

**CONTROL AND CO - ORDINATION**  
**FORMATIVE ASSESSMENT I**  
**Q. PAPER**

MARKS-30

TIME- 70 MINUTES

**Instructions:**

- Questions : 1 to 5 – 1 Mark each
  - Questions : 6 to 9 – 2 Marks each
  - Questions : 10 to 13 – 3 Marks each
  - Question 14 – 5 Marks
1. Which endocrine gland is unpaired?
  2. Which part of the brain controlled posture and balance of the body?
  3. Where in a neuron, conversions of electrical signal to a chemical signal occur?
  4. Which gland secretes digestive enzyme as well as hormones?
  5. We suddenly withdraw our hand when a pin pricks. Name the type of response involved in this action.
  6. What is a tropic movement? Explain with an example.
  7. What will happen if intake of iodine in our diet is low?
  8. Draw the structure of neuron and label the following on it:
    - a. Nucleus
    - b. Dendrite
    - c. Cell body
    - d. Axon
  9. Why are some patients of diabetes treated by giving injections of insulin?
  10. Why is the flow of signals in a synapse from axonal end of one neuron but not the reverse?
  11. What are reflex actions? Explain reflex arc.
  12. What are the major parts of the brains? Mention the functions of each.
  13. How does chemical co – ordination take place in animals?
  14.
    - a. Name the various plant hormones.
    - b. Give physiological effects of hormones on plant growth and development.

**HOTS QUESTIONS (SOLVED / UNSOLVED)**

Q1. Which hormone:

1. prepares the body for action?
2. controls the amount of sugar (glucose) in blood?
3. brings about changes in boys at puberty?
4. brings about changes in girls at puberty?

Ans. a) Adrenaline                      b) Insulin  
      c) Testosterone                    d) Oestrogen

Q2. i) Name the hormone produced by thyroid gland.

ii Which mineral is necessary for the synthesis of the above hormone?

iii Name the disease suffer from the deficiency of this mineral.

iv Write the function of the above hormones?

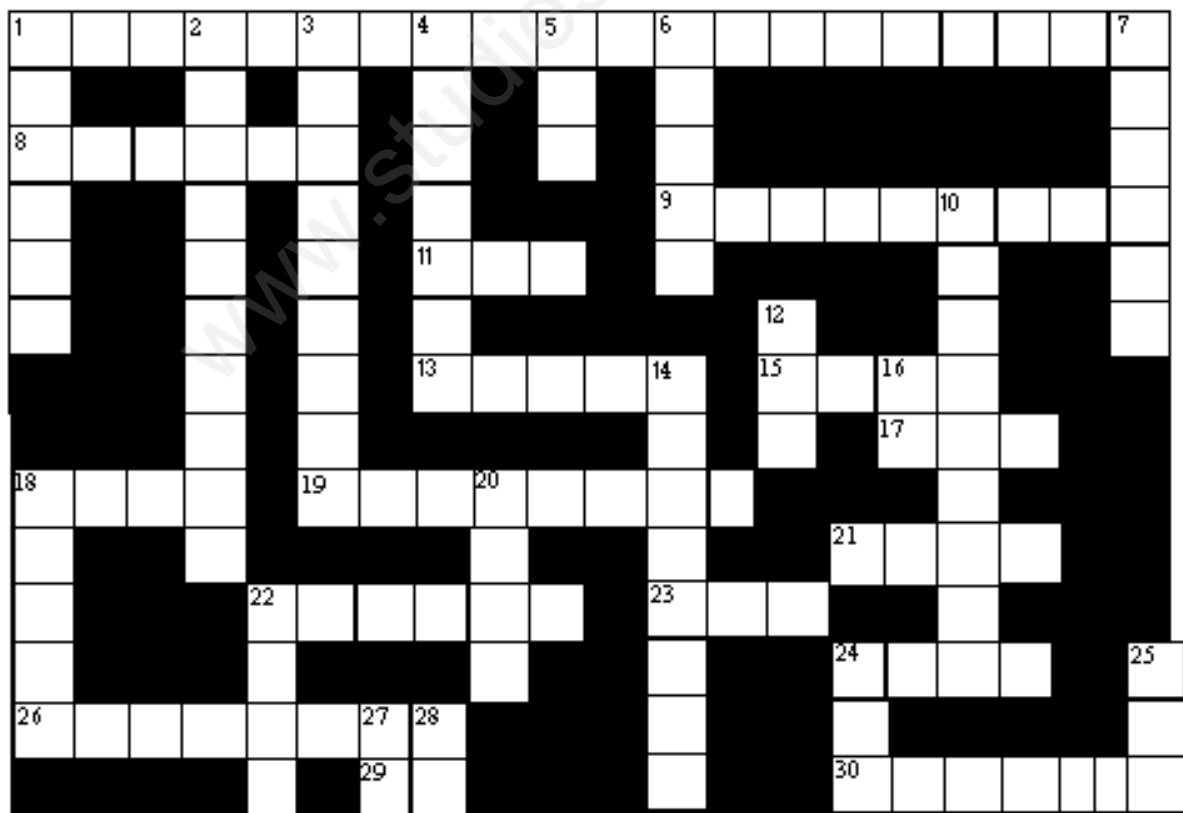
Q3. What is chemotropism? Give one example of chemotropism.

### **ORAL QUESTIONS**

1. What is the basic unit of nervous system?
2. How do neuron conduct message from brain to other parts?
3. What do you mean by CNS?
4. What are its main parts?
5. Which part controls reflex action?
6. What are endocrine glands?
7. What is the secretion of endocrine gland called?
8. Name a gland of human body which secretes both enzymes and hormone.
9. Which plant hormone helps in cell division?
10. Which hormones help on stem elongation?

**QUIZ**

1. Which system of our body is made of organised network for conducting information in the body?
2. Which part of the neuron receives information?
3. What is the name of the neuron which remains between the sensory neuron and the motor neuron? Where is it located?
4. Which part of the brain helps us to do activities like riding a cycle and walking in a straight line?
5. What are two major types of muscles we have?
6. What causes change in leave of 'touch me not' plant?
7. Which hormone helps us to prepare to combat adverse condition?
8. Name a female sex organ which produces gametes as well as female hormone.

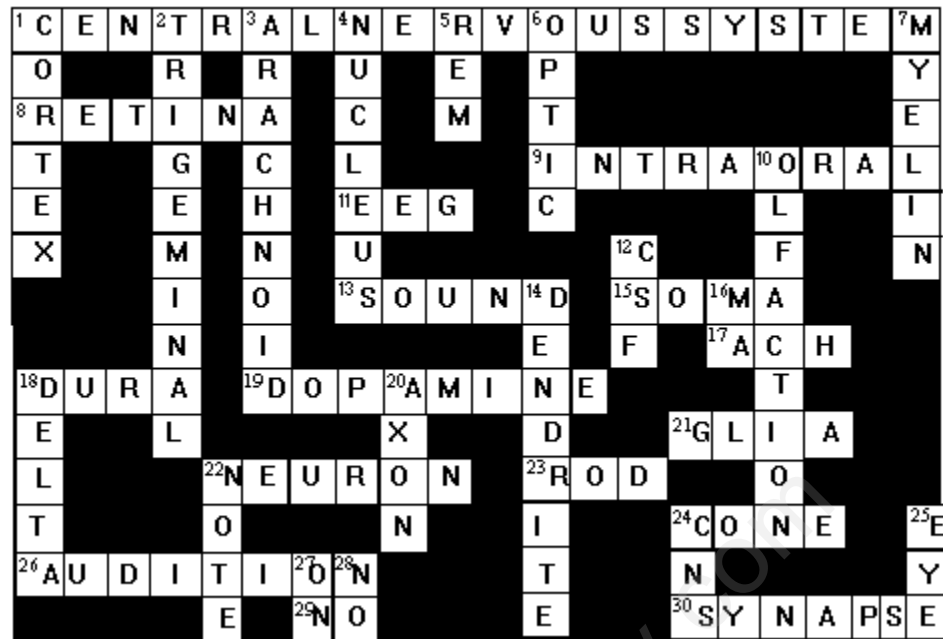
**CROSS WORD PUZZLE: NERVOUS SYSTEM**

**Clues****ACROSS**

1. Composed of the brain and spinal cord (3 words).
8. Contains photoreceptors; on the inner posterior portion of eye.
9. "Inside the mouth"
11. Electrical brain activity recorded with scalp or brain electrodes (abbreviation).
13. Necessary for hearing
17. Neurotransmitter in brain, spinal cord and peripheral nervous system (abbreviation).
18. Outermost layer of meninges.
19. Neurotransmitter lacking in patients with Parkinson's disease.
21. Supportive cells of the nervous system; "glue".
22. Nerve cell.
23. Photoreceptor that is not used for color vision.
24. Photoreceptor that is used for color vision.
26. The sense of hearing.
29. Opposite of "Yes"
30. Junction between two neurons.

**DOWN**

1. In the brain, it is the outermost layer of the gray matter.
2. The fifth cranial nerve.
3. The middle layer of the meninges.
4. The part of the cell containing chromosomes.
5. Period of sleep when dreams occur (abbreviation).
6. The second cranial nerve.
7. Fat-like substance that surrounds some axons.
10. The first cranial nerve.
12. Fluid that fills the ventricles (abbreviation).
14. Part of neuron that takes information TO the cell body.
16. Short for "mother".
18. Electrical brain activity between 2 and 4 Hz.
20. Part of neuron that takes information AWAY from the cell body.
22. A short written letter.
24. Abbreviation for 1 across.
25. Organ for vision.
27. Opposite of "off".
28. Opposite of "yes".

**ANSWERS: CROSS WORD PUZZLE: NERVOUS SYSTEM****ELECTRICITY**