

Quiz

Note: It is recommended that you save your response as you complete each question.

Subsection

Question 1 (1 point)



For an average person, the highest pitch he/she can hear is

- ☐ 20 Hz
- ☐ 200 Hz
- ☐ 2,000 Hz
- ☐ 20,000 Hz
- ☐ 200,000 Hz

Save

Question 2 (1 point)



What is the decibels for a sound with intensity being $100 I_{\text{ref}}$?

- ☐ 100 dB
- ☐ 20 dB
- ☐ 50 dB
- ☐ 10 dB
- ☐ 150 dB

Save

Question 3 (1 point)



An average factory has a sound intensity level of 80 dB, and a riveting machine has a sound intensity level of 120 dB. How many times greater is the sound intensity of the machine than that of the factory?

- ☐ 100,000
- ☐ 10
- ☐ 100
- ☐ 1,000
- ☐ 10,000

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Question 4 (1 point)



About 0 dB, which one of the following is wrong?

- ☐ it means the hreshold of hearing
- ☐ it means zero sound intensity
- ☐ it does not mean absence of sound wave
- ☐ there exists a sound that has lower decibels than 0 dB.

Save

Question 5 (1 point)



A sound with higher ____ is perceived to have a higher pitch.

- ☐ decibels
- ☐ fidelity
- ☐ frequency
- ☐ sampling rate
- ☐ bit depth

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Question 6 (1 point)



A waveform is a graphical representation of the ____ fluctuations of a sound wave.

- ☐ frequency-time
- ☐ pressure-space
- ☐ space-time
- ☐ pressure-time
- ☐ frequency-space

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Question 7 (1 point)



What is the frequency for the above sound wave?

- ☐ 3.67 Hz
- ☐ 1.67 Hz
- ☐ 2.67 Hz
- ☐ 0.67 Hz
- ☐ 1.33 Hz

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Question 8 (1 point)



Which of the following is NOT correct if more samples are taken from a sound wave,

- ☐ the reconstructed wave looks closer to the original wave
- ☐ the resulting file has a bigger file size
- ☐ the process has a higher sampling rate
- ☐ the sound has a higher frequency
- ☐ None of the above

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Question 9 (1 point)



What is the standardized sampling rate for CD quality music?

- ☐ 11,025 Hz
- ☐ 22,050 Hz
- ☐ 44,100 Hz
- ☐ 88,200 Hz

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Question 10 (1 point)



Which of the following is wrong?

- ☐ Sampling rate and sound frequency have the same unit, both use Hz.
- ☐ Sample rate is a setting that can be changed in the digitization process.
- ☐ Sound frequency is a setting that can be changed in the digitization process
- ☐ Higher sampling rate does not necessary mean higher pitch

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Question 11 (1 point)



The ____ of a digitized sound affects the accuracy of the sampled amplitudes being stored.

- ☐ amplitude
- ☐ frequency
- ☐ sampling rate
- ☐ bit depth
- ☐ dynamic range

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Question 12 (1 point)



In digital audio, higher resolution means higher ____.

- ☐ amplitude
- ☐ frequency
- ☐ sampling rate
- ☐ bit depth
- ☐ dynamic range

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Question 13 (1 point)



How many levels of amplitude values does a 10-bit sound allow?

- ☐ 10
- ☐ 100
- ☐ 1000
- ☐ 1024
- ☐ 256

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Question 14 (1 point)



What is the file size for a 10-minute CD-quality stereo music audio file? Choose the closest one.

- ☐ 10 MB
- ☐ 100 MB
- ☐ 150 MB
- ☐ 50 MB
- ☐ 200 MB

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Question 15 (1 point)

What is the file size for a 2-hour FM radio mono music audio file? Choose the closest one.

- ☐ 100 MB
- ☐ 200 MB
- ☐ 300 MB
- ☐ 400 MB
- ☐ 500 MB

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Question 16 (1 point)

For a 200MB audio file, how much time does it take to download this file if the internet speed is 1.5 Mbps? Choose the closest one.

- ☐ 10 minutes
- ☐ 20 minutes
- ☐ 5 minutes
- ☐ 25 minutes

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Question 17 (1 point)

If we consider human ear's most sensitive range of frequency (2,000 Hz to 5,000 Hz), then what is the lowest sampling rate may be used that still satisfies the Nyquist Theorem?

- ☐ 11,025 Hz AM Radio Quality/Speech
- ☐ 22,050 Hz Near FM Radio Quality
- ☐ 44,100 Hz CD Quality
- ☐ 48,000 Hz DAT (digital audio tape) Quality
- ☐ 96,000 Hz DVD-Audio Quality

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Question 18 (1 point)

Reducing the sampling rate by a half and reducing the bit depth by a half at the same time to an audio file will _____

- ☐ have no effect on the file size
- ☐ decrease the file size by half
- ☐ decrease the file size by 75%
- ☐ decrease the file size by 25%
- ☐ decrease the file size by 90%

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Question 19 (1 point)



The reduction of a digital audio file size cannot be achieved by ____.

- ☐ reducing the sampling rate
- ☐ reducing the pitch of the audio
- ☐ reducing the bit depth
- ☐ applying file compression techniques

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Question 20 (1 point)



Which of the following file extension indicates audio files?

- ☐ TIFF
- ☐ AIFF
- ☐ DIFF
- ☐ XIFF
- ☐ BIFF

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Save All Responses

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