

1. The network layer concerns with
a) bits b) frames c) packets d) none of the mentioned
2. Which one of the following is not a function of network layer?
a) routing b) inter-networking c) congestion control d) none of the mentioned
3. The 4 byte IP address consists of
a) network address b) host address c) both (a) and (b) d) none of the mentioned
4. The network layer protocol of internet is
a) Ethernet b) internet protocol c) hypertext transfer protocol d) none of the mentioned
5. ICMP is primarily used for
a) error and diagnostic functions b) addressing c) forwarding d) none of the mentioned
6. A ____ is a device that forwards packets between networks by processing the routing information included in the packet.
a) bridge b) firewall c) router d) all of the mentioned
7. OSI stands for
a) open system interconnection b) operating system interface
c) optical service implementation d) none of the mentioned
8. TCP/IP model does not have ____ layer but OSI model have this layer.
a) session layer b) presentation layer c) application layer d) both (a) and (b)
9. Which layer links the network support layers and user support layers
a) session layer b) data link layer c) transport layer d) network layer
10. Which address is used in an internet employing the TCP/IP protocols?
a) physical address and logical address b) port address c) specific address
d) all of the mentioned

11. TCP/IP model was developed ____ the OSI model.
a) prior to b) after c) simultaneous to d) none of the mentioned
12. Which layer is responsible for process to process delivery?
a) network layer b) transport layer c) session layer d) data link layer
13. Which address identifies a process on a host?
a) physical address b) logical address c) port address d) specific address
14. Which layer provides the services to user?
a) application layer b) session layer c) presentation layer d) none of the mentioned
15. Transmission data rate is decided by
a) network layer b) physical layer c) data link layer d) transport layer
16. The physical layer concerns with
a) bit-by-bit delivery b) process to process delivery c) application to application delivery
d) none of the mentioned
17. Which transmission media has the highest transmission speed in a network?
a) coaxial cable b) twisted pair cable c) optical fiber d) electrical cable
18. physical layer provides
a) mechanical specifications of electrical connectors and cables
b) electrical specification of transmission line signal level
c) specification for IR over optical fiber
d) all of the mentioned
19. The physical layer translates logical communication requests from the ____ into hardware specific operations.
a) data link layer
b) network layer
c) transport layer
d) application layer
20. The data link layer takes the packets from ____ and encapsulates them into frames for transmission.
a) network layer b) physical layer c) transport layer d) application layer

21. Which one of the following task is not done by data link layer?
a) framing b) error control c) flow control d) channel coding
22. Which sublayer of the data link layer performs data link functions that depend upon the type of medium?
a) logical link control sublayer
b) media access control sublayer
c) network interface control sublayer
d) none of the mentioned
23. Header of a frame generally contains
a) synchronization bytes b) addresses c) frame identifier d) all of the mentioned
24. Automatic repeat request error management mechanism is provided by
a) logical link control sublayer b) media access control sublayer c) network interface control sublayer d) none of the mentioned
25. When 2 or more bits in a data unit has been changed during the transmission, the error is called
a) random error b) burst error c) inverted error d) none of the mentioned
26. CRC stands for
a) cyclic redundancy check b) code repeat check c) code redundancy check
d) cyclic repeat check
27. Which one of the following is a data link protocol?
a) Ethernet b) point to point protocol c) HDLC d) all of the mentioned
28. Which one of the following is the multiple access protocol for channel access control?
a) CSMA/CD
b) CSMA/CA
c) both (a) and (b)
d) none of the mentioned
29. The technique of temporarily delaying outgoing acknowledgements so that they can be hooked onto the next outgoing data frame is called
a) piggybacking
b) cyclic redundancy check
c) fletcher's checksum
d) none of the mentioned
30. 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

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31. Which one of the following is a transport layer protocol used in internet?
a) TCP b) UDP c) both (a) and (b) d) none of the mentioned
32. 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) both (a) and (b)
d) none of the mentioned
33. Transmission control protocol 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
34. 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) none of the mentioned
35. Transport layer protocols deals with
a) application to application communication b) process to process communication
c) node to node communication d) none of the mentioned
36. Which one 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
37. The ___ translates internet domain and host names to IP address.
a) domain name system b) routing information protocol
c) network time protocol d) internet relay chat
38. Which one of the following allows a user at one site to establish a connection to another site and then pass keystrokes from local host to remote host?
a) HTTP b) FTP c) telnet d) none of the mentioned
39. Application layer protocol defines
a) types of messages exchanged
b) message format, syntax and semantics
c) rules for when and how processes send and respond to messages
d) all of the mentioned
40. Which one of the following protocol delivers/stores mail to receiver server?
a) simple mail transfer protocol b) post office protocol
c) internet mail access protocol d) hypertext transfer protocol

41. Which one of the following is not correct?
- a) application layer protocols are used by both source and destination devices during a communication session
 - b) application layer protocols implemented on the source and destination host must match
 - c) both (a) and (b)
 - d) none of the mentioned
42. Application layer offers _____ service
- a) End to end b) Process to process c) Both of the mentioned d) None of the mentioned
43. Pick the odd one out
- a) File transfer b) File download c) E-mail d) Interactive games
44. Which of the following is an application layer service?
- a) Network virtual terminal b) File transfer, access, and management
 - c) Mail service d) All of the mentioned
45. To deliver a message to the correct application program running on a host, the _____ address must be consulted
- a) IP b) MAC c) Port d) None of the mentioned
46. Electronic mail uses this Application layer protocol
- a) SMTP b) HTTP c) FTP d) SIP
47. The entire hostname has a maximum of
- a) 255 characters b) 127 characters c) 63 characters d) 31 characters
48. Which one of the following is not correct?
- a) telnet is a general purpose client-server program
 - b) telnet lets user access an application on a remote computer
 - c) telnet can also be used for file transfer
 - d) none of the mentioned
49. If we want that a character be interpreted by the client instead of server
- a) escape character has to be used
 - b) control functions has to be disabled
 - c) it is not possible
 - d) none of the mentioned
50. _____ allows you to connect and login to a remote computer
- a) Telnet
 - b) FTP
 - c) HTTP
 - d) None of the mentioned

