# Computer Networks

**SET-42** 

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# 1. In OSI model, which of the following layer provides error-free delivery of data?

- A. Data link
- B. Network
- C. transport
- D. Session

#### 2. ARP (Address Resolution Protocol) is

- A. a TCP/IP protocol used to dynamically bind a high level IP Address to a lowlevel physical hardware address
- B. a TCP/IP high level protocol for transferring files from one machine to another
- C. a protocol used to monitor computers
- D. a protocol that handles error and control messages
- 3. One of the header fields in an IP datagram is the Time to Live (TTL) field. Which of the following statements best explains the need for this field?
  - A. It can be used to prioritize packets
  - B. It can be used to reduce delays
  - C. It can be used to optimize throughput
  - D. It can be used to prevent packet looping

## 4. In Ethernet when Manchester encoding is used, the bit rate is:

- A. Half the baud rate.
- B. Twice the baud rate.
- C. Same as the baud rate.
- D. none of the above
- 5. Which one of the following statements is FALSE?

- A. Packet switching leads to better utilization of bandwidth resources than circuit switching.
- B. Packet switching results in less variation in delay than circuitswitching.
- C. Packet switching requires more per packet processing than circuitswitching
- D. Packet switching can lead to reordering unlike in circuitswitching
- 6. The physical layer translates logical communication requestsfrom the into hardware specific operations.
  - A. Data link layer
  - B. Network layer
  - C. Transport layer
  - D. Application layer
- 7. is the multiplexing technique that shifts each signal to a different carrierfrequency?
  - A. FDM
  - B. TDM
  - C. Both FDM & TDM
  - D. PDM
- 8. In TDM, the transmission rate of a multiplexed path is always the sum of the transmission rates of the signal sources.
  - A. Greater than
  - B. Lesser than
  - C. Equal to
  - D. Equal to or greater than
- 9. A network router joins two \_\_\_\_\_ together?
  - A. Computers

- B. Switches
- C. Networks
- D. Gateway

## 10. From the options below, which suits best for MODEM?

- A. a device that modulates an analog carrier signal to encode digital information
- B. a device that modulates a digital carrier signal to encode analog information
- C. a device that modulates an analog carrier signal to decode digital information
- D. a device that modulates a digital carrier signal to decode analog information
- 11. \_\_\_\_\_ is a standard suite of protocols used for packet switching across computer networks.
  - A. x.22
  - B. x.23
  - C. x.25
  - D. x.26
- 12. NAT stands for \_\_\_\_\_.
  - A. network address transformer
  - B. network address translator
  - C. network address translation
  - D. Both B and C above
- 13. Both ping and tracert are used to find If the computer is in the
  - A. True
  - B. False
- 14. In the OSI model, as a data packet moves from the lower to the upper layers, headers are

- A. added
- B. removed
- C. rearranged
- D. Modified
- 15. 9 93. Determine the maximum length of the cable (in km) for transmitting data at a rate of 500 Mbps in an Ethernet LAN with frames of size 10,000 bits. Assume the signal speed in the cable to be 2,00,000 km/s.
  - A. 1
  - B. 2
  - C. 2.5
  - D. 5
- 16. Which of the following device is used to connect two systems, especially if the systems use different protocols?
  - A. hub
  - B. bridge
  - C. gateway
  - D. repeater
- 17. In an Ethernet local area network, which one of the following statements is TRUE?
  - A. A station stops to sense the channel once it starts transmitting a frame.
  - B. The purpose of the jamming signal is to pad the frames that are smaller than the minimum frame size.
  - C. A station continues to transmit the packet even after the collision is detected.

- D. The exponential back off mechanism reduces the probability of collision on retransmissions
- 18. ASK, PSK, FSK, and QAM are examples of \_\_\_\_\_ encoding.
  - A. digital-to-digital
  - B. digital-to-analog
  - C. analog-to-analog
  - D. analog-to-digital
- 19. Which of the following system calls results in the sending of SYN packets?
  - A. socket
  - B. bind
  - C. listen
  - D. connect
- 20. In Ethernet CSMA/CD, the special bit sequence transmitted by media access management to handle collision is called
  - A. Preamble
  - B. Post amble
  - C. Jam
  - D. None of the above

ANSWER							
1.	С		11.	C		21.	
2.	A	$\mathbb{N}$	12.	√ C	1/	22.	
3.	D	Vin	13.	В	100	23.	5
4./	Α	· N	14.	В		24.	
5.	В	1	15.	(7B)	1	25.	3/1/2
≥ 6. <i>8</i>	Α	1	16.	C	)		
> 7.	A		17.	100	7	15	
8.	Α	2	18.	В		< €	
9.	С		19.	D		Š	
10.	A	00	20.	С		W/	