35 Lecture - PHY101

Important Mcqs

Which of the following is an example of absorption of light by matter?

A. A mirror reflecting light

B. A prism bending light

C. A black shirt absorbing light

D. A rainbow forming in the sky

Answer: C. A black shirt absorbing light

When light reflects off a smooth surface, it follows which law?

A. Law of reflection

B. Law of refraction

C. Law of absorption

D. Law of diffraction

Answer: A. Law of reflection

What happens to the speed of light when it enters a material with a higher refractive index?

A. It slows down

B. It speeds up

C. It stays the same

D. It stops

Answer: A. It slows down

Which of the following is an example of scattering of light?

A. A laser pointer beam passing through a glass window

B. A white wall reflecting light

C. A blue sky on a clear day

D. A red apple absorbing light

Answer: C. A blue sky on a clear day

What is the process by which light is redirected in many different directions as it passes through a material?

A. Reflection

B. Refraction

C. Absorption

D. Scattering

Answer: D. Scattering

What is the study of the interaction of light with matter to learn about its properties?

A. Spectroscopy

B. Optics

C. Photovoltaics

D. Refraction

Answer: A. Spectroscopy

Which of the following materials is opaque to visible light?

A. Glass

B. Air

C. Aluminum foil

D. Clear water

Answer: C. Aluminum foil

What is the conversion of light energy into electrical energy called?

A. Photovoltaics

B. Spectroscopy

C. Refraction

D. Scattering

Answer: A. Photovoltaics

What happens to the angle of refraction when light passes from a material with a high refractive index to a material with a lower refractive index?

A. It increases

B. It decreases

C. It stays the same

D. It depends on the angle of incidence

Answer: B. It decreases

What is the principle behind the operation of solar cells?

A. Reflection of light

B. Absorption of light

C. Scattering of light

D. Refraction of light

Answer: B. Absorption of light