

ASSIGNMENT

1-7) Mention two causes of (i) Myopia and (ii) Hypermetropia.

Ans) Hypermetropia

A condition in which the objects far away are clearly visible than those nearby.

Causes :

(a) The ciliary muscles get relaxed thus increasing the focal length of the eye lens, resulting low converging power.

(b) The eyeball becomes too small along its axis so that distance between lens and retina is reduced.

Myopia

A condition in which the objects nearby are clearly visible whereas faraway objects are difficult to view.

Causes :

(a) The ciliary muscles contract to reduce the focal length of the eye lens, resulting improper convergence (Over) [before the retina]

(b) The eyeball increases giving huge converging power.

2. → Differentiate ~~between~~ between near and far point.

Ans. → The minimum distance at which the object can be seen directly (distinctly) ~~and~~ without strain is called near point of the eye. For normal vision, it's about 25 cms.

The maximum distance at which the eye can see objects clearly is called far point of vision. It is infinity for normal eye vision and depends from eye to eye.

3. → What is Cataract? How can it be treated?

Ans. → Cataract is a condition in which the ~~the~~ eye lens becomes cloudy and the eyesight becomes foggy.

It can be treated by surgery. The opaque lens is removed and artificial lens is inserted.

4) What do you mean by power of accommodation?

Ans) Power of accommodation is the ability of the eye to focus near and far objects clearly on the retina by adjusting its focal length. Power of accommodation of the eye is limited. It implies the focal length of the eye lens can't be reduced beyond certain minimum limit.