

Brooklyn College, CIS Dept, CISC 7330X**Midterm Exam**

Name: _____

Section: _____ Id.: _____

(Each question is worth 5 points. You get 1 point for leaving an answer blank. You get no points for a wrong answer.)

1. (5 pts) For Token Ring, the maximum length of the lan is closer to:

- a. 5km
- b. 500km
- c. 50m
- d. 500m
- e. None of the above, answer is: _____

2. (5 pts) For Token Ring, in multicast mode

- a. destination removes packet
- b. sender removes packet
- c. packet is removed after time-to-live ticks to 0
- d. token is not used
- e. None of the above, answer is: _____

3. (5 pts) The correct order of OSI model layers is:

- a. Application, Presentation, Data Link, Transport, Network, Session, Physical
- b. Application, Presentation, Session, Transport, Network, Data Link, Physical
- c. Application, Presentation, Session, Network, Transport, Data Link, Physical
- d. Application, Presentation, Transport, Session, Network, Data Link, Physical
- e. None of the above, answer is: _____

4. (5 pts) The MAC layer is responsible for:

- a. Routing.
- b. Dealing with collisions.
- c. Converting ASCII to EBCDIC.
- d. End to end error correction.
- e. None of the above, answer is: _____

5. (5 pts) On a bus network,

- a. devices connect using an active interface.
- b. devices connect using a passive interface.
- c. LLC layer handles CSMA/CD

- d. all of the above
e. None of the above, answer is: _____
6. (5 pts) Ring network,
- a. devices connect using an active interface.
 - b. devices connect using a passive interface.
 - c. LLC layer handles CSMA/CD
 - d. all of the above
 - e. None of the above, answer is: _____
7. (5 pts) If bandwidth is 8Mhz, and SNR is 30, max capacity of the channel closer to:
- a. 20Mbps
 - b. 30Mbps
 - c. 40Mbps
 - d. 50Mbps
 - e. None of the above, answer is: _____
8. (5 pts) If bandwidth is 8Mhz, and SNR is 30, about how many voltage levels are required to achieve maximum capacity (from previous question).
- a. 3
 - b. 6
 - c. 12
 - d. 24
 - e. None of the above, answer is: _____
9. (5 pts) We wish to transmit data at 1Mbps using 4 voltage levels. What bandwidth is required?
- a. 25Mhz
 - b. 25kHz
 - c. 250kHz
 - d. 250Mhz
 - e. None of the above, answer is: _____
10. (5 pts)

usecalculator

We are transmitting data at a rate of 1000 bits per second. During transmission, the noise introduces errors so that, on average, 16% of bits are received incorrectly (i.e.: a 0 as 1, or 1 as 0). The maximum error free capacity of this channel is closer to:

- a. 350bps
- b. 550bps
- c. 650bps

- d. 850bps
- e. None of the above, answer is: _____
11. (5 pts) We are transmitting data at 100W, and detect only 90W when receiving, attenuation in decibels is closer to:
- a. -2.0
- b. -1.5
- c. -1.0
- d. -0.5
- e. None of the above, answer is: _____
12. (5 pts) The Data-Link layer is responsible for:
- a. Point to Point transmission
- b. Routing
- c. Name resolution
- d. Pinging
- e. None of the above, answer is: _____
13. (5 pts) Frequencies, connectors, and cables are part of:
- a. Frequency/Connector layer.
- b. LLC Layer
- c. MAC Layer
- d. Physical layer
- e. None of the above, answer is: _____
14. (5 pts) MAC layer is responsible for:
- a. Point to Point error checking.
- b. Accessing the media.
- c. Transcoding Network metadata
- d. Modulating Analog Corrections
- e. None of the above, answer is: _____
15. (5 pts) LLC layer is responsible for:
- a. Point to Point error checking.
- b. Accessing the media.
- c. Transcoding Network metadata
- d. Modulating Analog Corrections
- e. None of the above, answer is: _____
16. (5 pts) Network switches operate at:

- a. Session Layer
- b. Network layer
- c. Data Link Layer
- d. Physical Layer
- e. None of the above, answer is: _____

17. (5 pts) Routers operate at:

- a. Physical Layer
- b. Network layer
- c. Data Link Layer
- d. Session Layer
- e. None of the above, answer is: _____

18. (5 pts) The purpose of a mask in a routing table is:

- a. To get network interface.
- b. To get source address.
- c. To get network address.
- d. To get host address.
- e. None of the above, answer is: _____

19. (5 pts) NTP

- a. Uses UDP
- b. Uses TCP
- c. Opens a connection to get time.
- d. Creates a circuit to get time.
- e. None of the above, answer is: _____

20. (5 pts) Circuit Switching

- a. Is the same as packet switching
- b. Establishes a path upon connection
- c. Dangerous due to electricity.
- d. All of the above.
- e. None of the above, answer is: _____