

WORKSHEET 1

CHAPTER 2 – CONTROL AND COORDINATION

A. Tick (✓) the correct option.

- The fluid that lies above and below the meninges of the brain is called
a. lymph. b. serum. c. plasma. d. cerebrospinal fluid.
- Goitre results from
a. gibberellin toxication. b. iodine deficiency. c. calcium depletion. d. thyroid dysfunction.
- The hormone responsible for anger is
a. adrenaline. b. growth hormone. c. oestrogen. d. insulin.
- Artificial ripening of fruits is carried out by
a. auxin. b. kinetin. c. ethylene. d. ABA.
- Which one is not a reflex action?
a. Knee jerk b. Coughing
c. Closing of eyes on flashing light d. Swallowing

B. Fill in the blanks.

- The membranes covering the brain are called _____
- _____ is the master gland.
- The two examples of effectors are _____ and _____
- A neuron which carries an impulse to the brain is called a _____ neuron.
- All the voluntary actions of our body are controlled by _____

C. Name the following.

- Hormone that regulates the amount of sugar in blood.
- Hormone that controls the basal metabolic rate.
- Hormone that prepares the body for an emergency.
- Hormone that controls secondary sexual characters in females.
- Plant hormone that inhibits growth.

D. Mark the statements true (T) or false (F).

- Ovaries produce only one hormone.
- Pituitary gland is situated in the brain.
- Yawning is a reflex action.
- The movement of shoot towards light is geotropism.
- Coughing is a voluntary action.

Name:

Teacher's signature:

Class: X

Date:

E. Answer the following questions.

1. List the sequence of events that occur when a plant is exposed to unidirectional light, leading to bending of a growing shoot. Also name the hormone and the type of movement.
2. What is the significance of reflex actions?
3. Draw a well labelled diagram of a neuron.
4. What happens at the synapse between two neuron?
5. Why is the flow of signal in a neuron always unidirectional?

ANSWERS

WORKSHEET 1

A. Tick (✓) the correct option.

1. d 2. b 3. a 4. c 5. d

B. Fill in the blanks.

1. Meninges 2. Pituitary 3. Muscles, glands 4. Sensory 5. Cerebrum

C. Name the following.

1. Insulin 2. Thyroxine 3. Adrenaline 4. Oestrogen 5. Abscisic acid

D. State true (T) or false (F).

1. F 2. T 3. T 4. F 5. F

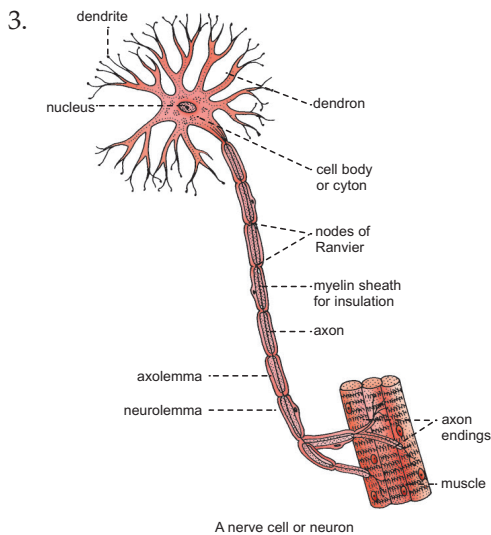
E. Answer the following questions.

1. When light comes from one side of the plant, auxin synthesized at shoot tip diffuses away from the light towards the shady side of the shoot. The higher concentration of auxin towards shady area stimulate the cells to grow longer and faster and the plant appears to bend towards light.

Hormone is auxin.

Type of movement – phototropic movement

2. There are certain body responses which are immediate and do not require any processing by the brain. Reflex is a quick response to harmful stimulus without brain having analyzed the same. It checks overloading and overtaxing of brain and have survival values.



4. When the electrical signal reaches the axonal end of a neuron, it releases chemical substances, called neurotransmitters that diffuse across the synapse towards dendritic end of other neuron. The neurotransmitter stimulates chemoreceptor sites present in post-synaptic neuron and generate another electrical signal.
5. When an electrical signal reaches the axonal end of one neuron, a chemical is released. The chemical diffuses towards the dendritic end of another neuron through the synapse where it stimulates chemoreceptor sites to generate another electrical signal. Since neurotransmitter is not secreted from the dendritic end of other neuron, flow of signal cannot move across synapse in reverse direction.