

Section A

- Write the answer of the following questions. [Each carries 1 Mark] [20]
- Chemicals which are released at the synaptic junction are called
(A) Hormone (B) Neurotransmitters (C) Cerebrospinal fluid (D) Lymph
 - Potential difference across resting membrane is negatively charged. This is due to differential distribution of the following ions.
(A) Na⁺ and K⁺ ions (B) CO₃²⁺ and Cl⁻ ions (C) Ca²⁺ and Mg²⁺ ions (D) Ca⁴⁺ and Cl⁻ ions
 - An area in the brain which is associated with strong emotion is
(A) Cerebral cortex (B) Cerebellum (C) Limbic system (D) Medulla
 - The function of our visceral organ is controlled by
(A) Sympathetic and somatic neural system.
(B) Sympathetic and parasympathetic neural system.
(C) Central and somatic nervous system
(D) None of the above
 - Resting membrane potential is maintained by
(A) Hormones (B) Neurotransmitters (C) Ion pumps (D) None of the above
 - Which of the following is the effect of parasympathetic nervous system ?
(A) Increase in blood pressure (B) Dilation of pupil
(C) Decrease of blood pressure (D) Secretion of digestive juices
 - In human which cranial nerve is having sensory and motor nerves ?
(A) Olfactory nerve (B) Trigeminal nerve (C) Optic nerve (D) Auditory nerve
 - Which is the largest part of human brain ?
(A) Cerebellum (B) Thalamus (C) Cerebrum (D) Medulla oblongata
 - In brain, where does olfactory centres located ?
(A) Olfactory (B) Cerebrum (C) Cerebellum (D) Mid. brain
 - During action potential, the rapid repolarization of Axon membrane is caused by increased permeability to
(A) K⁺ (B) Cl⁻ (C) Na⁺ (D) Ca²⁺
 - Myelinated nerve fibre differ from non-myelinated nerve fibres in
(A) Lacking nodes of Ranvier (B) Being without Schwann cell
(C) Showing saltatory conduct of nerve impulse (D) Slow conduction of nerve impulse
 - Where are myelinated nerve fibres found ?
(A) Spinal nerves (B) Cranial nerves (C) Both (A) and (B) (D) None of these
 - The terminal end of axon is called as
(A) Dendrite (B) Nissl's granule (C) Synaptic knob (D) Schwann's cell
 - In a resting nerve, what is true ?
(A) 3Na⁺ are pumped in and 2K⁺ pumped out
(B) 3Na⁺ are pumped out for every 2K⁺ pumped in

- (C) There are no $\text{Na}^+ - \text{K}^+$ pump
(D) $\text{Na}^+ - \text{K}^+$ pump stops working
15. The cerebral hemispheres are connected by a tract of nerve fibres called as
(A) Hypothalamus (B) Corpus callosum (C) Medulla (D) Pons
16. Sexual behaviour and expression of emotional reactions is regulated by
(A) Mid brain (B) Hind brain
(C) Forebrain (D) Corpora quadrigeminal
17. Which meninge of Brain is non-vascular ?
(A) outermost layer (B) innermost layer (C) middle layer (D) all of these
18. What does each branch of axon terminate into ?
(A) Synaptic knob (B) Vesicles (C) Tubules (D) Another cell
19. Which of the following is not a part of the cranial meninges ?
(A) Dura mater (B) Arachnoid (C) Pia mater (D) Corpus callosum
20. A : Stimulus is interpreted by the brain and not by sense organs.
R : Sense organs act as transducers, transforming the stimulus energy into impulse energy.
(A) A and R both are correct and R is correct explanation of A.
(B) A and R are correct but R is not correct explanation of A.
(C) A is correct and R is false.
(D) Both A and R are false.