

Essentials of the AV Industry Pretest

Not sure if you need to take Essentials? Do you think you know the basics of Audio Visual? Take this quick assessment test on Audio, Visual, and Systems to find out! Check your score on the last page.

AUDIO

1. An audio signal is an _____ representation of a sound.
 - a. Acoustical
 - b. Environmental
 - c. Aesthetic
 - d. Electrical

2. Any sound reinforcement system consists of two equal parts: the electronic system used to manipulate the audio signal and _____
 - a. The aesthetic environment.
 - b. The acoustical environment.
 - c. The emotional level.

3. What type of loudspeaker system is typically made up of speakers strategically suspended overhead or placed in the ceiling and may use center-to-center overlap?
 - a. Distributed
 - b. Cluster
 - c. Pleated
 - d. Central point

4. The study of sound-wave motion and sound behavior is the science of _____
 - a. Wave theory.
 - b. Behavior.
 - c. Acoustics.
 - d. Aesthetics.

5. Which type of sound is most intelligible?
 - a. Ambient sound
 - b. Direct sound
 - c. Reverberant sound
 - d. Reflected sound

6. Sound that bounces off of many surfaces before reaching the listener is called _____ sound.
- Direct
 - Reverberant
 - Reflected
 - Conversion
7. Sound waves have a time relationship to each other known as _____.
- Cycles
 - Sines
 - Peaks
 - Phase
8. When sound waves of the same frequency and amplitude arrive 180 degrees out-of-phase, which of the following phenomena occurs?
- Phase cancellation
 - Phase amplification
 - Standing waves
 - Phase doubling
9. Decibels are always expressed as a(n) _____ of two quantities.
- Sum
 - Ratio
 - Inverse
 - Addend
10. A dB may be used to express or describe _____
- Capacitance.
 - Resistance.
 - Wire Gauge.
 - SPL.
11. All sounds start with physical motion, such as vibrating string. This causes adjacent air molecules to push together, or _____
- Egress.
 - Rarefy.
 - Compress.
 - Attract.

12. A wavelength is measured at the starting points of two consecutive _____
- Frequencies.
 - Cycles.
 - Sines
13. Sound level decreases _____ dB every time the source to listener distance is doubled.
- 3
 - 6
 - 12
 - 2
14. Hertz is the unit of measure for _____
- Volts.
 - Amplitude.
 - Frequency.
 - Decibels.
15. One Hertz is equivalent to _____
- One cycle per second.
 - One amp passing through one ohm.
 - One milliamp passing through one ohm.

VISUAL

16. The distance between the optical center of a lens and the image plane is called the _____
- Depth of focus.
 - Depth of field.
 - Focal length.
 - Aperture.
17. The amount of light passed through the lens to the imager on a video camera is controlled by the _____
- Focus ring.
 - Iris.
 - Backfocus.
 - White level.
18. An R-Y, B-Y, Y video signal is also known as a(n) _____ video signal.
- S
 - Composite
 - Sync
 - Component

19. Modulating a composite video signal for transportation is commonly referred to as _____

- a. RF transmission.
- b. Baseband video.
- c. Data Display.
- d. Interpolation.

20. During video production, removing all of one color from the main image and replacing it with a second image is called a(n) _____

- a. Luminance key.
- b. Downstream key.
- c. Chroma key.
- d. Insertion key.

21. Which of the following incorporates color difference signals?

- a. Y/C
- b. Y, R-Y, B-Y
- c. Composite
- d. RGB

22. In a video system, using a single electronic reference for timing of all the connected equipment is called _____

- a. Genlock.
- b. Vsync.
- c. Hsync.
- d. Color sync.

23. Which device corrects for jitter in an analog video signal?

- a. Equalizer
- b. Jitter dampener
- c. Delay
- d. Time base Corrector

24. In a composite video signal, what determines the brightness?

- a. Phase
- b. Amplitude
- c. Sync
- d. Time code

25. Specialized devices that display the color hue information in the video signal are called _____
- Video timing generators.
 - Mutimeters.
 - Waveform monitors.
 - Vectorscopes.
26. Which display technology uses light passing through a medium to create an image?
- Transmissive
 - Interpolated
 - Reflective
 - DMD
27. The aspect ratio for a 1024 x 768 computer display is _____
- 4:5.
 - 3:5.
 - 4:3.
 - 16:9.
28. The ratio of image width to image height is defined as the _____
- Image consistency.
 - Aspect ratio.
 - Image size.
 - Image contrast.
29. The broadcast video standard used in North America and parts of South America and Asia is _____
- NAB.
 - PAL.
 - SECAM.
 - NTSC.
30. Which projector element is covered with tiny mirrors to produce a video or data image?
- LED.
 - DMD
 - DMR
 - LCD
31. What is the fundamental unit of measure on a fixed resolution display?
- Pixel
 - Shadow mask
 - Phosphor
 - Coil.

32. In a fixed resolution display, the greater the resolution capability the _____
- Greater heat dissipation capacity.
 - Lower the number of pixels.
 - Greater the number of pixels.
 - Same number of pixels.
33. A common technique for reducing the depth requirements of a rear projection space is _____
- Increasing image size.
 - Splitting the light path.
 - Folding the light path.
 - Intensifying light output.
34. The changing of direction of a light or sound ray is called _____
- Spherical aberration.
 - Chromatic aberration.
 - Dispersion.
 - Refraction.
35. Light passing through the edges of a lens at different focal lengths results in a blurred image. This is called _____
- Chromatic aberration.
 - Spherical aberration.
 - Curvature of field.
 - Refraction.
36. Which type of front screen has a smooth non-gloss surface similar to a white sheet, provides good color rendition, and evenly disperses light?
- Optical.
 - Matte.
 - Glass beaded.
 - Angular reflective.
37. The higher the color temperature of a light source, the _____ white light.
- Bluer
 - Redder
 - Greener
 - Brighter
38. The maximum viewing distance for viewing a displayed image is based on the _____
- Size of the room.
 - Amount of detail in the image.
 - Importance of the information.

39. For good viewing, projected images should not be viewed at angles greater than _____ degrees off of the projection axis.
- a. 90
 - b. 180
 - c. 45
 - d. 30
40. A single video or audio output is converted into multiple outputs to be distributed to the system by using a(n) _____
- a. DA.
 - b. Interface.
 - c. TBC.
 - d. Processing Amplifier.

SYSTEM

41. Which connector has a solid center pin with an outside sleeve and creates a pressure-fit type connection with its mate?
- a. Mini
 - b. Phone plug
 - c. XLR
 - d. RCA
42. 2. A cable with one conductor and a shield is _____
- a. Unbalanced.
 - b. Balanced
 - c. Line level.
 - d. Stereo.
43. A _____ bit display will display 65,536 colors.
- a. 24
 - b. 16
 - c. 256
 - d. 8
44. An 8-bit digital word is called a _____.
- a. Kilobit
 - b. Octabit
 - c. Byte
 - d. Megabyte

45. Digital signals are a stream of _____
- Waves.
 - Integers between 1 and 9.
 - 1's and 0's.
 - 1's and 2's.
46. The process of adding video and/or audio signals to an existing signal on a predetermined carrier frequency is called _____
- Modulation.
 - Interpolation.
 - Basebanding.
 - Heterodyning.
47. As the bandwidth of a display system increases, the potential resolution of the images is _____
- Bandwidth has no affect on image resolution.
 - At a greater risk of interference and degradation
 - Decreased.
 - Increased.
48. In a cable, the dielectric _____
- Conducts current.
 - Insulates and separates two conductors.
 - Allows signals to mix within the cable run.
 - Color codes the jackets.
49. The flow of electrons through a conductor is called _____
- Current.
 - Voltage.
 - Inductance.
 - Impedance.
50. When comparing the relationship of current to voltage and resistance, current is:
- Inversely proportional to voltage and directly proportional to resistance.
 - Directly proportional to voltage and directly proportional to resistance.
 - Directly proportional to the voltage and inversely proportional resistance.
 - Inversely proportional to voltage and inversely proportional to resistance.

ANSWER KEY

AUDIO	QUESTION	ANSWER
	1	D
	2	B
	3	A
	4	C
	5	B
	6	B
	7	D
	8	A
	9	B
	10	D
	11	C
	12	B
	13	B
	14	C
	15	A
VISUAL	16	C
	17	B
	18	D
	19	A
	20	C
	21	B
	22	A
	23	D
	24	B
	25	D
	26	A
	27	C
	28	B
	29	D
	30	B
	31	A
	32	C
	33	C
	34	D
	35	B
	36	B
	37	A
	38	B
	39	C
	40	A

SYSTEM	41	D
	42	A
	43	B
	44	C
	45	C
	46	A
	47	D
	48	B
	49	A
	50	C

Now that you have taken the assessment test how did you do? Add up your scores and follow the key below to determine whether Essentials of the AV Industry is right for you!

If you scored:

Less than 35 correct: InfoComm Academy recommends *Essentials of the AV Industry*—please visit www.infocomm.org to purchase the Essentials book or register for Essentials online course.

35-45 correct: Consider reviewing the content in Essential.

45-50 correct: The Essentials book may be a great reference for you, but you have a strong foundation in essential AV knowledge!