Year 2024

Multiple Type Questions [1Marks]

1) In a nerve cell, the site where the electrical impulse is converted into a chemical signal is known as : **[(31/1/1); (31/1/2); (31/3/3)]**
   (a) Axon (b) Dendrites (c) Neuromuscular junction (d) Cell body
2) Select out of the following a gland which does NOT occur as a pair in the human body : **[(31/2/1); (31/2/2); (31/2/3)]**
   (a) Pituitary (b) Ovary (c) Testis (d) Adrenal
3) Select from the following a plant hormone which promotes cell division. **[(31/3/2) ; (31/3/3)]**
   (a) Gibberellins (b) Auxins (c) Abscissic Acid (d) Cytokinins
4) A plant growth inhibitor hormone which causes wilting of leaves is called : **[(31/4/1); (31/4/2); (31/4/3)]**
   (a) Auxin (b) Cytokinin (c) Abscisic acid (d) Gibberellin
5) The correct sequence of events when someone's hand touches a hot object unconsciously : **[(31/5/1); (31/5/3)]**
   (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
6) Sense organ in which olfactory receptors are present is : **[(31/5/1); (31/5/2); (31/5/3)]**
   (a) Nose (b) Skin (c) Tongue (d) Inner ear
7) Identify an involuntary action from the following : **[(31/5/2)]**
   (a) Riding a bicycle
   (b) Picking up a pencil
   (c) Regular beating of heart
   (d) Walking in a straight line

Assertion and Reasoning [1 Mark]

These consist of two statements —Assertion (A) and Reason(R). Answer these questions selecting the appropriate option given below:
(a) Both Assertion (A) and Reason(R) are true and Reason(R) is the correct explanation of the Assertion (A).
(b)Both Assertion (A) and Reason(R) are true, but Reason(R) is not the correct explanation of the Assertion (A).
(c)Assertion (A) is true, but Reason(R) is false.
(d)Assertion (A) is false, but Reason(R) is true.

1) Assertion (A) : Receptors are usually located in our sense organs and perceive a particular stimulus.
   Reason (R) : Different sense organs have different receptors for detecting stimuli.

Very Short Answer Type Questions [2 Marks]

1) How is the movement of leaves of a sensitive plant different from the downward movement of the roots ? **[(31/1/1)]**
2) 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? **[(31/1/1)]**
3) In which region of the brain is (i) medulla and (ii) cerebrum located ?State one function of each. **[(31/1/2)]**
4) Name a hormone that promotes the growth of tendrils and explain how they help a pea plant to climb up other plants. **[(31/1/2)]**
5) (i) Write the significance of peripheral nervous system in human beings.
   (ii) How is human brain protected from mechanical injuries and shocks ? **[(31/1/3)]**
6) Name one directional growth movement each in response to chemicals and water in plants. Write an example for each of them.**[(31/1/3)]**
7) Where are auxins synthesized ? How do they promote phototropism? **[(31/3/1); (31/3/2); (31/3/3)]**

Short Answer Type Questions [3 Marks]

1) Define reflex action. With the help of a flow chart show the path of areflex action such as sneezing. **[(31/1/1); (31/1/2); (31/1/3)]**
2) (a) List two constituents of Central Nervous System (CNS). How are these components protected from injuries ?
   (b) Write two limitations of the use of electrical impulses. **[(31/3/1)]**
3) (a) List two constituents of Central Nervous System (CNS). How are these components protected from injuries ?
   (b) Write two limitations of the use of electrical impulses. **[(31/3/2)]**
4) Write the name and location of a hormone which helps a person to respond when chased by a dog. Mention the responses in the body which help him to deal with the situation. **[(31/3/3)]**
5) 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. **[(31/5/1); (31/5/2)]**
6) Name a plant growth hormone synthesized at the shoot tip. Explain its effect on the growth of a plant in response to light. **[(31/5/3)]**

Long Answer Type Questions [5 Marks]

1) (i) Distinguish between hormonal co-ordination in plants and animals. 5
   (ii) Which part of the brain is responsible for —
   (1) intelligence
   (2) riding a bicycle
   (3) vomiting
   (4) controlling hunger
   (iii) How is brain and spinal-cord protected against mechanical injuries ? **[(31/2/1); (31/2/2); (31/2/3)]**
2) (i) What are tropic movements? Give an example of a plant hormone which (1) inhibits growth and (2) promotes cell division.
   (ii) Explain directional movement of a tendril in pea plant in response to touch. Name the hormone responsible for this movement. **[(31/2/1); (31/2/2); (31/2/3)]**

3) (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.
(ii) Name the part of 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 ? **[(31/4/1); (31/4/2); (31/4/3)]**

4) (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. **[(31/4/1); (31/4/2); (31/4/3)]**

Year 2023

Multiple Type Questions [1Mark]

1) Select from the following the correct statement about tropic movement in plants: **[(31/1/1); (31/1/3)]**
(a)It is due to 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 stems.
(d)It is a growth related movement.

2) Select from the following the correct statement about tropic movement in plants :
(a)It is due to 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 stems.
(d)It is a growth related movement.

3) In plants the role of cytokinin is : **[(31/4/1)]**
(a) Promote cell division. (b) Wilting of leaves.
(c) Promote the opening of stomatal pore. (d) Help in the growth of stem.

4) The part in which gustatory receptors are present in our body is :**[(31/5/1); (31/5/2); (31/5/3)]**
(a) inner ear (b) skin (c) tongue (d) inner lining of nose

5) Sensory nerve of a reflex arc carries information from the receptor cells tothe : **[(31/6/1)]**
(a) spinal cord
(b) brain
(c) muscles of the effector organ
(d) bones of the receptor organ

6) Walking in a straight line and riding a bicycle are the activities which are possible due to a part of the brain. Choose the correct location and name of this part from the given table :**[(31/6/1); (31/6/2); (31/6/3)]**

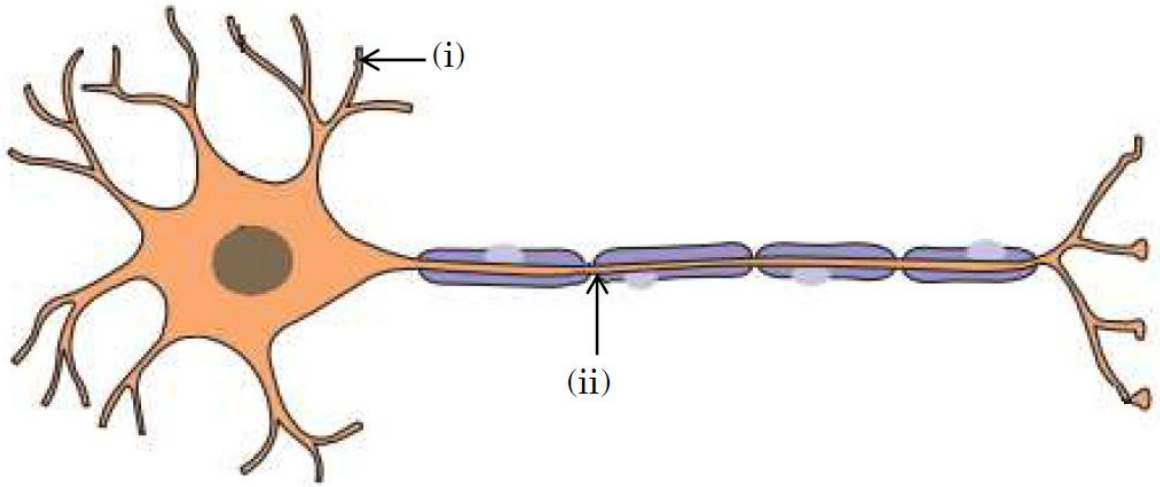
	Part of the Brain	**Name**
(a)	Fore brain	Cerebrum
(b)	Mid Brain	Hypothalamus
(c)	Hind brain	Cerebellum
(d)	Hind brain	Medulla

A	B	C	D
(a)(iii)	(i)	(iv)	(ii)

(b)(iii) (iv) (i) (ii)
(c)(iii) (iv) (ii) (i)
(d)(iii) (i) (ii) (iv)

Very Short Answer Type Questions [2 Marks]

1) A plant hormone helps in bending of stem towards light. Name the hormone and explain how is the movement achieved. **[(31/1/3)]**
2) Write the sequence of events that involve response of a person when a dust particle is inhaled through the nose by him.**[(31/1/2)]**
3) (a) Write the role of insulin in regulating blood sugar levels in 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? **[(31/1/1); (31/1/2)]**
4) Write the sequence of events that involve response of a person when a dust particle is inhaled through the nose by him.**[(31/1/1)]**
5) Name the part of brain which is responsible for the following actions : **[(31/4/1)]**
   (i) Maintaining posture and balance
   (ii) Beating of heart
   (iii) Thinking
   (iv) Blood pressure
6) Where are auxins synthesized in a plant ? Which organ of the plant shows : **[(31/4/1)]**
   (i) Positive phototropism
   (ii) Negative geotropism
   (iii) Positive hydrotropism
7) Name the hormone secreted in scary situations by animals. Write any three responses which enable the animal body to deal with it. **[(31/4/2)]**
8) 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? [(31/4/3)]
9) Write the name and function of parts (i) and (ii) in the diagram of a neuron given below.**[(31/5/1)]**



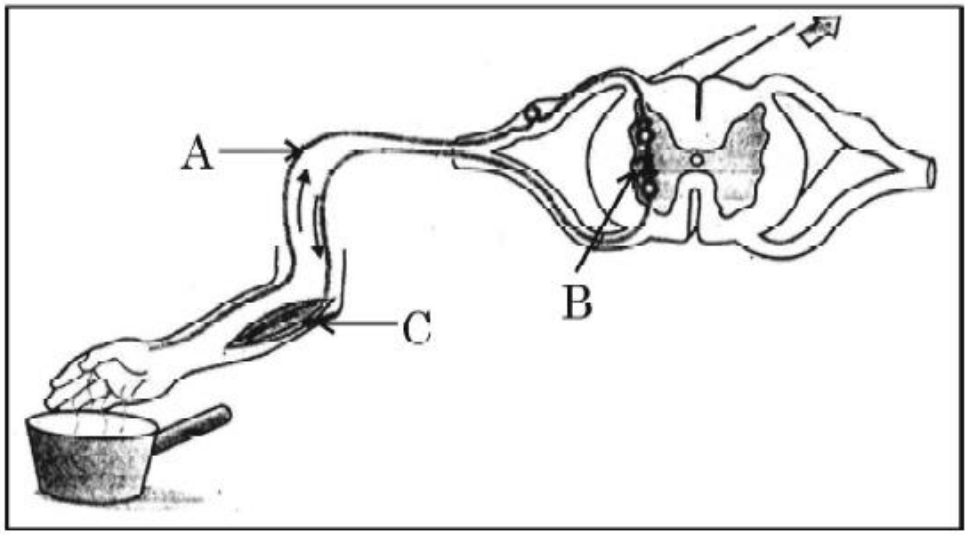
10) (a) How is the brain and spinal cord protected in human beings ?**[(31/5/3)]**
    (b) State one main function each of (i) Medulla and (ii) Cerebellum.
11) List two differences between the movement of leaves of a sensitive plant and the movement of a shoot towards light. **[(31/6/1); (31/6/2)]**
12) What happens at synapse between two neurons ? State briefly. **[(31/6/1); (31/6/2)]**

13) How is an electric impulse created in human nervous system ? Identify the parts of a neuron which helps the nerve impulse to travel **[(31/6/3)]**
(i) towards the cell body
(ii) away from the cell body

14) With the help of an example, explain how does the feedback mechanism regulate the hormone secretion.**[(31/6/3)]**

Short Answer Type Questions [3 Marks]

1) Name the hormone released and the gland which secretes it in human beings during scary situations. How does the body respond to enable it to deal with the situation? **[(31/2/1)]**
2) Explain the directional movement due to growth in response to touch in a pea plant.**[(31/2/2)]**
3) Name the gland and the hormone secreted by it in scary situations inhuman beings. List any two responses shown by our body when this hormone is secreted into the blood. **[(31/6/1); (31/6/3)]**
4) In the given diagram **[(31/6/1); (31/6/3)]**
(i) Name the parts labelled A, B, and C.
(ii) Write the functions of A and C.
(iii) Reflex arcs have evolved in animals ?Why ?



5) Some plants like pea plants have tendrils which help them to climb up other plants. Explain how is it done. Name the plant hormone responsible for this movement. **[(31/6/2)]**
6) Name the phenomenon occurring in plants which are under the control of gravity, water and chemicals with one example each that shows the movement involved. **[(31/6/2)]**

Long Answer Type Questions [5 Marks]

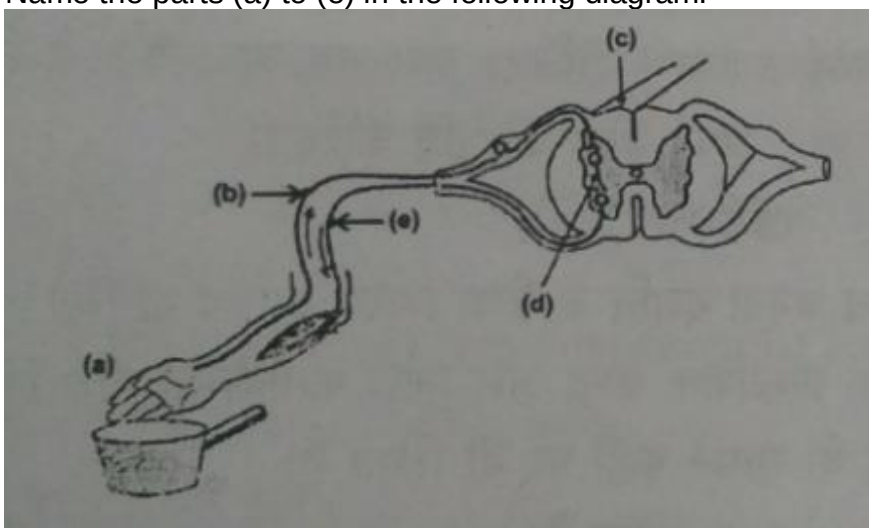
1) (i)List three points of difference between nervous and hormonal mechanisms for control and coordination in animals.
(ii) How are auxins related with the bending of plant shoot towards unidirectional light? Explain.**[(31/2/1); (31/2/2); (31/2/3)]**
2) (i) Name the disorder which a person is likely to suffer from the following due to :
(I)Over-secretion of growth hormone
(II)Deficiency of oestrogen in females
(III) Less secretion of thyroxine
Also name the gland that secretes each of the hormones mentioned above.

(ii) How is the timing and amount of hormone released regulated? Explain with the help of an example. **[(31/2/1); (31/2/2)]**

Year 2020

Short Answer Type Questions [3 Marks]

1) 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? **[(31/1/1); (31/1/2)]**
2) Why is chemical communication better than electrical impulses as a means of communication between cells in a multi-cellular organism? **[(31/1/1); (31/1/2)]**
3) Name the parts (a) to (e) in the following diagram.



What is the term given to the sequence of events occurring in the diagram? **[(31/1/3)]**
4) (a) What is tropism?
(b) How do auxins promote the growth of a tendril around a support? **[(31/1/3)]**
5) 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? **[(31/4/1); (31/4/3)]**
6) Define geotropism. Draw a labelled diagram of a plant showing geotropic movements of its parts.**[(31/4/1); (31/4/2); (31/4/3)]**
7) 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 **[(31/4/2)]**

Case based question

1) Thyroid gland is a bilobed structure situated in our neck region. It secretes a hormone called thyroxine. Iodine is necessary for the thyroid gland to make thyroxine. Thyroxine regulates carbohydrate, protein and fat metabolism in the body. It promotes growth of body tissues also. When there is an excess of thyroxine in the body, a person suffers from hyperthyroidism and if this gland is underactive it results in hypothyroidism. Hyperthyroidism is diagnosed by blood tests that measure the levels of thyroxine and Thyroid Stimulating Hormone (TSH). Hypothyroidism is

caused due to the deficiency of iodine in our diet resulting in a disease called goitre. Iodised salt can be included in our diet to control it.

(a) Where is thyroid gland situated in our body?

(b) State the function of thyroxine in human body.

(c) What is hyperthyroidism?

(d) How can we control hypothyroidism? **[(31/2/1); (31/2/2); (31/2/3)]**

2) Study the table in which the levels of Thyroid Stimulating Hormone (TSH) in women are given and answer the questions that follow on the basis of understanding of the following paragraph and the related studied concepts.

Age Range	**Normal (mU/L)**	**Low (mU/L)**
18 – 29 years	0.4 – 2.34 mU/L	< 0.4 mU/L
30 – 49 years	0.4 – 4.0 mU/L	< 0.4 mU/L
50 – 79 years	0.46 – 4.68 mU/L	< 0.46 mU/L

Women are at greater risk for developing abnormal TSH levels during menstruation, while giving birth and after going through menopause. Around 5% of women in the United States have some kind of thyroid problem compared to 3% of men. Despite claims that high TSH increases your risk for heart disease, a 2013 study found no link between high TSH and heart diseases. But a 2017 study showed that older women are especially at risk for developing thyroid cancer if they have high TSH levels along with thyroid nodules.

(a) A 35 year old woman has TSH level 6.03 mU/L. What change should she bring in her diet to control this level?

(b) When do women face a greater risk of abnormal TSH level?

(c) State the consequence of low TSH level.

(d) Name the mineral that is responsible for synthesis of hormone secreted by thyroid gland.

[(31/3/1); (31/3/2); (31/3/3)]

3) Thyroid Stimulating Hormone (TSH) stimulates thyroid gland to produce thyroxine. Study the table given below.

Table : TSH levels during pregnancy Stage of pregnancy

Stage of pregnancy	Normal (mU/L)	Low (mU/L)	High (mU/L)
First trimester	0·2 – 2·5	< 0·2	2·5 – 10
Second trimester	0·3 – 3·0	< 0·3	3·01 – 4·5
Third trimester	0·8 – 5·2	< 0·8	> 5·3

It is important to monitor TSH levels during pregnancy. High TSH levels and hypothyroidism can especially affect chances of miscarriage. Therefore, proper medication in consultation with a doctor is required to regulate/control the proper functioning of the thyroid gland.

(a) Give the full form of TSH. 1

(b) State the main function of TSH.1

(c) Why do TSH levels in pregnant women need to be monitored?

(d) A pregnant woman has TSH level of 8·95 mU/L. What care is needed for her?

[(31/5/1); (31/5/2); (31/5/3)]

Year 2019

Very Short Answer Type Questions [2 Marks]

1) How do auxins promote the growth of a tendril around a support? **[(31/3/1)]**
2) What is a nerve impulse? State the direction followed by a nerve impulse while travelling in the body of an organism. **[(31/3/1)]**
3) What is insulin? Why are some patients of diabetes treated by giving injections of insulin? **[(31/3/2)]**
4) How is the movement of leaves of the sensitive plants different from the movement of a shoot towards light?**[(31/3/2)]**
5) List in tabular form two differences between reflex action and walking. **[(31/3/3)]**
6) List in tabular form two differences between pepsin and trypsin. **[(31/3/3)]**

Short Answer Type Questions [3 Marks]

1) What are plant hormones? Name the plant hormones responsible for the following :
   (i) Growth of stem
   (ii) Promotion of cell division
   (iii) Inhibition of growth
   (iv) Elongation of cells **[(31/1/1); (31/1/2)]**
2) What is feedback mechanism of hormonic regulation. Take the example of insulin to explain this phenomenon.**[(31/1/2)**
3) Nervous and hormonal systems together perform the function of control and coordination in human beings. Justify this statement with the help of an example.**[(31/1/3)]**
4) List in tabular form three distinguishing features between cerebrum and cerebellum.**[(31/3/1); 31/3/3)]**
5) (a) Name the part of human brain which controls (i) voluntary actions, and (ii) involuntary actions.
   (b) Write the function of peripheral nervous system. Name the components of this system stating their origin. **[(31/3/2)]**
6) (a) Plants do not have any nervous system but yet, if we touch a sensitive plant, some observable changes take place in its leaves. Explain how could this plant respond to the external stimuli and how it is communicated.
   (b) Name the hormone that needs to be administered to
   i.increase the height of a dwarf plant.
   ii.cause rapid cell division in fruits and seeds. **[(31/4/1); (31/4/2); (31/4/3)]**
7) 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 the reverse direction? Explain.**[(31/5/1); (31/5/2)]**
8) ‘‘Nervous and hormonal systems together perform the function of control and coordination in human beings.’’ Justify the statement.**[(31/5/3)]**

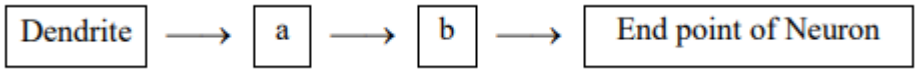
Long Answer Type Questions [5 Marks]

1) (a) Why is the use of iodised salt advisable? Name the disease caused due to deficiency of iodine in our diet and state its one symptom.
   (b) How do nerve impulses travel in the body? Explain. **[(31/2/1); (31/2/2); (31/2/3)]**
2) What is hydrotropism? Design an experiment to demonstrate this phenomenon. **[(31/2/1); (31/2/2); (31/2/3)]**

Year 2018

Very Short Answer Type Questions [2 Marks]

1) (a) Name one gustatory receptor and one olfactory receptor present in human beings.
(b) Write a and b in the given flow chart of neuron through which information travels as an electrical impulse.



[All India]

Short Answer Type Questions [3 Marks]

1) Name the hormones secreted by the following endocrine glands and specify one function of each:
(a) Thyroid (b) Pituitary (c) Pancreas **[All India]**
2) (i) What are endocrine glands? Write one main feature of it.
(ii) Name the hormone secreted by thyroid glands and state its main functions.
(iii) What is the importance of iodized salt in our daily life? **[For Blind Student]**
3) What constitutes the central and peripheral nervous systems ? How are various parts of central nervous system protected ?**[For Blind Student]**
4) How does chemical co-ordination occur in plants? **[For Blind Student]**

Year 2012

Very Short Answer Type Questions [1 Mark]

1) Name the part of brain which controls posture and balance of the body. **[CBSE (CCE)]**
2) Mention the part of body where gustatory and olfactory receptors are located. **[CBSE (CCE)]**

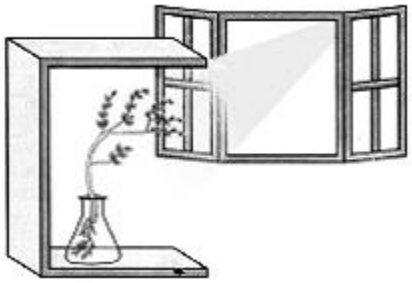
Short Answer Type Questions [3 Marks]

1) Smita's father has been advised by doctor to reduce his sugar intake. **[CBSE (CCE)]**
(i) Name the disease he is suffering from and name the hormone whose deficiency causes it,
(ii) Identify the gland that secretes it and mention the function of this hormone.
(iii) Explain how the time and amount of secretion of this hormone is regulated in human system.
2) State the functions of plant hormones. Name four different types of plant hormones. **[CBSE (CCE)]**
3) (a) How is brain protected from injury and shock? **[CBSE (CCE)]**
(b) Name two main parts of hind brain and state functions of each.
4) (a) Draw the structure of neuron and label cell body and axon. **[CBSE (CCE)]**
(b) Name the part of neuron
(i) where information is acquired
(ii) through which information travels as an electrical impulse
5) (a) Which plant hormone is present in greater concentration in the areas of rapid cell division? **[CBSE (CCE)]**
(b) Give one example of plant growth promoter and plant growth inhibitor.

Year 2011

Short Answer Type Questions [3 Marks]

1) Which organ secretes a hormone when blood sugar rises in our body? Name the hormone and name one enzyme released by this organ. **[CBSE (CCE)]**
2) (a) Explain how auxins help in bending a plant stem towards light.
   (b) State the objective of the experiment for which experimental set-up is shown in the given diagram. **[CBSE (CCE)]**



3) What causes tendril to encircle or coil around the object in contact with it is? Explain the process involved. **[CBSE (CCE)]**
4) Name any three endocrine glands in human body and briefly write the function of each of them. **[CBSE (CCE)]**
5) Which part of the brain controls Involuntary action? Write the function of any two regions of it. **[CBSE (CCE)]**
6) What is chemotropism? Give one example. Name any two plant hormone and mention their functions. **[CBSE (CCE)]**
7) State the functions of any three of the structural and functional unit of nervous system. **[CBSE (CCE)]**
8) What is 'hydrotropism'? Describe an experiment to demonstrate 'hydrotropism'. **[CBSE (CCE)]**
9) What are 'hormones'? State one function of each of the following hormones: (i) Thyroxine (ii) Insulin **[CBSE (CCE)]**
10) What is the function of receptors in our body? Think of a situation where receptor do not work properly. What problems are likely to arise? **[CBSE (CCE)]**

Year 2010

Very Short Answer Type Questions [1 Mark]

1) How is the spinal cord protected in the human body ? **[Delhi]**
2) Name any two types of tropism.**[Foreign]**
3) A potted plant is made to lie horizontally on the ground. Which part of the plant will show
   (i) positive geotropism?
   (ii) negative geotropism? **[Delhi]**
4) Mention the function of hind -brain in humans. **[All India]**
5) Mention the function of adrenaline hormone. **[All India]**

Very Short Answer Type Questions [2 Marks]

1) What are hormones ? Name the hormone secreted by thyroid and state its function. **[Delhi]**
2) 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 the phenomenon involved. **[All India]**

3) Name the hormones secreted by human testes. State its functions. **[All India]**
4) Name and explain the function of the hormone secreted by the pituitary gland in humans. **[All India]**

Short Answer Type Questions [3 Marks]

1) Design an experiment to demonstrate that the roots bend in the direction of water stimulus. **[Foreign]**
2) What is a reflex action? Describe the steps involved in a reflex action. **[Foreign]**
3) List the component of reflex arc in correct sequence. State in brief the role of brain in reflex action. **[Foreign]**

Year 2009

Very Short Answer Type Questions [1 Marks]

1) Name two tissues that provide control and coordination in multicellular animals.**[Delhi]**
2) Which endocrine gland secretes the growth hormone ?**[Foreign]**
3) A young green plant receives sunlight from one direction only. What will happen to its shoots and roots. **[Delhi (C)]**
4) Name the plant hormones which help / promote (i) cell division (ii) growth of the stem. **[Delhi (C)]**
5) What is the function of thyroxine hormone in our body? **[Delhi (C)]**
6) Which one of the following actions on touch is an example of chemical control ?
   (a) Movement on the touch-sensitive plant
   (b) Movement in human leg **[Foreign]**

Very Short Answer Type Questions [2 Marks]

1) What are 'nastic' and 'curvature' movements ? Give one example of each.**[Delhi]**
2) Write the name and functions of any two parts of human hind –brain. **[All India (C)]**
3) What are plant hormones? Write two important functions of auxin. **[All India (C)]**

Short Answer Type Questions [3 Marks]

1) What is 'phototropism'? How does it occur in plants ? Describe an activity to demonstrate phototropism. **[All India]**
2) (a) Name of two main constituents of the Central Nervous System in human beings.
   (b) What is the need for a system of control and coordination in human beings? **[Foreign]**
3) What is a reflex action ? Describe the steps involved in a reflex action. **[Foreign]**

Year 2008

Very Short Answer Type Questions [2 Marks]

1) (a) In the human body what is the role of (i) seminal vesicles and (ii) prostate gland ?
   (b) List two functions performed by testes in human beings. **[All India]**
2) Explain the cause of shoots of the plant bending towards light. **[Delhi (c)]**
3) "There is a need for a system of control and coordination in an organism." Justify the statement. **[Delhi (c)]**
4) Name the three major regions (or parts) of human brain. Which part of brain maintains posture and equilibrium of the body? **[Foreign]**

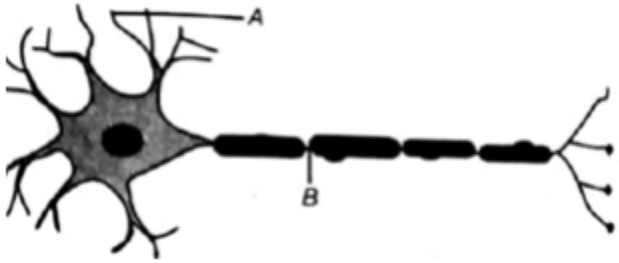
5) (a) Distinguish between voluntary and involuntary action of our body.
6) (b) Choose Involuntary actions from amongst the following:
Reading, beating of heart, salivation in the mouth on viewing a tasty food, talking **[Foreign]**

Short Answer Type Questions [3 Marks]

1) Which animal or plant hormone is associated with the following
(i) Increased sugar level in blood
(ii) Changes at puberty in boys
(iii) Inhibits growth of plants
(iv) Rapid development of fruits
(v) Dwarfism
(vi) Goitre

Long Answer Type Questions [5 Marks]

1) (a) Draw the structure of a neuron and label the following on it :
Nucleus, Dendrite, Cell body and Axon
(b) Name the part of neuron :
(i) where information is acquired.
(ii) through which information travels as an electrical impulse.
2) (a)



(i) Name the parts labelled A and B in the neuron drawn above.
(ii) Which part acquires the information in the neuron ?
(iii) Through which part does the information travels ?
(iv) In what form does this information travel ?
(v) Where is the impulse converted into chemical signal for onward transmission?
(b) Name the hormone secreted by thyroid. What is its function? Why is the use of iodised salt advisable.
3) (a) What is (i) phototropism and (ii) geotropism? With labelled diagrams describe an activity to show that light and gravity change the direction that plant parts grow in.
(b) Mention the role of each of the following plant hormones:
(i) Auxin
(ii) Abscisic acid **[All India]**