United College of Engineering and Research, Allahabad

Department of Computer Science & Engineering

B.Tech CSE- VI Semester

Set-4

Course Name: Computer Network **AKTU Course Code:** KCS-603

1. Transport layer aggregates data from different applications into a single stream before passing it to _____
   a) network layer
   b) data link layer
   c) application layer
   d) physical layer

2. Which of the following are transport layer protocols used in networking?
   a) TCP and FTP
   b) UDP and HTTP
   c) TCP and UDP
   d) HTTP and FTP

3. User datagram protocol is called connectionless because _____
   a) all UDP packets are treated independently by transport layer
   b) it sends data as a stream of related packets
   c) it is received in the same order as sent order
   d) it sends data very quickly

4. Transmission control protocol _____
   a) is a connection-oriented protocol
   b) uses a three way handshake to establish a connection
   c) receives data from application as a single stream
   d) all of the mentioned

5. An endpoint of an inter-process communication flow across a computer network is called _____
   a) socket
   b) pipe
   c) port
   d) machine

6. Socket-style API for windows is called _____
   a) wsock
   b) winsock

c) wins
d) sockwi

7. Which one of the following is a version of UDP with congestion control?
   a) datagram congestion control protocol
   b) stream control transmission protocol
   c) structured stream transport
   d) user congestion control protocol

8. Transport layer protocols deals with _____
   a) application to application communication
   b) process to process communication
   c) node to node communication
   d) man to man communication

9. Which of the following is a transport layer protocol?
   a) stream control transmission protocol
   b) internet control message protocol
   c) neighbor discovery protocol
   d) dynamic host configuration protocol

10. What are the functions of the transport layer?
    a) Multiplexing/ Demultiplexing
    b) Connection less Services
    c) Connection oriented service
    d) Congestion control

11. Which services are provided by transport layer?
    a) Error control
    b) Connection oriented service
    c) Connection less service
    d) Congestion control

12. TCP and UDP are called _____
    a) Application protocols
    b) Session protocols
    c) Transport protocols
    d) Network protocols

13. _____ does not provide reliable end to end communication.
    a) TCP
    b) UDP
    c) Both TCP and UDP
    d) Neither TCP nor UDP

14. Two broad categories of congestion control are
    a) Open-loop and Closed-loop
    b) Open-control and Closed-control

c) Active control and Passive control
d) Active loop and Passive loop

15. In open-loop control, policies are applied to _____
    a) Remove after congestion occurs
    b) Remove after sometime
    c) Prevent before congestion occurs
    d) Prevent before sending packets

16. Retransmission of packets must not be done when _____
    a) Packet is lost
    b) Packet is corrupted
    c) Packet is needed
    d) Packet is error-free

17. In Go-Back-N window, when the timer of the packet times out, several packets have to be resent even some may have arrived safe. Whereas in Selective Repeat window, the sender resends _____
    a) Packet which are not lost
    b) Only those packets which are lost or corrupted
    c) Packet from starting
    d) All the packets

18. Discarding policy is mainly done by _____
    a) Sender
    b) Receiver
    c) Router
    d) Switch

19. Closed-Loop control mechanisms try to _____
    a) Remove after congestion occurs
    b) Remove after sometime
    c) Prevent before congestion occurs
    d) Prevent before sending packets

20. The technique in which a congested node stops receiving data from the immediate upstream node or nodes is called as _____
    a) Admission policy
    b) Backpressure
    c) Forward signaling
    d) Backward signaling

21. Backpressure technique can be applied only to _____
    a) Congestion networks
    b) Closed circuit networks
    c) Open circuit networks
    d) Virtual circuit networks

22. The packet sent by a node to the source to inform it of congestion is called _____
    a) Explicit
    b) Discard
    c) Choke
    d) Backpressure

23. In the slow-start algorithm, the size of the congestion window increases _____ until it reaches a threshold
    a) Exponentially
    b)Additively
    c) Multiplicatively
    d) Suddenly

24. The token bucket can easily be implemented with a counter, initialized by
    a. 0
    b. 1
    c. -1
    d. -2

25. In Congestion, to define the maximum data rate of the traffic we use
    a. Average Data Packet
    b. Peak Data Rate
    c. Packet Data Rate
    d. Average Data Rate

26. In the slow-start algorithm, the size of the congestion window increases exponentially until it reaches
    a. 0
    b. n-1
    c. Threshold
    d. n+1

27. In Congestion, the maximum burst size normally refers to the maximum length of time the traffic is generated at the
    a. Average Rate
    b. Packet Rate
    c. Protocol Rate
    d. Peak Rate

28. In QoS techniques, packets wait in a buffer (queue) until the node is ready to process them in
    a. Out-of-Order Ones
    b. Fist-in First out
    c. Last-in First-Out
    d. First-in-Last-out

29. A leaky bucket algorithm shapes bursty traffic into fixed-rate traffic by averaging the
    a. Data Rate
    b. Average Rate

c. Traffic Rate
d. Traffic Shaping

30. In the _____ traffic model, the data rate changes suddenly in a very short time.
    a. constant bit rate
    b. variable bit rate
    c. bursty
    d. none of the above

31. Congestion in a network or internetwork occurs because routers and switches have _____.
    a. tables
    b. queues
    c. crosspoints
    d. none of the above

32. In a network, when the load is much less than the capacity of the network, the delay is _____.
    a. at a maximum
    b. at a minimum
    c. constant
    d. none of the above

33. In a network, when the load reaches the network capacity, the delay _____.
    a. increases sharply
    b. decreases sharply
    c. remains constant
    d. cannot be predicted

34. In a network, when the load is below the capacity of the network, the throughput _____.
    a. increases sharply
    b. increases proportionally with the load
    c. declines sharply
    d. declines proportionally with the load

35. In _____ congestion control, policies are applied to prevent congestion before it happens.
    a. open-loop
    b. closed-loop
    c. either (a) or (b)
    d. neither (a) nor (b)

36. In OSI model ICMP belongs to which layer ?

    A) Transport Layer.
    B) Data Link Layer.
    C) Internet Layer.
    D) Network Layer.

37. Which protocol used for e-mail ?

A) ICMP.
B) SNMP.
C) SMTP.
D) RIP.

38. Which of the following IP addresses can be used as (a) loop-back addresses?

a) 0.0.0.0
b) 127.0.0.1
c) 255.255.255.255
d) 0.255.255.255

39. An Aloha network uses an 18.2 kbps channel for sending message packets of 100 bits long size. Calculate the maximum throughput.

a) 5999
b) 6900
c) 6027
d) 5027

40. Which of the following is true with regard to the ping command?

a) Ping stands for Packet Internet Generator.
b) The ping command checks the port level connectivity between source destinations end points.
c) Ping summarizes the packet loss and round-trip delay between two IP end points.
d) The ping command activates the RARP protocol of the IP layer.

41. What is the maximum efficiency of pure aloha at G = 1/2?
a) 1.89
b) 17.99
c) 18.999
d) 18.4

42. What is the maximum efficiency of slotted aloha at G = 1?
a) 36.8
b) 35.8
c) 35.5
d) 37.8

43. Which of the following servers allows LAN users to share data?
a) Data server
b) Point server
c) File server
d) Communication server

44. What is the total vulnerable time value of pure Aloha?
    a) T_{fr}
    b) 1/2 T_{fr}
    c) 2 *T_{fr}
    d) 4 *T_{fr}

45. Which of the following layers does the HTTP protocol work on?
    a) Physical layer
    b) Data-link layer
    c) Application layer
    d) None of the these

46. What is the size of the destination port in the UDP protocol?
    a) 8 bits
    b) 16 bits
    c) 20 bits
    d) 32 bits

47. What network utility uses the time-To-Live (TTL) field in the IP header to elicit ICMP error messages?
    a) Ping
    b) Route
    c) Traceroute
    d) Ifconfig

48. What is the size of the UDP header?
    a) 8 bytes
    b) 16 bytes
    c) 20 bytes
    d) 64 bytes

49. Which of the following protocols is the connection-less protocol?
    a) UDP
    b) TCP
    c) IP
    d) All of the these

50. Which of the following devices is not a networking device?
    a) Hub
    b) Switch
    c) Bridge
    d) None of the these

Answer

1- a	2- c	3- a	4- d	5- a	6- b	7- a	8- b	9- a	10- c
11- b	12- c	13- b	14- a	15- c	16- d	17- b	18- c	19- a	20- b
21- d	22- c	23- a	24- a	25- b	26- c	27- d	28- b	29- a	30- c
31- b	32- b	33- a	34- b	35- a	36- d	37- c	38- b	39- c	40- c
41- d	42- a	43- c	44- c	45- c	46- b	47- c	48- c	49- a	50- d