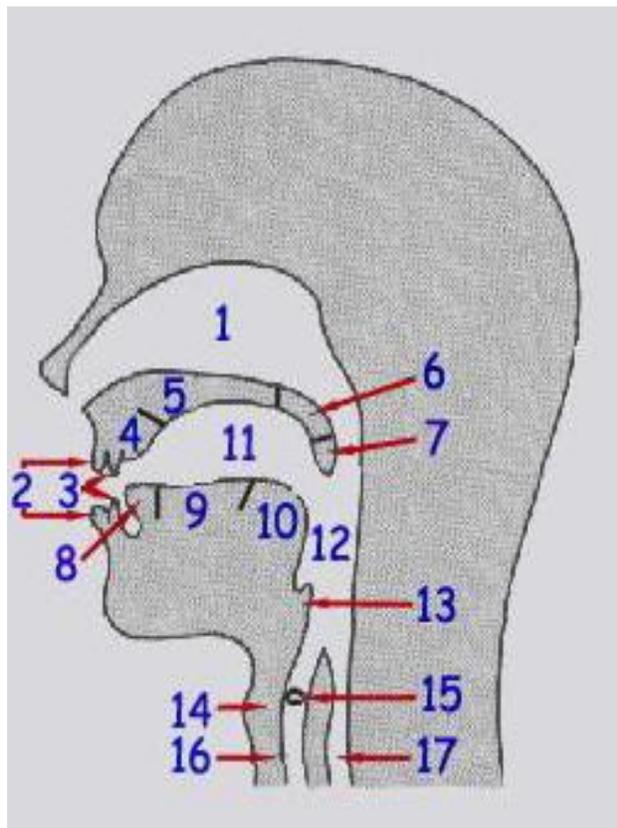


Draw the diagram of 'Organs of Speech' and explain Speech Mechanism. (10 Marks)



- 1- Nasal cavity
- 2- Lips
- 3- Teeth
- 4- Alveolar Ridge
- 5- Hard Palate
- 6- Velum / Soft Palate
- 7- Uvula
- 8- Apex / Tip of Tongue
- 9- Blade / Front of Tongue
- 10- Dorsum / Back of Tongue
- 11- Oral Cavity
- 12- Pharynx
- 13- Epiglottis
- 14- Larynx
- 15- Vocal Cords
- 16- Trachea
- 17- Eesophagus

The Eight Important Parts of Human Speech Organs & Their Definitions: In order to make this speech, eight different organs must work together.

1. Lips:



Lips form different shapes, such as an oval, and movements in order to make different sounds. Sounds can be formed by using the teeth to shape the lips, in combination with the tongue, or to block air from escaping the mouth. The tongue moves throughout the mouth and with many of the other organs, as well as making shapes like the lips, in order to formulate speech.

2. Teeth:



3. Tongue:

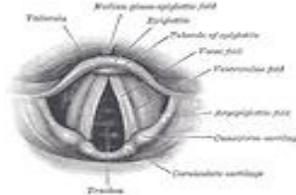


4. Uvula



The uvula is used to make guttural sounds. It helps to make nasal consonants by stopping air from moving through the nose.

5. Glottis / Vocal Cords



The Adams Apple contains 'Larynx'. Larynx contains vocal cords. The vocal cords contract and expand, vibrate and do not vibrate, when the air produced in lungs is passing through this vocal tract leading to production of different sounds (phonemes). Glottis is the gap formed in the middle of the vocal chords because of its different varying positions. When the vocal chords is completely blocked the glottis sound 'Q' is produced. The glottis is used to control the vibration made by the vocal chords, in order to make different sounds.

6. Ridge



To make different sounds, known as alveolar sounds, the tongue touches the ridges found on this organ.

7. Hard Palate



Like the alveolar ridge, the tongue touches and taps the palate when articulating speech.

8. Velum (Soft Palate)



The movable velum can retract and elevate in order to separate the mouth from the nasal cavity, helping to make speech less nasally. When the tongue hits the velum, it also makes a special sound called the velar consonant.

Speech Mechanism:

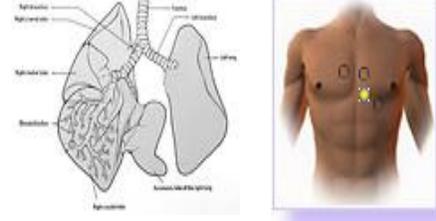
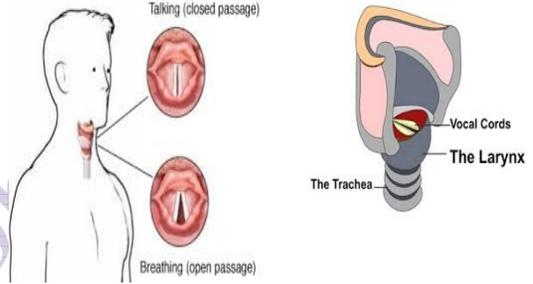
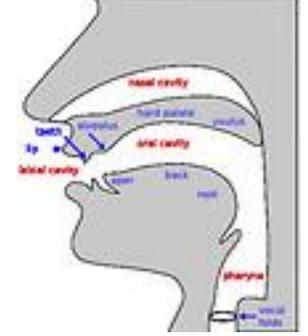
The speech mechanism explains how the sounds are produced in the speech organs. The organs of human body that are involved in the production of speech sounds, either directly or indirectly, are called 'Organs of Speech'. These organs of speech can be divided into the following three groups.

Based on these groups, the systems involved in speech mechanism are divided into three and these three systems are involved as a whole in production of sounds.

1. **The Respiratory System:** This comprises the lungs, the muscles of the chest and the wind pipe. These organs do the function of providing the required air for sound production by breathing in and releasing it out.
2. **The Phonatory system:** This comprises the larynx. The vocal cords contain the larynx which plays a vital role in sound production. It is here the wind is modified into sounds. It is the cause of the production of both voiced and voiceless sounds, by the vibration of vocal cords.
3. **The Articulatory/ pulmonic system:** This comprises the nose, teeth, tongue, roof of the mouth and the lips. The place and manner in which the sounds are produced and categorized is decided by this articulatory system.

During the production of different sounds, all these three systems join together and produce sounds of the language.

THE THREE SYSTEMS INVOLVED IN SPEECH MECHANISM

1. The Respiratory System	2. The Phonatory system	3. The Articulatory / pulmonic system
		
<ol style="list-style-type: none"> 1. Lungs, 2. Wind pipe / Trachea 3. Muscles of the chest 	<ol style="list-style-type: none"> 1. Larynx 2. Vocal cords 	<ol style="list-style-type: none"> 1. Nose 2. Teeth 3. Tongue 4. Roof of the mouth 5. Lips
