edX   **HKUSTx: ELEC1200.2x A System View of Communications: From Signals to...**

4.1 QUIZ QUESTION 1 (1/1 point)

Suppose we use Pulse Code Modulation to encode a single waveform by sampling it at a frequency of 16kHz and storing 12 bits per sample. What is the corresponding bit rate in bits per second (bps). Consider only the bits required to encode the samples, ignoring any overhead, e.g. due to headers.

Bit rate (bps):

| 192000 | ✓ **Answer:** 192000

$$192000$$

EXPLANATION

The bit rate is obtained by multiplying the sample rate (16,000 samples per second) by the number of bits per sample (12).

You have used 1 of 2 submissions

4.1 QUIZ QUESTION 2 (1/1 point)

Information is lost or discarded inside the Huffman Coding stage used in MP3 coding.

○ True

◉ False ✔

EXPLANATION

Huffman coding is a form of lossless compression. In MP3 encoding, the loss of information occurs due to the non-uniform quantization.

You have used 1 of 1 submissions