Name: _____ **Class:** _____ **Date:** _____ **ID: A**

Unit 4

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. Located inside the body of a digital camera, a _____ contains a light-sensitive grid that registers (in pixels) the light coming in through the camera's lens.
a. sensor
b. gridlock
c. lens
d. pixelator

____ 2. The standard rate of frames per second for American motion picture photography is:
a. 12 fps
b. 24 fps
c. 29.97 fps
d. 48 fps

____ 3. A lens used for widescreen aspect ratios (such as CinemaScope) that distorts the image by squeezing it (to the standard aspect ratio of 1.33:1) so that the picture can be unsqueezed by another lens during projection to achieve a widescreen aspect ratio.
a. Prime
b. Aperture
c. VistaVision
d. Anamorphic

____ 4. Granular texture in negatives that emerges as a result of clumping of silver-halide particles during processing, viewable under magnification.
a. Clumpers
b. Textiles
c. Grain
d. Stoppers

____ 5. Inside the body of the photographic lens, the opening typically regulated by an interlocking system of metallic leaves.
a. Depth of field
b. Aperture
c. F-stop
d. Shutter

____ 6. The ability of the recording medium to register fine detail, measured in digital images by the pixels per inch and quality of the sensor.
a. aperture
b. exposure
c. anamorphic
d. resolution

____ 7. The amount of time that the shutter remains open to admit light into the camera before closing is the shutter _____.
a. speed
b. aperture
c. f-stop
d. exposure

____ 8. A lens with a single focal length (a 25mm lens, a 50mm lens, a 150mm lens, etc.) is called a:
a. crane lens
b. zoom lens
c. scope lens
d. prime lens

____ 9. Areas of incorrect detail reproduction in a digital image caused by sensor chip misreadings or the inability of the camera to process visual information due to problems in exposure.
a. Noise
b. Chippers
c. Pixies
d. Depth of field

____ 10. Which of the following values is an example of an f-stop on a typical lens?
a. 0
b. 4
c. 48
d. 100

____ 11. The _____ of film emulsion or another recording medium expresses its graininess and ability to depict sharp edges and fine detail.
a. aperture
b. f-stop
c. definition
d. focus

____ 12. When film is running in a camera, the film _____ is the spot at which light hits the actual piece of film as it passes past the gate behind the lens. This is where the film is exposed to light as it runs through the camera.
a. plane
b. device
c. stock
d. tape

____ 13. The standard rate of frames per second for American television formats is:
a. 20 fps
b. 24 fps
c. 29.97 fps
d. 48 fps

____ 14. A _____ lens offers a close approximation of human eyesight for a particular type of film. For 16mm film, a 25mm lens is considered a "_____" lens and for 35mm film, a 50mm lens is considered "_____."
a. zoom
b. wide
c. normal
d. iris

____ 15. The capacity of emulsion in a strip of photographic film or of a photographic sensor to react to light, measured by the EI/ISO rating of the film or recording medium. Also referred to as the speed of a film stock.
a. f-stop
b. sensitivity
c. exposure
d. degree

Completion
Complete each statement.

16. Visible _____ is a form of electromagnetic radiation that the human eye can perceive. The spectrum of visible _____ lies in a relatively small band of wavelengths that register as a series of colors such as those seen in a rainbow.

17. Film _____ is unexposed photographic film characterized by its gauge (such as 8mm, 16mm, 35mm, or 70mm), type (black and white or color, along with other factors), light and color sensitivities (such as ISO and color temperature ratings), physical characteristics (such as length), and brand (Eastman Kodak, Fuji, and so forth).

18. In the eye, the _____ is the membrane suspended between the cornea and the lens and is perforated by the pupil. In photography, the _____ diaphragm is composed of metal elements that open and close to let in more or less light.

19. A _____ is one binary digit, which is a zero or a one. _____s are strings of digital information registered as 0s and 1s . 8 _____s = 1byte; 1024 bytes = 1kilobyte; 1024 KB = 1 megabyte; 1024 MB = 1 gigabyte.

20. The _____ ratio of a motion picture screen is the relationship of width to height of a frame. Standard ratios are 1.33:1 (early film and standard TV ratio, also known as 4:3); 1.85:1 (American theatrical standard), and 2.40:1 (Panavision widescreen standard).

21. _____of field is the portion of the image that appears in focus as measured by the points at a distance in front of the camera.

22. _____ is a number that is measured by dividing the focal length of a lens by the effective diameter of its aperture and is used for setting the iris. The _____ is also known as relative aperture.

23. A _____ is a term adapted from "picture element" that is actually a tiny square in a digital image. It represents a single light intensity and color value (measured in red, green, and blue components) among over 16 million possible colors.

24. John Alton, Gregg Toland, Ellen Kuras, Gordon Willis, Emmanuel Lubezki, Gabriel Figueroa, James Wong Howe, and Ernest Dickerson are all noted _____; during film production, they are in charge of use of the camera and lighting.

25. A _____ lens has a variable focal length at a specific range, which allows for rapid subject magnification. _____ lenses are included on virtually all consumer digital cameras so the user can change the focal length of the lens easily.

26. _____is the difference between the brightest and darkest points in a picture. A high _____ image features little gradation between light and dark and sharp whites and blacks, while a low _____ image contains significant gradation.

27. When a filmmaker asks "what lens are you using for this shot?" the answer is typically given by stating the _____ length of the lens. The _____ length is a measurement that defines the type of a particular lens, such as 16mm, 25mm, 50mm, or 150mm, typically determined inside the body of the lens: it is the length from the rear nodal point of the lens (where light is being sent back by refraction) to the film plane when the lens is focused at infinity.

28. _____ is the process of allowing light to make contact with film negative or other light-sensitive recording surface for a specific length of time.

29. White _____ is a sensor system used for adjusting the camera to the appropriate color temperature setting in response to the light illuminating the scene. Completing this camera adjustment is an important part of basic digital cinematography.

30. A light _____ is an instrument used for measuring the intensity of light on a scene.

Essay

Answer question completely to receive full credit. Remember to:.

- Be specific! Use appropriate terms to be clear in your discussion.

- Use examples to support your argument.

- If appropriate, use personal perspective - your own observations and experiences - to illustrate your responses.

- If allowed by instructor, employ drawings or diagrams to support your argument.

31. Explain the essential components of color photography, including the three primary additive colors and their negatives.

    Your response must include at least two of the follow topics: references to the human eye; discussion of early developments in color cinematography; Technicolor and the three-strip system; and comparisons and contrasts with black and white photography.

32. Imagine a scene that will be shot for a motion picture project. Devise the following:

    Setting
    Characters (minimum two)
    Basic narrative setup or action
    Three shots from the entire sequence for the scene

    Using the example of a series of three shots in this scene, explain at least four decisions, challenges, or considerations that a cinematographer will face during preparations or the actual shoot.