

Neural Control and Coordination

I. Select the correct answer from the following questions:

Question 1.

Human brain has greater development of

- (a) Optic lobes
- (b) Medulla oblongata
- (c) Cerebrum
- (d) Cerebellum

▼ [Answer](#)

Answer: (c) Cerebrum

Question 2.

Outer most covering of brain is

- (a) Pia mater
- (b) White matter
- (c) Arachnoid
- (d) Dura mater

▼ [Answer](#)

Answer: (d) Dura mater

Question 3.

Third ventricle occurs in

- (a) Brain
- (b) Skull
- (c) Bones
- (d) Heart

▼ [Answer](#)

Answer: (a) Brain

Question 4.

Tree like branched structure found in cerebellum is

- (a) Areole
- (b) Arachnoid
- (c) Arboreal
- (d) Arbor

▼ [Answer](#)

Answer: (a) Areole

Question 5.

Number of spinal nerves in human being is

- (a) 31
- (b) 37
- (c) 14
- (d) 20

▼ Answer

Answer: (a) 31

Question 6.

Fourth cranial nerve is

- (a) Trochlear (Pathetic)
- (b) Optic
- (c) Oculomotor
- (d) Trigeminal

▼ Answer

Answer: (a) Trochlear (Pathetic)

Question 7.

Auditory nerve is responsible for

- (a) Sight
- (b) Hearing
- (c) Smell
- (d) None of these

▼ Answer

Answer: (b) Hearing

Question 8.

Synapse is a close proximity of

- (a) Two veins
- (b) Two lymphatics
- (c) Two neurons
- (d) Two arteries

▼ Answer

Answer: (c) Two neurons

Question 9.

Outer region of spinal cord is

- (a) White matter
- (b) Grey matter
- (c) Pia mater
- (d) Dura mater

▼ Answer

Answer: (a) White matter

Question 10.

A nerve impulse leaves a neuron via the

- (a) Dendrites
- (b) Axon
- (c) Cyton
- (d) Nucleus

▼ Answer

Answer: (b) Axon

Question 11.

Regulatory control of temperature

- (a) Hypothalamus
- (b) Cerebellum
- (c) Superior
- (d) Inferior colliculi

▼ [Answer](#)

Answer: (a) Hypothalamus

Question 12.

Endolymph is found in

- (a) Internal ear
- (b) Cnidoblast
- (c) Synovial cavity
- (d) Posterior chamber of eye

▼ [Answer](#)

Answer: (a) Internal Ear

Question 13.

Sequence of ear ossicles is

- (a) Stapes, malleus, incus
- (b) Malleus, stapes, incus
- (c) malleus, incus, stapes
- (d) Incus, stapes, malleus

▼ [Answer](#)

Answer: (c) malleus, incus, stapes

Question 14.

Pupil is regulated by

- (a) Radial and circular muscles
- (b) Meridional muscles
- (c) Radial muscles
- (d) Circular muscles

▼ [Answer](#)

Answer: (d) Circular muscles

Question 15.

The hair cells in the ear are stimulated by movements of

- (a) Lymph
- (b) Endolymph
- (c) Perilymph
- (d) Haemolymph

▼ [Answer](#)

Answer: (b) Endolymph

Question 16.

Cochlea of mammalian ear helps in

- (a) Phonoreception
- (b) Sound production
- (c) Equilibrium & hearing
- (d) Equilibrium

▼ [Answer](#)

Answer: (a) Phonoreception

Question 17.

Fovea centralis lacks

- (a) Rod ceils
- (b) Blood vessels
- (c) Covering of nerve fibres
- (d) All of these

▼ [Answer](#)

Answer: (d) All of these

Question 18.

Iris is an extension of

- (a) Sclera
- (b) Retina
- (c) Cornea
- (d) Choroid and retina

▼ [Answer](#)

Answer: (d) Choroid and retina

Question 19.

The optic disc is also called

- (a) Blind spot
- (b) Fovea
- (c) Ora serrata
- (d) Optic chiasma

▼ [Answer](#)

Answer: (a) Blind spot

Question 20.

The rods are receptors for

- (a) Vision
- (b) Taste
- (c) Smell
- (d) Hearing
- (e) Touch

▼ [Answer](#)

Answer: (a) Vision

II. Fill in the blanks:

Question 1.

..... is the process through which two or more organs interact and complement the functions of one another.

▼ [Answer](#)

Answer: Coordination

Question 2.

The neural system of all animals is composed of highly specialised cells called '.....' which can detect, receive and transmit different kinds of stimuli.

▼ [Answer](#)

Answer: neurons

Question 3.

The human neural system is divided into two parts, namely, (i) and (ii)

▼ [Answer](#)

Answer: the central neural system (CNS), the peripheral neural system.

Question 4.

The nerve fibres of the PNS are of two types, namely, (a) and (b)

▼ [Answer](#)

Answer: afferent fibres, efferent fibres.

Question 5.

The PNS is divided into two divisions called and

▼ [Answer](#)

Answer: somatic neural system, autonomic neural system

Question 6.

A neuron is a microscopic structure composed of three major parts, namely,, and

▼ [Answer](#)

Answer: cell body, dendrites, axon.

Question 7.

There are two types of axons, namely, and

▼ [Answer](#)

Answer: myelinated, non-myelinated

Question 8.

The brain can be divided into three major parts: (i), (ii), and (iii)

▼ [Answer](#)

Answer: forebrain, midbrain, hind brain

Question 9.

The midbrain is located between the of the forebrain and pons of the hind brain.

▼ Answer

Answer: thalamus/hypothalamus,

Question 10.

The hind brain comprise, and

▼ Answer

Answer: pones, cerebellum, medulla.

Question 11.

The iris is called the

▼ Answer

Answer: pupil.

Question 12.

There are two types of photoreceptor cells, namely

▼ Answer

Answer: rods and cones

Question 13.

The photosensitive compounds in the human eyes is composed of (a protein) and (an aldehyde of vitamin A).

▼ Answer

Answer: opsin, retinal

Question 14.

The ear can be divided into three major sections called the, the and the

▼ Answer

Answer: outer ear, middle ear, inner ear

Question 15.

The coiled portion of the labyrinth is called

▼ Answer

Answer: cochlea.

III. Mark the statements True (T) or False (F)

Question 1.

The waves in the lymphs induce a ripple in the basilar membrane.

▼ Answer

Answer: True

Question 2.

The saccula and utricle contain a projecting ridge called macula.

▼ Answer

Answer: True

Question 3.

The inner ear also contains a complex system called hair cells.

▼ Answer

Answer: False

Question 4.

The hair cells are present in rows on the internal side of the organ of corti.

▼ Answer

Answer: True

Question 5.

At the base of the cochlea, the scala vestibuli ends at the otolith organ.

▼ Answer

Answer: False

Question 6.

The fluid filled inner ear called labyrinth consists of two parts, the bony and the membranous labyrinths.

▼ Answer

Answer: True

Question 7.

The malleus is attached to the tympanic membrane and the stapes is attached to the oval window of the cochlea.

▼ Answer

Answer: True

Question 8.

The space between the lens and the retina is called aqueous chamber.

▼ Answer

Answer: False

Question 9.

The space between the cornea and the lens is called vitreous chamber

▼ Answer

Answer: False

Question 10.

The ciliary body itself continues forwards to form a pigmented and opaque structure called the iris.

▼ Answer

Answer: True

IV. Match the column I with column II.

Column I	Column II
(a) Photoreceptor cells	1. Cerebrum, thalamus and hypothalamus
(b) Dense connective tissue	2. Corpus callosum
(c) Choroid	3. reflex action
(d) Central nervous system	4. rods and cones
(e) Hind brain	5. Passes through the mid brain
(f) Cerebral aqueduct	6. sclera
(g) Forebrain	7. Hypothalamic hormones.
(h) Neurosecretory cells	8. Contain many blood vessels
(i) Hemispheres	9. Cranial meninges
(j) The brain	10. pons, cerebellum and medulla
(k) Neurotransmitters bind	11. plasma membrane
(l) Plasma membrane	12. resting potential
(m) Nerve impulse	13. myelinated and non-myelinated.
(n) axons	14. receptors
(o) neuron	15. cell body, dendrites and axon

▼ Answer

Answer:

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