



ASSIGNMENT NO. 2

SUBJECT: PHYSICS

CLASS-X

JULY'2026

CHAPTER 10: HUMAN EYE AND COLOURFUL WORLD

1. The ability of the eye lens to adjust its focal length is called:
 - (a) Refraction
 - (b) Accommodation
 - (c) Dispersion
 - (d) Reflection
2. Which defect of vision can be corrected using a concave lens?
 - (a) Hypermetropia
 - (b) Myopia
 - (c) Presbyopia
 - (d) Cataract
3. The colour of the sky appears blue due to:
 - (a) Reflection
 - (b) Refraction
 - (c) Scattering of light
 - (d) Dispersion
4. The red colour is used as a danger signal because:
 - (a) It has the highest frequency.
 - (b) It is scattered the least.
 - (c) It is scattered the most.
 - (d) It travels faster than other colours.
5. Define the power of accommodation.
6. What is myopia? Draw a ray diagram.
7. What is hypermetropia? How is it corrected?
8. Why do stars appear to twinkle?
9. Why does the Sun appear reddish at sunrise and sunset?
10. What is Tyndall effect?
11. Why is the sky dark for astronauts in space?
12. Explain the structure and working of the human eye with a labelled diagram.
13. Differentiate between myopia and hypermetropia.
14. Explain atmospheric refraction with two examples.
15. Why is the traffic signal red at the top?
16. Explain why the sky appears blue during the day.
17. State the causes and correction of presbyopia.
18. Explain the formation of a rainbow.
19. Explain the phenomenon of scattering of light. Why is the sky blue and the Sun reddish at sunrise and sunset?
20. Explain atmospheric refraction and discuss:
 - Twinkling of stars
 - Advanced sunrise
 - Delayed sunset