



Brain International School

Vikas Puri, New Delhi

ASSIGNMENT NO. 3

SUBJECT: BIOLOGY

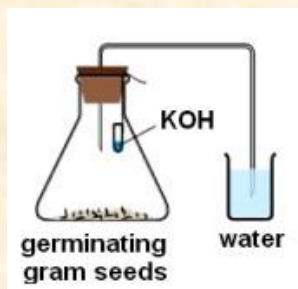
CLASS-X

JULY,2025

CHAPTER 5: LIFE PROCESSES

2 Marks Each

1. In the experimental setup shown below



- KOH solution has been kept in the flask to _____.
 - In the given setup, water rises in the tube because of _____.
2. In single celled organisms diffusion is sufficient to meet all their requirements of food, exchange of gases or removal of wastes but it is not in case of multicellular organisms. Explain the reason for this difference.
3. a) What will happen to a plant if its xylem is removed?
b) Why do herbivores have longer, small intestine than carnivores?

3 Marks each

- 1.Explain the statement “double circulation is necessary in human beings”
- 2.How are the nephrons designed to produce urine?
- 3.Explain glomerular filtration.
- 4.Write the functions of a)ureter b)urinary bladder c)urethra
- 5.How do plants excrete the waste?
- 6.What are the substance that are reabsorbed from the initial filtrate?

CHAPTER 6: CONTROL AND CORDINATION

2 Marks Each

1. What is a phytohormone? Name any two phytohormones.
2. Differentiate between tropic and nastic movements.
3. List the functions of testosterone and estrogen

3 Marks each

1. (a) How is brain protected from injury and shock?
(b) Name two main parts of hind brain and state the functions of each.
Hind brain parts:
2. (a) Draw the structure of neuron and label the cell body and axon.
(b) Name the part of neuron:
(i) where information is acquired- Dendrite(Dendritic end)
(ii) through which information travels as an electrical impulse- Axon
3. (i) Name the hormones that are released in human males and females when they reach puberty.
(ii) Name a gland associated with brain. Which problem is caused due to the deficiency of the hormone released by this gland?

5 Marks each

1. (a) Explain any three directional movements in plants.
(b) Which organ secretes a hormone when blood sugar rises in our body?
(c) Name the master gland present in the brain.
(d) Why is it advised to use iodised salt in our diet?
(e) Name the part of the brain which controls posture and balance of the body.
2. Nervous and hormonal system together perform the function of control and coordination in human beings. Justify the statement.
3. Name the two main organs of our central nervous system. Which one of them plays a major role in sending command to muscles to act without involving thinking process? Name and explain the phenomenon involved.

CASE STUDY

If the body design in the squirrel relied only on electrical impulses via nerve cells, the range of tissues instructed to prepare for the coming activity would be limited. On the other hand, if a chemical signal were to be sent as well, it would reach all cells of the body and provide the wide ranging changes needed. This is done in many animals, including human beings, using a hormone called adrenaline that is secreted from the adrenal glands.

- i) Give the location of Adrenaline gland. Name the hormone released with its function.
- ii) Discuss the sudden changes in the body.