1. **How is the human eye adapted to its function?**



* conjunctiva is thin/transparent/tough to allow light to pass through/to protect the eye
* Sclerotic layer is made up of (collagen) fibers/fibrous. It maintains shape of the eyeball/protects the eye
* cornea is transparent/curved thus refracts light rays/allows light to pass through
* Choroid is a layer of tissue with black pigment/dark pigment. Prevents internal reflection of light in the eye/contains blood vessels that supply oxygen/nutrients/remove (metabolic) wastes from the eye
* retina has cones/rods for bright colour vision/low light vision
* yellow spot has a high concentration of cones for accurate vision/visual acuity
* Blind spot has no cones and rods. Place where optic nerve leaves/enters the eye
* optic nerve has (sensory) nerve fibers for transmission of impulses to the brain (for interpretation)
* Lens is biconvex/made up of elastic material/transparent. Adjust focus on far or near objects allow light to pass through/for refraction of light rays
* ciliary body is made up of muscle fibers/glandular which contract/relax to change shape
* suspensory ligaments are inelastic to hold lens in position/attach it to ciliary body
* iris(is the coloured part of the eye it) has radial and circular muscles which control size of pupil
* pupil is the small hole at the centre of iris through which light passes into the eye
* aqueous humor is a fluid through which oxygen/nutrients pass to the cornea/lens/maintains shape of the eyeball/refracts light rays
* vitreous humor is a fluid which maintains shape of eye/refracts light rays
1. **Explain how the eye forms an image**
* the mammalian eye works like a camera
* light rays enter the cornea pass through the pupil, aqueous humor, lens and vireous humor
* light rays are refracted by the aqueous and humor and lenses
* finally light falls on the retina to form an image
* the image is real and inverted and smaller than object, back to front/reversed
* Retina forms a fine image when light rays reach it.