

Class 8 light and vision: Reflection and refraction MCQ with Ans

1. A ray of light strikes the surface of mirror at an angle of 30° with the mirror. The angle of reflection is:
(a) 30° (b) 60° (c) 45° (d) none.
2. An object 20cm high is placed at a distance of 100 cm from a plane mirror .The size of the image will be.
(a) 20 cm (b) 40cm (c) 10cm (d) 100cm
3. Velocity of light in vacuum is
(a) 3×10^8 cm/s (b) 3×10^8 km/s (c) 3×10^8 m/s (d)none of these
4. A concave mirror is a part of a sphere of radius 30cm.It's focal length is
(a) at infinity (b)10cm (c)15cm (d) 60cm
5. Magnification produced by a plane mirror is
(a)-1 (b) zero (c) +1 (d) infinity
6. Mirror used for focusing light is
(a) Concave (b) Convex (c) plane (d) none
7. A concave mirror forms a real and enlarged image of an object if the object is placed at/between
(a) 2F (b) F (c) F and C (d)F and P
8. Focal length of a plane mirror is
(a) zero (b)infinity
(c) double of its aperture (d)half of its aperture
9. $\sin C =$
(a) $n/1$ (b) $1/n$ (c) n^2 (d) $n/2$
10. When a ray of light is incident normally, the angle of incidence is

- (a) 90° (b) 0 (c) 45° (d) none

11. A stick in water appears broken due to

- (a) reflection of light (b) refraction of light
(c) total internal reflection (d) none of these

12. If angle of incidence is 0° then angle of reflection is

- (a) 90° (b) 0° (c) 45° (d) 60°

13. Refractive index of diamond with respect to vacuum is 2.5, and 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

14. Critical angle of a substance is 30° . Its refractive index is

- (a) 0.2 (b) 2 (c) 0.5 (d) 2.5

15. Velocity of light in diamond is

- (a) 2.1×10^8 (b) 1.2×10^8 (c) 1.5×10^8 (d) 2.5×10^8

16. When a ray goes from an optically rarer medium to a denser medium, it

- (a) goes straight (b) bends away from normal
(c) bends towards normal (d) reflect back

17. Lateral displacement is directly proportional to:

- (a) Angle of incidence (b) angle of refraction
(c) Thickness of the slab (d) velocity of light

18. $n_x \sin C =$

- (a) zero (b) 1 (c) infinity (d) none of these

19. To a fish, the plane surface of earth appears to be enclosed within an angle of

- (a) 60° (b) 180° (c) 97° (d) 45°

20. Power of a lens is 2D, it's focal length is

- (a) -0.5 m (b) 50 cm (c) 150cm (d) 50m

21. The splitting of light into its component colours is called

- (a) refraction (b) spectrum (c) dispersion (d) diffraction

22. if 'i' is critical angle, 'r' is

- (a) zero (b) 90° (c) 180° (d) 45°

23. A drop of water appears like pearl due to

- (a) refraction (b) none (c) reflection (d) total internal reflection

24. curvature of a plane glass is

- (a) infinity (b) zero (c) equal to C (d) none

25. Myopia can be corrected using

- (a) concave lens (b) convex lens
(c) cylindrical lens (d) Plano convex lens

Answer key

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|------|------|------|------|------|------|
| 1.b | 2.a | 3.c | 4.c | 5.c | 6.a |
| 7.c | 8.a | 9.b | 10.b | 11.b | 12.b |
| 13.c | 14.b | 15.b | 16.c | 17.c | 18.b |
| 19.c | 20.b | 21.c | 22.b | 23.d | 24.a |
| 25.a | | | | | |