

Scientific Foundations of Film Studies

Film Studies · Answer Key · 18 Questions

1. What is the psychological phenomenon known as the 'phi phenomenon' that allows viewers to perceive motion in a sequence of static images?

- A) Persistence of vision
- B) The beta movement**
- C) Temporal aliasing
- D) Chromatic aberration

2. What is the standard frame rate for professional cinematic projection established in 1927 with the introduction of sound-on-film technology?

- A) 16 fps
- B) 24 fps**
- C) 30 fps
- D) 48 fps

3. In film color grading, which primary color model is used for digital cinema displays?

- A) CMYK
- B) Pantone
- C) RGB**
- D) HSL

4. What is the technical term for the device used to adjust the intensity of a light source in a film studio without altering its color temperature?

- A) Gobo
- B) Scrim**
- C) Gel
- D) C-stand

5. Which chemical element is primarily responsible for the light-sensitivity of traditional 35mm black-and-white photographic film emulsions?

- A) Silver halides**
- B) Titanium dioxide
- C) Ferric oxide
- D) Copper sulfate

6. What does the acronym 'DCI' stand for in the context of professional film projection standards?

A) Digital Cinema Initiatives

B) Direct Cinematic Integration

C) Dynamic Camera Interface

D) Digital Content Indexing

7. In optical physics, what is the 'flicker fusion threshold' as it relates to cinema projection?

A) The point where individual frames merge into continuous motion

B) The speed at which a lens aperture changes

C) The rate at which film stock degrades

D) The frequency of light refraction through a prism

8. What type of lens has a variable focal length, allowing for magnification changes without physically moving the camera?

A) Prime lens

B) Anamorphic lens

C) Zoom lens

D) Macro lens

9. Which invention by the Lumière brothers served as both a camera and a projector?

A) Kinetoscope

B) Cinématographe

C) Vitascope

D) Phantasmagoria

10. What is the 'aspect ratio' of the standard Academy format established by the Academy of Motion Picture Arts and Sciences in 1932?

A) 1.33:1

B) 1.85:1

C) 2.39:1

D) 1.78:1

11. Which component of a film camera shutter is responsible for controlling the duration of light exposure on each individual frame?

A) Aperture diaphragm

B) Rotary disc shutter

C) Neutral density filter

D) Sensor gain control

12. What physical property of the human eye does the 'persistence of vision' theory rely upon to maintain an image for a fraction of a second?

- A) Retinal fatigue
- B) Photoreceptor lag**
- C) Iris constriction
- D) Lens refraction

13. What is the primary function of a 'matte box' in cinematic cinematography?

- A) To reduce lens flare and hold filters**
- B) To store digital media
- C) To stabilize camera movement
- D) To record audio metadata

14. What term describes the depth of field range where objects in an image appear acceptably sharp?

- A) Circle of confusion
- B) Hyperfocal distance**
- C) Chromatic dispersion
- D) Diffraction limit

15. In terms of sound engineering for film, what is the standard sampling rate for CD-quality audio?

- A) 44.1 kHz**
- B) 48.0 kHz
- C) 96.0 kHz
- D) 22.05 kHz

16. What is the purpose of a 'neutral density' (ND) filter on a camera lens?

- A) To shift the color spectrum towards blue
- B) To reduce light intensity without affecting hue**
- C) To increase the sharpness of the image
- D) To create a wide-angle distortion

17. Which specific property of film stock is measured by its ISO or ASA rating?

- A) Contrast ratio
- B) Light sensitivity**
- C) Color depth
- D) Grain size

18. What happens to the angle of view when a lens focal length is increased?

A) It widens

B) It narrows

C) It remains constant

D) It inverts