

Q Write definition, causes, symptoms and treatment through diagram of the following:

- (i) Short sightedness (ii) Far sightedness  
(iii) colour blindness (iv) night blindness

(1) SHORT-SIGHTEDNESS:

Short sightedness is also known as near sightedness and myopia. which means that you can see objects that are near clearly but have difficulty seeing objects that are farther away.

for example if someone has myopia, he may not be able to make out highway signs until they are just a few feet away.

(A) CAUSES:

- > A family history of myopia
- > spending a lot of time doing "close up" work, like reading or using screens like those on smart phones or computers.
- > not spending a lot of time outdoors
- > ethnicity.

(B) SYMPTOMS:

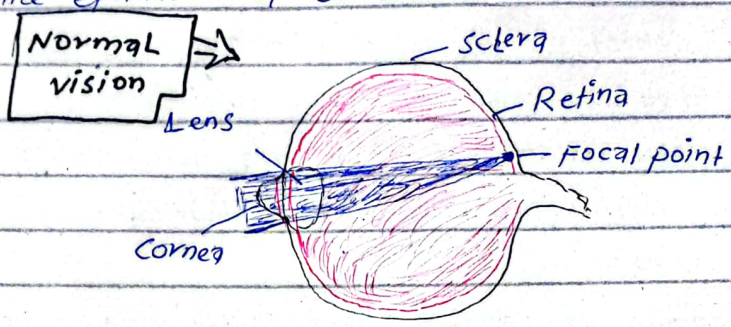
- > faraway objects look blurred or fuzzy.
- > close items appear clear
- > headaches
- > eye strain
- > squinting

(C) TREATMENT:

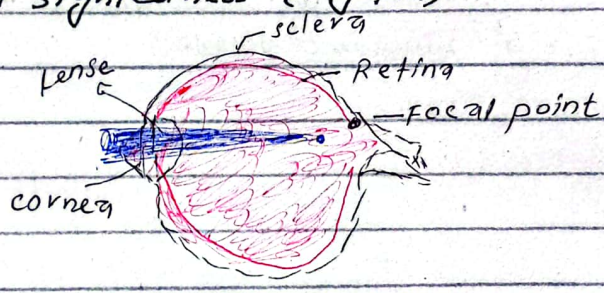
- > Eyeglasses
- > contact lenses

-> LASIK: it is a laser assisted (situ keratomileus procedure) common surgery for myopia.

-> LASEK: it is a laser assisted (sub epithelial keratectomy procedure) where a doctor uses a laser to cut a flap through the epithilium of cornea.



short sightedness (myopia)



② FAR SIGHTEDNESS

Farsightedness or Hyperopia is a common eye condition that may cause you to have blurry close up vision.

people with hyperopia:

- > Typically have an easier time seeing objects that are far away.
- > Have difficulty focusing their eyes on things that are close up.



### (ii) CAUSES:

- > Having an eyeball that is relatively short (from front to back). Healthcare providers call this "Decreased Axial length".
- > Having a cornea that is flatter than expected.

### (iii) SYMPTOMS:

- > Blurry vision - especially when looking at things that are close to your face.
- > Blurred vision / fatigue at night.
- > Difficulty reading.
- > Double vision when reading.
- > Dull pain in your eye.
- > Eye strain -
- > Squinting when reading.

### (iv) TREATMENT:

#### Eye glasses:

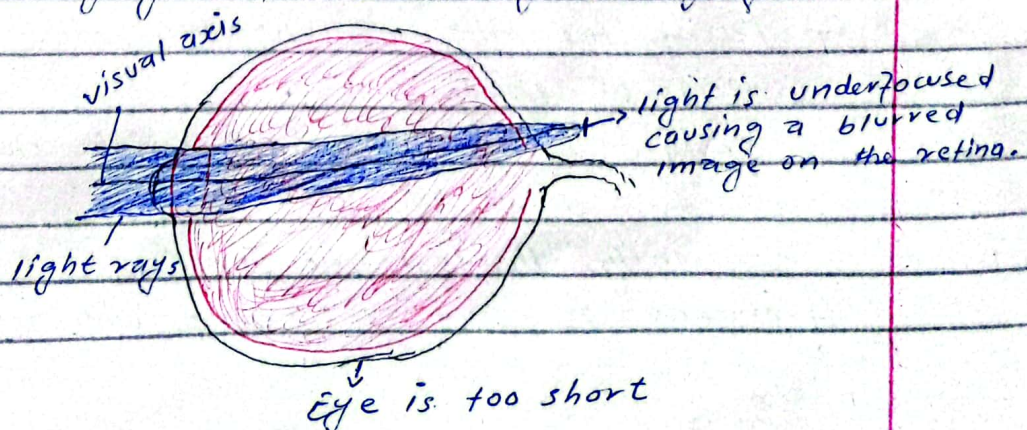
The lenses in eyeglasses provide a simple way to correct hyperopia.

#### contact lenses:

contact lenses work like eyeglasses. They corrects the way light bends when it enters your eye.

#### surgery:

Hyperopia can be corrected through surgery, exp: LASIK eye surgery.





③ ~~color~~ COLOR BLINDNESS:

color blindness (color vision deficiency) is a fairly common condition in which you do not see colors in the traditional way. This happens when cones (a type of nerve cell in your eye retina) are not working correctly. Cones pass light and images as they enter your eye and send signals to your brain that allow you to perceive color.

Ⓐ CAUSES:

- > Exposure to chemicals that harm your nerve system, such as organic solvents, solvent mixtures and heavy metals.
- > Long term exposure to welding lights.
- > Medication, including hydroxychloroquine (to treat rheumatoid arthritis.)
- > Eye condition, including age related issues.
- > Medical conditions that affects your brain or nerve system, including diabetes.

Ⓑ SYMPTOMS:

- You may have a form of color blindness if you have trouble:
- > Telling the difference between certain colors or shades.
  - > Seeing the brightness of certain colors.

Ⓒ TREATMENT:

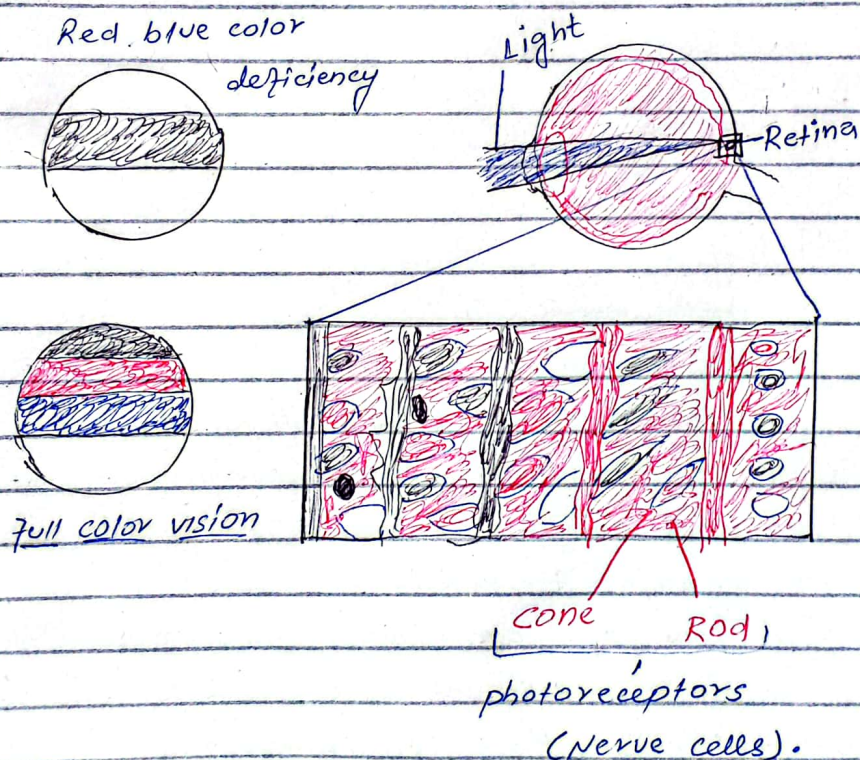
currently, there is no medical treatment or cure for people with inherited ->



color blindness. If you have acquired color blindness, your healthcare provider will ~~the~~ treat the underlying conditions, or adjust your medications as needed.

#### ① PREVENTION:

You can not prevent inherited colour blindness, However you may be able to lower your risk of acquired color blindness, by visiting doctor, yearly check ups.



#### ④ NIGHT BLINDNESS:

Night Blindness, also known as Nyctalopia pronounced (Nik-Tah-LOPE-ee-uh) is when you have trouble seeing in dim or dark settings. It can happen if your eyes have trouble quickly adjusting to changes in brightness or have issues with detecting lights.



### (A) CAUSES:

Night blindness is a symptom of other conditions, not a disease on its own. Conditions that can cause night blindness usually fall into two categories: (1) Not enough light getting to your retina or your retinas not working properly. (2) cataracts, Glaucoma, LASIK.

### (1) Retina related causes of night blindness includes:

Rare, genetic retinal diseases like cone rod dystrophy, retinitis pigmentosa and congenital stationary night blindness. Vitamin A deficiency, gastric bypass surgery and weight loss surgeries.

### (B) TREATMENT:

Treating nyctalopia involves treating the cause. Some conditions are treatable or even curable, like cataracts, or vitamin A deficiency.

A few of conditions that cause night blindness, especially genetic diseases, are not treatable. For these conditions, the only option is try to limit the effects of night blindness or other symptoms.