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. RefractionD. 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