UNIT-3

1. IEEE has defined the specifications for a wirless LAN,called _____ which covers the physical and datalink layers.
   a)IEEE 802.3
   b)IEEE 802.5
   c)IEEE 802.11
   d)IEEE 802.2
2. What is the access point (AP) in a wireless LAN?
   a) device that allows wireless devices to connect to a wired network
   b) wireless devices itself
   c) both device that allows wireless devices to connect to a wired network and wireless devices itself
   d) all the nodes in the network
   3.IEEE 802.11a,has data rate of_____MBps
   a)1
   b)2
   c)6
   d)none of the above
   4.A set that makes stationary or mobile wireless station and also have optional central base station is known as
   a)Basic service set
   b)Extended Service Set
   c)Network point set
   d)Access Pont
   5) In filtering when the frame is forwarded, the decision must specify the
   a)device
   b)modes
   c)port
   d)bridge
   6.A device that connects networks with different protocols

a)switch
b)Hub
c)Gateway
d)all of these
7. The network layer is concerned with _____ of data.
a) bits
b) frames
c) packets
d) bytes
8. The network layer protocol for internet is _____
a) ethernet
b) internet protocol
c) hypertext transfer protocol
d) file transfer protocol
9. Which of the following routing algorithms can be used for network layer design?
a) shortest path algorithm
b) distance vector routing
c) link state routing
d) all of the mentioned
10.An IPv4 address consists of _____
a)4
b)8
c)32
d)64
11.Identify the class of the following IPv4 address 191.1.2.3
a)A
b)B
c)C
d)none of these
12.The number of addresses assigned to an organization in classless addressing _____
a)can be any number

b)must be a multiple of 256
c)must be a power of 2
d)none of the above

13. Network addresses are the very important concepts of
a)Routing
b)Mask
c)IP addressing
d)Classless addressing
14.A organization is granted a block,one address is 2.2.2.64/25.if the subnet prefix length is 8,what is the maximum number of subnets?
a)2
b)4
c)8
d)none of above
15.In a block,the prefix length is /24,what is the mask?
a)255.255.255.0
b)255.255.242.0
c)255.255.0.0
d)none of the above
16.What is the default mask for class A in CIDR notation?
a)/9
b)/8
c)/16
d)none of the above
17. Several protocols for upper layers in bluetooth use _____
a) UDP
b) HSP
c) ITC
d) L2CAP

18. In version field of IPv4 header, when machine is using some other version of IPv4 then datagram is _____

a) Discarded

b) Accepted

c) Interpreted

d) Interpreted incorrectly

19. Which protocol is commonly used to retrieve email from a mail server?

a) FTP

b) IMAP

c) HTML

d) TELNET

20. In IPv4 what is needed to determine the number of the last byte of a fragment?

a)Identification Number

b)Offset number

c)Total length

d)b and c

21.The network layer protocol for internet is _____

a) ethernet

b) internet protocol

c) hypertext transfer protocol

d) file transfer protocol

Ans:b

22.ICMP is primarily used for _____

a) error and diagnostic functions

b) addressing

c) forwarding

d) routing

Ans:a

23.Which of the following routing algorithm takes into account the current network load.

(A) broadcast (B) shortest path
(C) flooding (D) distance vector routing

Answer: D

24.Count-to-Infinity problem occurs in .....

(A) distance vector routing (B) short path first
(C) link state routing (D) hierarchical routing

Answer: A

25..---------- was originally developed to provide a loop-free method of exchanging routing information between autonous systems

a.OSPF
a.EIGRP
c.BGP
d.RIP
Ans:c

26.The distance vector routing the updateing packet conveys the knowledge of the router about----------

a.The whole network
b.the neighbourhood
c.either a or b
neither a nor b
Ans:a

27.The example of the routing algorithm is
a.TELNET
b.TNET
c.ARPANET
d.ARNET

Ans:C

28.The types of autonomous system defined by BGP is /are
a.Stub
b.Multi-homed
c.Transit
D.All of the above

Ans:D

29.The OSPF protocol is an intra domain routing protocol based on ---------- routing

a.distance vector
b.link state
c.path vector
d.non above above

Ans:b

30.In OSI network architecture ,the routing is performed by

a.network layer

b.data link layer

c.transport layer

d.session layer

Ans:a

31. 1. The size of an IP address in IPv6 is _____

a) 4 bytes

b) 128 bits

c) 8 bytes

d) 100 bits

Ans:b

32. The _____ field determines the lifetime of IPv6 datagram

a) Hop limit

b) TTL

c) Next header

d) Type of traffic

Ans:a

33. In the IPv6 header, the traffic class field is similar to which field in the IPv4 header?

a) Fragmentation field

b) Fast-switching

c) ToS field

d) Option field

Ans:c

34. IPv6 does not use _____ type of address.

a) broadcast

b) multicast

c) anycast

d) unicast

Ans:a

35.To convert broadcasting to multicasting the protocol uses

a.Three procedures

b.Two procedures

c.one procedure

d.Multi procedure

Ans:b

36. Find the number of subnets and valid hosts per subnet for IP address with subnet mask 200.100.230.140/26

a)64 subnets and 4 hosts per subnets

b) 62 subnets and 4 hosts per subnets

c)4 subnets and 64 hosts per subnets

d) 4 subnets and 62 hosts per subnets

Ans:d

37. An organization is granted a block of classless addresses with the starting address 199.34.76.128/29.How many addresses are granted?

a)8

b)16

c)32

d)None of the above

Ans:a

38. If a router finds network address of packet which matches multiple entries of forwarding table. Then it is by

a)matching with the longest suffix of incoming packet

b) matching with the shortest suffix of incoming packet

c) matching with the longest prefix of incoming packet

d) matching with the shortest prefix of incoming packet

Ans:c

39. In IPv4header, what is the value of the total length field in bytes if the header is 28 bytes and the data field is 400 bytes?

a)428

b)407

c)107

d)427

Ans:428

40. Which TCP port is used by BGP?

a)168

b)169

C)178

d)179

Ans:d

41.What is the first address of a block of classless address if one of the address is 12.2.2.127/28?

a)122.2.2.0

b)12.2.2.96

c)12.2.2.112

d)none of the above

Ans:c

42.Match the following

A)Point-to-Point link	i)A network that is connected to only one router
B)Transport link	ii)A link which connects two routers without any device inbetween the
C)Virtual link	iii)A network with several routers attached to it
D)Stub link	iv)Link which is created by administrator

a)A-ii,B-iii,C-iv,D-i

b)A-I,B-iv,C-iii,D-ii

c)A-ii,B-iv,C-iii,D-i

d)A-I,B-iii,C-iv,D-ii

Ans:a

43.Which message is used when BGP finds an error condition is occurred?

a)BGP open message

b)BGP notification message

c)BGP keepalive message

d)BGP update message

Ans:b

44.What is autonomous systems?

a)A group of networks under authority of a single administration

b)A group of hosts under authority of a single administration

c)A group of networks and routers under authority of a single administration

d)A group of hosts and routers under authority of a single administration

Ans:c

45. Suppose two IPv6 nodes want to interoperate using IPv6 datagrams, but they are connected to each other by intervening IPv4 routers. The best solution here is _____
a) Use dual-stack approach
b) Tunneling
c) No solution
d) Replace the system

Ans:b

46 A packet has arrived in which the offset value is 100, the value of HLEN is 5, and the value of the total length field is 100. What are the numbers of the first byte and the last byte?

a) first byte number is 400, the last byte number must be 479

b) first byte number is 800, the last byte number must be 879

c) first byte number is 400, the last byte number must be 479

d)first byte number is 800, the last byte number must be 479

Ans:b

47. 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

Answer: (D)

48. **In the IPv4 addressing format, the number of networks allowed under Class C addresses is**
(A) 2^14
(B) 2^7
(C) 2^21
(D) 2^24

Answer (C)

49. A packet has arrived with an M bit value of 1 and a fragmentation offset value of 0. Is this the first fragment, the last fragment, or a middle fragment?(page no 571)

a) either the first fragment or a middle one

b)Only last fragment

c)either first fragment or the last fragment

d)a middle fragment

Ans:a

50. A _____ is used by the source to predetermine a route for the datagram as it travels through the Internet

a) strict source route option

b) Multliple-Byte Options

c) Loose Source Route

d) timestamp option

Ams:a

51. ICMP error messages are

(i) No ICMP error message will be generated in response to a datagram carrying an ICMP error message.

(ii)No ICMP error message will be generated for a fragmented datagram that is the first fragment.

(iii)No ICMP error message will be generated for a datagram having a special address such as 127.0.0.0 or 0.0.0.0.

(iv)No ICMP error message will be generated for a datagram having a multicast address.

a)i and iii

b)ii and iii

c) i, ii and iv

d) i,iiii and iv

Ans:d

52.The _____ protocol allows the administrator to assign a cost,called a metric,to each route

a)OSPF

b)RIP

c)BGP

d)None of the above

Ans:a

53. Using the format we defined for Ethernet addresses, find the interface identifier if the physical address in the EUI is (F5-A9-23-EF-07-14-7A-D2)16. (page no:670)

a) F7:A9:23EF:0714:7AD2.

b) F7A9:23EF:0714:7AD2.

c) F7:A9:23:EF:07:14:7A:D2.

d)None of the above

Ans:b