Multiple Choice Question Bank
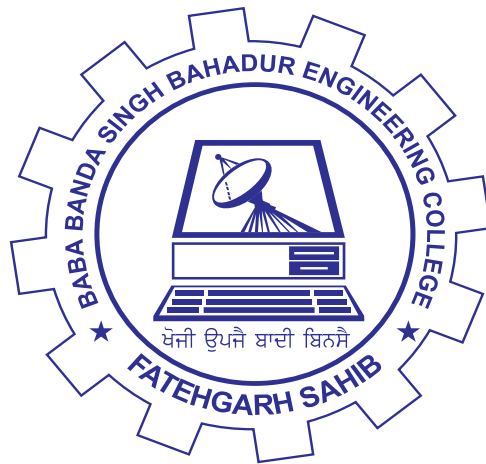
COMPUTER NETWORKS - II

(BCSE1-520)

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UNIT I & II

1. In computer security, …………………….. means that computer system assets can be modified only by authorized parities.
   A. Confidentiality
   B. Integrity
   C. Availability
   D. Authenticity.

2. The type of threats on the security of a computer system or network are……………………
   i)   Interruption
   ii)   Interception
   iii)   Modification
   iv)   Creation
   v)   Fabrication

   A. i, ii, iii and iv only

   B. ii, iii, iv and v only

   C. i, ii, iii and v only

   D. All i, ii, iii, iv and v.

3. Which of the following is independent malicious program that need not any host program
   A. trap doors
   B.trojan horse
   C. Virus
   D. Worm.

4. IPv6 is designed to allow extension of the

   A. Protocol
   B. DataSet
   C. Headers
   D. Routes

5. An IPv6 address is

   A. 8 bits long
   B. 16 bits long
   C. 32 bits long
   D. 128 bits long.

6. In subcategories of reserved address in IPv6, address that is used by a host to test itself without going into network is called

   A. Unspecified address
   B. Loopback address
   C. Compatible address
   D. Mapped address

7. In IPv6 addresses, addresses start with eight 0s are called

   A. Unicast addresses
   B. Multicast addresses
   C. Anycast addresses
   D. Reserved addresses

8. IPV6 is in which format
   A. Hexadecimal format
   B. Octal format
   C. Alphanumeric format
   D. Numeric format

9. Which of the following is true when describing a multicast address?

   A. Packets addressed to a unicast address are delivered to a single interface.
   B. Packets are delivered to all interfaces identified by the address. This is also called a one-to-many address.
   C. Identifies multiple interfaces and is only delivered to one address. This address can also be called one-to-one-of-many.
   D. These addresses are meant for non-routing purposes, but they are almost globally unique so it is unlikely they will have an address overlap.

10. Which of the following is true when describing a unicast address?

    A. Packets addressed to a unicast address are delivered to a single interface.
    B. These are your typical publicly routable addresses, just like a regular publicly routable address in IPv4.
    C. These are like private addresses in IPv4 in that they are not meant to be routed.

D. These addresses are meant for non-routing purposes, but they are almost globally unique so it is unlikely they will have an address overlap.

11. Which statement(s) about IPv6 addresses are true?

1. Leading zeros are required.

2. Two colons (::) are used to represent successive hexadecimal fields of zeros.

3. Two colons (::) are used to separate fields.

4. A single interface will have multiple IPv6 addresses of different types.

A. 1 and 3
B. 2 and 4
C. 1, 3 and 4
D. All of the above

12. IPSec is designed to provide the security at the
A. Transport layer
B. Network layer
C. Application layer
D. Session layer

13. In tunnel mode IPsec protects the
A. Entire IP packet
B. IP header
C. IP payload
D. None of the mentioned

14. Network layer firewall works as a
A. Frame filter
B. Packet filter
C. Both (a) and (b)
D. None of the mentioned

15. Network layer firewall has two sub-categories as
A. Stateful firewall and stateless firewall
B. bit oriented firewall and byte oriented firewall

C. frame firewall and packet firewall

D. none of the mentioned

16. WPA2 is used for security in

A. ethernet

B. bluetooth

c) wi-fi

d) none of the mentioned

17. An attempt to make a computer resource unavailable to its intended users is called

A. denial-of-service attack

B. virus attack

C. worms attack

D. botnet process

18. AH Protocol provides source authentication and data integrity, but not

A. Integrity

B. Privacy

C. Nonrepudiation

D. Both A & C

19.ESP provides

A. Source authentication

B. Data integrity

C. Privacy

D. All of them

20._____ operates in the transport mode or the tunnel mode.

A. IPSec

B. SSL

C. PGP

D. none of the above

21. IKE creates SAs for _____

A. SSL

B. PGP

C. IPSec

D. VP

22. _____ provides either authentication or encryption, or both, for packets at the IP

level.

A. AH

B. ESP

C. PGP

D. SSL

23. One security protocol for the e-mail system is _____

A. IPSec

B.SSL

C. PGP

D. None of the above

24.IKE is a complex protocol based on _____ other protocols.

A. two

B. three

C. four

D. five

25.IPSec defines two protocols: _____ and _____.

A. AH; SSL

B. PGP; ESP

C. AH; ESP

D. All of the above

26.In the _____ mode, IPSec protects information delivered from the transportLayer to
the network layer.

A. Transport

B. Tunnel

C.   Either (a) or (b)

D.   Either (a) nor (b)

27._____ is the protocol designed to create security associations, both inbound and outbound.

A.   SA

B.   CA

C.   KDC

D.   IKE

28. A _____network is used inside an organization.

A.   private

B.   public

C.   semi-private

D.   semi-public

29.SSL provides _____.

A.   message integrity

B.   confidentiality

C.   compression

D.   all of the above

30.The Internet authorities have reserved addresses for _____.

A.   intranets

B.   internets

C.   extranets

 D.   none of the above

31.An _____ is a network that allows authorized access from outside users.

A.   intranet

B.   internet

C.   extranet

D.   none of the above

32._____ is a collection of protocols designed by the IETF (Internet Engineering Task Force) to provide security for a packet at the network level.

A.   IPSec

B.   SSL

C.   PGP

D.   none of the above

33. IKE uses _____.

A.   Oakley

B.   SKEME

C.   ISAKMP

D.   all of the above

34. IPSec uses a set of SAs called the _____.

A.   SAD

B.   SAB

C.   SADB

D.   none of the above

35. An _____ is a private network that uses the Internet model.

A.   intranet

B.   internet

C.   extranet

D.   none of the above

36. IKE is a complex protocol based on _____ other protocols.

A.   two

B.   three

C.   four

D.   five

37. IPSec defines two protocols: _____ and _____.

A.   AH; SSL

B.   PGP; ESP

C.   AH; ESP

D.   all of the above

38.In the _____ mode, IPSec protects information delivered from the transport layer to the network layer.

      A.   transport

      B.   tunnel

      C.   either (a) or (b)

      D.   neither (a) nor (b)

39._____ is the protocol designed to create security associations, both inbound and outbound.

      A.   SA

      B.   CA

      C.   KDC

      D.   IKE

40.A _____network is used inside an organization.

      A.   private

      B.   public

      C.   semi-private

      D.   semi-public

41.SSL provides _____.

      A.   message integrity

      B.   confidentiality

      C.   compression

      D.   all of the above

42.The Internet authorities have reserved addresses for _____.

      A.   intranets

      B.   internets

      C.   extranets

      D.   none of the above

43.An_____ is a network that allows authorized access from outside users.

      A.   intranet

B.	internet

C.	extranet

D.	none of the above

44._____ is a collection of protocols designed by the IETF (Internet Engineering Task Force) to provide security for a packet at the network level.

A.	IPSec

B.	SSL

C.	PGP

D.	none of the above

45.IKE uses _____.

A.	Oakley

B.	SKEME

C.	ISAKMP

D.	all of the above

46. IPSec uses a set of SAs called the _____.

A.	SAD

B.	SAB

C.	SADB

D.	none of the above

47.An _____ is a private network that uses the Internet model.

A.	intranet

B.	internet

C.	extranet

D.	none of the above

48.The _____ mode is normally used when we need host-to-host (end-to-end) protection of data.

A.	transport

B.	tunnel

C.	either (a) or (b)

D.	neither (a) nor (b)

49. In the _____ mode, IPSec protects the whole IP packet, including the original IP header.

      A.   transport

      B.   tunnel

      C.   either (a) or (b)

      D.   neither (a) nor (b)

UNIT III & IV

1. Fading of the received radio signals in a mobile communication environment occurs because of .....

A) Direct propagation

B) Multipath Propagation

C) Bi-path Propagation

D) None of the above

2.State whether True of False.

i) The cells or subdivisions of a geographical area are always hexagonal.

ii) A land to Mobile call originates through the Telephone exchange.

A) True, False

B) False, True

C) False, False

D) True, True

3. In .... Frequency Spectrum is divided into smaller spectra and is allocated to each user.

A) TDMA

B) CDMA

C) FDMA

D) FGMA

4. In .... multiple access is achieved by allocating different time slots for the different users.

A) TDMA

B) CDMA

C) FDMA

D) FGMA

5.State whether True of False.

i) In GSM only TDMA is used.

ii) There is zero inter-channel interference in CDMA.

A) True, False

B) False, True

C) False, False

D) True, True

6. The basic GSM is based on _____ traffic channels.

A) Connection oriented.

B) Connection less.

C) Packet switching.

D) Circuit switching.

7. .... are typically characterized by very small cells, especially in densely populated areas.

A) 2G system.

B) 3G system.

C) 2.5G system.

D) 3.5G system.
8. A antenna which attempts to direct all its energy in a particular direction is called as a.............

A) Directional Antenna

B) One to One Antenna

C) Propagation Antenna

D) Single Direction Antenna

9. Which mode is used for installing networks in wireless communication device characteristics?

A) Fixed and wired.

B) Mobile and wired.

C) Fixed and wired.

D) Mobile and wireless.

10. 3G W-CDMA is also known as

A) UMTS

B) DECT

C) DCS-1800

D) ETACS

11. Commonly used mode for 3G networks is

A) TDMA

B) FDMA

C) TDD

D) FDD

12. Why are waves with a very low frequency not used for data transmission in computer networks?

A) They require large antennas, have lower bandwidth and are difficult to manage in cells and frequency reuse schemes
B) They require small antennas and have higher bandwidth
C) They do not penetrate material

13.)What are the main reasons for using cellular systems?

A) The main reasons are to support many users, low power and localization
B) The main reason is profit maximization for service providers
C) The main reasons are user localization and frequency reuse

14. In TDMA, interference happens if

A) Senders transmit data at the same time

B) Senders do not transmit data at the same time

C)Senders transmit data at the same frequency

15. In FDMA, interference happens if

A) Senders transmit data using non-orthogonal codes

B) Senders transmit data at the same frequency

C) Senders transmit data at the same time

16. In CDMA, interference happens if

A) Senders transmit data at the same time

B) Senders transmit data using non-orthogonal codes

C) Senders transmit data at the same frequency

17. Standard GSM systems support a data rate of

A) 9.6 kbps

B) 64 kbps

C) 128 kbps

18. GPRS is an extension to GSM that operates

A) Circuit-switched

B) Packet-switched

C) Both circuit and packet switched

19. Main reasons for a handover in GSM are

A) Weak signal in cell and heavy cell load

B) Heavy cell load

C) Mobile station moves from cell to cell

20. GPRS needs the following parts of a typical GSM

A) Does not need any part of GSM

B) The packet-switched core for data transmission

C) The circuit-switched core for localization and authentication

21. IMT-2000 / 3G systems operate at

A) 1 GHz

B) 2 GHz X

C) 3 GHz

22. Main features of 3G include (in comparison to 2G)

A) Better voice quality

B) Higher data rates

C) Better voice quality and higher and flexible data rates X

23. LTE stands for

A) Lite Technical Edge
B) Long Term Evolution X
C) Linear Technological Evolution
D) Linear Tech Evolution

24. What is the access point (AP) in wireless LAN?

A) device that allows wireless devices to connect to a wired network

B) wireless devices itself

C) both (a) and (b)

D) none of the mentioned

25. In wireless ad-hoc network

A) access point is not required

B) access point is must

C) nodes are not required

D) none of the mentioned

26. Which multiple access technique is used by IEEE 802.11 standard for wireless LAN?

A) CDMA

B) CSMA/CA

C) ALOHA

D) None of the mentioned

27. In wireless distribution system

A) multiple access point are inter-connected with each other

B) there is no access point

C) only one access point exists

D) none of the mentioned

28. In wireless network an extended service set is a set of

A) connected basic service sets

B) all stations

C) all access points

D) none of the mentioned

29. Mostly _____ is used in wireless LAN.

A) time division multiplexing

B) orthogonal frequency division multiplexing

C) space division multiplexing

D) none of the mentioned

30. Which one of the following event is not possible in wireless LAN.

A) collision detection

B) acknowledgement of data frames

C) multi-mode data transmission

D) none of the mentioned

31. What is Wired Equivalent Privacy (WEP) ?

A) security algorithm for ethernet

B) security algorithm for wireless networks

C) security algorithm for usb communication

D) none of the mentioned

32.What isWPA?

A) wi-fi protected access

B) wired protected access

C) wired process access

D) wi-fi process access

33.The original IEEE 802.11, has a data rate of _____Mbps.

A) 11

B) 22

C) 6

D) 1

34.In IEEE 802.11, when a frame is going from a station to an AP, the address flag is _____.

A) 01

B) 10

C) 11

D) 00

35. In IEEE 802.11, when a frame is going from one station in a BSS to another without passing through the distribution system, the address flag is _____.

A) 11

B) 00

C) 10

D) 01

36. In IEEE 802.11, the access method used in the PCF sublayer is _____.

A) polling

B) controlled

C) contention

D) none of the above

37. IEEE 802.11, a BSS without an AP is called an _____.

A) an infrastructure network

B) an ad hoc architecture

C) either (a) or (b)

D) neither (a) nor (b)

38. In IEEE 802.11, the addressing mechanism can include up to _____addresses.

A) six

B) five

C) four

D) none of the above

39. In Bluetooth, the _____ layer is roughly equivalent to the physical layer of the Internet model.

A) baseband

B) radio

C) L2CAP

D) none of the above

40. In IEEE 802.11, a station with _____ mobility is either stationary (not moving) or moving only inside a BSS.

A) ESS-transition

B) no-transition

C) BSS-transition

D) none of the above

41. In Bluetooth, the L2CAP sublayer, is roughly equivalent to the LLC sublayer in LANs.

A) baseband

B) L2CAP

C) radio

D) none of the above

42. In IEEE 802.11, when a frame is going from one AP to another AP in a wireless distribution system, the address flag is _____.

A) 10

B) 01

C) 11

D) 00

43. A Bluetooth network is called a _____.

A) scatternet

B) bluenet

C) piconet

D) none of the above

44. A Bluetooth network consists of _____ primary device(s) and up to _____ secondary devices.

A) one; seven

B) one; five

C) five; three

D) two; six

45. In Bluetooth, the current data rate is ____Mbps.

A) 11

B) 5

C) 2

D) none of the above

46. In IEEE 802.11, a BSS with an AP is sometimes referred to as _____.

A) an infrastructure network

B) an ad hoc architecture

C) either (a) or (b)

D) neither (a) nor (b)

47. In IEEE 802.11, the _____ is a timer used for collision avoidance.

A) BSS

B) ESS

C) NAV

D) none of the above

48. In IEEE 802.11, the MAC layer frame has _____ fields.

A) four

B) six

C) five

D) none of the above

49. Bluetooth uses _____method in the physical layer to avoid interference from other devices or other networks.

A) FHSS

B) DSSS

C) FDMA

D) none of the above

50. In Bluetooth, the _____ link is used when data integrity is more important than avoiding latency.

A) SCL

B) ACO

C) ACL

D) SCO

51. In Bluetooth, the _____layer is roughly equivalent to the MAC sublayer in LANs.

A) L2CAP

B) radio

C) baseband

D) none of the above

52. IEEE has defined the specifications for a wireless LAN, called _____, which covers the physical and data link layers.

A) IEEE 802.5

B) IEEE 802.11

C) IEEE 802.2

D) IEEE 802.3

52. In IEEE 802.11, a station with _____ mobility can move from one ESS to another.

A) BSS-transition

B) ESS-transition

C) no-transition

D) none of the above

54. The IEEE 802.11g, uses _____.

A) DSSS

B) OFDM

C) FHSS

D) either (a) or (c)

55. In IEEE 802.11, the access method used in the DCF sublayer is _____.

A) CSMA/CA

B) CSMA/CD

C) ALOHA

D) none of the above

56. The RTS and CTS frames in CSMA/CA _____ solve the hidden station problem. The RTS and CTS frames in CSMA/CA _____ solve the exposed station problem.

A) cannot; cannot

B) can; cannot

C) cannot; can

D) can; can

57. In IEEE 802.11, communication between two stations in two different BSSs usually occurs via two _____.

A) ESSs

B) APs

C) BSSs

D) none of the above

58. Bluetooth is a _____ technology that connects devices (called gadgets) in a small area.

A) VLAN

B) wired LAN

C) wireless LAN

D) none of the above

59. The original IEEE 802.11, uses _____.

A) FHSS

B) OFDM

C) DSSS

D) either (a) or (c)

60. The IEEE 802.11a, uses _____.

A) DSSS

B) OFDM

C) FHSS

D) either (a) or (c)

61. In IEEE 802.11, a ____ is made of stationary or mobile wireless stations and an optional central base station, known as the access point (AP).

A) BSS

B) CSS

C) ESS

D) none of the above

62. The IEEE 802.11 standard for wireless LANs defines two services: _____ and _____.

A) ESS; SSS

B) BSS; ESS

C) BSS; ASS

D) BSS; DCF

63. In Bluetooth, the _____ link is used when avoiding latency (delay in data delivery) is more important than integrity (error-free delivery).

A) SCL

B) ACL

C) ACO

D) SCO

64. IEEE 802.11b, has a data rate of _____Mbps.

A) 5.5

B) 2

C) 1

D) none of the above

65. IEEE 802.11g, has a data rate of _____Mbps.

A) 22

B) 11

C) 2

D) 1

66. In IEEE 802.11, a station with _____mobility can move from one BSS to another, but the movement is confined inside one ESS.

A) ESS-transition

B) no-transition

C) BSS-transition

D) none of the above

67. The access method in Bluetooth is _____.

A) TDD-TDMA

B) CDMA

C) FDMA

D) none of the above

68. The IEEE 802.11 wireless LANs use _____ types of frames.

A) five

B) six

C) four

D) none of the above

69. In IEEE 802.11, _____ is an optional access method that can be implemented in an infrastructure network (not in an ad hoc network).

A) PCF

B) DCF

C) either (a) or (b)

D) neither (a) nor (b)

70. In IEEE 802.11, when a frame is coming from an AP and going to a station, the address flag is _____.

A) 00

B) 11

C) 10

D) 01

71. In Bluetooth, multiple _____ form a network called a _____.

A) piconets: bluenet

B) scatternet; piconets

C) piconets: scatternet

D) bluenet; scatternet

72. The IEEE 802.11b, uses _____.

A) OFDM

B) FHSS

C) DSSS

D) either (a) or (b)

73. IEEE 802.11a, has a data rate of _____Mbps.

A) 6

B) 2

C) 1

D) none of the above

74. A wireless network interface controller can work in

    A) infrastructure mode

    B) ad-hoc mode

    C) both (a) and (b)

    D) none of the mentioned