

Choose the correct answer:

1. The refractive index of four substances A, B, C and D are 1.31, 1.43, 1.33, 2.4 respectively. The speed of light is maximum in

- (a) A (b) B (c) C (d) D

2. Where should an object be placed so that a real and inverted image of same size is obtained by a convex lens

- (a) f (b) $2f$ (c) infinity (d) between f and $2f$

3. A small bulb is placed at the principal focus of a convex lens. When the bulb is switched on, the lens will produce

- (a) a convergent beam of light (b) a divergent beam of light
(c) a parallel beam of light (d) a colored beam of light

4. Magnification of a convex lens is

- (a) Positive (b) Negative (c) either positive or negative (d) zero

5. A convex lens forms a real, diminished point sized image at focus. Then the position of the object is at

- (a) Focus (b) infinity (c) at $2f$ (d) between f and $2f$

6. Power of a lens is $-4D$, then its focal length is

- (a) 4m (b) $-40m$ (c) $-0.25 m$ (d) $-2.5 m$

7. In a myopic eye, the image of the object is formed

- (a) Behind the retina (b) on the retina
(c) in front of the retina (d) on the blind spot

8. The eye defect „presbyopia“ can be corrected by

- (a) Convex lens (b) concave lens (c) convex mirror (d) Bi focal lenses

9. Which of the following lens would you prefer to use while reading small letters found in a dictionary?

- (a) A convex lens of focal length 5 cm (b) A concave lens of focal length 5 cm
(c) A convex lens of focal length 10 cm (d) A concave lens of focal length 10 cm

10. If V_B , V_G , V_R be the velocity of blue, green and red light respectively in a glass prism, then which of the following statement gives the correct relation?

- (a) $V_B = V_G = V_R$ (b) $V_B > V_G > V_R$ (c) $V_B < V_G < V_R$ (d) $V_B < V_G > V_R$