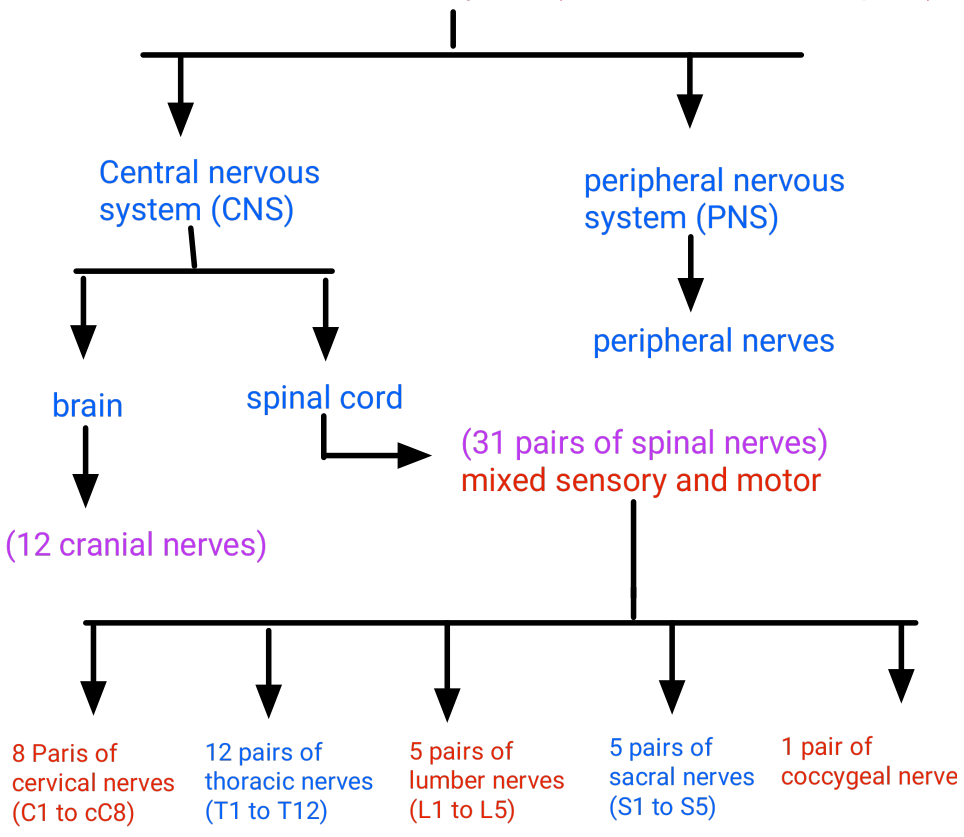
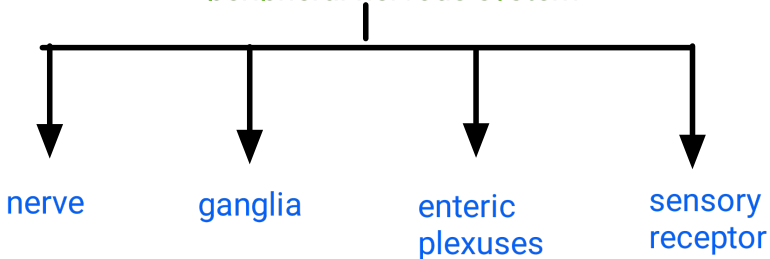


lecture (3) of physiology

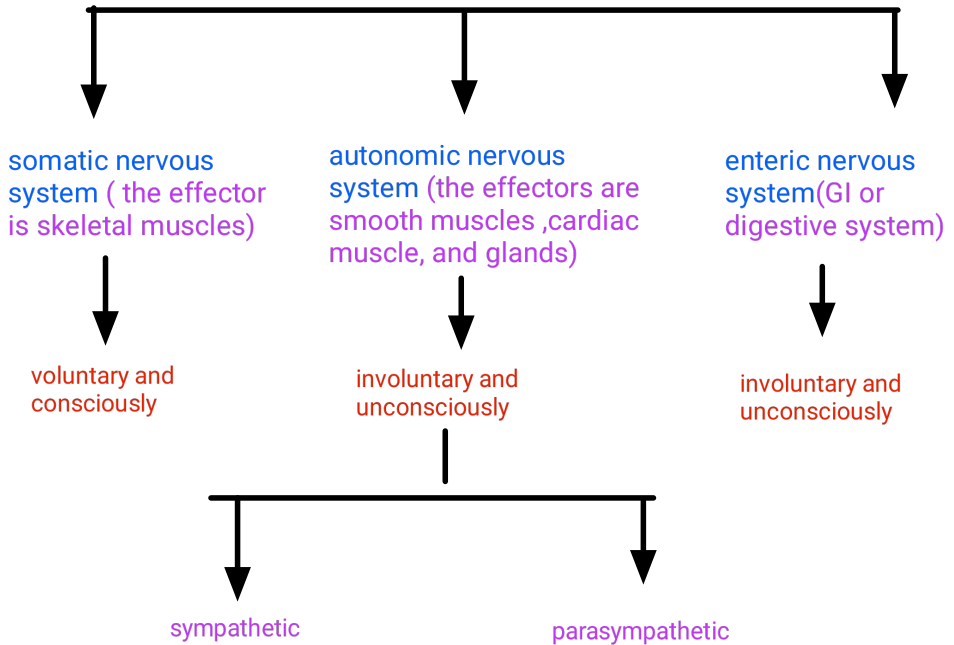
the nervous system(3% but the most complex)



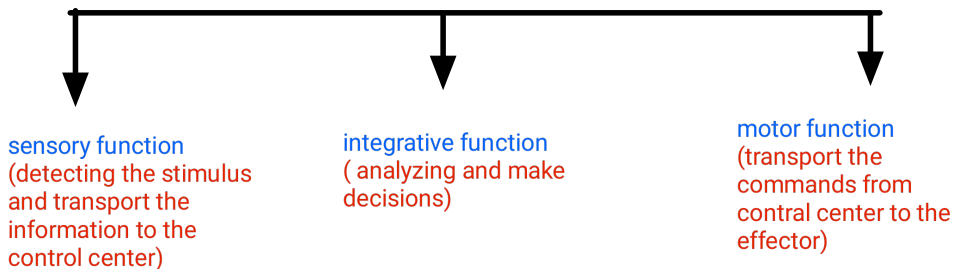
peripheral nervous system



PNS



functions of nervous system



nervous tissue

neurons (no ability to undergo dividing and it's responsible of generating of action potential)

neuroglia (they have ability to undergo dividing and it's responsible of support and maintain the interstitial fluid)

the Neuron consist of

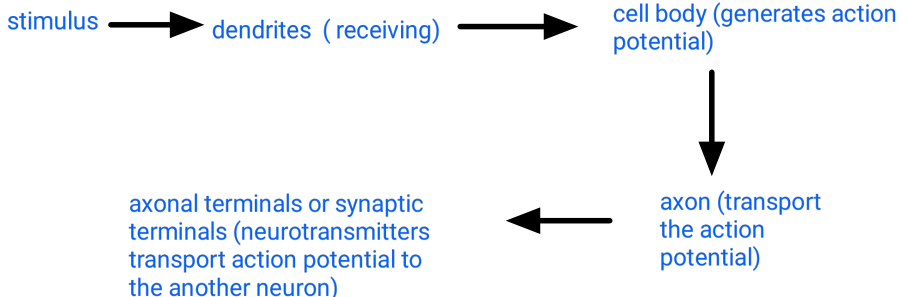
dendrites
(receiving or
input portion)

cell body(contains free
ribosomes and rough
endoplasmic reticulum
and it's side where action
potential synthesized)

axon (long and thin ,
it is responsible of
transport the action
potential away from
the cell body)

axon terminals or
synaptic terminals
(which swell to
synaptic end bulb that
contains synaptic
vessels which store
neurotransmitters)

how the Neuron works



classification of neurons

structural classification(according
the number of processes)

functional classification

unipolar (most
of the body's
sensory neurons)

bipolar
(some of
the sensory
neurons)

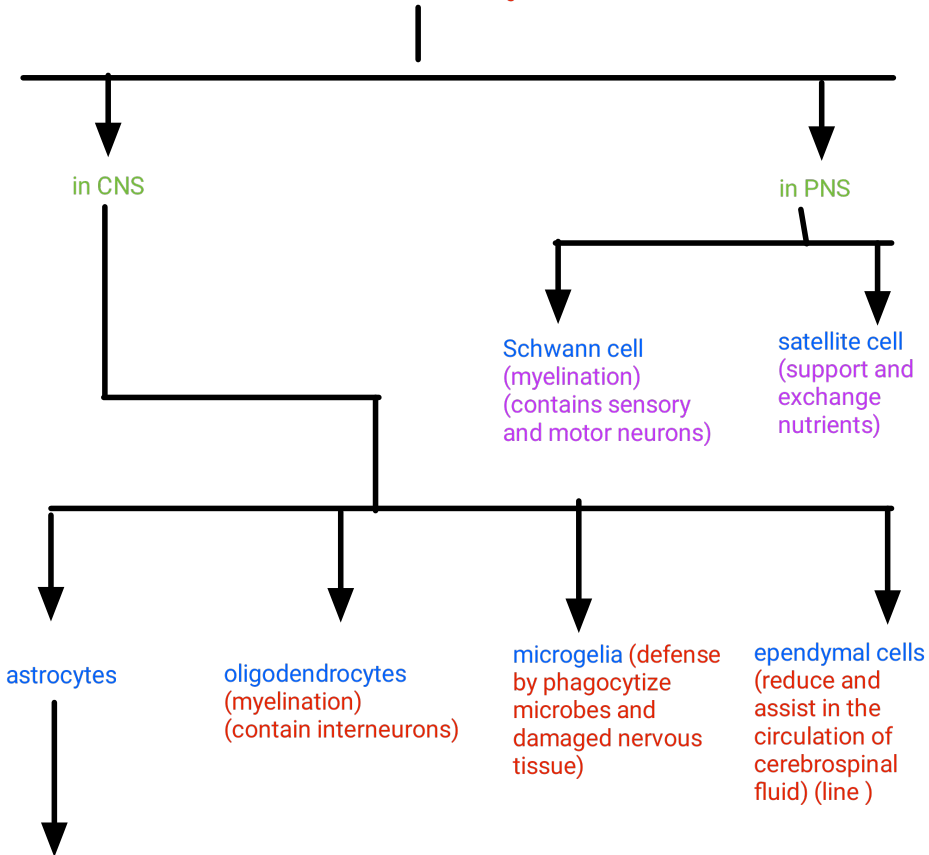
multipolar (all
motor neurons
and many
interneurons)

sensory
or
afferent

motor
or
efferent

interneurons or
association
neurons

classification of neuroglia



1. support neurons

2. isolate neurons from harmful substances in blood

3. regulate the growth , migration , and interconnection among neurons in the brain

4. maintain the appropriate chemical environment for the generation of nerve impulses .

5. play a role in learning and memory by influencing the formation of the neural synapses.