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SUBJECT:- PHYSICS

CLASS:- XTH

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SUBJECT TEACHER:- MR. NEEL NIRANJAN

CHAPTER 4. (LIGHT)

1. List four properties of the image formed by a convex mirror.

Answer. Properties of image formed by a convex mirror:

1. It is always formed behind the mirror, between the pole and its focus.
2. It is always virtual and erect.
3. Its size is always smaller than the object.
4. Magnification is always positive.

2. List four properties of the image formed by a concave mirror, when object is placed between focus and pole of the mirror.

Answer.

1. The image is formed behind the mirror.
2. It is enlarged, he. magnified.
3. It is virtual.
4. It is erect.

3. List four properties of the image formed by a plane mirror.

Answer. Properties of image formed by a plane mirror:

1. It is always virtual and erect.
2. Its size is equal to that of the object.
3. It is formed at the same distance behind the mirror as the object is in front of the mirror.
4. It is laterally inverted.

44. Define the focus of a concave mirror. If the radius of curvature of a convex mirror is 30 cm, what would be its focal length? [Foreign]

Answer. The point on the principal axis where all the rays parallel to it meet after reflection is called focus. Since, $R = 30 \text{ cm}$ and $f=R/2$ we have, $f=+15 \text{ cm}$ for a convex mirror