Class-X(Concept Map)

HUMAN EYE

Forms an inverted real image on retina

Fine focal adjustments

Controls size of pupil

Dark muscular diaphragm

Controls amount of light

Light enters through cornea

To change focal length of lens

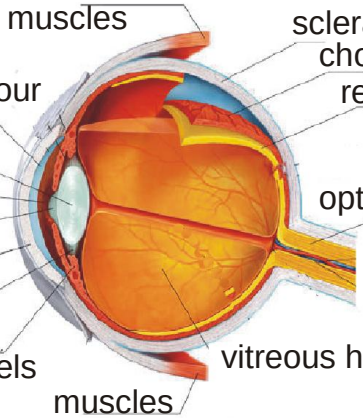


Image formed

Has enormous light sensitive cells

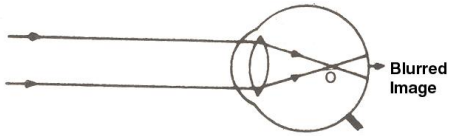
Get activated upon illumination and generate electrical signals

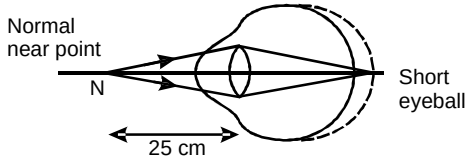
opticnerve

Electrical signals sent to brain via optic nerves

Eye ball

Sphere diameter 2.3 cm

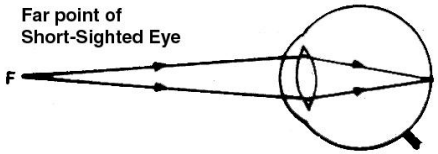


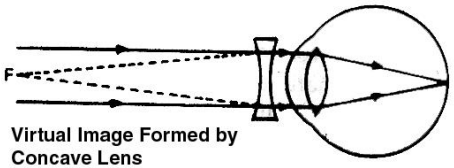


(a)

Structure & working

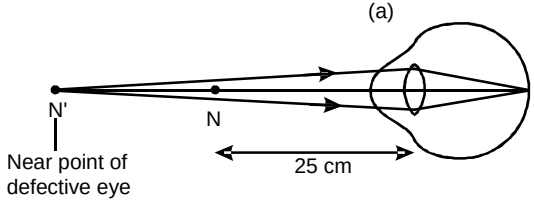
Myopia



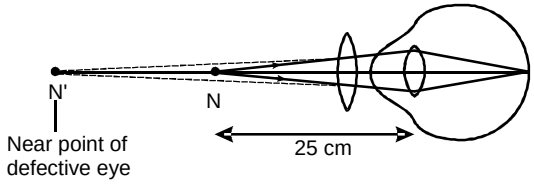


Defects

Hypermetropia



(b)



(c)

Cataract

- For old people lens becomes milky & cloudy
- Lens restored by cataract surgery

Accomodation

- Ability to adjust focal length its self
- Can't decreased below certain minimum limit
- The farthest point for normal eye-infinity
- The least distance for normal eye-25 cm

Presbyopia

Caused due to old age

Correction:Bifocal lens with both concave and convex lens