

Board – ICSE

Class – 10

Topic – Nervous system and Sense Organ

1. Fill in the blanks:

- (i) Tympanic chamber is filled with _____.
- (ii) _____ is the organ of balance and hearing in the body.
- (iii) An inability to focus on nearby objects due to loss of elasticity of the lens with age is called _____.

2. True & False:

- (i) Cochlea of the ear is concerned with the sense of balance.
- (ii) Cones are the receptor cells in the retina of the eye sensitive to dim light.
- (iii) Hypermetropia is a defect of the eye caused due to the eyeball elongation.
- (iv) Rods are responsible for vision in the dark.

3. Match the Column:

Column A

Column B

- | | |
|--------------------------------|--|
| (i) Auditory (Eustachian tube) | (a) Provide information about the spatial orientation of the head. |
| (ii) Incus | (b) Transfers vibrations from a bone to a membrane |
| (iii) Semi-circular canal | (c) Equalizes pressure between the middle ear and the atmosphere. |
| (iv) Oval window | (d) Transfers vibrations from a bone to a bone. |
| (v) Stapes | (e) Transfers vibrations from a bone to a fluid. |

4. Multiple Choice Questions:

- (i) The sequence of ear ossicles of vertebrates starting from the tympanum is:
 - a) Incus, Malleus, Stapes
 - b) Stapes, Malleus, Incus
 - c) Malleus, Incus, Stapes
 - d) Stapes, Incus, Malleus
- (ii) The aperture in the eye through which light enters is the:
 - a) Pupil
 - b) Conjunctiva
 - c) Ciliary muscles
 - d) Choroid
- (iii) The parts of the human ear concerned with hearing are :

- a) Cochlea,, ear ossicles and tympanum
 - b) Semicircular canals, Utriculus and sacculus
 - c) Eustachian tube, tympanum and Utriculus
 - d) Perilymph, ear ossicles and semicircular canals
5. Give Technical Terms:
- (i) The nutritive layer of the eye which also presents reflection of light.
 - (ii) Name the part of the retina on which an object is focused for the clearest vision.
6. State the Location:
- (i) Semicircular canals
 - (ii) Organ of Corti
 - (iii) Pinnae
7. Choose the Odd One Out:
- (i) Semicircular canals, cochlea, Tympanum, Utriculus.
 - (ii) Myopia, cataract, Hypermetropia, Squint, cretinism.
 - (iii) Ciliary muscle, Chords, Fovea, Gustatory cells.
 - (iv) Pons, Cerebellum, Medulla Oblongata, Cerebrum.
8. Name the Following:
- (i) Name the three small bones present in the middle ear. What is the biological term for them collectively?
 - (ii) Give the technical term for the structure found in the inner ear.
 - (iii) The area where the image is formed but not seen by our eye is termed as.
 - (iv) The innermost layer of the eye.
9. Explain the Terms:
- (i) Accommodation in the eye
 - (ii) Presbyopia
10. Write the functional activity of the following structures:
- (i) Choroid coat in the eye
 - (ii) Aqueous humour
 - (iii) Endolymph
 - (iv) Conjunctiva
11. Draw a diagram of the human eye as seen in a vertical section and label the parts which suits the following descriptions relating to the:
- (i) Photosensitive layer of the eye.
 - (ii) Structure which is responsible for holding the eye lens in its position.

- (iii) Structure which maintains the shape of the eye ball and the area of no vision.
- (iv) Anterior chamber seen in front of the eye lens.
- (v) Outer most transparent layer seen in front of the eye ball.

12. Give technical terms:

- (i) What type of lens is used to correct?
 - a) Astigmatism
 - b) Myopia
 - c) Hypermetropia.
- (iv) The path which responsible for protecting the eye from sweat.
- (v) The type of lens used to correct myopia is

13. State the location:

- (i) Yellow spot
- (ii) Incus
- (iii) Iris