Vidya Bhawan Balika Vidyapeeth Lakhisarai Arun Kumar Gupta Class 10th Subject Biology Date:- 22.06.21

Protection of Brain and Spinal Cord

 \rightarrow <u>Protection of Brain</u>: Brain is protected by a fluid filled balloon which acts as shock absorber and is enclosed in cranium (skull or brain box).

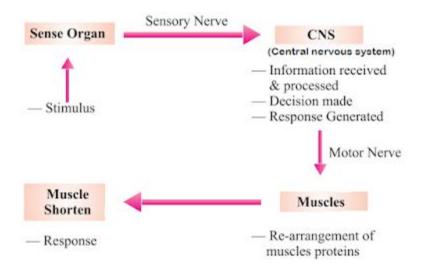
 \rightarrow <u>Protection of Spinal Cord</u>: Spinal cord is enclosed in vertebral column.

Coordination between Nervous and Muscular Tissue

 \rightarrow For taking place the voluntary actions, the brain has to send messages to muscles.

 \rightarrow The communication between the central nervous system and the other parts of the body is facilitated by the peripheral nervous system consisting of cranial nerves arising from the brain and spinal nerves arising from the spinal cord.

 \rightarrow The brain thus allows us to think and take actions based on that thinking. This is accomplished through a complex design, with different parts of the brain responsible for integrating different inputs and outputs.



Limitations of Electric communication/Nervous system

(i) Electric impulse will reach only to those cells that are connected by nervous tissue.

(ii) After generation and transmission of an electrical impulse, the cell takes some time to reset its mechanism before transmitting another impulse. So cells cannot continually create and transmit impulse.

(iii) Plants do not have any nervous system.