

(BOOK 3 UNIT : 8)

MORE ORGAN SYSTEM

FIIL IN THE BLANKS:

- 1) There are approximately a million of nephrons in a kidney.
- 2) The spinal cord runs down through the middle of the backbone.
- 3) The brain is protected by the skull.
- 4) Impulses can travel in one direction only.
- 5) The pituitary gland is sometimes called the master gland.
- 6) The pancreas makes insulin to regulate blood sugar levels.
- 7) An adult human body contains about 40 litres of water.
- 8) Endocrine hormones travels through bloodstream.
- 9) Urea is produced by the break down of proteins.

DEFINE THE FOLLOWING :

a) Hormones: are chemical messengers made in special gland called endocrine gland. They control most of the body function like growth metabolism etc .

b) Reflex action: is an involuntary and spontaneous movement in response to a stimulus.

c) Neuron: A neuron is a specialized cell that forms the basis of the nervous system.

MATCH THE FOLLOWING:

1) Insects touches eyelid	Coughing (3)
2) Body gets cold	Saliva in the mouth(4)
3) Food get in to the windpipe	Sweating (5)
4) hungry and smell of food	Adrenalin (6)
5) Body gets hot	Shivering (2)
6) Adrenal gland	Eye blink (1)

ANSWER THE FOLLOWING:

Q1) Describe the path of a nerve impulse causing a reflex action when accidentally touch a hot plate.

- A) 1) Pain receptors in your skin are stimulated.
- 2) Impulses are sent to the spinal cord along the fibre of a sensory neuron.
- 3) A relay nerve cell passes the message on through a motor neuron to the muscles..
- 4)The muscle contracts and moves your hand away.

Q2) What is the central nervous system?

- A) The brain and spinal cord together are called central nervous system.

Q3) Define synapse and explain how synaps works.

- A) Impulses travel from one nerve to another by a special link called **synapse**. The end of one nerve cell lie very close to the cell body of another nerve cell, they donot touch each other. When an impulse moves along one nerve cell it releases a chemical that diffuse across the synapse and stimulated the other nerve cell.

Q4) What is a target organ?

A) The parts of the body that respond to particular hormone is called target organ.

Q5) Explain how urine is held in your bladder until your body urinate.

A) A ring of muscle at the base of the bladder keeps the bladder closed until your body urinate. A tube carries urine out of the body.

Q6) Explain how the amount of water in the blood is regulated.

A) The amount of water in the blood is monitored as it passes through the brain. The brain sends a hormone to 'tell' the kidneys how much water to get rid off.

Q7) Draw a schematic diagram comparing the hormone and nervous system.

Note : Refer text book 3 (Pg # 114)

Q8) Draw and label the diagram of sensory and motor nerve cell. **(Pg # 110) Book 3**