DAVP2

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QUIZ 1 Ques Bank

Digital Audio: Introduction & Depth

Easy:

1. What is sound defined as?
   - a) A burst of light
   - b) A pressure wave created by a vibrating object
   - c) A stationary object
   - d) An electromagnetic field
2. Which part of the ear collects sound and pushes it into the ear canal?
   - a) Middle Ear
   - b) Inner Ear
   - c) Outer Ear
   - d) Cochlea
3. Who invented the phonograph in 1877?
   - a) Edouard-Léon Scott de Martinville
   - b) Emile Berliner
   - c) Lee De Forest
   - d) Thomas Alva Edison
4. What is the core concept of Digital Audio Recording?
   - a) Amplification
   - b) Equalization
   - c) Sampling
   - d) Mixing
5. What unit is the sampling rate expressed in?

- a) Decibels (dB)
- b) Millimeters (mm)
- c) Hertz (Hz)
- d) F-stops

Medium:

6. According to the Nyquist Theorem, what should the sampling rate be for lossless digitization?

   - a) Equal to the highest frequency component ($F_s = f_{max}$)
   - b) At least twice the highest frequency component ($F_s \geq 2f_{max}$)
   - c) Half the highest frequency component ($F_s \geq 0.5f_{max}$)
   - d) Ten times the highest frequency component ($F_s \geq 10f_{max}$)

7. What is the name for the distortion that occurs if the sampling rate is less than twice the maximum frequency component?

   - a) Compression
   - b) Echo
   - c) Aliasing (Foldover)
   - d) Reverb

8. Which of these is a common standard sampling frequency for CD quality?

   - a) 32 kHz
   - b) 44.1 kHz
   - c) 48 kHz
   - d) 96 kHz

9. What does "dynamic range" in digital audio refer to?

   - a) The overall duration of an audio signal
   - b) The range between the loudest and softest sounds a system can handle
   - c) The frequency spectrum of the audio
   - d) The clarity of the sound

10. When did digital audio first reach the public, and by what means?

    - a) 1930s, Tape recordings
    - b) 1957, Phonographs
    - c) 1982, Compact Discs (CDs)
    - d) 2000s, High-resolution audio files

Advanced:

11. Why is a decibel (dB) considered a ratio rather than a direct unit of volume?

    - a) It measures the absolute intensity of sound.
    - b) It uses a linear scale for comparison.
    - c) It indicates the ratio of one level to a reference level, using a logarithmic scale.
    - d) It only applies to digital audio signals.

12. If you sample a sine wave at 1.5 times per cycle, how might the reconstructed waveform appear compared to the original?

    - a) As a straight line (constant)
    - b) As a higher frequency sine wave
    - c) As a lower frequency sine wave
    - d) Exactly the same as the original, with no loss of information

13. Which historical sound recording method was described as "analog" because the waveform encoded on tape was a close analogy to the original sound waveform?

    - a) Phonograph
    - b) Gramophone
    - c) Optical film recording
    - d) Tape recording (Magnetophons)

Microphones and Equalization

Easy:

14. What is the primary function of a microphone in sound engineering?

    - a) To amplify electronic signals
    - b) To convert acoustic sound into electronic signals
    - c) To equalize frequency levels
    - d) To store audio data

15. Which type of microphone is known for its diaphragm being unburdened by a coil, making it very responsive and accurate?

    - a) Dynamic Microphone
    - b) Ribbon Microphone
    - c) Capacitor (Condenser) Microphone
    - d) Lapel Mic

16. What is equalization (EQ) in sound engineering?

    - a) Boosting or reducing the overall volume of a signal
    - b) Boosting or reducing the levels of different frequencies within an audio signal
    - c) Adding effects like reverb or delay
    - d) Converting analog signals to digital

17. Which of the following is considered the simplest form of equalizer?

    - a) Graphic EQ
    - b) Parametric EQ
    - c) Filters
    - d) Bell EQ

18. What is the frequency range for "Bass" in the audio spectrum?

- a) 20 to 60 Hz
- b) 60 to 250 Hz
- c) 250 to 500 Hz
- d) 500 Hz to 2 kHz

Medium:

19. Dynamic microphones are also commonly known by what alternative name?

    - a) Condenser microphones
    - b) Moving coil microphones
    - c) Ribbon microphones
    - d) Lapel microphones

20. What characteristic of early ribbon microphones was often considered a trade-off for their warm, vintage tone?

    - a) Their large size
    - b) Their high cost
    - c) Their extreme fragility
    - d) Their inability to handle high frequencies

21. What is the primary benefit of advanced equalization systems compared to basic treble and bass controls?

    - a) They are easier to use for beginners.
    - b) They can only reduce frequencies.
    - c) They provide finer control, allowing adjustment of narrower frequency ranges without significantly affecting neighboring frequencies.
    - d) They can automatically correct all audio imperfections.

22. A shelving EQ applied to the "trembly high end" of the sound frequency spectrum, used to add crispness to hats or vocals, is known as a:

    - a) Low shelf
    - b) Bell EQ
    - c) High shelf
    - d) Notch filter

23. Which type of filter allows high frequencies to pass through while reducing low frequencies in level?

    - a) Low Pass Filter (LPF)
    - b) High Pass Filter (HPF)
    - c) Band Pass Filter
    - d) Band Stop Filter

Advanced:

24. What are the three basic controls typically found on a parametric EQ?

    - a) Treble, Bass, Mid

- b) Gain, Pan, Send
- c) Level, Frequency, "Q" (Quality Factor)
- d) Input, Output, Threshold

25. A band stop filter, also known as a notch filter, performs which specific function?

- a) Allows only low frequencies to pass.
- b) Allows only high frequencies to pass.
- c) Allows both low and high frequencies to pass, while attenuating a region in the mid-band.
- d) Attenuates both low and high frequencies, allowing only mid frequencies through.

26. Why is a capacitor (condenser) microphone generally more accurate and faithful to the original sound than a dynamic microphone?

- a) It has a heavier diaphragm.
- b) Its diaphragm is unburdened by a coil, making it lighter and more responsive.
- c) It uses magnetic principles to generate a signal.
- d) It is primarily used for loud sounds.

Camera Optics: Lenses, Focus, and Exposure

Easy:

27. What are the two main types of image sensors found in digital cameras?

- a) Film and Plate
- b) CCD and CMOS
- c) Aperture and Shutter
- d) Lens and Viewfinder

28. Which component of a camera is responsible for concentrating light reflected from subjects onto the sensor?

- a) Shutter
- b) Aperture
- c) Lens
- d) Viewfinder

29. How is focal length represented?

- a) Decibels (dB)
- b) Hertz (Hz)
- c) Millimeters (mm)
- d) F-stops

30. What is the ability of the lens to concentrate light to create the sharpest image called?

- a) Aperture
- b) Exposure
- c) Focus

- d) Focal length

31. What is the variable opening built into the lens that controls the amount of light striking the sensor chips?

    - a) Shutter
    - b) Viewfinder
    - c) Focal plane
    - d) Aperture (Iris)

Medium:

32. What effect does a longer focal length have on the subject in the frame?

    - a) The subject appears smaller, and more subjects can be included.
    - b) The subject appears larger, and fewer subjects can be included.
    - c) The subject appears distorted.
    - d) It has no effect on subject size, only on depth of field.

33. Which type of lens has a fixed focal length?

    - a) Zoom lens
    - b) Telephoto lens
    - c) Prime lens
    - d) Wide Angle lens

34. How does each full f-stop typically affect the amount of light allowed to pass through the lens?

    - a) It triples (if opening) or halves (if closing) the light.
    - b) It doubles (if opening) or halves (if closing) the light.
    - c) It quarters (if opening) or doubles (if closing) the light.
    - d) It does not affect the amount of light, only the depth of field.

35. What does the term "stop down" mean in relation to aperture?

    - a) To increase the size of the aperture opening and lower the f-stop number.
    - b) To close the aperture or increase the f-stop number.
    - c) To keep the aperture size constant.
    - d) To adjust the focal length.

36. What is the general rule of thumb for setting shutter speed in filmmaking relative to the Frames per second (FPS)?

    - a) Shutter speed should be half your FPS.
    - b) Shutter speed should be equal to your FPS.
    - c) Shutter speed should be double your FPS.
    - d) Shutter speed should be four times your FPS.

Advanced:

37. If you "open up" the aperture from f/4 to f/2.8, how much light are you allowing to pass through the lens?

- a) Half as much light
- b) The same amount of light
- c) Twice as much light
- d) Four times as much light

38. Depth of Field (DOF) is dependent on which three characteristics of a lens?

- a) Zoom, Shutter Speed, ISO
- b) Focus, Focal Length, and Aperture
- c) White Balance, Contrast, Saturation
- d) Resolution, Frame Rate, Compression

39. What does the term "shutter angle" describe, and how does a larger angle affect shutter speed?

- a) It describes the lens's field of view; a larger angle means a faster shutter speed.
- b) It describes the shutter speed relative to the frame rate; a larger angle means a slower shutter speed.
- c) It describes the lens's optical center; a larger angle means a faster shutter speed.
- d) It describes the aperture opening; a larger angle means a slower shutter speed.

40. How does a more wide open aperture setting (lower f-stop number) affect the depth of field?

- a) It creates a deeper depth of field.
- b) It creates a shallower depth of field.
- c) It has no effect on depth of field.
- d) It increases the focal length.

Visual Composition and Lighting Techniques

Easy:

41. What term refers to the screen space used for your presentation, determined by the viewfinder boundaries?

- a) Composition
- b) Frame
- c) Field of View
- d) Head Room

42. What is the primary goal of composition in visual media?

- a) To make the scene as bright as possible.
- b) To record sound clearly.
- c) To make the arrangement of objects, settings, and characters pleasing or acceptable to the audience.
- d) To capture continuous movement.

43. What does "screen direction" describe?

- a) The role of the film director.

- b) The direction objects, animals, or people appear to be facing or moving on the screen.
- c) The path of the camera.
- d) The flow of the narrative.

44. What are the three distinct light sources used in the "three-point lighting formula"?

- a) Sunlight, Moonlight, Artificial light
- b) Top light, Bottom light, Side light
- c) Key light, Fill light, Back light
- d) Front light, Left light, Right light

45. Which field of view emphasizes the environment or setting, showing much more than the subject matter in the frame?

- a) Close-up (CU)
- b) Medium Shot (MS)
- c) Long Shot (LS)
- d) Extreme Long Shot (ELS)

Medium:

46. When composing a shot with a single, main subject without a specific left/right orientation, where is it typically considered correct to place it horizontally?

- a) Off-center to the left
- b) Off-center to the right
- c) Centered in the frame
- d) In the background

47. What technique involves intentionally placing the main subject off-center to create curiosity, which can then be rewarded by the introduction of another character into the empty space?

- a) Centering
- b) Lead room
- c) Off-centering
- d) Rule of thirds

48. What is the "golden rule" for consistently achieving correct head room, regardless of the field of view?

- a) Place the top of the head exactly at the top of the frame.
- b) Divide the screen into horizontal thirds and place the person’s eyes on or near the top third line.
- c) Keep a consistent amount of space (e.g., 1 inch) above the head.
- d) Place the person's mouth on the center line.

49. What is the purpose of the "fill light" in three-point lighting?

- a) To be the brightest light source, acting as the sun.
- b) To cast a rim of light, separating the subject from the background.
- c) To soften shadows created by the key light.
- d) To illuminate the background only.

50. What is the intensity ratio used for the lights in the three-point lighting formula?

    - a) 1 to 1 ratio
    - b) 2 to 1 ratio
    - c) 3 to 1 ratio
    - d) 4 to 1 ratio

Advanced:

51. When depicting a conversation between two characters, why are they typically placed slightly off-center to one side, facing each other in profile to the camera?

    - a) To avoid focusing too much on their faces.
    - b) To create "lead room," implying their gaze or potential movement and making the interaction feel natural.
    - c) To ensure consistent head room.
    - d) To make the shot appear more dynamic.

52. The "Back Light" in three-point lighting typically has what intensity relative to the key light, and for what purpose?

    - a) Half the intensity of the key light, to soften shadows.
    - b) The same intensity as the key light, to create a rim of light separating the subject from the background.
    - c) Double the intensity of the key light, to brightly illuminate the background.
    - d) No specific intensity, its purpose is purely aesthetic.

53. Which field of view is approximately "one third of the subject matter framed" and is often a classic "head and shoulders" shot focusing on emotion and detail?

    - a) Extreme Long Shot (ELS)
    - b) Long Shot (LS)
    - c) Medium Shot (MS)
    - d) Close-up (CU)

The Craft of Visual Storytelling

Easy:

54. For visual storytelling, a story is fundamentally defined as a progression from point A to point B, meaning what must occur?

    - a) A grand, extensive change
    - b) Some form of change, even if small
    - c) No change, only documentation
    - d) A return to point A without any journey

55. In the hierarchical structure of a story, what creates "scenes"?

    - a) Acts

- b) Sequences
- c) Dramatic beats
- d) Shots

56. What are the broadest divisions of a story, typically three in number?

- a) Scenes
- b) Shots
- c) Acts
- d) Sequences

57. Who is the "protagonist" in a story?

- a) The personification of the major force against the main character.
- b) The central subject of the story, through whose eyes the audience primarily experiences the narrative.
- c) The person responsible for the inciting incident.
- d) A minor character in a subplot.

58. What is the "climax" of a story?

- a) The final winding down of the story.
- b) The initial set-up of the world and characters.
- c) The point of maximum emotional intensity or conflict.
- d) The resolution of all subplots.

Medium:

59. What is the longest act in the typical three-act story structure, focusing on the protagonist's efforts to confront and resolve the problem?

- a) Act One
- b) Act Two
- c) Act Three
- d) The Resolution

60. What unifies a scene, and what must every scene have?

- a) Unifying elements like character/location/time/theme; a clear objective.
- b) Only location; no specific objective is necessary.
- c) Only character; a surprising twist.
- d) Production budget; a happy ending.

61. What are "beats" defined as, and what is their significance?

- a) A collection of closely related scenes; the unified whole.
- b) A collection of actions that describe a single thought; the smallest unit of action within a visual story.
- c) A series of camera set-ups; key decisions for framing.
- d) Broad divisions of a story; problem identification.

62. What is "motivation" for a protagonist?

    - a) The external events that happen to them.
    - b) The driving force inside them, created by the pursuit of an "object of desire," that motivates their decisions to act.
    - c) The forces working against them.
    - d) The ending of the story.

63. Which event "propels the protagonist into an active pursuit of the 'object of desire'" and "radically upsets the balance of forces in the protagonist's life"?

    - a) The Climax
    - b) The Resolution
    - c) The Inciting Incident
    - d) A Subplot

Advanced:

64. What are the four ways scenes can cause change or turning points in a narrative?

    - a) Introduction, Development, Conclusion, Evaluation
    - b) Surprise, Increase Curiosity, Insight, New Direction
    - c) Plot Twist, Character Arc, Setting Change, Dialogue
    - d) Exposition, Rising Action, Falling Action, Denouement

65. In the hierarchical structure of a story, how does the progression flow from smallest to largest unit?

    - a) Acts → Sequences → Scenes → Shots → Beats → Actions → Gestures
    - b) Gestures → Actions → Beats → Shots → Scenes → Sequences → Acts → Story
    - c) Shots → Beats → Actions → Gestures → Scenes → Sequences → Acts
    - d) Story → Acts → Sequences → Scenes → Shots → Beats → Actions → Gestures

66. What are the three levels of conflict identified in story structure?

    - a) Physical, Emotional, Intellectual
    - b) Inner (self), Personal (friends/family), Outer (society/external forces)
    - c) Protagonist vs. Antagonist, Protagonist vs. Nature, Protagonist vs. Technology
    - d) Simple, Complex, Unresolved

67. Based on the provided shooting script example for a pandemic situation, what audio element shifts from "tension & panic music" to "Rhythmic music with calm notes" during the opening scene?

    - a) When Dr. Paro's narration describes the severity of the second wave.
    - b) When the video transitions to B-rolls showing facilities and services arranged in the campus.
    - c) During the doctor's interview shot.
    - d) When the students provide "Bytes."

QUIZ 1 ANS KEYS

1. b

2. c
3. d
4. c
5. c
6. b
7. c
8. b
9. b
10. c
11. c
12. c
13. d
14. b
15. c
16. b
17. c
18. a
19. b
20. c
21. c
22. c
23. b
24. c
25. c
26. b
27. b
28. c
29. c
30. c
31. d
32. b
33. c
34. b
35. b
36. a
37. c
38. b
39. b
40. b
41. b
42. c
43. b
44. c
45. d
46. c
47. b

48. b
49. c
50. b
51. b
52. b
53. d
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56. c
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60. a
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62. b
63. c
64. b
65. b
66. b
67. b