

**MANIPAL UNIVERSITY**  
**FIRST YEAR M.A.S.L.P. DEGREE EXAMINATION – DECEMBER 2015**  
**SUBJECT: SH 103 – SPEECH SCIENCE AND PRODUCTION**  
**(NEW REGULATION)**

Tuesday, December 15, 2015

Time: 10:00 – 13:00 Hrs.

Max. Marks: 80

✍ **Answer ALL the questions.**

1A. Explain the basic principles of breathing for singing.

1B. Write a note on checking action.

(12+4 = 16 marks)

**OR**

2A. Describe any one model of vocal fold vibration and highlight the merits of the same.

2B. Explain laryngeal bio mechanics.

(12+4 = 16 marks)

3A. Elaborate on effects of vowel height on velopharyngeal airway resistance.

3B. Explain the physiology of resonatory system.

(6+10 = 16 marks)

**OR**

4. Discuss the upper and lower airway dynamics of vowel production.

(16 marks)

5. Explain any one close loop model of speech production.

(16 marks)

**OR**

6. Explain the Garrets model of Speech Production.

(16 marks)

7A. Describe the acoustic theory of speech production.

7B. Does acoustic theory of speech production explain sub glottal resonances? Justify your view point.

(12+4 = 16 marks)

**OR**

8A. Describe the acoustic features associated with different place of articulation.

8B. Differentiate voiced and unvoiced stops based on acoustic features.

(6+10 = 16 marks)

- 9A. Discuss the techniques used in the infant cry analysis procedure.
- 9B. Outline the forensic voice assessment procedure in brief.

(10+6 = 16 marks)

**OR**

10. Describe the different methods of speech synthesis. Discuss the applicability of it in the management of individuals with communication disorders.

(16 marks)

