

The Human Physiology of Cinema

Film Studies · Practice Test · 20 Questions

1. What is the standard frame rate of film (24 fps) designed to exploit in the human visual system to create the illusion of smooth motion?

- A) Persistence of vision
- B) The blind spot
- C) Foveal peripheral fusion
- D) Retinal light adaptation

2. Extended exposure to high-intensity strobe lighting in films can trigger seizures in individuals with which specific health condition?

- A) Photosensitive epilepsy
- B) Type 1 diabetes
- C) Hypertension
- D) Narcolepsy

3. When filming in extreme cold environments for long durations, which physiological response is the body's primary method of generating heat to maintain a core temperature?

- A) Vasodilation
- B) Shivering thermogenesis
- C) Bradycardia
- D) Hyperventilation

4. During a long film screening, which human muscle is most responsible for maintaining posture while sitting in a theater seat?

- A) Biceps brachii
- B) Erector spinae
- C) Gastrocnemius
- D) Deltoid

5. In 3D cinema, 'vergence-accommodation conflict' often causes which physical symptom for viewers?

- A) Ear infection
- B) Nausea and eye strain
- C) Increased heart rate
- D) Improved night vision

6. What is the primary human organ responsible for maintaining balance, which can be disrupted by the rapid camera movements found in handheld 'shaky cam' cinematography?

- A) The cochlea and vestibular system
- B) The frontal lobe
- C) The cerebellum
- D) The pituitary gland

7. Exposure to high-decibel audio levels during action film post-production can lead to temporary threshold shift, which affects which human sensory organ?

- A) Olfactory bulb
- B) Tympanic membrane
- C) Organ of Corti in the inner ear
- D) Gustatory receptors

8. What physiological state occurs when a film editor experiences intense 'flow' or concentration, often leading to a temporary decrease in blink rate?

- A) Dry eye syndrome
- B) Hyper-salivation
- C) Tachycardia
- D) Muscle atrophy

9. When actors perform high-altitude scenes, the lower partial pressure of oxygen can lead to which physiological condition?

- A) Hypoxia
- B) Hyperglycemia
- C) Dehydration
- D) Hypocalcemia

10. In film lighting, what is the 'Kelvin' scale primarily used to measure, which influences the body's circadian rhythm when exposed to artificial set lights?

- A) Color temperature of light
- B) Sound frequency
- C) Lumen intensity
- D) Radiant heat

11. The study of ergonomics in film animation work focuses on preventing injury to which part of the human body?

- A) Carpal tunnel and musculoskeletal system
- B) Hair follicles
- C) Subcutaneous fat
- D) Enamel density

12. Prolonged sitting during marathon film viewings can increase the risk of Deep Vein Thrombosis (DVT) in which part of the human body?

- A) The lungs
- B) The lower extremities
- C) The cranial cavity
- D) The heart

13. What substance is produced in the human pineal gland and is suppressed by blue-light exposure from cinema screens, affecting sleep onset?

- A) Melatonin
- B) Adrenaline
- C) Insulin
- D) Cortisol

14. During a 'foley' recording session, which human joint is most frequently engaged in repetitive motion to simulate footsteps?

- A) Ankle and knee
- B) Temporomandibular joint
- C) Thoracic spine
- D) Cervical vertebrae

15. High-contrast film images can cause 'afterimages' on the retina due to the fatigue of which specific type of photoreceptor cell?

- A) Cones
- B) Osteocytes
- C) Adipocytes
- D) Chondrocytes

16. What is the primary role of the pupil in the human eye when an audience member moves from a brightly lit lobby into a dark theater?

- A) Constriction
- B) Dilation
- C) Eversion
- D) Calcification

17. The psychological phenomenon of 'suspension of disbelief' is supported by activity in which part of the human brain?

- A) Prefrontal cortex
- B) Medulla oblongata
- C) Cerebellum
- D) Brain stem

18. Which nutrient deficiency is most commonly linked to poor visual acuity in low-light environments, relevant to watching noir films?

- A) Vitamin A
- B) Vitamin C
- C) Calcium
- D) Iron

19. When an actor performs a 'scream' in a horror film, which anatomical structure is primarily responsible for the vocal sound production?

- A) Larynx
- B) Esophagus
- C) Trachea
- D) Diaphragm

20. What is the average human blink rate per minute, which is relevant to how film editors manage jump cuts to hide continuity errors?

- A) 15-20 times
- B) 50-60 times
- C) 100-120 times
- D) 2-5 times