

Chapter -2 Human Eye and Colourful World

1 – Mark Questions

1. When we enter from bright sunlight to a dark room, we cannot see initially, why?
2. What do you understand by power of accommodation?
3. A person uses spectacles of power +2D. What is the defect of vision he is suffering from?
4. Name one phenomenon caused by atmospheric refraction.
5. A child cannot read information written on blackboard which is at distance of 6m. But he can see the nearby object, by which defect is he suffering from?

2 – Mark Questions

1. We can see sun two minutes before actual sunrise and two minutes after actual sunset. Why?
2. Why does stars twinkle but planets do not?
3. What is presbyopia? How can it be corrected?
4. Why does the sky appears dark, instead of blue to astronaut?
5. By drawing a neat diagram show the course of a ray of light through a prism, showing clearly the angle of deviation and angle of emergence.

3 – Mark Questions

1. With diagram illustrate the defective and corrected hypermetropic eye.
2. A person with a myopic eye is not able to see beyond 3m distinctly. Determine the nature, focal length and power of the lens required.
3. A ray of white light passes through an equilateral prism and breaks up into component colours. Draw a neat ray diagram to show the path of rays and state which colour: deviate least and deviate most.
4. Why does the sun appear reddish in the early morning?
5. What do you understand by term dispersion of light?
By drawing a neat diagram show how can dispersed light can be recombined to form white light.

5 – Mark Questions

1. What is Myopia? List two causes for the same. Describe with a ray diagram, how this defect is corrected.
2. What is Hypermetropia? List two causes for the same. Describe with a ray diagram, how this defect is corrected.