Computer Networks (Mid term Exam)

Your email will be recorded when you submit this form.

Not **bcsf18m027@pucit.edu.pk**? Switch account

* Required

Computer Networks (Mid term Exam)

What is the bandwidth of a signal that ranges from 1 MHz to 4 MHz? *

- ○ 1 KHz
- ◉ 3 MHz
- ○ 4 MHz
- ○ none of the above

A periodic signal completes one cycle in 0.001 s. What is the frequency? *

- ○ 1 Hz
- ◉ 1 KHz
- ○ 100 Hz
- ○ 1 MHz

When propagation speed is multiplied by propagation time, we get the _____. *

- ○ wavelength of the signal
- ◉ distance a signal or bit has traveled
- ○ distortion factor
- ○ throughput

How many carrier frequencies are used in BFSK? *

- ○ 2
- ◉ 1
- ○ 0
- ○ none of the above

The word _____ refers to the portion of a _____ that carries a transmission. *

- ○ line; channel
- ◉ link; channel
- ○ line; link
- ○ channel; link

A _____ sine wave is not useful in data communications; we need to send a _____ signal. *

- [x] single-frequency; composite
- [ ] none of the above
- [ ] single-frequency; double-frequency
- [ ] composite; single-frequency This is the correct answer.

The constellation diagram of 16-QAM has _____ dots. *

- [ ] 4
- [ ] 8
- [x] 16
- [ ] none of the above

A sine wave in the _____ domain can be represented by one single spike in the _____ domain. *

- [ ] phase; time
- [ ] time; frequency
- [ ] time; phase
- [x] frequency; time

Which multiplexing technique transmits analog signals? *

- ○ WDM
- ○ TDM
- ○ FDM
- ◉ (a) and (c)

How many carrier frequencies are used in BPSK? *

- ○ 0
- ◉ 1
- ○ 2
- ○ none of the above

In TDM, the transmission rate of the multiplexed path is usually _____ the sum of the transmission rates of the signal sources. *

- ○ less than
- ◉ greater than
- ○ not related to
- ○ equal to

In a multiplexed system, ____ lines share the bandwidth of _____ link. *

- (●) n; 1
- ( ) 1; n
- ( ) 1; 1
- ( ) n; n

If the baud rate for a 64-QAM signal is 2000, what is the bit rate? *

- ( ) 400
- ( ) 300
- (●) 12000
- ( ) 1000

_____ is an analog multiplexing technique to combine optical signals. *

- (●) WDM
- ( ) FDM
- ( ) TDM
- ( ) None of the above

In QAM, both _____ of a carrier frequency are varied. *

- ( ) phase and frequency
- (●) amplitude and phase
- ( ) frequency and amplitude
- ( ) none of the above

AM and FM are examples of _____ conversion. *

- [x] analog-to-analog
- [ ] digital-to-digital
- [ ] analog-to-digital
- [ ] digital-to-analog

_____ conversion is the representation of analog information by an analog signal. *

- [x] Analog-to-analog
- [ ] Analog-to-digital
- [ ] Digital-to-analog
- [ ] Digital-to-digital

Given two sine waves A and B, if the frequency of A is twice that of B, then the period of B is _____ that of A. *

- [ ] one-half
- [ ] indeterminate from
- [x] twice
- [ ] the same as

_____ can impair a signal. *

- ○ Attenuation
- ◉ All of the above
- ○ Distortion
- ○ Noise

In _____ TDM, slots are dynamically allocated to improve bandwidth efficiency. *

- ○ isochronous
- ○ synchronous
- ◉ statistical
- ○ none of the above

If the bit rate for an FSK signal is 1200 bps, the baud rate is _____. *

- ◉ 1200
- ○ 400
- ○ 300
- ○ 600

In _____ transmission, the carrier signal is modulated so that its amplitude varies with the changing amplitudes of the modulating signal. *

- ○ PM
- ○ FM
- ◉ AM
- ○ none of the above

In _____, the peak amplitude of one signal level is 0; the other is the same as the amplitude of the carrier frequency. *

- ◉ OOK
- ○ PSK
- ○ FSK
- ○ none of the above

How many carrier frequencies are used in BASK? *

- ○ 0
- ◉ 1
- ○ 2
- ○ none of the above

How many carrier frequencies are used in QPSK? *

- [ ] 0
- [x] 2
- [ ] 1
- [ ] none of the above

_____ is a type of transmission impairment in which an outside source such as crosstalk corrupts a signal. *

- [ ] Frequency
- [ ] Amplitude
- [ ] Phase
- [x] Voltage

_____is the rate of change with respect to time. *

- [ ] Time
- [ ] Voltage
- [x] Frequency
- [ ] Amplitude

Quadrature amplitude modulation (QAM) is a combination of _____. *

- ○ PSK and FSK
- ○ ASK and FSK
- ◉ ASK and PSK
- ○ none of the above

The constellation diagram of QPSK has _____ dots.
*

- ○ 4
- ○ 2
- ○ 1
- ◉ none of the above

If the maximum amplitude of a sine wave is 2 V, the minimum amplitude is _____ V. *

- ○ 1
- ○ between -2 and 2
- ○ 2
- ◉ -2

The constellation diagram of BPSK has _____ dots. *

- [ ] 0
- [ ] 1
- [x] 2
- [ ] none of the above

If the bit rate for an ASK signal is 1200 bps, the baud rate is _____. *

- [ ] 400
- [x] 1200
- [ ] 300
- [ ] 600

_____ can be applied when the bandwidth of a link (in hertz) is greater than the combined bandwidths of the signals to be transmitted. *

- [ ] TDM
- [x] FDM
- [ ] Both (a) or (b)
- [ ] Neither (a) or (b)

Baseband transmission of a digital signal is possible only if we have a ____ channel. *

- ○ low rate
- ○ bandpass
- ◉ low-pass
- ○ high rate

If the baud rate is 400 for a QPSK signal, the bit rate is _____ bps. *

- ○ 1600
- ○ 100
- ○ 400
- ◉ 800

Data can be _____. *

- ○ digital
- ○ analog
- ◉ (a) or (b)
- ○ none of the above

ASK, PSK, FSK, and QAM are examples of _____ conversion. *

- (●) digital-to-analog
- ( ) digital-to-digital
- ( ) analog-to-digital
- ( ) Analog-to-analog

A constellation diagram shows us the _____ of a signal element, particularly when we are using two carriers (one in-phase and one quadrature). *

- ( ) amplitude and frequency
- (●) amplitude and phase
- ( ) frequency and phase
- ( ) none of the above

_____ can be achieved by using multiplexing; _____ can be achieved by using spreading. *

- (●) Efficiency; privacy and antijamming
- ( ) Privacy and efficiency; antijamming
- ( ) Privacy and antijamming; efficiency
- ( ) Efficiency and antijamming; privacy

For a _____ channel, the Nyquist bit rate formula defines the theoretical maximum bit rate. *

- (●) Noiseless
- ( ) bandpass
- ( ) noisy
- ( ) low-pass

In _____, the amplitude of the carrier signal is varied to create signal elements. Both frequency and phase remain constant
*

- (●) ASK
- ( ) FSK
- ( ) QAM
- ( ) PSK

Before data can be transmitted, they must be transformed to _____. *

- ( ) periodic signals
- (●) electromagnetic signals
- ( ) low-frequency sine waves
- ( ) aperiodic signals

In synchronous TDM, for n signal sources of the same data rate, each frame contains _____ slots. *

- ○ n – 1
- ○ 0 to n
- ◉ n
- ○ n + 1

Analog-to-analog conversion is needed if the available bandwidth is _____. *

- ◉ band-pass
- ○ low-pass
- ○ either (a) or (b)
- ○ neither (a) nor (b)

The _____ product defines the number of bits that can fill the link. *

- ○ frequency-amplitude
- ◉ bandwidth-delay
- ○ delay-amplitude
- ○ bandwidth-period

_____ conversion is the process of changing one of the characteristics of an analog signal based on the information in the digital data. *

- ○ Analog-to-analog
- ○ Digital-to-digital
- ◉ Digital-to-analog
- ○ Analog-to-digital

If the available channel is a _____ channel, we cannot send a digital signal directly to the channel. *

- ◉ bandpass
- ○ low-pass
- ○ low rate
- ○ high rate

A(n)_____ signal is a composite analog signal with an infinite bandwidth. *

- ○ either (a) or (b)
- ○ analog
- ○ neither (a) nor (b)
- ◉ digital

The _____ of a composite signal is the difference between the highest and the lowest frequencies contained in that signal. *

- ○ amplitude
- ○ frequency
- ◉ bandwidth
- ○ period

_____ describes the position of the waveform relative to time 0. *

- ○ Amplitude
- ○ Voltage
- ○ Frequency
- ◉ Phase

In a time-domain plot, the horizontal axis is a measure of _____. *

- ○ frequency
- ○ signal amplitude
- ◉ time
- ○ phase

Given an AM radio signal with a bandwidth of 10 KHz and the highest-frequency component at 705 KHz, what is the frequency of the carrier signal? *

- ○ 710 KHz
- ○ 705 KHz
- ◉ 700 KHz
- ○ Cannot be determined from given information

In _____, the phase of the carrier is varied to represent two or more different signal elements. Both peak amplitude and frequency remain constant. *

- ○ QAM
- ◉ PSK
- ○ FSK
- ○ ASK

_____ is a type of transmission impairment in which the signal loses strength due to the different propagation speeds of each frequency that makes up the signal. *

- ◉ Attenuation
- ○ Decibel
- ○ Distortion
- ○ Noise

A signal is measured at two different points. The power is P1 at the first point and P2 at the second point. The dB is 0. This means _____. *

- (●) P2 equals P1
- ( ) P2 is zero
- ( ) P2 is much smaller than P1
- ( ) P2 is much larger than P1

If the bit rate for a 16-QAM signal is 4000 bps, what is the baud rate? *

- ( ) 300
- ( ) 400
- (●) 1000
- ( ) 1200

Which of the following is not an analog-to-analog conversion? *

- (●) QAM
- ( ) FM
- ( ) PM
- ( ) AM

Which of the following is not a digital-to-analog conversion? *

- ○ PSK
- ○ ASK
- ○ FSK
- ◉ AM

If the bandwidth of a signal is 5 KHz and the lowest frequency is 52 KHz, what is the highest frequency? *

- ◉ 57 KHz
- ○ 47 KHz
- ○ 10 KHz
- ○ 5 KHz

_____ data have discrete states and take discrete values. *

- ○ Analog
- ◉ Digital
- ○ (a) or (b)
- ○ None of the above

Page 2 of 2

Back Submit