

# Phonetics and Phonology

First Year

## Organs of Speech (Revision)

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## What is Phonetics?

It is a branch of linguistics. It is the science that studies the classification and description of human sounds in general.

## Phonology:

It is the science that studies the classification and description of human sounds in particular languages.

### **Accent:**

Is a variety (a kind) of pronunciation which gives colour to the pronunciation of a particular speaker.

### **Dialect:**

Is a variety (a kind) of language which varies (differs) according to pronunciation, vocabulary , grammar, and word order.

### **Received pronunciation:**

It is a variety of pronunciation spoken by Londoners and the areas around it.

# Consonants:

They are sounds produced with an impediment in the vocal tract ( Passage). They are classified into two types:

**Voiced consonants:** They are sounds produced with vibration in the vocal cords (folds).

**Voiceless consonants:** They are sounds produced without vibration in the vocal cords (folds).

The following table shows voiced and voiceless consonants:

Voiceless consonants	p , t , k , f, θ ,s, ʃ , tʃ, h
Voiced consonants	b, d , g , v, ð ,z, ʒ ,dʒ, m, n, ŋ , l ,r, w, j

**The total number of voiced and voiceless consonants in English is 24.**

**The total number of vowels in English is 12.**

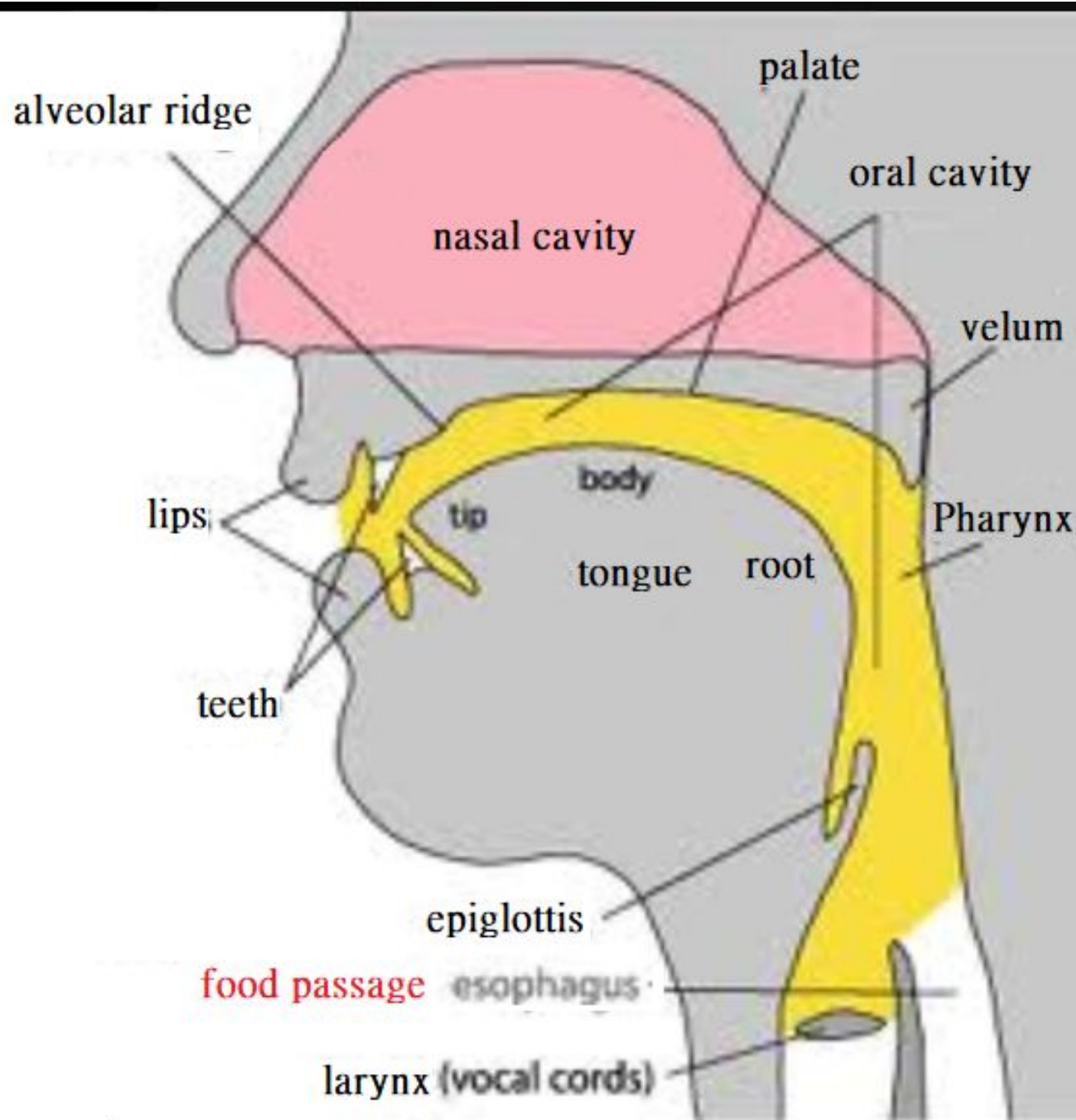
**The total number of diphthongs and triphthongs is 8.**

**\*Note: Please, see list of symbols in Peter Roach Phonetics and Phonology page X and xi.**

## Q. What is Articulatory Phonetics?

**Articulatory Phonetics**: It is a branch of Phonetics that studies the organs of speech and the sounds produced by these organs. It studies how the sounds are produced and where they are produced.

**Articulators (Organs of speech)**: They are the different parts (organs) of speech involved in the production of speech sounds.



# Some basic definitions:

Articulators above the larynx: They are the different organs of speech that are found in the vocal tract( Oral Cavity) and (nasal cavity ).

The vocal tract: Refers to the oral cavity (passage) and nasal cavity .

The larynx: It is one of the most important parts of speech. It is sometimes called Adam's apple. It contains the vocal cords(folds) and the glottis.

The vocal cords: They are two bands of tissue, when they vibrate, voiced sounds are produced.

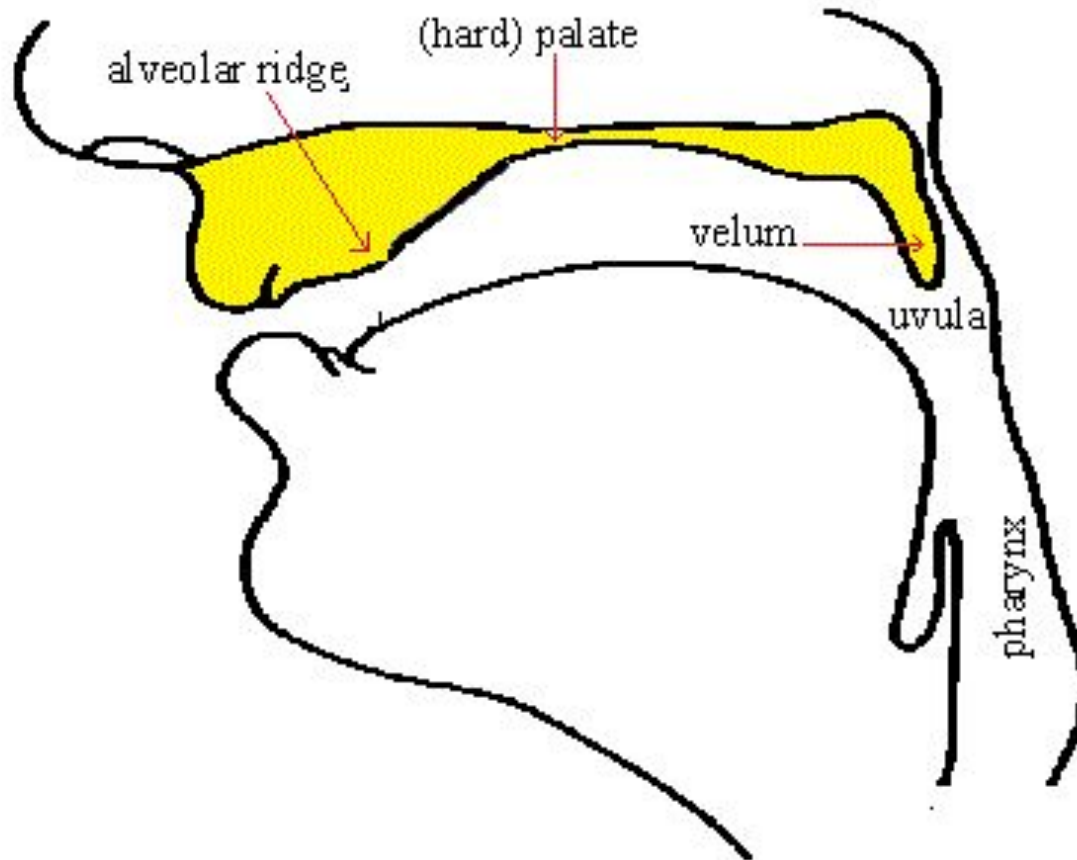


**Glottis:** It is the space(opening) found between the vocal cords. It is open in normal breathing.

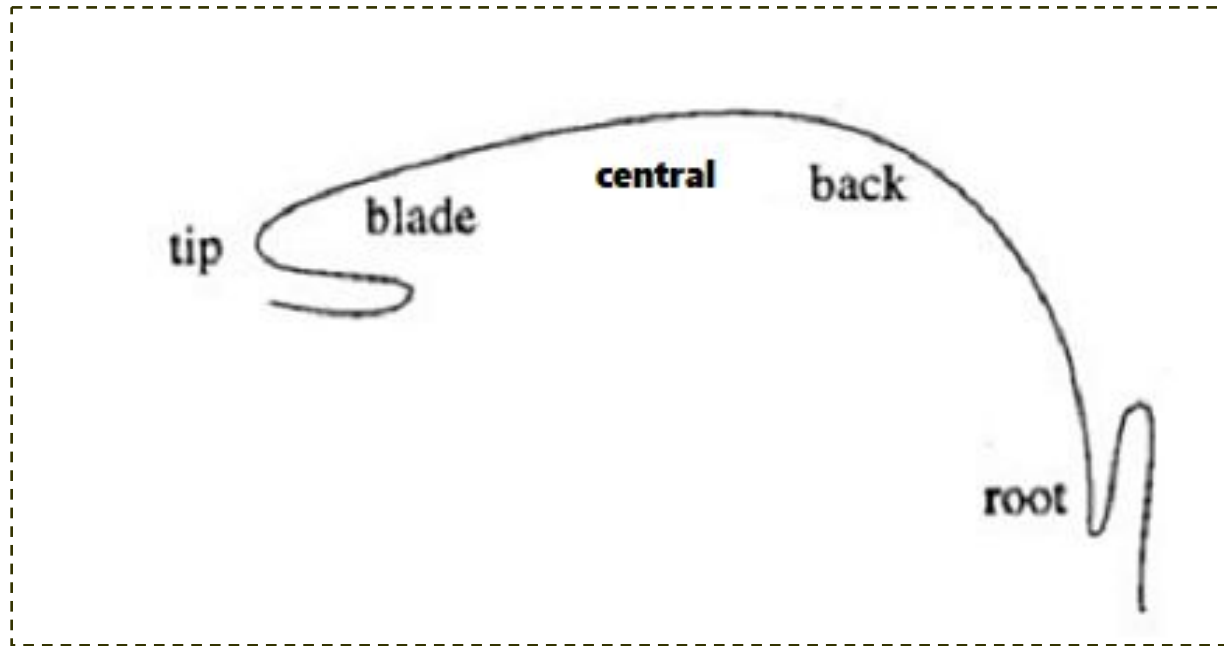
**The pharynx:** It is a tube which begins above the larynx. It is about 7cm long in women and 8cm in men. It leads to oral cavity and nasal cavity.

**The soft palate or velum:** It is the hanging part of the palate. It is raised in the production of oral sounds and lowered in the production of nasal sounds /m,n,ŋ/

# The Palate (Roof of the mouth)



- **The tongue:** It is a moveable(active) organ of speech. It moves in different places in the oral cavity during the production of speech sounds. It is divided into (tip, blade, central, back and root) as in the following diagram.



**Parts of the Tongue**

**Windpipe:** It is a tube that leads to the two lungs. At its top, there is the larynx.

**The oral cavity:** it is the mouth cavity (passage) where the oral sounds are produced.

**The nasal cavity:** It is the cavity where the nasal sounds /m,n,ŋ/ are produced.

**IPA:** International Phonetic Alphabet. It is an international system by which each sound phoneme is given one symbol.

**The Phoneme:** It is a sound unit. Such as /b/, /d/, /m/, etc.

**The Epiglottis:** It is just like a valve used to cover the glottis during swallowing food to prevent it from getting into the windpipe.

**Active (Moveable) Articulators:** are the moveable parts in the oral cavity, such as the lips, tongue, lower jaw, epiglottis and the vocal cords.

**Passive (Immoveable, Static) Articulators:** are those parts of the vocal tract which cannot move, such as roof of the mouth(Palate) and the upper teeth.