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Courses » Basics of Noise and its Measurements

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Unit 9 - Week 8

Course outline

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- Quiz : Week 8 Assignment
- Lecture 43: Short time Fourier transforms (STFT)
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Week 8 Assignment

The due date for submitting this assignment has passed. **Due on 2017-03-21, 23:59 IST**
As per our records you have not submitted this assignment.

1) Short Time Fourier Transform (STFT) is suitable for:

1 point

- Stationary signals
- Non-stationary signals
- Both stationary and non-stationary signals
- None of the above

No, the answer is incorrect.

Score: 0

Accepted Answers:

Both stationary and non-stationary signals

2) In Short Time Fourier Transform (STFT), *Window Sliding* is the process executed in order to _____.

1 point

- Smoothen the transition of signal in time domain.
- Find the frequency component of a non-stationary signal.
- Improve time localization.
- Improve frequency localization.

No, the answer is incorrect.

Score: 0

Accepted Answers:

Smoothen the transition of signal in time domain.

3) Reverberation Time (T_{rev}) is the time required for a steady state sound signal to decay by _____ dB.

1 point

- 30
- 50
- 60
- 100

No, the answer is incorrect.

Score: 0

Accepted Answers:

60

4) Calculate the reverberation time at 125Hz for a classroom that is 8m wide by 12m long by 3m high. The floor is vinyl tile on concrete, the walls are made of 1/2" drywall (gypsum) board, and the ceiling is acoustic tile suspended in frames. (Use the table given to find the necessary values.)

1 point

- 0.55 s
- 0.7 s
- 0.6 s
- 0.35 s

No, the answer is incorrect.

Score: 0

Accepted Answers:

0.55 s

5) Dimension of an anechoic chamber/room depends on:

- Frequency range of signals to be used.
- Size of the objects to be tested.
- Type of absorptive element used in anechoic chamber/room.
- All of the above.

No, the answer is incorrect.

Score: 0

Accepted Answers:

All of the above.

6) Integer rating used to define the quality of a building partition in attenuating airborne sound is **1 point** _____.

- NRC (Noise Reduction Coefficient).
- STC (Sound Transmission Class).
- SAA (Sound Absorption Average).
- None of the above.

No, the answer is incorrect.

Score: 0

Accepted Answers:

STC (Sound Transmission Class).

7) Scalar representation of the amount of sound energy absorbed upon striking a particular surface is called _____. **1 point**

- NRC (Noise Reduction Coefficient).
- STC (Sound Transmission Class).
- SAA (Sound Absorption Average).
- None of the above.

No, the answer is incorrect.

Score: 0

Accepted Answers:

NRC (Noise Reduction Coefficient).

8) Reverberation rooms are used to measure _____. **1 point**

- Reverberation time of an enclosed room.
- Mean free path of a room.
- Sound Pressure Level of a source.
- Absorption coefficient of a material.

No, the answer is incorrect.

Score: 0

Accepted Answers:

Absorption coefficient of a material.

9) Spectrograms are also called _____. **1 point**

- Spectral waterfalls.
- Voiceprints.



- Voicegrams.
- All of the above

No, the answer is incorrect.

Score: 0

Accepted Answers:

All of the above

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