

BIOLOGY

CLASS X

Questions and Answers

Control and Coordination

Very Short Answer Type (1 mark)

- Q. What happens if a young green plant receives sunlight from one direction only?
- Q. Which plant hormone's function is opposite to auxins, gibberellins and cytokinins?
- Q. What are endocrine glands?
- Q. Which plant hormone helps in ripening of fruits and flowering in plants?
- Q. What is reflex action?
- Q. What are the components of the CNS (Central Nervous System)?
- Q. What are spinal and cranial nerves?
- Q. Name the hormone secreted by:
1. Ovary
 2. Pancreas
 3. Pituitary Gland
- Q. Name the gaseous phytohormone.
- Q. Write an example of nastic movement in plants.
- Q. Activities like coughing, sneezing and swallowing are regulated by which part of the brain?
- Q. Which gland secretes adrenaline?
- Q. What is function of olfactory lobes?
- Q. Give example of chemotropism and hydrotropism.

Short Answer Type I (2 marks)

- Q. How do endocrine glands help in maintaining feedback control?
- Q. How does a touch-me-not plant respond on touching? What is this movement called?
- Q. Name the components of Human Nervous System?
- Q. Where is Cerebro Spinal Fluid (CSF) present? What is its function?
- Q. Represent schematically the path of a reflex arc.
- Q. Why endocrine glands are called ductless glands? How do they send hormones to the target organs?
- Q. Name the plant hormones responsible for the following:
1. Elongation of cells
 2. Promotion of cell division
 3. Ripening of fruits
 4. Growth of the tip stem

Answer the following:

- I. Dwarfism results due to deficiency of which hormone?
- II. Blood sugar level rises due to deficiency of which hormone?
- III. Which gland secretes digestive enzymes as well as hormones?
- IV. Which endocrine gland is present in males but not in females?

Short Answer Type II (3 marks)

- Q. Write the characteristics common to all hormones.
- Q. Mention the functions of cerebellum and cerebrum.
- Q. Where are pons and medulla oblongata located? Write their functions.
- Q. You have touched a hot object; represent diagrammatically the path that leads to a response that is, quickly pulling back the hand.
- Q. How does nervous tissue cause action?
- Q. Compare electrical impulse with respect to chemical impulse.
- Q. What is the effect of adrenaline on our body?

Long Answer Type (5 marks)

- Q. Mention one function of each of these hormones:
1. Thyroxin
 2. Insulin
 3. Adrenaline
 4. Testosterone
 5. Growth Hormone
 6. Oestrogen
- Q. Draw a well labelled diagram of brain showing – meninges, CSF, cerebrum, pituitary, cerebellum, pons, medulla oblongata, mid-brain.
- Q. How does chemical coordination take place in animals? Draw diagram also.
- Q. Draw an outline diagram of human body and label various endocrine glands.
- Q. Name the various plant hormones. Also give their physiological effects on plant growth and development.
- Q. Diff b/w:-
1. Nastic / Tropic Movement
 2. Sensory / Motor Nerve
 3. Phototropism / Geotropism
 4. Electrical impulse / Chemical impulse
 5. Sneezing / Walking