

Board – ICSE

Class – 10th

Topic – Sense Organs.

1. Name the following : The layer of the eyeball that forms the transparent Cornea

Ans: Sclerotic layer (Sclera)

2. Mention the exact location of the Lacrimal gland.

Ans: Eyes

3. Mention the exact location of Malleus

Ans: Middle ear

4. What is the biological term for the three small bones present in the middle ear collectively?

Ans: Collectively they are termed as ossicles.

5. State whether the following is simple reflex, conditioned reflex or neither of the two:

Contraction of eye pupil:

Ans: Contraction of eye pupil: Simple

6. Differentiate between members of the following pair with reference to what is asked in bracket. Rod and cone cells (pigment contained)

Ans: Rod cells contain rhodopsin whereas the cone cells contain iodopsin.

7. Note the relationship between the first two words and suggest the suitable word for the fourth place. Cones: Iodopsin: Rods:

Ans: Cones: Iodopsin: rods: rhodopsin

8. Name the following:

(a) The photoreceptors found in the retina of the eye.

(b) The part of the eye responsible for its shape.

(c) The region in the eyes where the rods and cones are located is the

Ans: (a) Rods and cones (b) Cornea (c) Retina

9. Name the two structure in the eye responsible for bringing about the change in the shape of the lens.

Ans: Ciliary muscles and suspensory ligament

10. What is the shape of the lens during distant vision?

Ans: The shape of the lens during distant vision is rounded or more convex.

11. What is the shape of the lens during near vision?

Ans: The shape of the lens during near vision is flattened.

12. What is meant by power of accommodation of the eye?

Ans: The ability of the eye to focus sharply on things which are near to the eye as well as far off is known as the power of accommodation.

13. Sometimes you remember a vivid picture of a dream you saw. What is the role of your eyes in this experience?

Ans: The brain sees the vivid picture of the dream through the eyes. Our eyes have actually never seen the vivid picture. This is an example of optical illusion. The area of dream is controlled by the cerebrum of the central nervous system. So sometime we can remember the vivid picture seen in the dream.

14. Give the technical term for the structure found in the inner ear.

Ans: The middle ear or membranous labyrinth has two structures inside it, the cochlea and the semi-circular canals.

15. Name the three ear ossicles. How do they contribute in the mechanism of hearing?

Ans: The three ear ossicles are: Malleus (hammer), Incus (anvil) and Stapes (stir up). The last ear ossicle, stapes, vibrates and transmits the vibration to the oval window. The role of other two ear ossicles is to magnify the vibration of stapes as a result of their lever like action.

16. Where is the Utriculus located? Briefly mention its function.

Ans: Utriculus is located in the inner ear. It joins the semi-circular canals to cochlea. It also helps in maintaining static balance of the body.

17. Where is the Semicircular canals located? Briefly mention its function.

Ans: Semicircular canals are located in the inner ear. These help in maintaining the dynamic equilibrium of the body.

18. Where is the Cochlea located? Briefly mention its function.

Ans: Cochlea is located in the inner ear. It helps in transmitting impulses to the brain via the auditory nerve.

19. Where is the oval window located? Briefly mention its function.

Ans: Oval window is located in the middle ear. It helps in setting the fluid in the cochlear canals into vibration.

20. What is a lacrimal gland?

Ans: Lacrimal gland is a tear gland located at the upper sideward portion of the eye orbit. Its secretion lubricates the surface of the eye, washes always the dust particles and kills germs.