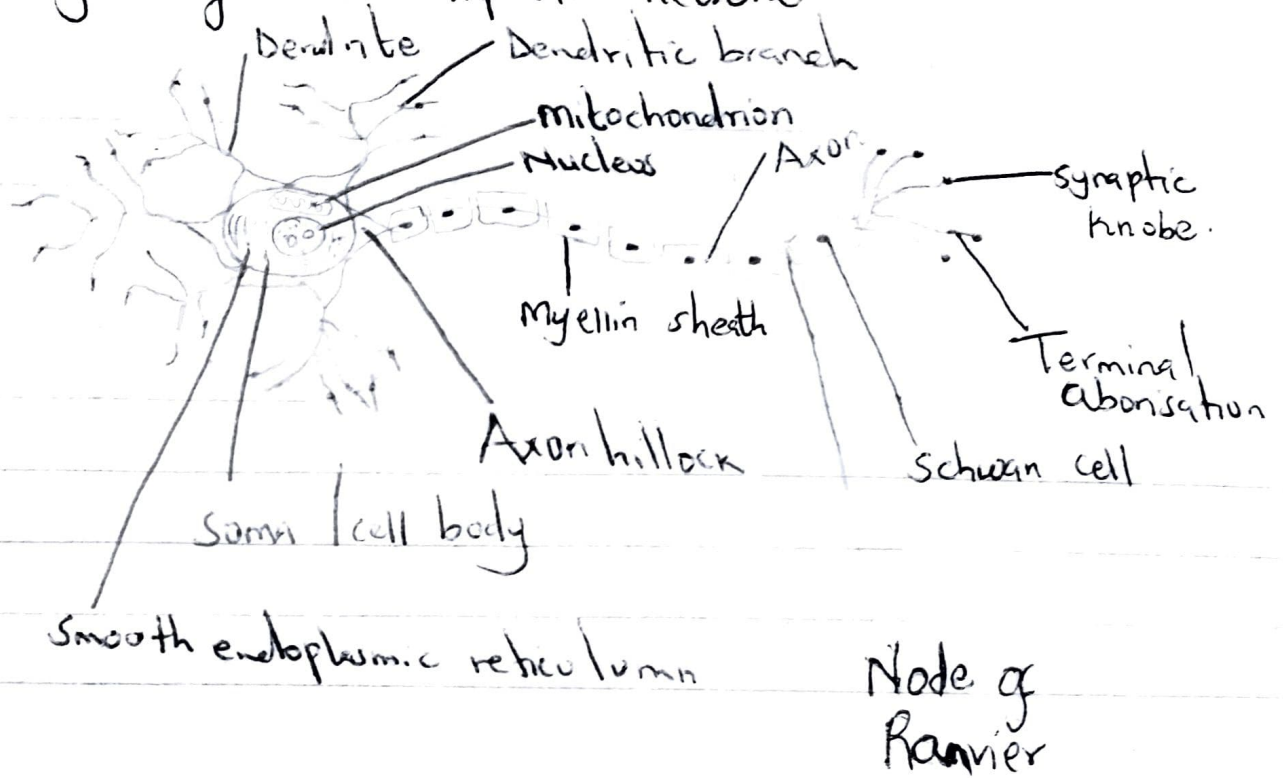


Assignment

02/02/2020

Sketch a diagram of a multipolar neurone.



12. Differentiate between sensory neurone, motor neurone and interneurone.

3.

Sensory neurone	interneurone	motor neurone
They are afferent  Their cell bodies are located in the dorsal ganglia of spinal cord	They relay sensory and motor neurones  Their cell bodies are located in the grey matter.	They are efferent.  Their cell bodies are located at the spinal cord.
It carries sensory information towards the central nervous system	They receive, process and make decision on the information received. The information is processed to signals.	They send the signals away from the central nervous system.
Have <sup>sensory</sup> receptors		Have effectors

### 3. Functional differences between dendrites and Axon.

#### AXONS

They take information away from the cell body.

They have synaptic knobs which as has a synapse in which have secretory vesicles which secrete neurotransmitters which gaps the nerve cells.

Have myelin sheath which increases their electrical conductivity because myelin sheath insulates the axon and assembles voltage-gated sodium channels.

Have node of Ranvier which allow generation of a fast electrical impulse along the axon.

#### DENDRITES

Take information to the cell body.

They lack synaptic knobs instead have tapering ends thus do have sectional function.

Lack myelin sheath. Thus their electrical conductivity is reduced.

Lack node of Ranvier thus there is low generation of electrical impulse.

4. How proteins and other chemicals synthesized in the soma get into the synaptic knob.

~~They synthesized~~ synthesized proteins are moved from the soma to the axon by anterograde transport.

- The proteins are travel along microtubules of the cytoskeleton.  
- A motor protein kinesin enhance the movement in the anterograde transport.

- The proteins are transported to the synaptic knob through the fast anterograde transport.

- When they reach the synaptic knob they can be change to enzymes.

5. By what process can a virus invaded a peripheral nervous fibre get to some of that neurone?

They move by Retrograde axonal transport by help of dynein motor.