

1. During audio analysis, what is the purpose of A-Weighting (A-Weighted filtering)?

- (a) To reduce amplitude values to zero
- (b) To enhance low-frequency components of the signal
- (c) To emphasize frequencies more sensitive to the human ear**
- (d) To eliminate only high frequencies
- (e) To amplify all bands of the signal equally

2. What is the most common way to represent an audio signal in the time domain?

- (a) Describe the signal with statistical values
- (b) Plot the signal as a waveform**
- (c) Represent the signal only by its maximum value
- (d) Show the signal in the complex plane
- (e) Represent the signal on a logarithmic scale

3. Which statement best defines the concept of decibel (dB)?

- (a) Decibel is used only to measure the loudness of musical instruments.
- (b) Decibel represents the distance sound travels in one second.
- (c) Decibel measures energy on a logarithmic scale.**
- (d) Decibel can never have negative values for any signal.
- (e) Decibel only makes sense within the frequency range audible to humans.

4. What cannot be observed when examining the waveform of a signal?

- (a) The signal's sudden attack points
- (b) Changes in amplitude over the duration of the signal
- (c) The average temperature of the recording environment**
- (d) The maximum peak values of the signal
- (e) The time-varying shape of the signal

5. What is one of the key advantages of using the Fourier Transform in signal analysis?

- (a) It measures the distance sound travels in a vacuum.
- (b) It identifies and separates frequency components of a signal.**
- (c) It predicts future signal values with absolute accuracy.
- (d) It calculates the weight of the signal's source material.
- (e) It removes all unwanted signals automatically.