

# Photography and Human Physiology

Photography · Answer Key · 12 Questions

---

**1. Which part of the human eye functions most similarly to a camera lens by focusing light onto the retina?**

- A) The iris
- B) The cornea
- C) The crystalline lens**
- D) The vitreous humor

**2. In photography, 'red-eye' occurs when a camera flash reflects off which structure at the back of the human eye?**

- A) The macula
- B) The choroid**
- C) The optic disc
- D) The fovea

**3. What is the medical term for the eye condition where a person has difficulty focusing on close-up objects, often requiring corrective lenses that mimic a macro photography focus?**

- A) Myopia
- B) Hyperopia**
- C) Astigmatism
- D) Glaucoma

**4. Long-term exposure to high-intensity strobe lighting has been clinically observed to potentially trigger which health condition in susceptible individuals?**

- A) Photosensitive epilepsy**
- B) Tinnitus
- C) Macular degeneration
- D) Color blindness

**5. Which photoreceptor cells in the human retina are primarily responsible for low-light vision, analogous to high ISO settings in digital sensors?**

- A) Cone cells
- B) Ganglion cells
- C) Rod cells**
- D) Bipolar cells

**6. The 'persistence of vision' phenomenon, which makes cinematic photography appear as continuous motion, is caused by limitations in which human organ?**

**A) The brain**

- B) The inner ear
- C) The pineal gland
- D) The hypothalamus

**7. Excessive blue light exposure from high-resolution digital camera screens and monitors is known to interfere with the secretion of which hormone?**

A) Adrenaline

**B) Melatonin**

- C) Insulin
- D) Cortisol

**8. Which visual defect, often corrected in photographic post-processing, occurs in the human eye when the cornea is curved unevenly?**

**A) Astigmatism**

- B) Cataracts
- C) Presbyopia
- D) Nystagmus

**9. What is the primary function of the iris in the human eye, which serves the same mechanical purpose as a camera aperture?**

A) Filtering UV rays

B) Adjusting the focal length

**C) Controlling the amount of light entering the eye**

D) Refracting light images

**10. In the context of color photography and biology, which cells in the retina provide the 'color data' that the brain interprets?**

A) Rod cells

**B) Cone cells**

- C) Amacrine cells
- D) Horizontal cells

**11. Which condition, caused by prolonged intense focusing on a camera viewfinder or screen, is characterized by eye strain and reduced blink rate?**

**A) Digital Eye Strain**

- B) Retinal detachment
- C) Hypertrophy
- D) Strabismus

**12. The fovea centralis provides the highest visual acuity in the human eye, much like which part of a digital image sensor?**

A) The pixel pitch

**B) The center focus point**

C) The Bayer filter

D) The CMOS circuitry