Light - Reflection and Refraction - Class X - Paper Set 3

1. The distance between the pole and the center of curvature of a spherical mirror is the:

   a) Principal focus
   b) Radius of curvature
   c) Principal axis
   d) Aperture

2. A virtual, erect, and enlarged image is formed by a concave mirror when the object is placed:

   a) Beyond the center of curvature
   b) At the principal focus
   c) Between the pole and the principal focus
   d) At infinity

3. A convex lens is also known as a:

   a) Diverging lens
   b) Converging lens
   c) Parallel lens
   d) Biconcave lens

4. Which phenomenon explains why a pencil appears bent when immersed in water?

   a) Reflection
   b) Refraction
   c) Dispersion
   d) Diffraction

5. The focal length of a concave lens with power -3D is:

   a) -0.3 m
   b) -3.3 m
   c) -0.5 m
   d) -0.33 m

6. An image formed by a convex mirror is always:

   a) Real and inverted
   b) Virtual, erect, and diminished
   c) Enlarged and real
   d) Reduced and real

7. In a plane mirror, the distance between the object and image is:

   a) Double the object distance
   b) Equal to object distance
   c) Half the object distance
   d) Variable

8. The principal axis of a spherical mirror passes through:

   a) Only the pole
   b) Only the focus
   c) Both the pole and center of curvature
   d) Only the center of curvature

9. The unit of power of a lens is:

   a) Meter
   b) Dioptre
   c) Joule
   d) Candela

10. The focal length of a convex mirror with radius of curvature 40 cm is:

    a) 40 cm
    b) 20 cm
    c) -40 cm
    d) -20 cm

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