End Semester Exam KT

TE (Semester-VI)

Computer Communication Networks -ECC602

1. TCP in Computer networking stands for : (1 mrk)

a. Transfer Control Protocol
b. Transmission Control Protocol
c. Transfer Control Permission
d. Transmission Control Permission

2. For a Mesh topology with 5 nodes, number of links required to connect them all are: (2 mrk)

a. 12
b. 3
c. 5
d. 10

3. Logic link Control (MAC) is a part of _____layer (1 mrk)

1) Physical Layer
2) Data link Layer
3) Network Layer
4) Transport Layer

4. A MAN normally covers an area of (1 mrk)

1) 0 to 1 Kilometres
2) 5 to 50 kilometres
3) 5 to 10 meters
4) More than 100 Kilometres

5. To move packets from Source to destination and provide internetworking is a function of _____ layer (1 mrk)

a. Physical
b. Data Link
c. Network
d. Transport

6. _____layer is responsible to transmit ,Encrypt and compress data . (1 mrk)

a. Physical
b. Presentation
c. Network
d. Transport

7. The physical layer is concerned with _____(1 mrk)
a. bit-by-bit delivery
b. process to process delivery
c. application to application delivery
d. port to port delivery

8. The number of layers in TCP_IP reference model is _____(1 mrk)

a) 4

b) 5

c) 6

d) 7

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9. A single channel is shared by multiple signals by _____(1 mrk)
a. analog modulation
b. digital modulation
c. multiplexing
d. phase modulation

10. The IEEE and telecommunications industry standards for wireless data communications Wireless Personal-Area Network (WPAN) is referred as : (1 mrk)
a. Standard IEEE 802.11
b. Standard IEEE 802.15
c. Standard IEEE 802.16
d. Standard IEEE 802.17

11. Which strategy of network connection possesses an ability of sharing the dedicated link capacity only between two nodes(1 mrk)
a. Point-to-point
b. Multi-point
c. Multi-drop
d. Point drop

12. Which protocol of TCP/IP exhibits its usability in applications requiring instant and essentially reliable delivery operations? (1 mrk)
    a. Transmission Control Protocol (TCP)
    b. User Datagram Protocol (UDP)
    c. Internet Protocol (IP)
    d. File Transfer Protocol (FTP)

13. HFC system uses a combination of : (1 mrk)
    a. optical fibers and coaxial cables

b. Optical Fibers and Twisted pair cables
c. Twisted pair and Coaxial Cables
d. Twisted pair and Optical cables

14. TCP/IP model does not have _____ layer but OSI model have this layer. (1 mrk)
    a. session layer
    b. transport layer
    c. application layer
    d. network layer

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15. Let the data stream be 10111111011111000 and the flag is “01111110”, from a frame structure after bit stuffing we get : (2 mrk)
    a.1011111010111110000
    b.10111110111111100000
    c.11101111101111111000
    d.11011111011111110001

16. In Stop and Wait protocol when does the station B send a positive acknowledgement (ACK) to station A? (1 mrk)

a. only when no error occurs at the transmission level

b. when retransmission of old packet in a novel frame is necessary

c. only when station B receives frame with errors

d. only when station A receives frame with errors

17. Which category of HDLC frames undergoes error and flow control mechanisms by comprising send and receive sequence numbers?

a. U-frames

b. I-frames

c. S-frames

d. M-Frames

18. If the frame contained ``A B DLE D E DLE'', the characters transmitted over the channel would be i(2 mrk)

a. ``DLE STX A B DLE DLE D E DLE DLE DLE ETX''.

b. ``DLE STX A B DLE DLE DLE D E DLE DLE DLE ETX''
c. ``DLE STX A B DLE DLE D E D E DLE DLE DLE ETX''.
d. ``DLE STX A B DLE DLE D E DLE DLE DLE ETX ETX''.

19. Define the type of the following destination addresses: 47:20:1B:2E:08:EE(2 mrk)

a. Telecast
b. Multicast
c. Unicast
d. bicast

20. Define the type of the following destination addresses: 44:30:10:21:10:1A (2 mrk)

a. Telecast
b. Multicast
c. Unicast
d. Bicast

21.Size of the sender windows in Selective Repeat ARQ for m= 4 is: (2 mrk)

a. 8
b. 7
c. 9
d. 10

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22. For slotted ALOHA is The maximum throughput Smax = _____ when G= (1). (2 mrk)

a. 0.184

b. 0.368

c. 1.234

d. 4.32

23. Following is not a type of CSMA Protocols: (1 mrk)

a. Non-Persistent CSMA

b. 1-Persistent CSMA

c. p-Persistent CSMA

d. M-Persistent CSMA

24. Transmission medium is divided into M separate frequency bands between M station (1 mrk)

a. TDMA
b. FDMA
c. CDMA
d. MDMA

25. Following is not the method for controlled access: (1 mrk)

a. Reservation

b. Polling

c. Token Passing

d. Slotted Aloha

26. The throughput for pure ALOHA is (2)

a. $S = G \times e^{-G}$

b. $S = G \times e^{-2G}$

c. $2S = G \times e^{-G}$

d. $S = G \times e^{-G/2}$

27. IEEE standard for Wireless Personal-Area Network (WPAN): Commonly known as Bluetooth is : (1 mrk)

a. Standard IEEE 802.11

b. Standard IEEE 802.15

c. Standard IEEE 802.16

d. Standard IEEE 802.17

28. Which of the following is the Random access protocol for channel access control? (1 mrk)
a. CSMA/CD
b. TDMA
c. Polling
d. HDLC

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29. The computation of the shortest path in OSPF is usually done by _____(1 mrk)

a) Bellman-ford algorithm

b) Routing information protocol

c) Dijkstra's algorithm

d) Distance vector routing

30. In an IP packet, the value of HLEN is 1000 in binary. How many bytes of options are being carried by this packet? (2 mrk)
    a. 12 bytes
    b. 10 bytes
    c. 14 bytes
    d. 08 bytes
31. A packet has arrived with an M bit value of 0. This fragment ____(2 mrk)
    a. Last one
    b. First one
    c. Middle one
    d. Second last one
32. A packet has arrived in which the offset value is 100. What is the number of the first byte? (2 mrk)
    a. 800.
    b. 879
    c. 100
    d. 200
33. An IP packet has arrived with the first few hexadecimal digits as shown below:

    45000028000100000102 . . .

    How many hops can this packet travel before being dropped? (2 mrk)
    a. 1 hop
    b. 2 hops
    c. 3 hops
    d. 4 hops

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34. TCP process may not write and read data at the same speed. So we need _____ for storage. (1 mrk)
    a) Packets
    b) Buffers
    c) Segments
    d) Stacks

35. TCP groups a number of bytes together into a packet called _____(1 mrk)

a) Packet

b) Buffer

c) Segment

d) Stack

36. Communication offered by TCP is _____(1 mrk)

a) Full-duplex

b) Half-duplex

c) Semi-duplex

d) Byte by byte

36. The following is a dump of a TCP header in hexadecimal format (2 mrk)

05320017 00000001 00000000 500207FF 00000000. What is the source port number?

a.100

b. 1330

c. 21

d.2300

37. The following is a dump of a TCP header in hexadecimal format

05320017 00000001 00000000 500207FF 00000000. What is the destination port number? (2 mrk)

a. 25
b. 23
c. 24
d. 22