

PH: 9835859669

JSUNIL TUTORIAL

PUNJABI COLONY GALI 01

CLASS 8TH

refraction of light

(I) Define any five. (a). Optical centre (b). principal axis (c). principal focus (d). focal length (e) lens

(II) Choose correct one 1x 5= 5

- 1) A stick in water appears broken due to
(a) Reflection of light (b) refraction of light (c) total internal reflection (d) none of these
- 2) Refractive index of diamond with respect to vacuum is 2.5, then the velocity of light in diamond is. (a) 25×10^8 m/s (b) 2.5×10^8 m/s (c) 1.2×10^8 m/s (d) 2.1×10^8 m/s
- 3) Lateral displacement is directly proportional to:
(a) Angle of incidence (b) angle of refraction (c) Thickness of the slab (d) velocity of light
- 4) A drop of water appears like pearl due to
(a) refraction (b) none (c) reflection (d) total internal reflection
- 5) Myopia can be corrected using
(a) concave lens (b) convex lens (c) cylindrical lens (d) plano convex lens

(II) Answer in brief (any five)

1. Define refractive index. which medium will bend light more- glass or water?
2. What is difference between the displacement produced by a rectangular glass slab in a ray of light and the deviation produced by a glass prism?
3. Explain the term spectrum. Why does a glass prism split white light into its constituent colours?
4. Why does a concave lens always form a virtual image of an object? Draw a diagram to illustrate this.
5. What do you mean by the accommodation of the eye? What gives the eye the power of accommodation?
6. Distinguish between myopia and hypermetropia. Draw diagrams to show how these defects can be corrected by using suitable lenses.
7. What do you mean by refraction of light? In which direction will light bend when travelling from an optically rarer to denser medium?