

## CBSE TEST PAPER SOLVED

### Class 10- Control and Coordination

#### Very Short Answers (1 Mark)

1. Where is auxin synthesized in plants?

Ans: Synthesized at shoot tip

2. Which gland is known as Master gland?

Ans: Pituitary gland

3. Name the hormone that regulates blood sugar level.

Ans: Insulin

4. What is synapse.

Ans: The point of contact between the terminal branches of axon of one neuron with the dendrite of another neuron is called synapse

5. What are tropic movements? Give one examples

Ans: The directional movements in response to stimulus in plant are called tropic movements for example growth of shoot towards light or growth of pollen tube towards ovule.

6. Define hormones

Ans: Hormones are the chemical messengers secreted in very small amounts by specialised tissues called ductless glands. They act on target tissues/organs usually away from their source.

7. Which hormone has inhibiting effect on growth of plants

Ans: Auxin

8. What is phototropism?

Ans: Movement of the parts of plant towards light is called phototropism.

9. What are the components of central Nervous System.

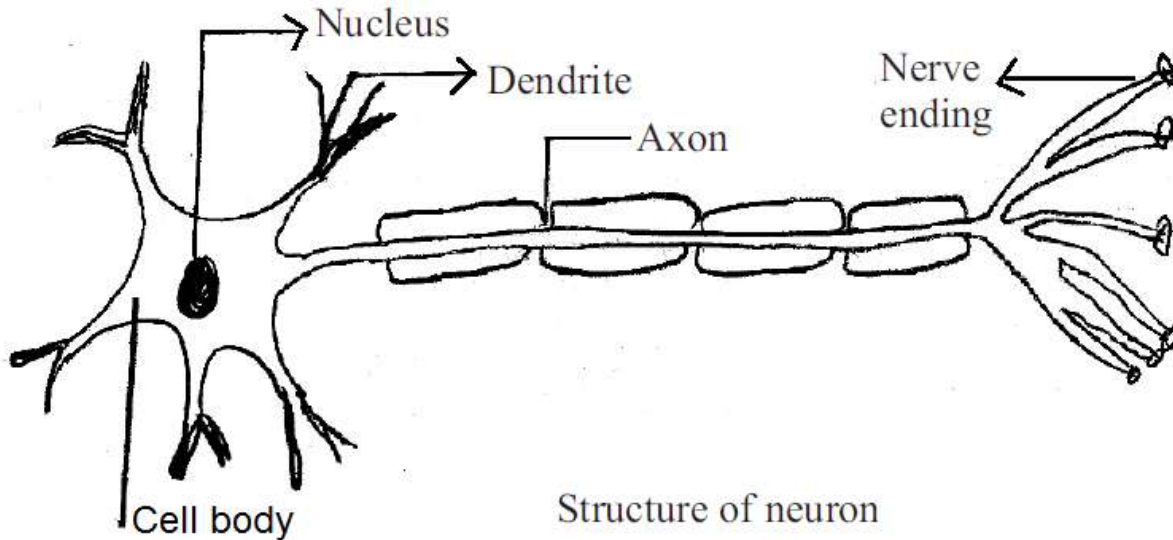
Ans: Brain and Spinal Cord

10. What happens at synapse between two neurons.

Ans: At synapse between two neurons electrical signal is converted into chemical message for onward transmission to next neuron by release of neurotransmitters

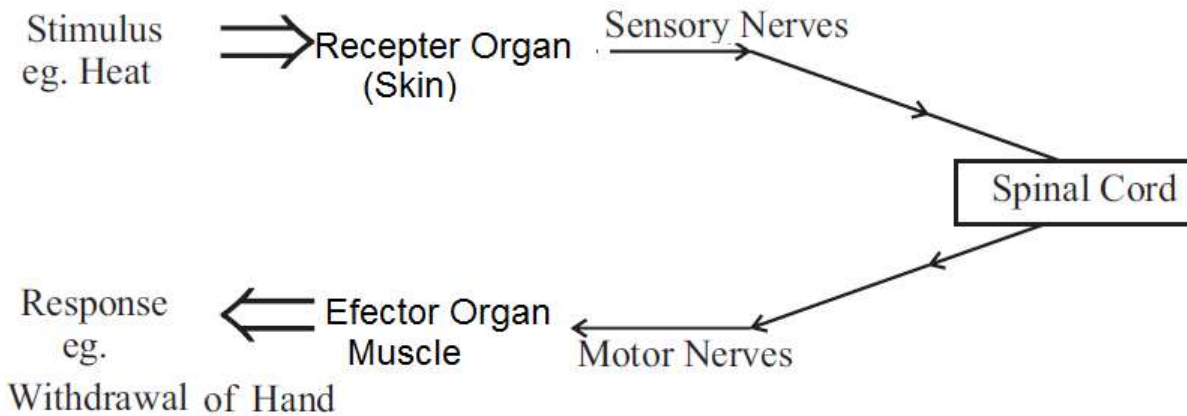
**Short Answers (2 Marks)**

1. Draw diagram of neuron and label cell body, dendrites and axon.



2. What is reflex arc? Explain with the help of a flow-chart.

The pathway through which impulses pass is called reflex arc.



3. Mention one function of each of the following

- i) Cerebellum
- ii) Pons.

Ans: i) Function of Cerebellum a) Controls posture and balance b) Control precision of voluntary actions

i) Function of pones (a) involuntary action (b) regulation of respiration

4. What is the cause of diabetes? How it can be controlled.

Ans: Diabetes is caused due to deficiency of Insulin hormone secreted by Pancreas that is responsible to lower/control the blood sugar levels.

It is controlled by injections of insulin hormone which helps in regulating blood-sugar level.

5. Why it is advisable to use iodised salt.

Ans: Iodine mineral is essential part of thyroxine hormone so it is important that we must consume iodised salt as in turn it is essential for thyroid gland as it controls carbohydrate, proteins and fat metabolism for best balance of growth

6. What are the different receptors present in our body? What are their functions?

Ans: The different receptors present in our body are

(i) Ear : Hearing/ Balance of the body

(ii) eyes : Visual Stimulus

(iii) skin: Pain,Touch,Heat

(iv)Nose : Smell detection

(v)Tongue : Taste Detection

7. What are plant hormones? Name a plant hormone that promotes growth in plants.

Ans: Plant hormones are chemical compounds which help to coordinate growth, development and responses to the environment.

Auxin is a plant hormone that promotes growth in plants

8. What are sensory and motor neurons? Write their functions.

Ans: Sensory nerves are nerves which carry information from the receptors (sense organs) to the brain and spinal cord.

Motor nerves are nerves which carry information from the brain and spinal cord to the effectors (muscles and glands).

## Long Answers (5 Marks)

1. What are hormones (in animals) List four characteristics of hormones. Name the hormone required for the following.

i) Development of moustache and beard in human male ii) Lowering of blood glucose.

Ans: Hormones are the chemical messengers secreted in very small amounts by specialized tissues called ductless glands. They act on target tissues/organs usually away from their source.

### Characteristics of hormones are as follows:

- i) Hormones are secreted by endocrine cells.
- ii) Hormones are chemical messengers.
- iii) They are chemical signals that circulate in the body fluids.
- iv) The hormones regulate the behavior of the target cells.

i) Development of moustache and beard in human male :- Testosterone

ii) Lowering of blood glucose: Thyroxin

2. Mention the functions of a) Fore brain b) Mid brain c) Hind brain

Ans:

Following are the functions of

- a) Fore brain : Thinking part of the brain that control the voluntary actions.
- b) Mid brain : controls involuntary actions and reflex movements of head, neck, eyes etc.
- c) Hind brain: controls body movements, balance and posture.

3. A person has lost his control over muscular activities. (VBQ)

- a) What can be the possible cause? b) What would you advice the person to overcome the problem?
- c) Which value is inculcated?

Ans: a)Cerebellum control is lost due to taking of excess of alcohol

b) Advice – Not to take alcohol

c) Value- concern for human life