



INDINA SCHOOL NIZWA

CLASS X , BIOLOGY WORKSHEET– CH 6 BOARD QUESTIONS

Q1: In a nerve cell, the site where the electrical impulse is converted into a chemical signal is known as: (2024)

- (a)** Axon
- (b)** Dendrites
- (c)** Neuromuscular junction
- (d)** Cell body

Q2: (A) How is the movement of the leaves of a sensitive plant different from the downward movement of the roots? (2024)

OR

(B) There is a hormone which regulates carbohydrate, protein and fat metabolism in our body. Name the hormone and the gland which secretes it. Why is it important for us to have iodised salt in our diet?

Q3: Define reflex action. With the help of a flow chart show the path of a reflex action such as sneezing. (2024)

Q4: Select out of the following a gland which does NOT occur as a pair in the human body : (2024)

- (a)** Pituitary
- (b)** Ovary
- (c)** Testis
- (d)** Adrenal

Q5: (a) (i) Distinguish between hormonal co-ordination in plants and animals. (2024)

(ii) Which part of the brain is responsible for –

- (1) Intelligence**
- (2) riding a bicycle**
- (3) vomiting**
- (4) controlling hunger**

(iii) How is the brain and spinal cord protected against mechanical injuries?

OR

(b) (i) What are tropic movements? Give an example of a plant hormone that (1) inhibits growth and (2) promotes cell division.

(ii) Explain the directional movement of a tendril in a pea plant in response to touch. Name the hormone responsible for this movement.

Q6: Select from the following a plant hormone which promotes cell division. (CBSE 2024)

- (a) Gibberellins
- (b) Auxins
- (c) Absciscic Acid
- (d) Cytokinins

Q7: A plant growth inhibitor hormone that causes wilting of leaves is called: (2024)

- (a) Auxin
- (b) Cytokinin
- (c) Absciscic acid
- (d) Gibberellin

Q8: Where are auxins synthesized? How do they promote phototropism? (CBSE 2024)

Q9: (a) (i) Define a reflex arc. Why have reflex arcs evolved in animals? Trace the sequence of events which occur, when you suddenly touch a hot object. (2024)

(ii) Name the part of the nervous system which helps in communication between the central nervous system and other parts of the body. What are the two components of this system?

OR

(b) (i) Leaves of 'chhui-mui' plant begin to fold up and droop in response to a stimulus. Name the stimulus and write the cause for such a rapid movement. Is there any growth involved in the movement?

(ii) Define geotropism in plants. What is meant by positive and negative geotropism? Give one example of each type.

Q10: The correct sequence of events when someone's hand touches a hot object unconsciously: (2024)

- (a) Receptors in skin → Motor neuron → Relay neuron → Sensory neuron → Effector muscle in arm
- (b) Receptors in skin → Relay neuron → Sensory neuron → Motor neuron → Effector muscle in arm
- (c) Receptors in skin → Sensory neuron → Relay neuron → Motor neuron → Effector muscle in arm
- (d) Receptors in skin → Sensory neuron → Effector muscle in arm → Motor neuron → Relay neuron

Q11: Sense organ in which olfactory receptors are present is: (2024)

- (a) Nose
- (b) Skin
- (c) Tongue
- (d) Inner ear

Q12: Taking the example of any two animal hormones along with their gland of secretion, explain how these hormones help (i) in growth and development and (ii) regulate metabolism, in the body. (2024)

2023

Q1: The sensory nerve of a reflex arc carries information from the receptor cells to the (2023)

- (a) spinal cord
- (b) brain
- (c) muscles of the effector organ
- (d) bones of the receptor organ

Q2: Name the part of the brain which is responsible for the following actions: (2023)

- (i) Maintaining posture and balance
- (ii) Beating of heart
- (iii) Thinking
- (iv) Blood pressure

Q3: (a) How are the brain and spinal cord protected in human beings?

(b) State one main function of

(i) Medulla and

(ii) Cerebellum. (2023)

Q4: (a) Where are auxins synthesised in a plant?

(b) Which organ of the plant shows:

- (i) Positive phototropism
- (ii) Negative geotropism
- (iii) Positive hydrotropism (2023)

Q5: Name a plant hormone responsible for bending of a shoot of a plant when it is exposed to unidirectional light. How does it promote phototropism? (2023)

Q6: Select from the following the correct statement about tropic movement in plants.

- (a) It is due to the stimulus of touch and temperature.
 - (b) It does not depend upon the direction of stimulus received.
 - (c) It is observed only in roots and not in stem.
 - (d) It is a growth-related movement. (CBSE 2023)
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Q7: (A) Write the role of insulin in regulating blood sugar levels in the human body. Mention the disease caused due to it.

(B) How is the timing and the amount of release of insulin in the blood regulated? (CBSE 2023)

Q1: Define geotropism. Draw a labelled diagram of a plant showing the geotropic movement of its parts. (2020)

Q2: A squirrel is in a scary situation. Its body has to prepare for either fighting or running away. State the immediate changes that take place in its body so that the squirrel is able to either fight or run. (2020)

Q3: Why is chemical communication better than electrical impulses as a means of communication between cells in a multicellular organisms? (2020)

Q4: A cheetah, on seeing a prey moves towards him at a very high speed. What causes the movement of his muscles? How does the chemistry of cellular components of muscles change during this event? (2020)

Q5: What constitutes the central and peripheral nervous systems? How are the components of central nervous system protected? Which signals will get disrupted in case of a spinal cord injury? (2020 C)

Q6: (a) Name the hormone secreted by (i) Pituitary, and (ii) Thyroid stating one main function of each. Name the disorder a person is likely to suffer from due to the deficiency of the above mentioned hormones.

(b) How is the timing and amount of hormone released regulated ? Explain with an example. (2020 C)

Q7: (a) Name one organ each where growth hormone is synthesized in man and plant.

(b) 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. (2020)

Q8: Write in tabular form the location and function of the hormones secreted by each of the following glands present in the human body: (A) Pituitary gland

(B) Thyroid gland

(C) Pancreas (CBSE 2020)

Q1: What is a nerve impulse? State the direction followed by a nerve impulse while travelling in the body of an organism. (2019)

Q2. Draw a diagram of a neuron and label the part...a) where information is acquired - b) through which information travels as an electric impulse c) where the electric impulse must be converted into a chemical signal for onward transmission. (2019)

Q3. Why does the flow of signals in a synapse from axonal end of one neuron to dendritic end of another neuron take place but not in reverse direction ? Explain (2019)