



Week- 5th to 9th October

Number of Blocks: 1

Guidelines:-

Dear Students,

- Refer to the following content of the chapter.
- These notes will help you to understand the concept of the lesson.
- Do the assignment questions in the Biology notebook.

TOPIC: 1. Nervous Tissue

Instructional Aids: Link for Textbook:-

http://ncertbooks.prashanthellina.com/class_9.Science.Science/CHAP%205.pdf

Learning outcomes :

1. The learners will be able to appreciate the function of nervous tissues in our body .
2. The learners will be able to identify its shape and location in our body.

Activity: Students will make 3D model of Nervous Tissues using waste material .

<https://www.youtube.com/watch?v=eEplGmgZ6Vw>

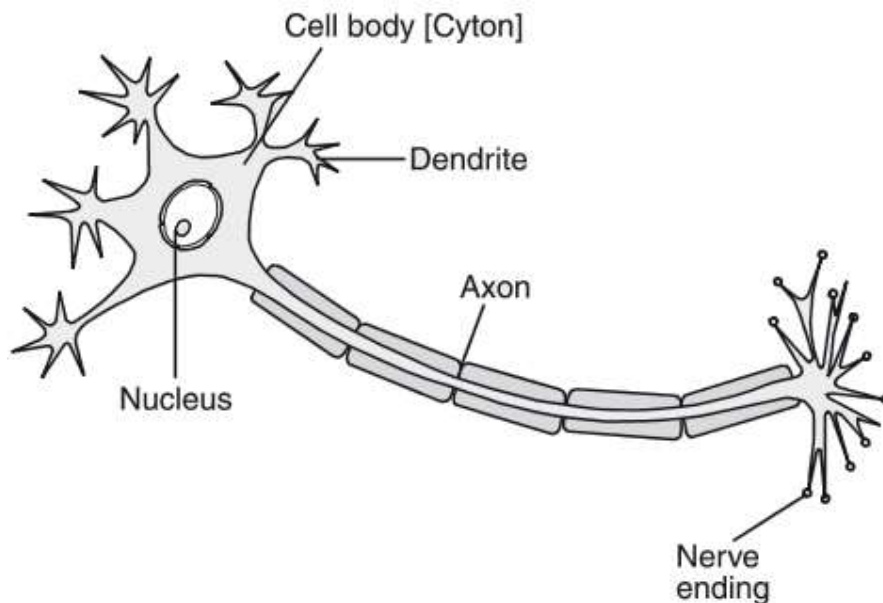
Lesson Development:

Nervous Tissue

- **How do we react to stimuli?**
 - This is because of the nervous tissues present in our body. They are capable of transmitting information quickly from the brain to different parts of the body and vice-versa.
- Therefore nervous tissues are found in nerves, brain, and spinal cord.
- The Nervous tissue is made up of cells called the **Nerve Cells** or **Neurons**.
- These neurons connect together to form the nerves of our body.

• Structure of a Neuron

- It is an elongated cell with a Cell Body that consists of some branch-like structure called Dendrites.
- There is a Nucleus present in the centre of the cell body.
- The Nerve Endings of the cell are connected with the cell body via Axon.
- A nerve cell can be up to 1 m long.



Structure of a Neuron

1. Dendrites

- They are tree-like extensions (highly-branched) at the beginning of a neuron.
- They receive chemical signals from different neurons of the body.

2. Cell Body/Cyton has a nucleus and cytoplasm in it.

3. Axon

- It is a long structure that connects the cell body to the nerve endings.
- It is covered with a special insulating substance called myelin. It helps in rapid transmission of signals.

Click on the link to see the structure and function of Nervous Tissue.

<https://www.youtube.com/watch?v=FT44xI92LCU>

ASSIGNMENT

Q1. With the help of a flow diagram, show how messages are conveyed from one place to another within the body?

Q2. (i) Draw a labelled diagram of a neuron (Four labellings).

(ii) Identify the tissue which is made up of nerve cells.

(iii) Name one organ that is made of this tissue.

Q3. ASSERTION-REASON QUESTION:

The following question consist of two statements-Assertion(A) and Reason(R).

Answer the questions selecting the appropriate option below:

a) Both A and R are true and R is the correct explanation for A

b) Both A and R are true but R is not the correct explanation for A

c) A is true but R is false

d) A is false but R is true

ASSERTION: Nervous tissue is made of neurons that receive and conduct impulses.

REASON: Nerve cells are branched.
