

CS601

MIDTERM BY VU SPARKY



Version (1.1)



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1. In an analogue hierarchy to carry voice channels, a super group has _____ bandwidth.
 - a. 60 kHz
 - b. 240 Hz ✓^{HB}
 - c. 240 kHz
 - d. 120 kHz
2. In frequency modulation, the frequency of the oscillator changes according to the _____.
 - a. Input voltage ✓^{HB}
 - b. Output voltage
 - c. Output phase
 - d. Output frequency
3. Which one of the following is not a bipolar encoding level?
 - a. One
 - b. Negative
 - c. Positive
 - d. Zero ✓^{HB}
4. The human voice normally contains frequency range from _____.
 - a. 0 to 3000 Hz
 - b. 0 to 6000 Hz
 - c. 0 to 5000 Hz ✓^{HB}
 - d. 0 to 4000 Hz
5. In _____, modulation process is used by the transmitting devices to shift their data to a specific carrier frequency for multiplexing.
 - a. WDM
 - b. TDM
 - c. PDM

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- d. **FDM** ✓^{HB}
6. Block coding scheme contains _____ number of steps.
- a. 4
 - b. 5
 - c. **3** ✓^{HB}
 - d. 2
7. _____ is the first step in PCM technique.
- a. Substitution
 - b. Quantizing
 - c. Encoding
 - d. **Sampling** ✓^{HB}
8. Narrow bands of light in wave division multiplexing are denoted by _____.
- a. **λ** ✓^{HB}
 - b. β
 - c. α
 - d. π
9. Polar encoding scheme uses _____ voltage level.
- a. 3
 - b. 1
 - c. 0
 - d. **2** ✓^{HB}
10. QAM stands for _____.
- a. **Quadrature Amplitude Modulation** ✓^{HB}
 - b. Quarter Altitude Modulator
 - c. Quadrature Amplifier Modulation
 - d. Quadrature Amplitude Modifier

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1. In statistical time division multiplexing, number of slots in frame are less than _____.

- a. Input frequency
- b. Input lines
- c. Multiplexed T lines @studywithhamza25
- d. Output data rate

2. Density of the core at the destination decreases in _____ propagation mode

- a. Single mode, step index
- b. Single mode, graded index @studywithhamza25
- c. Multimode, step index
- d. Multimode, graded index

3. The fiber optic cable of type 7/125 is of _____ mode.

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4. _____ technique does not follow analog to analog conversion.

- a. QAM @studywithhamza25
- b. AM
- c. PM
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- a. RG-11
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- a. Two @studywithhamza25
- b. Three
- c. Four
- d. Five

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- a. **Consol**
- b. **Parallel**
- c. **IrDA** @studywithhamza25
- d. **USB**

11. In Phase shift key, _____ is/are kept constant.

- a. **Frequency**
- b. **Amplitude and Phase**
- c. **Phase** @studywithhamza25
- d. **Amplitude and Frequency**

12. Technique that allows the simultaneous transmission of multiple signals across a single data link, is known as _____.

- a. **Multiplexing** @studywithhamza25
- b. **Demodulating**
- c. **Compressing**
- d. **Encryption**

13. Time division multiplexing is used in _____ systems.

- a. **Hybrid**
- b. **Digital** @studywithhamza25
- c. **Automated**
- d. **Analog**

14. Binary _____ is also called On-OFF

Keying.

- a. FSK
- b. PSK
- c. **ASK** @studywithhamza25
- d. QAM

15. Both ----- remain constant in Frequency Shift

Keying.

- a. amplitude and phase
- b. phase and baud rate
- c. **frequency and amplitude** @studywithhamza25
- d. bit rate and phase

16. QAM stands for _____ .

- a. **Quadrature Amplitude Modulation** @studywithhamza25
- b. Quadrature Amplifier Modulation
- c. Quarter Altitude Modulator
- d. Quadrature Amplitude Modifier

17. In _____ multiplexing technique, guard bands are used to avoid overlapping of frequency bands assigned to each user.

- a. TDM
- b. PDM
- c. **FDM** @studywithhamza25
- d. CSMA

18. Simultaneous transmission of multiple signals across a single data link is called _____.

- a. Demodulation
- b. Demultiplexing
- c. Modulation
- d. **Multiplexing** @studywithhamza25

19. A telephone line analog signal has got the bandwidth of _____.

- a. **4 kHz** @studywithhamza25
- b. 16 kHz
- c. 8 kHz
- d. 2 kHz

20. Electromagnetic waves ranging in frequencies between 1 and 300 GHz are called _____.

- a. Light wave
- b. Infrared waves
- c. Radio waves
- d. **Microwaves** @studywithhamza25

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1. _____ is the encoded message sent from one station to another when they are connected securely.
 - a. Encrypted data
 - b. Cryptogram
 - c. **Cipher Text** ✓^{HB}
 - d. Secure message
2. Low pass channel with _____ bandwidth is not real and is used for theoretical modeling.
 - a. Multiplexed
 - b. **Infinite** ✓^{HB}
 - c. Narrow
 - d. Ethernet
3. Which of the following best illustrates the concept of decapsulation in internet protocol layering?
 - a. Converting a digital image into sound waves for transmission.
 - b. Encrypting a sensitive email to send it securely.
 - c. **Unzipping a compressed file on your computer to access its contents.** ✓^{HB}
 - d. Writing a message on a piece of paper before placing it in an envelope.
4. _____ signal completes a certain pattern in a specific amount of time.
 - a. Wavelength

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- b. APeriodic
- c. Non-periodic
- d. **Periodic** ✓^{HB}

5. A connecting device _____ in a network

- a. Determines the type of data transmitted in the network.
- b. **Controls network traffic and facilitates data transfer between devices.** ✓^{HB}
- c. Provides power supply to network devices.
- d. Manages network security

6. Switch is a _____ layer device.

- a. Application
- b. Network
- c. Transport
- d. **Data link** ✓^{HB}

7. _____ is the data format used at Transport layer of TCP/IP Protocol suite.

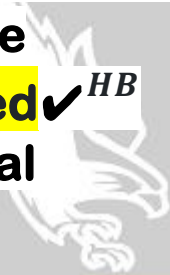
- a. Frame
- b. **Segment** ✓^{HB}
- c. Packet
- d. Bit

8. Packets travel in _____ layer of TCP/IP Protocol suite.

- a. Application
- b. **Network** ✓^{HB}
- c. Data link

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- d. Presentation
9. The communication at the Application, Transport and Network layer is _____.
- a. Physical
 - b. Rational
 - c. **Logical** ✓^{HB}
 - d. Real
10. Digital signals are identified by a _____ set of discrete values.
- a. Infinite
 - b. **Limited** ✓^{HB}
 - c. Logical



THANKS FOR WATCHING!

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1. _____ is a network device which operates on the network layer in the TCP/IP protocol suite.
 - a. **Router** @studywithhamza25
 - b. Hub
 - c. Gateway
 - d. Switch

2. _____ are known as identical objects in Data link layer.
 - a. Messages
 - b. **Frame** @studywithhamza25
 - c. Datagrams
 - d. Bits

3. Suppose a signal is attenuated then the value of decibel will be _____.
 - a. 0
 - b. 1
 - c. **Negative** @studywithhamza25
 - d. Positive

4. We quantize the sampling output into certain levels based on range of _____ and required accuracy.
 - a. Frequency
 - b. Latency
 - c. **Amplitude** @studywithhamza25
 - d. Time Period

5. During data communication, the received signal is not always same as the transmitted signal due to _____.
 - a. Multiplexing

- b. **Transmission impairments**
 - c. Delta Modulation
 - d. Phase shift key
6. The conversion of _____ sample of the signal into _____ form is called quantizing process
- a. **Analog, Digital @studywithhamza25**
 - b. Amplitude, Frequency
 - c. Frequency, Bit Stream
 - d. Frequency, Amplitude
7. To calculate the data rate for noisy channel _____ formula is used.
- a. **Nyquist @studywithhamza25**
 - b. Shannon
 - c. Propagation
 - d. Greedy
8. To measure the data rate _____ theoretically formula(s) were developed.
- a. 4
 - b. 1
 - c. **2 @studywithhamza25**
 - d. 3
9. At the Application layer, object/information is in the form of _____.
- a. Segment
 - b. **Message**
 - c. Packet
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10. Transmission media does not include _____.
- Air
 - None of the above @studywithhamza25**
 - Free space
 - Water
11. Token Ring was devised by _____.
- Dell
 - IBM @studywithhamza25**
 - NASA
 - OSI
12. _____ encoding scheme is somewhat a combination of the RZ and NRZ-I schemes.
- Manchester
 - Manchester and differential Manchester
 - Differential Manchester @studywithhamza25**
 - AMI
13. Which of following technique(s) is used for Analog-to-Digital Conversion.
- Pulse Code Modulation (PCM)
 - Delta Modulation (DM)
 - Bit Modulation(BDM)
 - Both Pulse Code and Delta Modulation**
14. We can have combination of _____ possible codes with a 5-bit code.
- 32 @studywithhamza25**
 - 8
 - 4

- d. 16
15. In _____ encoding scheme, the voltage level oscillates between a positive and a negative value although it may remain at zero level between the two values.
- a. Uni-Polar
 - b. **Bi-Polar @studywithhamza25**
 - c. Non-Polar
 - d. Polar
16. _____ is a network device which operates on the network layer in the TCP/IP protocol suite.
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17. Which one of the following is not a sampling technique?
- a. Flat Top Sampling
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18. In Pulse code modulation the term sampling can also be referred as _____.
- a. Pulse sample Modulation
 - b. Pulse Line Modulation
 - c. **Pulse Amplitude Modulation @studywithhamza25**
 - d. Pulse Frequency Modulation

19. Taking off the header from the message is called

_____.

- a. Decapsulation @studywithhamza25
 - b. Layering
 - c. Stuffing
 - d. Encryption
20. The layer of TCP/IP protocol suite which is on the top is known as _____ layer.

- a. Transport
- b. Network
- c. Application @studywithhamza25
- d. Data link



A switched network consists of a series of interlinked _____ called switches.

a. Points

b. Nodes

c. Roots

d. Systems

In digital communication, why do we use a checksum for error detection in a message?

a. To ensure even or odd parity

b. To facilitate faster data transmission

c. To correct errors

d. To encrypt the data

_____ is the process of converting digital data to digital signals.

a. CSMA/CD

b. Segmentation

c. Line coding

d. CSMA/CA

The primary cause of unpredictable changes in bits during data transmission is _____

a. interference

b. framing

c. encryption



d. decapsulation

In Block coding scheme, number of code words is always _____ data words.

a. Same as

b. Greater than

c. Equal to

d. Less than

Datagram approach and virtual circuit approach are two popular approaches which lead us to _____.

a. Line switching

b. Packet switching

c. Circuit switching

d. Dynamic switching

In Linear Block codes, _____ of two valid code words creates another valid code word.

a. XOR

b. NOR

c. AND

d. OR

In _____ systems, resources are allocated on demand.

- a. Circuit switching
- b. Line switching
- c. Frequency switching

d. Packet switching

In cross bar switch, the cross points can be calculated by _____
inputs and outputs.

- a. Adding
- b. Multiplying**
- c. Dividing
- d. Subtracting

Redundancy contribute to error detection by _____

- a. reducing the size of data frames
- b. encrypting data for secure transmission
- c. increasing the speed of data transmission
- d. adding extra bits to create relationships for error detection**

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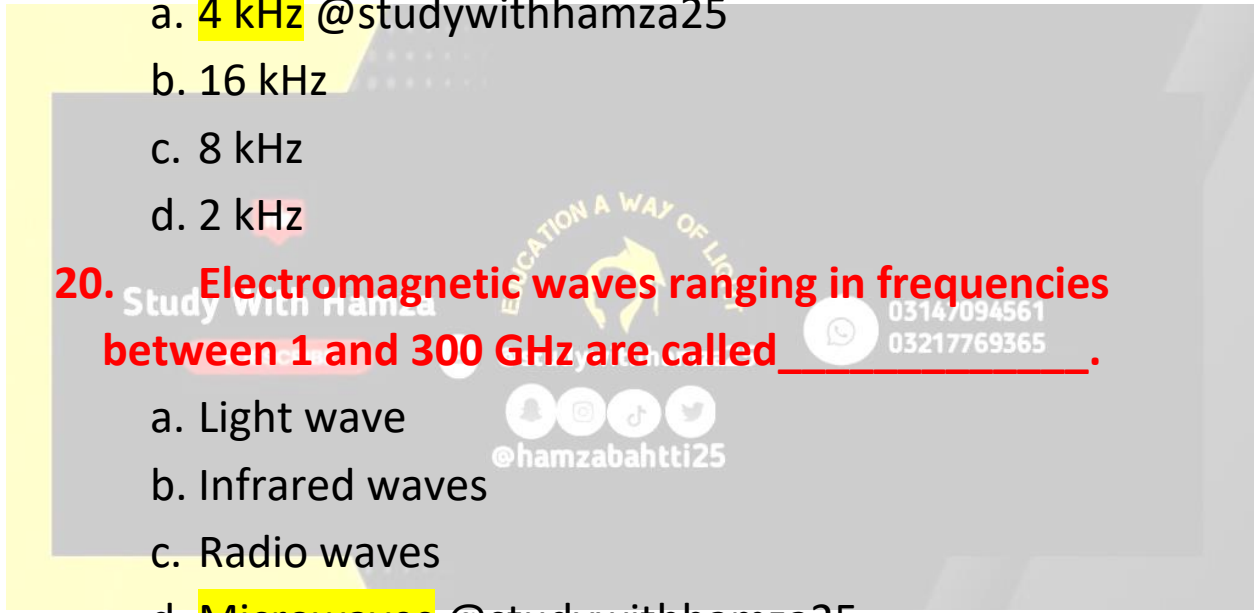
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