

4th - Nervous Tissues

A type of animal tissues which are responsible for receiving effects and different sensation and responds for them. It controls body organs functions and regulates the vital function.

Components of Nervous Systems:

1- Central Nervous System (CNS): -

- a) Brain.
- b) Spinal cord.

2- Peripheral Nervous System (PNS): -

- a) Cranial nerves.
- b) Spinal nerves.

3- The Autonomic Nervous System (ANS): -

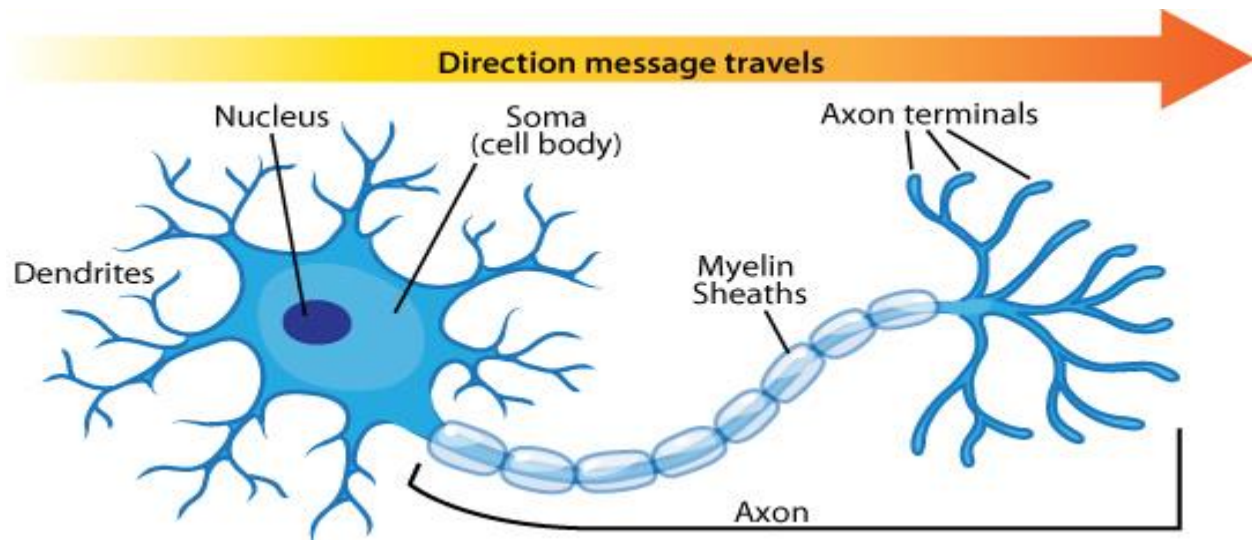
- a) Sympathetic Nervous System.
- a) Para-sympathetic Nervous System.

Nervous tissues consist of: -

- 1- Neuron.
- 2- Neuroglia cells.
- 3- Proper connective tissue.

Structure of Neuron:

It consists of two main parts neuron's body and Axon. It divides according to number of neuron's polars unipolar, bipolar and polypolar.



Neuron

Histological Structure of Nerves:

It's a large group of Nervous fibers and every nerve fiber is like a cylinder with central axis covered with medullated sheath and last covered with Neurolemma.

Histological Structure of Spinal Cord:

It exists into backbone vertebrates and surrounds with two layers, external layer (Dura mater) and internal layer (Pia mater) and between them there is arachnoid.

It consists of two regions

a) Central Zone

It's called " Gray Matter".

It looks like Butterfly.

It consists of Neuron's bodies and Neuroglia cells.

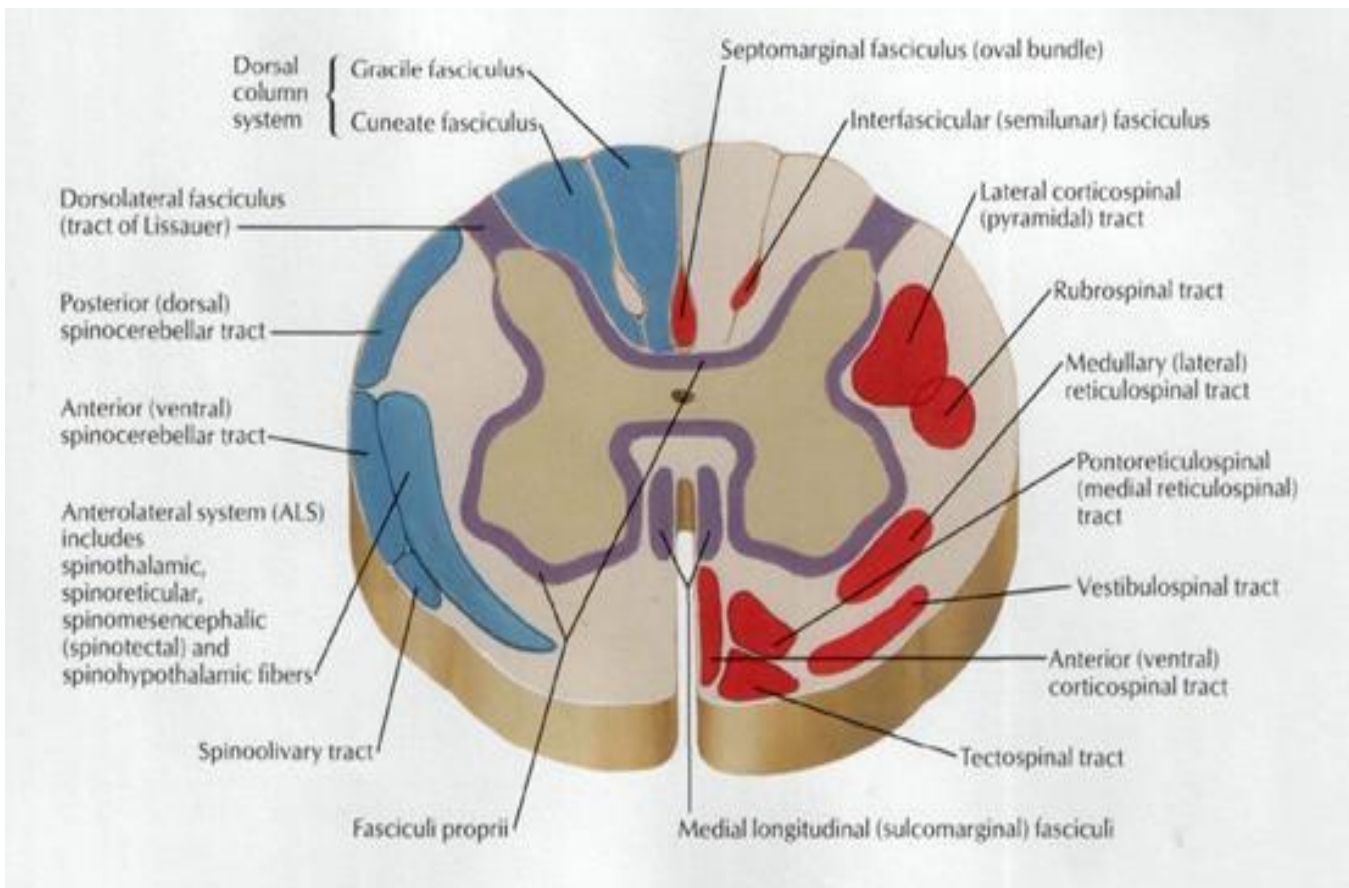
It has a dorsal and ventral horn also, dorsal and ventral commissure.

b) Peripheral Zone

It's called " White Matter".

It consists of Nervous fibers.

It has a dorsal and ventral fissure.



T. S. of Spinal Cord