

# 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**