

## **CONTROL AND COORDINATION**

### **HOTS: (High Order Thinking Skill) Questions**

- Q.1) On touching a hot plate, you suddenly withdraw your hand. Which category of neurons became active first and which one next?
- Q.2) Give one example of plant part.
- Which is positively hydrotropic as well as positively geotropic?
  - Which is positively phototropic but negatively geotropic?
- Q.3) What name is given to the microscopic gap between two adjacent neurons?
- Q.4) If we step on something sharp accidentally we move our foot away at once .what is this type of response known as?
- Q.5) A part of the hind brain makes possible activities like walking, skating, riding a bicycle and picking up a pencil.name this part of the hind brain.
- Q.6) The neck of a person appears to be swollen.
- Name the disease this person suffering from.
  - Name the mineral whose deficiency in the diet causes this disease.
- Q.7) Name the plant hormone:
- which inhibits growth and causes wilting of leaves. (b) which promotes cell division.
- Q.8) Taking the example of heart beat, justify the antagonistic action of the sympathetic and the parasympathetic nerves.
- Q.9) Why is abscisic acid known as stress hormone in plants?
- Q.10) Name the part of neuron
- where information is acquired. (b) through which information travels as an electrical impulse.
- Q.11) How does the plant shoot bends, when the plant is placed in a room having only one open window?
- Q.12) Who transmits nerve impulse across the synapse?
- Q.13) Give a reason to explain why
- adrenaline helps in dealing emergency situations?
  - secretions of growth hormone should be specific in the human body?
- Q.14) Why do leaves drop off seasonally?
- Q.15) Give reason why endocrine glands release their secretions into the blood?

### **QUESTION BANK FOR PRACTICE**

- Q1. A particular hormone requires Iodine for its synthesis .Name the endocrine gland which secretes this hormone and state it's location in the human body.
- Q2. Write a term for the chemical substance which brings about control and coordination in plants?
- Q3. What is the apical dominance?
- Q4. Name the organ associated with the nervous system which is also part of endocrine system and secretes hormone.

- Q5. Why hormones are called informational molecules?
- Q6. Why do leaves of “touch me not” plant droops when we touch it?
- Q7. Name the structural and functional unit of nervous system.
- Q8. What is the difference between the manner in which movement in the sensitive plant and movement in our legs takes place?
- Q9. Why do people in the mountainous regions get goitre?
- Q10. What is a synaptic cleft?
- Q11. What are the scientific names for the following receptors in humans?  
a) Receptors of smell                      b) Receptors of taste
- Q12. Which hormone is responsible for the development of moustache and beard in men?
- Q13. How do we detect the smell of an agarbatti?
- Q14. Why do stem and root show unilateral growth towards light and gravity of earth respectively?
- Q15. Which part of the brain controls involuntary actions such as blood pressure, salivation and vomiting?
- Q16. Justify that the pancreas and gonads perform dual function.
- Q17. Why are some patients of diabetes treated by giving injections of insulin?
- Q18. Pituitary gland is often called as master gland. Why?
- Q19. How can thyroid activity be determined in man?
- Q20. Do the plants have nervous plants like animals? If not, how control and coordination takes place in plants?
- Q21. Nervous and hormonal systems together perform the function of control and coordination in human beings. Justify the statement.
- Q22. Which hormone is released into blood when its sugar level rises? Name the organ which produces the hormone and its effect on blood sugar level. Also name one digestive enzyme that this organ secretes and the function of this enzyme
- Q23. Describe how auxins are related with the bending of shoots towards the source of light.
- Q24. Define nerve impulse. Which structure in a neuron helps to conduct a nerve impulse:  
a. Towards the cell body.    b. Away from the cell body.