For More Questions

1) In uniform quantization process

a. The step size remains same
b. Step size varies according to the values of the input signal
c. The quantizer has linear characteristics
d. Both a and c are correct

ANSWER: (d) Both a and c are correct

2) The process of converting the analog sample into discrete form is called

a. Modulation
b. Multiplexing
c. Quantization
d. Sampling

ANSWER:(c) Quantization

3) The characteristics of compressor in μ-law companding are

a. Continuous in nature
b. Logarithmic in nature
c. Linear in nature
d. Discrete in nature

ANSWER: (a) Continuous in nature

4) The modulation techniques used to convert analog signal into digital signal are

a. Pulse code modulation
b. Delta modulation
c. Adaptive delta modulation
d. All of the above

ANSWER: (d) All of the above

5) The sequence of operations in which PCM is done is

a. Sampling, quantizing, encoding
b. Quantizing, encoding, sampling
c. Quantizing, sampling, encoding
d. None of the above

ANSWER:(a) Sampling, quantizing, encoding

6) In PCM, the parameter varied in accordance with the amplitude of the modulating signal is

a. Amplitude
b. Frequency
c. Phase
d. None of the above

ANSWER: (d) None of the above

7) One of the disadvantages of PCM is

a. It requires large bandwidth
b. Very high noise
c. Cannot be decoded easily
d. All of the above

ANSWER: (a) It requires large bandwidth

8) The expression for bandwidth BW of a PCM system, where v is the number of bits per sample and f_m is the modulating frequency, is given by

a. $BW \geq vf_m$
b. $BW \leq vf_m$
c. $BW \geq 2 vf_m$
d. $BW \geq 1/2 vf_m$

ANSWER: (a) $BW \geq vf_m$

9) The error probability of a PCM is

a. Calculated using noise and inter symbol interference
b. Gaussian noise + error component due to inter symbol interference
c. Calculated using power spectral density
d. All of the above

ANSWER: (d) All of the above

10) In Delta modulation,

a. One bit per sample is transmitted
b. All the coded bits used for sampling are transmitted
c. The step size is fixed
d. Both a and c are correct

ANSWER: (d) Both a and c are correct