CA1 Set-B CSE-306

Section: Roll no. MM: 30

1) Which of the following is incorrect statement?
   a) Any ethernet network card has a unique 48 bit MAC address
   b) ARP solves the problem of finding out which ethernet address corresponds to a given IP address
   c) Machines connected to Internet do not use ARP
   d) The advantage of using ARP over configuration files is the simplicity

2) Segmentation and reassembly is the responsibility of
   a) 4^{th} layer b) 5^{th} layer c) 2^{nd} layer d) 3^{rd} layer

3) What are the four fundamental characteristics of data communication?
   a) Delivery, reliability, security, and jitter
   b) Performance, reliability, security, and jitter
   c) Delivery, accuracy, timeliness, and jitter
   d) Performance, accuracy, timeliness, and jitter

4) The minimum bandwidth of Manchester and differential Manchester is 2 times that of NRZ.
   a) True b) False

5) Which layer deals with
   i) File system Transfer: _____
   ii) Oversees both error control & flow control
   iii) Data Translation

a) Application, Data Link, Presentation
b) Application, Transport, Presentation
c) Application, Transport, Session
d) Application, Data Link, Session

6) Match List-I with List-II and select the correct answer using the codes given below:

List-I	**List-II**
A. Repeaters	1. Data Link Layer
B. Bridges	2. Network Layer
C. Routers	3. Physical Layer

	A	B	C
a	2	3	1
b	3	1	2
c	3	2	1
d	2	1	3

7) What is latency in networking
   a) The range of frequencies in a composite signal
   b) The amount of the time signal takes to complete one cycle
   c) The distance one bit occupies on a transmission medium
   d) The total time it takes for a message to travel from sender to receiver

8) The _____ is actually a multiport repeater

a)Bridge b) VLAN c) Router d)Hub

9) ARP is:
   a) A TCP/IP protocol used to dynamically bind a high level IP address to a low level physical hardware address.
   b) A TCP/IP high level protocol for transferring files from one machine to another.
   c) A TCP/IP protocol used to dynamically bind a low level physical hardware address to a high level IP address.
   d) A protocol that handles error and control messages

10) In _____, the frequency of the carrier signal is varied to represent data. Both peak amplitude and phase remain
constant.

a) ASK b)FSK c)PSK d)QAM

11) Quadrature amplitude modulation (QAM) is a combination of _____.
   a) PSK and FSK
   b)ASK and FSK
   c) ASK and PSK
   d) none of the above

12) In _____ schemes, the voltages are on the both sides of the time axis. For example, the voltage level for 0 can be
positive and the voltage level for 1 can be negative.
   a) unipolar
   b) bipolar
   c) polar
   d) all of the above

13) There are three sampling methods: _____.
   a) ideal, natural, and flat-top
   b) ideal, sampled, and flat-top
   c) quantized, sampled, and ideal
   d) none of the above

14) One Picoseconds (PS) is equivalent to

a)10^{-3} b)10^{-6} c)10^{-9} d) 10^{-12}

15) In induced noise, the impairment is created by sources like
   a) Motor and appliances
   b) Power Lines
   c) the sending and receiving antenna
   d) Motion of electrons in wire

16) Calculate the theoretical channel capacity. If SNR(dB) = 36 and the channel bandwidth is 2 MHz.
   a) 12Mbps b)24Mbps c)16Mbps d)32Mbps

17) Which of the following statements are true about Quantization and sampling

i. According to the Nyquist theorem, the sampling rate must be at least 4 times the highest frequency contained in the signal

ii. Sampling results in a series of pulses of varying amplitude values ranging between two limits: a min and a max.

iii. When a signal is quantized, we introduce an error - the coded signal is an approximation of the actual amplitude value.

iv. Signals with lower amplitude values will suffer more from quantization error

a) i,ii and iii
b) ii,iii and iv
c) i,iii and iv,
d) i, ii, iii and iv

18) Match the multiplexing technique with the signals on which it works in the given order:
FDM, TDM, WDM matches with:

a) Analog, Analog, Digital
b) Analog, Digital, Analog
c) Analog, Digital, Digital
d) Digital, Analog, Digital

19) The _____ rate defines the number of data elements sent in 1s; the _____ rate is the number of signal elements sent in 1s.

a) Data, Signal
b) Signal ,Data
c) Baud ,Bit
d) Bit, Baud

20) If link transmits 4000 frames per second and each slot has 8 bits, transmission rate of circuit is

A) 32 kbps B) 500 bps C) 500 kbps D) 32 bps

21) In _____ 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.

a) Attenuation b) Noise c) Distortion d) Decibel

22) In We send a voice signal from a microphone to a recorder, the transmission is

(a) Base band transmission
(b) Broad band transmission
(c) both a and b
(d) none of the above

23) We An analog signal carries 4 bits per signal element. If 1000 signal elements are sent per second, find the bit rate

a) 4000 bps b) 1000 bps c) 6000 bps d) 2000 bps

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

A) Amplitude B) Time C) Frequency D) Phase

25) In _____ transmission, the frequency of the carrier signal is modulated to follow the changing voltage level (amplitude) of the modulating signal. The peak amplitude and phase of the carrier signal remain constant, but as the amplitude of the information signal changes, the frequency of the carrier changes
correspondingly.
a)AM
b)FM
c)PM
d) none of the above

26)What are the five components of a data communication system?

a. Message, sender, receiver, transmission medium, and protocol

b. Message, server, client, transmission medium, and protocol

c. Message, sender, receiver, network, and protocol

d. Message, server, client, network, and protocol

27)What is the port number for IGMP
a) 533
b) 682
c) 465
d) 823

28)A device is sending out data at the rate of 1000 bps. How long does it take to send a file of 100,000 characters
a)200s b)400s c) 600s d)800s

29)Transmission data rate is decided by which layer
a) Physical b) data link c) transport d) network

30) Which of the following assertions is false about the Internet Protocol (IP)?

a) It is possible for a computer to have multiple IP addresses.
b) IP packets from the same source to the same destination can take different routes in the network.
c) IP ensures that a packet is discarded if it is unable to reach its destination within a given number of hops.
d) The packet source cannot set the route of an outgoing packets; the route is determined only by the routing tables in the routers on the way

Answers

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30