The Human Eye and the Colourful World - Class X - Paper Set 3

1. When we look at an object through a prism, the light beam that comes out of the prism is called the:

   a) Incident ray
   b) Refracted ray
   c) Emergent ray
   d) Deviated ray

2. The change in focal length of the eye lens is controlled by:

   a) Iris
   b) Retina
   c) Ciliary muscles
   d) Cornea

3. The phenomenon that causes a rainbow to form is:

   a) Reflection
   b) Refraction and dispersion
   c) Diffraction
   d) Polarization

4. A person with hypermetropia requires which type of corrective lens?

   a) Concave
   b) Convex
   c) Plane
   d) Bifocal

5. The minimum distance at which a person with normal vision can see clearly is called the:

   a) Near point
   b) Far point
   c) Least focal distance
   d) Distinct vision

6. Why does the sky appear dark to an astronaut in space?

   a) Lack of atmosphere for scattering
   b) The moon blocks the sun’s light
   c) Light absorption by space
   d) Refraction in space

7. Which of these causes the red appearance of the sun at sunrise and sunset?

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

8. To correct presbyopia, a person may require:

    a) Convex lens only b) Concave lens only

    c) Bifocal lens d) None of these

9. The color of light that bends the least when passing through a prism is:

    a) Blue b) Red

    c) Green d) Violet

10. Which cells in the retina are responsible for color vision?

    a) Rods b) Cones

    c) Neurons d) Ciliary cells

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