

Chapter 07

CONTROL AND COORDINATION

HUMAN BRAIN

Brain:

Human Brain also called Encephalon.

- It weight – 1200 to 1400 gm
- It is located in cranial cavity
- 100 billion neurons present

Parts of Brain:

Human Brain divided into 3 – parts.

1. Fore Brain(Encephalon): Made up of 3 – parts.

- a. Olfactory Lobe
- b. Cerebrum
- c. Diencephalon

2. Mid Brain(Encephalon): Made up of 2 – parts.

- a. Optic Lobes – Corpora Quadrigemina
- b. Peduncles

3. Hind Brain(Encephalon): Made up of 3 – parts.

- a. Cerebellum
- b. Pons varoli
- c. Medulla oblongata

Fore Brain:

- Fore brain is the main thinking part of the brain.
- It has regions which receive sensory impulse from various receptors.

- Separate areas of Fore brain for Hearing, Smell, Sight.
- There are separate areas which store information in Brain.

Mid brain and hind brain:

- Many involuntary actions controlled by mid & hind brain.
- Breathing, digestion, size of pupil, blood pressure, salivation & vomiting.
- In hind brain – cerebellum – helps to maintain posture and balance of the body, Straight line, riding a bicycle.

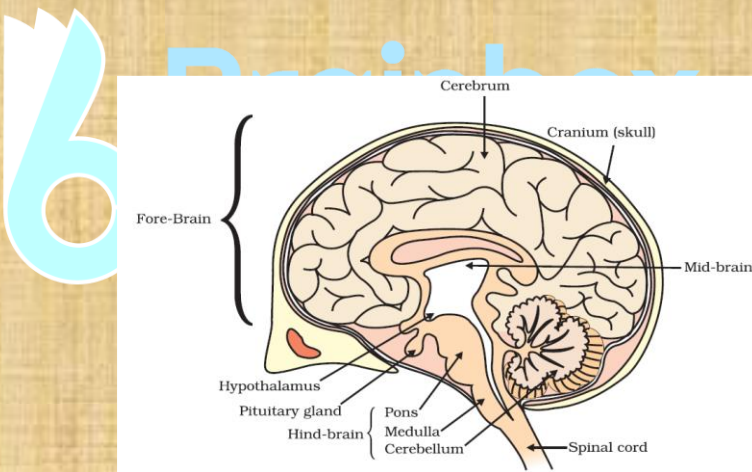


Figure : Human brain

Brain Box (Cranium box):

- The delicate organ like brain protected by bony box called cranium box.
- Outer surface of brain box and spinal cord covered with a tissue layer called Meninges.

Meninges:

These are connective tissue membrane which are covered and protect CNS.

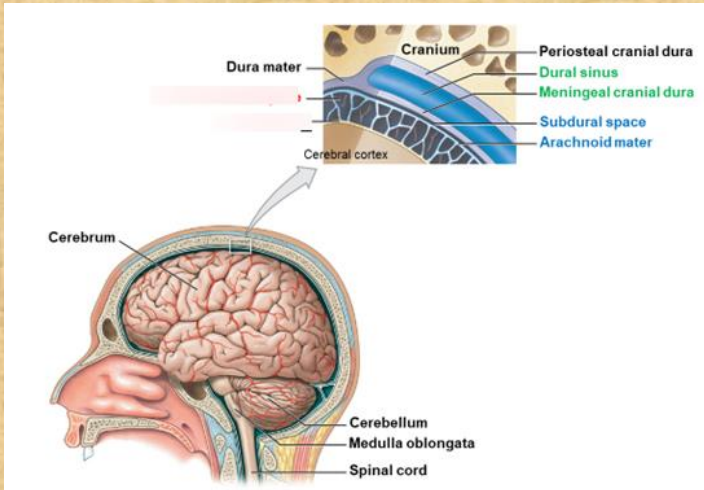


Figure: Meninges

Parts of Meninges:

Meninges divided in to 3 - layers.

1. Dura Mater:

Outer most fibrous tissue layer.

2. Archnoid Mater:

Network of collagen.

3. Pia Mater:

Inner most layer, vascular, squamous epithelial.