## 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) $0^{\circ}$
B) $90^{\circ}$
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