O/L Science

Basics of Human Brain





What is the Human Brain?

The human brain is an incredibly complex organ that serves as the central command center of the nervous system.

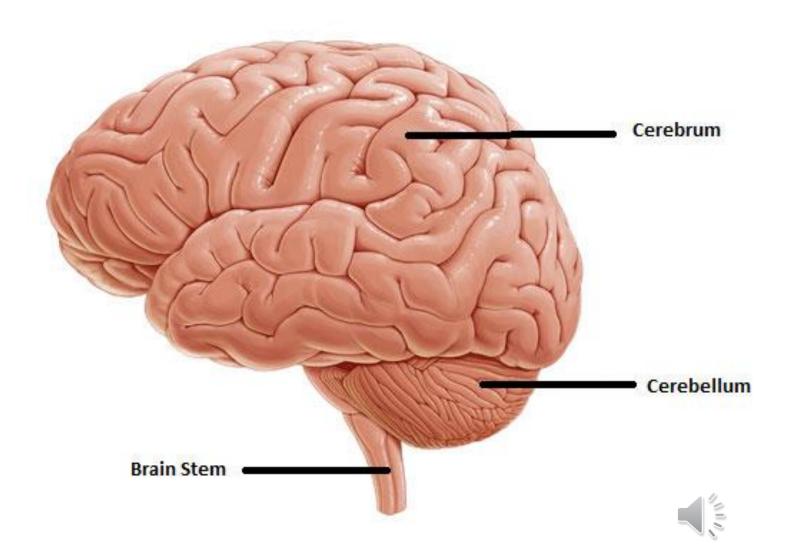
It is the most vital and sophisticated part of the human body, responsible for

coordinating and controlling all bodily functions, as well as processing thoughts and emotions.

Parts of the Human Brain

There are three main parts:

- 1. Cerebrum
- 2. Cerebellum
- 3. Brainstem



Cerebrum

 The largest part of the brain, responsible for conscious thought, voluntary actions, and sensory perception







Brainstem

 Connecting the brain to the spinal cord, it regulates essential functions like breathing, heartbeat, and digestion.

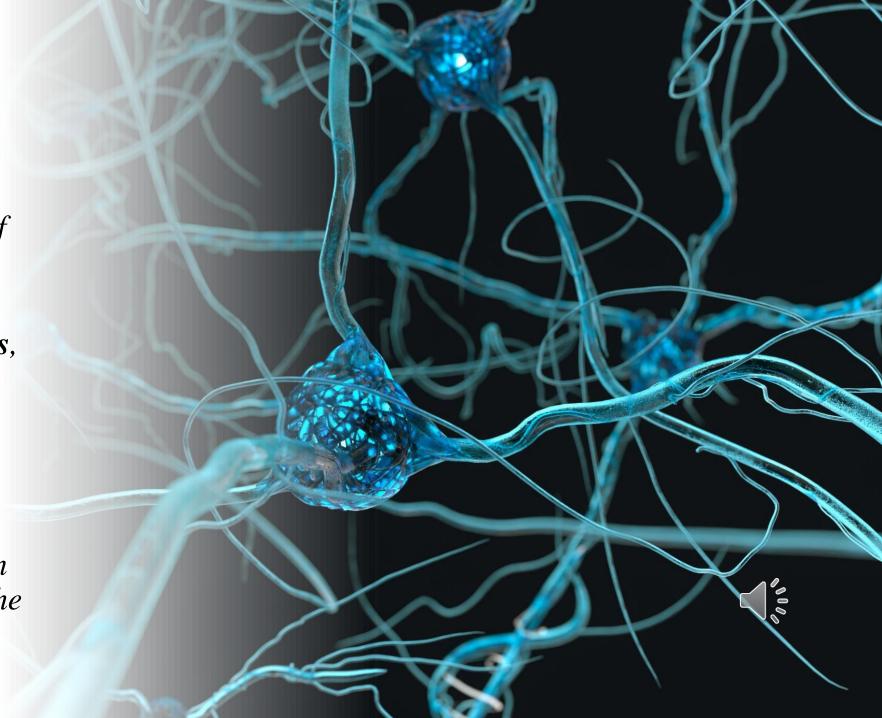


Neurons

The basic functional units of the brain are **neurons**.

Neurons communicate with each other through synapses, which are tiny gaps where chemical and electrical signals are transmitted.

This complex network of neurons allows for the processing and transmission of information throughout the brain.



Basic Functions of Human Brain

• Sensory Processing:

Different areas of the brain process information from the senses, such as

vision

hearing

taste

smell

touch



Basic Functions of Human Brain



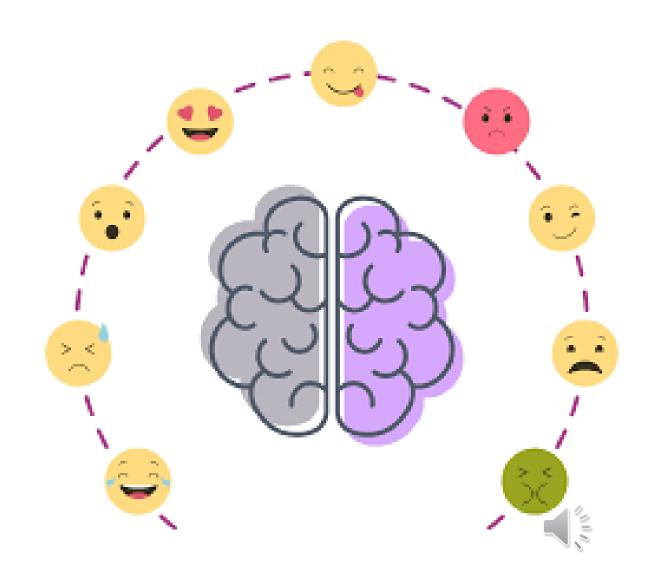
• Memory and Learning:

The brain is essential for forming memories and acquiring new knowledge and skills.

Basic Functions of Human Brain

Emotion and Behavior:

Structures like the limbic system influence emotions, motivation, and behavior.



Covered Points:

- Basic Definition for the Human Brain
- Basic Three parts of the Brain
- Introduction about the Neurons
- Basic Functions of the Human Brain

