

38 Lecture - PHY101

Important Mcqs

Which of the following laws states that the incident ray, the reflected ray, and the normal to the surface of reflection all lie in the same plane?

- A) Law of reflection
- B) Law of refraction
- C) Principle of least time
- D) Principle of rectilinear propagation

Answer: A) Law of reflection

What is the angle of incidence for total internal reflection?

- A) 0°
- B) 90°
- C) 180°
- D) Greater than the critical angle

Answer: D) Greater than the critical angle

Which type of lens is thicker at the center than at the edges?

- A) Convex lens
- B) Concave lens
- C) Plano-convex lens
- D) Plano-concave lens

Answer: A) Convex lens

The focal length of a lens depends on which of the following?

- A) The curvature of the lens
- B) The refractive index of the lens

- C) Both A and B
- D) None of the above

Answer: C) Both A and B

Which of the following is a measure of the degree of bending of light as it passes from one medium to another?

- A) Reflection coefficient
- B) Refraction coefficient
- C) Diffraction coefficient
- D) Absorption coefficient

Answer: B) Refraction coefficient

What is the angle of incidence for a light ray that undergoes minimum deviation while passing through a prism?

- A) Greater than the critical angle
- B) Equal to the critical angle
- C) Less than the critical angle
- D) Depends on the refractive index of the prism

Answer: B) Equal to the critical angle

Which of the following is a measure of the ability of a lens to focus light?

- A) Focal length
- B) Refractive index
- C) Aberration
- D) Dispersion

Answer: A) Focal length

The ratio of the speed of light in a vacuum to the speed of light in a medium is known as which of the following?

- A) Refractive index

- B) Reflection coefficient
- C) Absorption coefficient
- D) Transmission coefficient

Answer: A) Refractive index

Which of the following occurs when light waves from different sources combine to form a pattern of constructive and destructive interference?

- A) Diffraction
- B) Reflection
- C) Refraction
- D) Interference

Answer: D) Interference

Which of the following is a measure of the degree of spreading of light as it passes through an aperture or around an obstacle?

- A) Reflection
- B) Refraction
- C) Diffraction
- D) Interference

Answer: C) Diffraction