
| 5. Define mean flow rate, S/Z ratio and phonation quotient | 4 | 10 | 6 |
| 6. Describe vibratory modes of vocal folds | 4 | 10 | 6 |
| 7. Write short note on acoustic features of affricates | 4 | 10 | 6 |
| 8. Explain two mass model of vocal fold vibration | 4 | 10 | 6 |
| 9. Explain using spectrographic patterns the place of articulation cues for stop consonants | 4 | 10 | 6 |
| 10. Write short note on spirometer and its clinical application | 4 | 10 | 6 |

[LB 1012]

OCTOBER 2012

Sub. Code: 3003

MASTER OF AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY

(MASLP) DEGREE EXAMINATION

FIRST YEAR

PAPER III – SPEECH SCIENCE AND PRODUCTION

Q.P. Code : 433003

Time : 3 hours
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

Pages Time Marks
(Max.)(Max.)(Max.)

- | | | | |
|---|----|----|----|
| 1. The source filter theory of speech production. | 17 | 40 | 20 |
| 2. Neuro motor mechanism of the articulatory, phonatory and respiratory system. | 17 | 40 | 20 |

II. Write Notes on :

- | | | | |
|--|---|----|---|
| 1. Checking action. | 4 | 10 | 6 |
| 2. Variations in breathing patterns. | 4 | 10 | 6 |
| 3. Describe the anatomy, physiology and functions of the thyroartenoid muscle. | 4 | 10 | 6 |
| 4. Explain the prephonation phase. | 4 | 10 | 6 |
| 5. Relation between subglottal pressure and pitch. | 4 | 10 | 6 |
| 6. Mechanism of falsetto. | 4 | 10 | 6 |
| 7. Speaker recognition. | 4 | 10 | 6 |
| 8. Aerodynamics of stops. | 4 | 10 | 6 |
| 9. Spectrographic cues for vowels. | 4 | 10 | 6 |
| 10. Analysis of laughter. | 4 | 10 | 6 |

[LC 0413]

APRIL 2013

Sub. Code: 3003

MASTER OF AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY

(MASLP) DEGREE EXAMINATION

FIRST YEAR

PAPER III – SPEECH SCIENCE AND PRODUCTION

Q.P. Code : 433003

Time : 3 hours

Maximum : 100 marks

I. Elaborate on:

(2x20=40)

1. Pitch and intensity changing mechanism.
2. Application of spectrography in basic and applied research.

II. Write notes on :

(10X6=60)

1. Measurement of subglottal pressure during speech.
2. Muscles of larynx.
3. Explain bernoulli's effect and its application to phonation.
4. Transglottal pressure differential.
5. Development of larynx.
6. Nervous control for respiration.
7. Infant cry analysis.
8. Spectrographic cues for stops.
9. Speech analysis in forensic sciences.
10. Aerodynamics of nasals.
