

Name :
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SSLC Unit Test Series 2018 MAY

BIOLOGY
Chapter 01

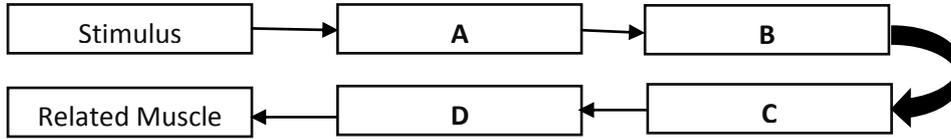
CODE

BGY C01

Time : 1.30 Hours

(Maximum score : 40)

1. The path way of impulses are illustrated in the flow chart. Analyse it and fill in the blanks. (2)

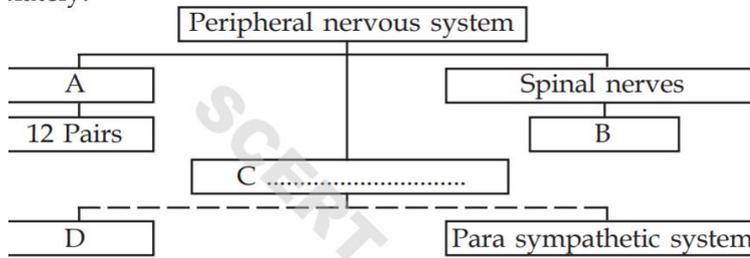


2. The Brain contains a fluid which is formed from and reabsorbed to the blood. (2)

- (a) What is that Fluid?
- (b) What are the functions of that fluid?

3. 'The dorsal root and ventral root plays a major role in the transmission of impulses from spinal cord to various parts of the body and viceversa'. - Explain. (2)

4. One of the components of nervous system is given below. Fill the blanks appropriately. (2)



5. All reflex action takes place under the control of spinal cord. Evaluate the statement with suitable examples. (2)

6. The reason for their diseases of two patients is given (3)

- X - Accumulation of an insoluble protein.
- Y - Destruction of specialized ganglions in the brain.

- (a) Identify the disease of patients X and Y.
- (b) The deficiency of which neurotransmitter causes disease Y?

7. Mohan was partially paralysed after met with an accident. (2)

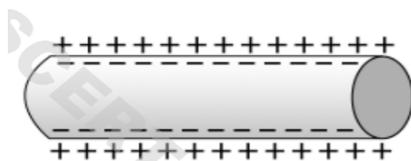
- (a) Which part of mohan is damaged?
- (b) How is brain protected?

8. Observe the figure and label the corresponding parts after copying the figure. (3)



- (a) Part which maintains Homeostasis.
- (b) Second largest part
- (c) Act as Relay station of impulses

9. The following structure shows the charge distribution on either side of plasma membrane of axon. (3)



- (a) Why there is a difference in charge on either side of plasma membrane? (3)
- (b) What changes that the stimulus takes place in the charge distribution and how impulse is transmitted.

10. Which of the following activities takes place under control of Parasympathetic nervous system. (1)

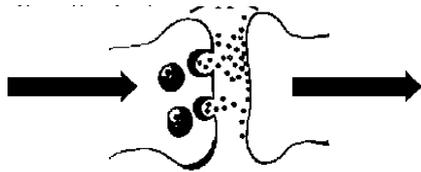
Urinary Bladder contract, Glycogen converted to Glucose, Gastric activities slows down,
Production of saliva decreases

12. The illustration of a nerve based on its function is given below.

Organ \longrightarrow Central Nervous system

- (a) Identify the nerve illustrated above. (1)
 (b) What is the name of the nerve which carries impulses in reverse direction? (1)

13. Observe the figure showing impulses transmitting from one neuron to another.



- (a) Identify the part illustrated above. (1)
 (b) Name the part from which certain chemical substances are released. (1)
 (c) Name any one such chemical substance. (1)

14. In a classroom discussion it is argued that “The vertebral column in adult extends only up to the middle and remaining portion is empty whereas in infants it extends throughout its length,”

- Do you agree with this? Explain your views. (2)

15. Identify the word pair relationship of the first pair and fill up the second pair. (2)

- (a) Cranial Nerves : 12 pairs ; Spinal nerves :
 (b) Skull : Brain ;: Spinal cord
 (c) Hypothalamus: Maintains Homeostasis;: centre of involuntary actions.
 (d) Dendrite : Receives impulse and transmits to Dendron.
 Axon :

16. Identify the odd one out. What is common among others?

- (a) Touch, Light, Hunger, Sound (b) Breathing, sight, intelligence, Hearing. (2)

17. Appu said it is White matter outside and inner grey matter in brain.

- (a) Do you agree with this. Explain. (1)
 (b) Explain white matter and grey matter. (2)

18. Box A and B contain parts of brain and their related functions/ Location.

Write the **name of part, its location and function** by choosing from the box. (4)

Box A
 Cerebellum
 Hypothalamus
 Medulla Oblongata
 Thalamus

Box B
 Situated behind cerebrum
 Controls involuntary actions
 Maintains equilibrium of the body
 Located near cerebrum as rod shaped
 Maintains Homeostasis
 Situated just below the thalamus
 Act as relay station of impulses
 Situated just below cerebrum