Light - Reflection and Refraction - Class X - Paper Set 2

1. The bending of light when it passes from one medium to another is called:

    a) Reflection

    b) Refraction

    c) Dispersion

    d) Diffraction

2. The mirror formula is represented as:

    a) $\frac{1}{f} = \frac{1}{v} + \frac{1}{u}$

    b) $\frac{1}{f} = \frac{1}{v} - \frac{1}{u}$

    c) f=u+v

    d) f=u−v

3. In a convex lens, the principal focus is located:

    a) In front of the lens

    b) At the center of curvature

    c) Behind the lens

    d) At infinity

4. A virtual image formed by a concave mirror occurs when the object is:

    a) At the principal focus

    b) Beyond the center of curvature

    c) Between the pole and the principal focus

    d) At infinity

5. A magnification value of -1 means that the image is:

    a) Virtual and smaller

    b) Real and inverted, same size as object

    c) Real and larger

    d) Virtual and larger

6. A convex lens with focal length 10 cm forms an image at 20 cm; the object distance is:

    a) 5 cm

    b) 10 cm

    c) 15 cm

    d) 20 cm

7. A lens with a focal length of -20 cm is:

    a) Convex

    b) Concave

    c) Plane   d) Cylindrical

8. A ray of light passing through the optical center of a lens:

    a) Diverges   b) Converges

    c) Passes without deviation   d) Bends sharply

9. Which of the following has the highest optical density?

    a) Water   b) Glass

    c) Air   d) Diamond

10. The power of a lens with a focal length of 50 cm is:

    a) +2 D   b) -2 D

    c) +0.5 D   d) -0.5 D

Answers for Set 2: 1-b, 2-a, 3-c, 4-c, 5-b, 6-b, 7-b, 8-c, 9-d, 10-a