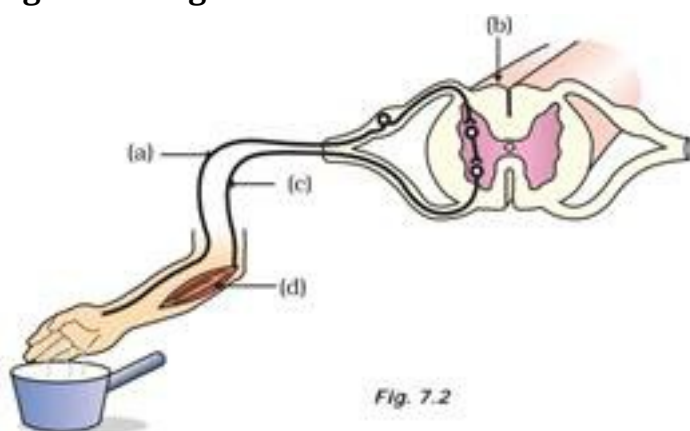


CBSE Class 10 Science
NCERT Exemplar Solution
Chapter 7
Control and Coordination

Short Answer Questions

34. Label the parts (a), (b), (c) and (d) and show the direction of flow of electrical signals in Figure.



Ans. (a) Sensory neuron

(b) Spinal cord

(c) Motor neuron

(d) Muscle

35. Name the plant hormones responsible for the following

(a) elongation of cells

Ans. Auxin

(b) growth of stem

Ans. Giberellins

(c) promotion of cell division

Ans. Cytokinin

(d) falling of senescent leaves.

Ans. Absciscic acid

36. Label the endocrine glands in Figure.

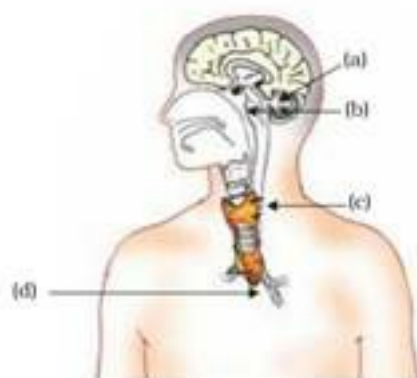


Fig. 7.3

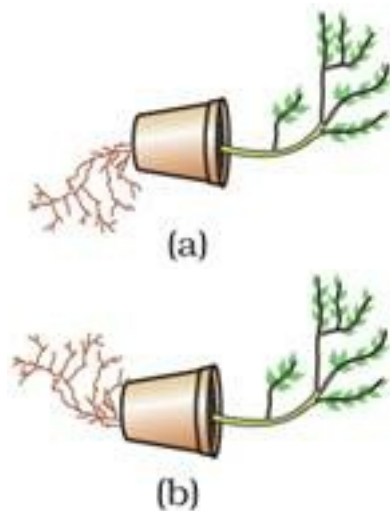
Ans. (a) Pineal gland

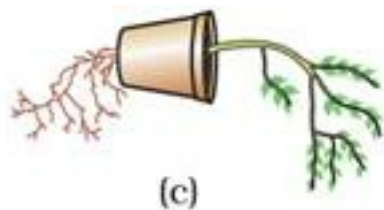
(b) Pituitary gland

(c) Thyroid gland

(d) Thymus

37. In figure (a), (b) and (c), which appears more accurate and why?





Ans. Figure 'a' appears more accurate. In this figure roots are showing positive geotropism, while shoot is showing negative geotropism and positive phototropism.

38. Label the parts of a neuron in Figure.

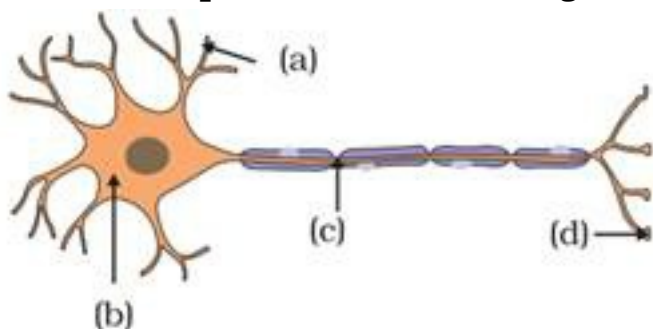


Fig. 7.5

Ans. (a) Dendrite

(b) Cell body

(c) Axon

(d) Axon terminal

39. Match the terms of Column (A) with those of Column (B)

Column A	Column B
(a) Olfactory receptors	(i) Tongue
(b) Thermal receptors (temperature receptors)	(ii) Eye
(c) Gustatoreceptors	(iii) Nose
(d) Photoreceptors	(iv) Skin

Ans. (a)-iii (b)-iv (c)-i (d)-ii

40. What is a tropic movement? Explain with an example.

Ans. The movements which are in a particular direction in relation to the stimulus are called

tropic movements. Tropic movements happen as a result of growth of a plant part in a particular direction. There are four types of tropic movements, viz. geotropic, phototropic, hydrotropic and thigmotropic.

Example : Roots usually show positive geotropic movement, i.e. they grow in the direction of the gravity. Stems usually show negative geotropic movement.

41. What will happen if intake of iodine in our diet is low?

Ans. Iodine is essential for manufacture of thyroxin in the body. If intake of iodine in our diet is low, it will reduce the production of thyroxin. This can result in hypothyroidism. It can even result in goiter.

42. What happens at the synapse between two neurons?

Ans. The junction between two neurons is called synapse. When electrical impulse reaches the axonal end of a neuron, it sets off the release of neurotransmitters in the synapse. These neurotransmitters enter the dendrite of another neuron to set off electrical signal in that neuron. That is how electrical impulse travels from one neuron to another.

43. Answer the following:

(a) Which hormone is responsible for the changes noticed in females at puberty?

Ans. Oestrogen

(b) Dwarfism results due to deficiency of which hormone?

Ans. Growth hormone

(c) Blood sugar level rises due to deficiency of which hormone?

Ans. Insulin

(d) Iodine is necessary for the synthesis of which hormone?

Ans. Thyroxin

44. Answer the following:

(a) Name the endocrine gland associated with brain?

Ans. Pituitary

(b) Which gland secretes digestive enzymes as well as hormones?

Ans. pancreas

(c) Name the endocrine gland associated with kidneys?

Ans. Adrenal gland

(d) Which endocrine gland is present in males but not in females?

Ans. Testis