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

A**nswer: 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