

Digital measurement techniques

Total Questions: 3

Most Correct Answers: #2

Least Correct Answers: #2

1. The sampling theorem is violated. What consequences arise?

- 5/17 A From the measured samples a higher frequency will be estimated.
- 2/17 B The original, time-continuous signal can be re-constructed, if the perfect inverse transformation is done.
- 7/17 C From the measured samples a lower frequency will be estimated.
- 9/17 D Aliasing occurs.

2. Shadow spectra...

- 0/17 A ...only occur when dealing with digital images.
- 7/17 B ...result from the sampling process.
- 16/17 C ...have the same shape as the spectra of the original signal, but are shifted by multiples of the sampling frequency.
- 6/17 D ...can also occur when dealing with analog signals.

3. Quantization...

- 14/17 A ...is the mapping of continuous values to discrete values via an A/D converter.
- 2/17 B ...can be done without information loss.
- 9/17 C ...is about the discretization of a signal's amplitude.
- 8/17 D ...is about the discretization of the continuous time.