

Questions Set - 3

[Home](#) >> [Category](#) >> [Electronic Engineering \(MCQ\) questions & answers](#)



[MCQs](#) [English Tutorials](#) [Download](#)



1) Two vectors a , b are orthogonal if

- a. $\langle a, b \rangle = 0$
- b. $\langle a, b \rangle = \langle a, a \rangle \langle b, b \rangle$
- c. $\langle a, b \rangle = 1$
- d. $\langle a, b \rangle = - \langle a, a \rangle \langle b, b \rangle$

[Answer](#) [Explanation](#) [Related Ques](#)

ANSWER: $\langle a, b \rangle = 0$

Explanation:

No explanation is available for this question!

2) One dimensional signal is a function of

- a. Multiple independent variables
- b. Single independent variable
- c. Multiple dependent variables
- d. Single dependent variable

[Answer](#) [Explanation](#) [Related Ques](#)

ANSWER: Single independent variable

- a. Output that is product of all the signals
- b. Output that is sum of all the signals
- c. Output that is of highest amplitude of all the signals
- d. Output that is of largest spectrum of all the signals

Answer Explanation Related Ques

ANSWER: Output that is sum of all the signals

Explanation:

No explanation is available for this question!

4) The scaling of a sequence $x[n]$ by a factor α is given

- a. $y[n] = \alpha [x[n]]^2$
- b. $y[n] = \alpha x[n^2]$
- c. $y[n] = \alpha x[n]$
- d. $y[n] = x[n]x[-n]$

Answer Explanation Related Ques

ANSWER: $y[n] = \alpha x[n]$

Explanation:

No explanation is available for this question!

5) DFT is applied to

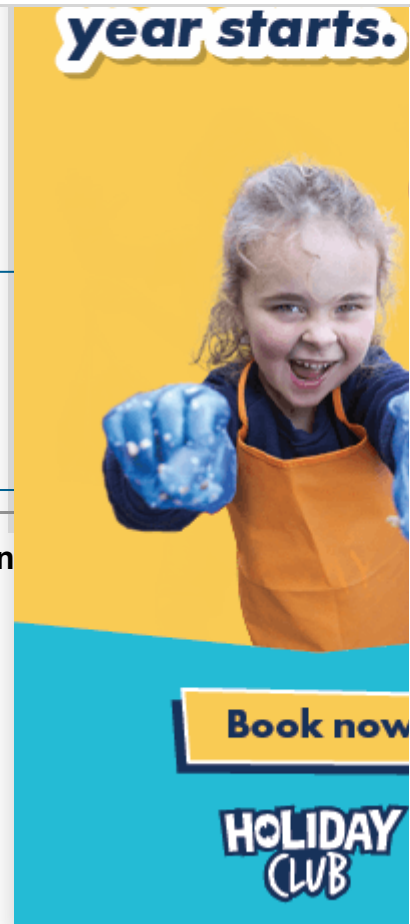
- a. Infinite sequences
- b. Finite discrete sequences
- c. Continuous infinite signals
- d. Continuous finite sequences

Answer Explanation Related Ques

ANSWER: Finite discrete sequences

Explanation:

No explanation is available for this question!



4) Large segments of data

- a. 1, 2 and 3 are correct
- b. 3 and 4 are correct
- c. 1 and 2 are correct
- d. All the four are correct

Answer	Explanation	Related Ques
--------	-------------	--------------

ANSWER: 1 and 2 are correct**Explanation:**

No explanation is available for this question!

7) In Overlap-Add Method with linear convolution of a discrete-time signal of length M , for a length N , zero padding should be of length

- a. $L, M > N$
- b. $L, M = N$
- c. $L, M < N$
- d. $L, M < N^2$

Answer	Explanation	Related Ques
--------	-------------	--------------

ANSWER: $L, M < N$ **Explanation:**

No explanation is available for this question!

8) Discrete cosine transforms (DCTs) express a function or a signal in terms of

- a. Sum of cosine functions oscillating at different frequencies



Become Job Ready

skill-lync.com

OPEN

b. Sum of cosine functions oscillating at same frequencies

ResumeCoach

c. Sum of cosine functions at different sampling intervals

d. Sum of cosine functions oscillating at same sampling intervals

[Answer](#) [Explanation](#) [Related Ques](#)

ANSWER: Sum of cosine functions oscillating at different frequencies

Explanation:

No explanation is available for this question!

9) A system is said to be unstable if

- a. None of the poles of its transfer function is shifted to the right half of s-plane
- b. At least one zero of its transfer function is shifted to the right half of s-plane
- c. At least one pole of its transfer function is shifted to the right half of s-plane
- d. At least one pole of its transfer function is shifted to the left half of s-plane

10) A system is said to be marginally unstable if

- a. None of its zeros of its transfer function lies on the $j\omega$ axis of s-plane
- b. At least one zero of its transfer function lies on the $j\omega$ axis of s-plane
- c. None of its poles of its transfer function lies on the $j\omega$ axis of s-plane
- d. At least one pole of its transfer function lies on the $j\omega$ axis of s-plane

Answer

Explanation

Related Ques

ANSWER: At least one pole of its transfer function lies on the $j\omega$ axis of s-plane

Explanation:

No explanation is available for this question!

11) The nonlinear difference equations are solved using

- a. Iterative method
- b. Cobweb model
- c. Phase diagram
- d. Power series method

Answer

Explanation

Related Ques

ANSWER: Phase diagram

Explanation:

No explanation is available for this question!

12) Correlation is used for

- 1) Computation of average power in waveforms
- 2) Climatography
- 3) Identification of binary code word in PCM systems
- 4) Quantization

- a. 1, 2 and 3 are correct
- b. 1 and 2 are correct



Explanation:

No explanation is available for this question!

13) The Chebyshev filters have

- 1) Flat pass band
- 2) Flat stop band
- 3) Equiripple pass band
- 4) Tapering stop band

- a. 1 and 2 are correct
- b. 2 and 4 are correct
- c. 2 and 3 are correct
- d. All the four are correct

Answer Explanation Related Ques

ANSWER: 2 and 3 are correct**Explanation:**

No explanation is available for this question!

14) The Elliptic filters have

- 1) Flat pass band
- 2) Flat stop band
- 3) Equiripple pass band
- 4) Equiripple stop band

- a. 1 and 2 are correct
- b. 3 and 4 are correct
- c. 2 and 3 are correct
- d. All the four are correct

Answer Explanation Related Ques

ANSWER: 3 and 4 are correct

- 1) Coefficient quantization error
- 2) Adder overflow limit cycle
- 3) Round off noise
- 4) Limit cycles

- a. 1, 2 and 3 are correct
- b. 1 and 3 are correct
- c. 1 and 4 are correct
- d. All the four are correct

Answer Explanation Related Ques

ANSWER: All the four are correct

Explanation:

No explanation is available for this question!

16) The error in the filter output that results from rounding or truncating calculation is called

- a. Coefficient quantization error
- b. Adder overflow limit cycle
- c. Round off noise
- d. Limit cycles

Answer Explanation Related Ques

ANSWER: Round off noise

Explanation:

No explanation is available for this question!

17) Consider the assertions given below. Which among them is an advantage of IIR filters?

- a. Necessity of computational techniques for filter implementation
- b. Requirement of large storage
- c. Incapability of simulating prototype analog filters
- d. Presence of linear phase response



18) For a linear phase filter, if Z_1 is zero then what would be the value of Z_1^{-1} or 1

- a. Zero
- b. Unity
- c. Infinity
- d. Unpredictable

Answer Explanation Related Ques

ANSWER: Zero

Explanation:

No explanation is available for this question!

19) In FIR filter design, which among the following parameters is/are separately c Kaiser window?

- a. Order of filter (M)
- b. Transition width of main lobe
- c. Both a and b
- d. None of the above

Answer Explanation Related Ques

ANSWER: Both a and b

Explanation:

No explanation is available for this question!

20) Which window function is also regarded as 'Raised-cosine window'?

- a. Hamming window
- b. Hanning window
- c. Barlett window
- d. Blackman window

Answer Explanation Related Ques

_____ from the middle to the ends.

- a. linearly
- b. elliptically
- c. hyperbolically
- d. parabolically

Answer Explanation Related Ques

ANSWER: linearly

Explanation:

No explanation is available for this question!

22) In Gibb's phenomenon, the ringing effect is predominantly present near the _

- a. bandgap
- b. bandedge
- c. bandwidth
- d. bandshell

Answer Explanation Related Ques

ANSWER: bandedge

Explanation:

No explanation is available for this question!

23) How is/are the roundoff errors reduced in the digital FIR filter?

- a. By representation of all products with double-length registers
- b. By rounding the results after acquiring the final sum
- c. Both a and b
- d. None of the above

Answer Explanation Related Ques

ANSWER: Both a and b

- a. adders
- b. subtractors
- c. multipliers
- d. dividers

[Answer](#)[Explanation](#)[Related Ques](#)

ANSWER: multipliers

Explanation:

No explanation is available for this question!

25) Which filters exhibit their dependency upon the system design for the stabilit

- a. FIR
- b. IIR
- c. Both a and b
- d. None of the above

[Answer](#)[Explanation](#)[Related Ques](#)

ANSWER: IIR

Explanation:

No explanation is available for this question!

26) In FIR filters, which among the following parameters remains unaffected by tl effect?

- a. Magnitude Response
- b. Phase Characteristics
- c. Both a and b
- d. None of the above

[Answer](#)[Explanation](#)[Related Ques](#)

ANSWER: Phase Characteristics



- a. Increased
- b. Constant
- c. Decreased
- d. None of the above

[Answer](#)[Explanation](#)[Related Ques](#)

ANSWER: Increased

Explanation:

No explanation is available for this question!

28) In cascade form of realization, how many bits should be used to represent the coefficients in order to avoid the quantization effect on filter coefficients?

- a. 5 to 10
- b. 12 to 14
- c. 20 to 24
- d. 28 to 40

[Answer](#)[Explanation](#)[Related Ques](#)

ANSWER: 12 to 14

Explanation:

No explanation is available for this question!

29) Consider the assertions (steps) given below. Which among the following is a designing steps for the sampling rate converters?

- A. Computation of decimation/interpolation factor for each stage.**
- B. Clarification of anti-aliasing / anti-imaging filter requirements.**
- C. Designing of filter at each stage.**
- D. Calculation of optimum stages of decimation/ interpolation yielding maximum efficiency implementation.**

- a. A, B, C, D
- b. C, A, D, B



Explanation:

No explanation is available for this question!

30) For designing a multirate LPF with passband 0 to 50 Hz, stopband 60 to 280 Hz, passband deviation 0.001, stopband deviation 0.01 and sampling frequency (f_s) = 400 Hz, what is the value of normalized transition width?

- a. 0.025 Hz
- b. 1.25 Hz
- c. 1.50 Hz
- d. 2.6 Hz

Answer	Explanation	Related Ques
--------	-------------	--------------

ANSWER: 0.025 Hz

Explanation:

No explanation is available for this question!

31) In polyphase filters, the subfilters which share a common delay line results in storage requirement by factor _____

- a. 1
- b. 2
- c. 3
- d. 4

Answer	Explanation	Related Ques
--------	-------------	--------------

ANSWER: 3

Explanation:

No explanation is available for this question!

32) How is the operating level of sampling rate for the subfilters involved in the polyphase filter?

- a. Low
- b. Moderate



Explanation:

No explanation is available for this question!

33) In polyphase filter, which kind of realization is/are adopted for three subfilters coefficients?

- a. Cascade
- b. Parallel
- c. Direct
- d. All of the above

[Answer](#)[Explanation](#)[Related Ques](#)

ANSWER: Parallel

Explanation:

No explanation is available for this question!

34) How is the sampling rate conversion achieved by factor I/D?

- a. By increase in the sampling rate with (I)
- b. By filtering the sequence to remove unwanted images of spectra of original signal
- c. By decimation of filtered signal with factor D
- d. All of the above

[Answer](#)[Explanation](#)[Related Ques](#)

ANSWER: All of the above

Explanation:

No explanation is available for this question!

35) Program Sequence plays a crucial role in maintaining the track of _____

- a. Program counter increment
- b. Conditional branching & looping
- c. Subroutine & interrupt handling
- d. All of the above

- a. Implicate
- b. Explicate
- c. Both a and b
- d. None of the above

[Answer](#)[Explanation](#)[Related Ques](#)

ANSWER: Implicate

Explanation:

No explanation is available for this question!

37) In TMS 320 C6x processor architecture, which functional unit is adopted for transfer of data from register to and from control register?

- a. L₂
- b. M₂
- c. S₂
- d. D₂

[Answer](#)[Explanation](#)[Related Ques](#)

ANSWER: S₂

Explanation:

No explanation is available for this question!

38) In TMS 320 C6x processor architecture, which operation/s is/are performed by the barrel shifter?

- a. Bit expansion
- b. Bit interleaving & deinterleaving
- c. Rotation & Variable shifting
- d. All of the above

[Answer](#)[Explanation](#)[Related Ques](#)

ANSWER: All of the above



- a. Synchronous burst
- b. Asynchronous devices
- c. Externally shared memory devices
- d. All of the above

[Answer](#)[Explanation](#)[Related Ques](#)

ANSWER: All of the above

Explanation:

No explanation is available for this question!

40) Which peripheral on C 6 X processor allows buffering of serial samples in memory automatically & especially with an assistance of EDMA controller?

- a. Boot Loader
- b. HPI
- c. EMIF
- d. McBSP

[Answer](#)[Explanation](#)[Related Ques](#)

ANSWER: McBSP

Explanation:

No explanation is available for this question!

Top Credit Card C

Finder

From 0% Interest Offers To Bc
Points, \$0 Fee & Extras. Comp
Australian Credit Cards!

OPEN



Digital Signal Processing
Test Questions Set - 2

Digital Signal Processing
Test Questions Set - 1

VLSI Design & Technology
Test Questions Set - 3

VLSI Design & Technology
Test Questions Set - 2

VLSI Design & Technology
Test Questions Set - 1

Embedded Processors Test
Questions Set - 2

Embedded Processors Test
Questions Set - 1

Optical Fiber
Communication Test
Questions Set - 3

Optical Fiber
Communication Test
Questions Set - 2

Optical Fiber
Communication Test
Questions Set - 1

Information Theory & Coding
Techniques Test Set 2

Information Theory & Coding
Techniques Test Set 1

Integrated Circuits Test
Questions Set 2

Integrated Circuits Test
Questions Set 1

Telecommunication &
Switching Systems Test Set
2

Telecommunication &
Switching Systems Test Set
1

Mobile Communication Test
Questions Set 4

Mobile Communication Test
Questions Set 3

Mobile Communication Test
Questions Set 2

Mobile Communication Test
Questions Set 1





[Applications Test Questions Set](#)

