

B) CHOROID

- Bluish middle layer. Contains many blood vessels.
- Choroid is thin over posterior two-thirds of the eyeball, but it is thick in the anterior part to form ciliary body.
- Ciliary body continues forward to form a visible pigmented and opaque portion of the eye called the iris.
- Iris has a central opening called pupil. The diameter of the pupil is regulated by the muscle fibres of iris.
- This helps to regulate the amount of light entering the eye.
- The eyeball contains a transparent crystalline lens.
- It is held in place by ligaments attached to the ciliary body.
- Closing of the eyelids when light falls on them.
- Knee jerk phenomenon.
- If a child sees or smells a food unknown to him, he does not salivate
- But if he sees or smells that food every time before tasting it, he salivates (conditioned reflex).

The pathway of impulses in a reflex action is called Reflex arc.

It consists of

§ A receptor organ:

It receives the stimulus.

§ Sensory (afferent) neuron:

It transmits impulses from sense organ to CNS.

§ Intermediate (connector) neuron:

It connects sensory and motor neurons.

§ Motor (efferent/effector/excitor) neuron:

-It conducts

impulse from the CNS to effector organ.

§ An effector organ (muscle/gland):

It responds to impulse.

C) RETINA

- Inner layer.
- It contains 3 layers of cells – from inner to outer
 - ganglion cells, bipolar cells & photoreceptor cells.
- Photoreceptor cells are 2 types: rods and cones.
- They contain photosensitive proteins (photopigments).
- Photopigments are formed of opsin (a protein) and retinal (an aldehyde of vitamin A).

CONE CELLS

- Function: Daylight (photopic) vision & colour vision.
- There are 3 types of cones containing photopigments