# NEURAL CONTROL AND COORDINATION

## **EXERCISE**

				/ in					
1.	Afferent nerve fiber (1) C.N.S. to effector	conducts impulse from :- (2) Receptor to C.N.S.	NERVE IMPULSE CONDUCTION						
	(3) Receptor to effect		11.	When a nerve fibers is stimulated the inside of the membrane becomes :-					
2.	The nerves leading to the central nervous system			(1) Filled with acetyl choline					
	are called :-			(2) Negatively charged					
	(1) Afferent	(2) Efferent		(3) Positively charged					
	(3) Motor	(4) None		(4) Neutral					
3.	Unit of nervous syste	m :-	12.	Nerve impulses are initiated by nerve fibers only when the membrane shall become more permeable					
	(1) Neuron	(2) Neuroglia							
4.	(3) Axon	(4) Cyton		to:-					
	Integrative exetem in	the heady are		(1) Adrenaline (2) Phosphorus					
4.	Integrative system in (1) Endocrine system			(3) Sodium ions (4) Potassium ions					
	(2) Blood vascular sys		13.	When the axons membrane is positively charged					
	(2) Bioda vascalar sys	tom (1) Bom I & B		outside and negatively charged inside, then the					
5.		f the functional activities in		condition is known as:-					
	human is acheieved b			<ul><li>(1) Action potential</li><li>(2) Resting potential</li><li>(3) Active potential</li></ul>					
	(1) Nervous system (3) Blood	<ul><li>(2) Endocrine system</li><li>(4) Muscular system</li></ul>	7						
	(3) Blood	(4) Musculai system		(4) Differential potential					
6.		ated with which system?	14.	Depolarization of axolemma during nerve conduction takes place because of-					
	(1) Nervous system	(2) Digestive system	1.						
	(3) Muscular system	(4) Blood vascular system		(1) Equal amount of Na+ & K+ move out across					
<b>7</b> .	Intercellular communi	cation in multicel <mark>lular organis</mark> m		axolema					
	occurs through -			(2) Na+ move inside					
	(1) Nervous system or	nly		<ul><li>(3) More Na+ outside</li><li>(4) None</li></ul>					
	(2) Digestive system of	only							
	(3) Respiratory system only			In the resting state of the neural membrane,					
	(4) Both nervous and	endocrine sys <mark>tem</mark>		diffusion due to concentration gradients, if allowed would drive :-					
8.	Synaptic vesicles are	found in –		(1) K+ and Na+ out of the cell					
	(1) presynaptic neuron			(2) Na+ into the cell					
	(2) post synaptic neur	ron		<ul><li>(3) Na<sup>+</sup> out of the cell</li><li>(4) K<sup>+</sup> into the cell</li></ul>					
	(3) synaptic cleft								
	(4) none of these		16.	Repolarisation of Neuron is occured due to:- (1) Influx of Na+					
9.	In a myelinated neuron, two adjacent myelin sheaths			(2) Influx of K <sup>+</sup>					
	are separated by gaps called :			(3) Efflux of Na <sup>+</sup>					
	(1) nodes of Ranvier	(2) synaptic cleft		(4) Efflux of K <sup>+</sup>					
	(3) synaptic knob	(4) neural plate	17.	Pre synaptic membrane is part of :					
10.	Nissl's granules are fo	ound in :		(1) Dendron					
es: 7,	(1) liver cells (2) nerve cells			(2) Axon hillock					
	(3) kidney	(4) heart		(3) Telodendria					

(4) Soma

### **NEURAL CONTROL AND COORDINATION**

- **18.** Corpus callosum connects :-
  - (1) Two cerebral hemisphere
  - (2) Two optic lobes
  - (3) Two olfactory lobes
  - (4) Optic chiasma
- **19.** Outer most covering of brain is called :-
  - (1) Choroid
- (2) Duramater
- (3) Piamater
- (4) Arachnoid
- 20. Piamater is:
  - (1) Inner most meninge
- (2) Middle meninge
- (3) Outer meninge
- (4) None
- **21.** Which of the following is not a part of hind brain:
  - (1) Medulla oblongata
- (2) Thalamus
- (3) Cerebellum
- (4) Pons
- **22.** Which of the following is the part of mid brain?
  - (1) Cerebrum
  - (2) Diencephalon
  - (3) Corpora quadrigemina
  - (4) None of these
- **23.** Which part of the brain regulates the body temperature, hunger and water balance:
  - (1) Hypothalamus
  - (2) Infundibulum
  - (3) Medulla oblongata
  - (4) Pons veroli
- **24.** Column 'I' list the parts of human brain and column 'II' lists the functions. Match the two columns and identify the correct choice from those given -

#### Column I Column II

- (A) Cerebrum
- (i) Controls the pituitary
- (B) Cerebellum
- (ii) Controls vision and hearing
- (C) Hypothalamus

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Ans.

- (iii) Controls the rate of heart beat (iv) Seat of intelligence
- (D) Midbrain
- ...
- (v) Maintains body posture
- (1) A=v, B=iv, C=ii, D=i
- (2) A=iv, B=v, C=ii, D=i
- (3) A=v, B=iv, C=i, D=ii
- (4) A=iv, B=v, C=i, D=ii

- **25.** The correct sequence of meninges of brain from outside to inside is:
  - (1) duramater  $\rightarrow$  arachnoid  $\rightarrow$  piamater
  - (2) arachnoid  $\rightarrow$  duramater  $\rightarrow$  piamater
  - (3) piamater  $\rightarrow$  duramater  $\rightarrow$  arachnoid
  - (4) duramater  $\rightarrow$  piamater  $\rightarrow$  arachnoid
- **26.** Which of the following is not an organ of the central nervous system:-
  - (1) Brain
- (2) Spinal cord
- (3) Medulla oblongata
- (4) Vagus
- **27.** Purely motor cranial nerve includes :-
  - (1) I, V, VII
- (2) I, II, IV
- (3) III, IV, VI, XI
- (4) None of these
- 28. Number of spinal nerves in human:-
  - (1) 31 pairs
- (2) 32 pairs
- (3) 12 pairs
- (4) 37 pairs
- 29. Stimulation of sympathetic nervous system causes :-
  - (1) Contriction of blood vessels and high blood pressure
  - (2) Dilation of bronchi & pupil
  - (3) Erection of hair
  - (4) All of the above
- **30.** Which one of the following is not an effect of sympathetic nervous system
  - (1) Dilation of pupil
  - (2) Inhibition of peristalsis
  - (3) Elevation of blood pressure
  - (4) Stimulation for saliva secreation

#### REFLEX ACTION

- **31.** Reflex arc consists of :
  - (1) motor nerve
  - (2) sensory nerve
  - (3) both sensory and motor nerves
  - (4) none of these

## **ANSWER KEY**

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	2	1	1	4	1	1	4	1	1	2	3	3	2	2	2
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	4	3	1	2	1	2	3	1	4	1	4	3	1	4	4
Que.	31														