

Rev
20/1/22

Biology Nervous System Worksheet

1. Name the nerves that are attached to the brain and emerge from the skull. (1)

Ans. Cranial nerves are attached to the brain and emerge from the skull.

2. A microscopic gap between adjacent neurons over which nerve impulses pass from one neuron to the next is called :- (1)

- A. Neurotransmitter
- B. Synapse
- C. Axon
- D. None of the above

3. Spinal Cord originates from _____ part of the brain?
Ans :- Brain stem or at the area called medulla oblongata. (1)

4. What is synapse? How is an electrical impulse created in a neuron? (2)

Ans. Synapse is the point of contact between the terminal branches of the axon of a neuron with the dendrites of another neuron separated by a fine gap. The information acquired at the end of the dendritic tip of a neuron sets off a chemical reaction which creates an electrical impulse.

5. How is brain protected from injury and shock? (2)

Ans. The brain is protected by a skull or cranium which helps the brain from any such injury and the cerebrospinal fluid present between the meninges and brain which acts as a shock absorber and protects it from shock.

6. Give the sequence of events which occurs when we touch a hot

object. Which part of the nervous system plays a major role in sending command to muscles to act without involving thinking process? Name the phenomenon involved. (5)

Ans. When we touch any hot object we can't control it and immediately without thinking anything we pull our hand back. Spinal cord plays a major role in sending command to muscles to act without thinking. The phenomenon involved here is called Reflex action.

7. Complete the two lists in the table below to show the different activities and functions of the sympathetic and parasympathetic divisions of the autonomic nervous systems on some key organs of the human body. (5).

Sympathetic Nervous System	Organ	Parasympathetic Nervous System
Dilate pupils	Eye Muscles	Constrict pupils
Inhibit salivation	Salivary glands	Stimulate Saliva
Increase heartbeat	Heart	Normalise heartbeat
Relax airways	Respiratory system	Constrict airways.
Inhibit activity of stomach	Stomach	Stimulate activity of stomach
Inhibit activity	Intestines	Stimulate activity
Inhibit pancreas	Pancreas	Stimulates pancreas
Inhibit gall bladder	Gall Bladder	Stimulate gall bladder
Relax Bladder	Urinary Bladder	Contract Bladder.