Subject: **BCA**
Paper name: **Computer Networking**
Paper No: **BCA403**
Semester: **IV**

A. Multiple choice questions [75 (15 from each unit)]

1. Computer Network is
    a) Collection of hardware components and computers
    b) Interconnected by communication channels
    c) Sharing of resources and information
    d) All of the above

2. What is a firewall
    a) The physical boundary of network
    b) An operating system of computer network
    c) A system designed to prevent unauthorized access
    d) A web browsing software

3. How many layers are there in OSI reference model?
    a) 4
    b) 5
    c) 6
    d) 7

4. Components of network does not include
    a) Bandwidth
    b) Sender
    c) Receiver
    d) Transmission medium

5. Set of rules that govern data communication is called
    a) addressing
    b) topology
    c) Protocol
    d) None of the above

6. Two way communication simultaneously
    a) Full Duplex
    b) Half-Duplex

c) Duplex

d) Simplex

7. Types of networking addressing not include

a) Physical

b) Logical

c) Port address

d) None of the above

8. The physical arrangement of your computer network is called

a) OSI model

b) TCP/IP model

c) Topology

d) None of the above

9. Select the odd one

a) LAN

b) MAN

c) WAN

d) VAN

10. The signal changes its form or shape (frequency change)

a) Attenuation

b) Distortion

c) Noise

d) All of the above

11. It is a measure of how fast we can actually send data through a network

a) bandwidth

b) Throughput

c) Latency

d) Jitter

12. _____ are devices that can transmit data between two heterogeneous LAN's

a) Repeaters

b) Routers

c) Bridges

d) Gateway

13. _____ refers to information that is continuous.
    a) Data
    b) Analog signal
    c) Digital signal
    d) None of the above

14. TCP/IP model don't have
    a) Data link layer
    b) Session layer
    c) Application layer
    d) Transport layer

15. Choose the odd one
    a) Bus topology
    b) Star topology
    c) Physical topology
    d) Mesh topology

16. A _____ can be broadly defined as anything that can carry information from a
    source to destination.
    a) Bandwidth
    b) Gateway
    c) Transmission medium
    d) Network

17. Types of Transmission media are
    a) Guided and Unguided
    b) Bridge and Repeater
    c) Baseband and Broadband
    d) None of the above

18. Guided media don't include
    a) Optical fiber
    b) Coaxial Cable
    c) Token ring
    d) Twisted pair cable

19. Connector used for twisted pair cable is
    a) RJ45
    b) BN45

c) RG59

d) RG11

20. Radio waves travel through the lowest portion of the atmosphere, hugging the earth is called
    a) Line-of-sight propagation
    b) Sky propagation
    c) Ground propagation
    d) All of the above

21. EHF stands for
    a) Extended High Frequency
    b) External High Frequency
    c) Extraordinary Hidden Force
    d) Extremely High Frequency

22. ASK, PSK and FSK are example of _____ conversion
    a) Digital to digital
    b) Digital to analog
    c) Analog to digital
    d) Analog to analog

23. If the bit rate for an ASK signal is 1200 bps, the baud rate is _____
    a) 200
    b) 400
    c) 600
    d) 1200

24. A circuit switch network is made of a set of switches connected by physical
    a) links
    b) media
    c) nodes
    d) lines

25. Circuit switching takes place at
    a) session layer
    b) application layer
    c) data link layer
    d) physical layer

26. The synchronous Time-Division Multiplexing (TDM) is not efficient because of
    a) higher data rate
    b) infinite frames
    c) empty slots
    d) Both a and c

27. The multiplexing technique, in which each input connection has an allotment in the output even it it is not sending data is
    a) A synchronous TDM
    b) Synchronous TDM
    c) FDM
    d) WDM

28. How many types of multiplexing techniques are there
    a) one
    b) Two
    c) Three
    d) Four

29. Switching in the internet is done by using the datagram approach to packet switching at the
    a) network layer
    b) application layer
    c) data link layer
    d) physical layer

30. The routing processor searching for the routing table is called
    a) switch fabric
    b) buffer
    c) table lookup
    d) rolling table

31. The term_____ means that only 1 bit of a given data unit is changed from 1 to 0 or from 0 to 1
    a) single bit error
    b) double bit error
    c) triple bit error
    d) None of the above

32. The term _____ means that 2 or more bits in the data unit have changed from 1 to 0 or from 0 to 1.
    a) Burst error
    b) Coding error
    c) syntax error
    d) none of the above

33. In cyclic redundancy checking, the divisor is _____ the CRC
    a) The same size as
    b) one bit less than
    c) one bit more than
    d) none of the above

34. In _____ error correction, the receiver asks the sender to send the data again.
    a) backward
    b) retransmission
    c) forward
    d) none of the above

35. The _____ between two words is the number of differences between corresponding bits
    a) Hamming code
    b) Hamming distance
    c) Hamming rule
    d) None of the above

36. ICMP stands for
    a) Internet Control Media Protocol
    b) Internet Circuit Medium Post
    c) Internet Control Message Protocol
    d) Internet Circuit Module Protocol

37. The network layer protocol for internet is _____
    a) Ethernet
    b) Internet protocol
    c) Hypertext transfer protocol
    d) File transfer protocol

38. IPV4 has _____ bits
    a) 12
    b) 32
    c) 64
    d) 128

39. IPV6 has _____ bits
    a) 12
    b) 32
    c) 54
    d) 128

40. Alternate and adaptive routing algorithm belongs to _____
    a) static routing
    b) permanent routing
    c) standard routing
    d) dynamic routing

41. The term that refers to a set of procedures used to restrict the amount of data that the sender can send before waiting for acknowledgment is
    a) error control
    b) flow control
    c) delay
    d) byte stuffing

42. Port address is also known as
    a) service point address
    b) Receiver point address
    c) Sender point address
    d) Both b & c

43. Error control is the combination of
    a) error detection and error correction
    b) flow and error control
    c) bit stuffing and unstuffing
    d) byte stuffing and unstuffing

44. ARQ stands for
    a) Automatic repeat quantization
    b) Automatic repeat request

    c) Automatic retransmission request

    d) Acknowledge repeat request

45. The most common protocol for point to point access is the point to point protocol (PPP), which is a _____ protocol

    a) bit-oriented

    b) byte-oriented

    c) character-oriented

    d) non of the above

46. In a linear block code, the exclusive OR (XOR) or any two valid code words creates

    a) valid codeword

    b) invalid codeward

    c) valid data

    d) invalid data

47. A simple parity-check code has admin=

    a) 0

    b) 1

    c) 2

    d) 3

48. A simple parity-check code is the most familiar

    a) error-correcting code

    b) error detecting code

    c) dataword

    d) both a and b

49. The simplest protocol and the Stop-and-Wait Protocol are for channels

    a) noisy

    b) noiseless

    c) either a) or b)

    d) neither a) or b)

50. The _____ protocol has flow control, but not error control

    a) stop and wait

    b) simplest

    c) Go Back N ARQ

    d) Selective-Repeat ARQ

51. The _____ protocol has both flow control and error control
    a) stop and wait
    b) Go Back N ARQ
    c) Selective-Repeat ARQ
    d) both b) and c)

52. In Go-Back-N ARQ if 5 is the number of bits for the sequence number, then the maximum size of the receive window must be _____
    a) 15
    b) 16
    c) 31
    d) 1

53. _____ control refers to a set of procedures used to restrict the amount of data the sender can send before waiting for acknowledgment.
    a) Flow
    b) Error
    c) Trasmission
    d) none of the above

54. In PPP, the _____ is a simple authentication procedure with a two-step process:
    a) NCP
    b) LCP
    c) CHAP
    d) PAP

55. In a _____ protocol, the data section of a frame is a sequence of characters.
    a) bit-oriented
    b) character-oriented
    c) either a or b
    d) none of the above

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

57. TCP is the standard protocol with std no?
    a) 4
    b) 5
    c) 6
    d) 7

58. Transport layer is which layer in OSI model
    a) Second layer
    b) Third layer
    c) Fourth layer
    d) Fifth layer

59. Class C lies between
    a) 0-126
    b) 240 - 255
    c) 192 - 223
    d) 128 - 191

60. Web pages are stored at
    a) Server
    b) Client
    c) Domain
    d) Mail Server

61. DNS stands for
    a) Domain New Server
    b) Digital Naming System
    c) Domain Name System
    d) Domain Name Service

62. Which DNS client maps an address to a name or a name to an address especially when required by a host?
    a) Resolver
    b) Mapper
    c) Primary Server
    d) Secondary Server

63. Full form of TELNET is
    a) Telecommunication Network
    b) Telephone Network

c) Telegram Network

d) Telephone Networking

64. Which language in WWW specifies a web's way by describing three-dimensional objects?

a) HTML

b) VRML

c) XML

d) UML

65. Which field of cookie in WWW represents the server's directory structure by identifying the utilization of part associated with server's file tree?

a) Domain

b) Path

c) Content

d) Secure

66. FTP stands for

a) File Tranmission Protocol

b) File Transfer Protocol

c) File Transmission Procedure

d) File Transfer Priority

67. Which one of the following protocol delivers/stores mail to receiver server?

a) SMTP

b) POP

c) Internet mail access protocol

d) HTML

68. The ASCII encoding of binary data is called

a) base 64 encoding

b) base 32 encoding

c) base 16 encoding

d) base 8 encoding

69. 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) TCP

70. 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 above

71. The data link control portion of most LAN protocols in use today is based on _____.
    a) FDDI
    b) HDLC
    c) ANSI
    d) SDLC

72. IEEE 802.1 is concerned with _____ issues in LANs and MANs
    a) error
    b) networking
    c) internetworking
    d) flow control

73. Ethernet, Token Ring and Token Bus are all different types of _____.
    a) VANs
    b) WANs
    c) MANs
    d) LANs

74. The flag, CRC, and station address fields are added to the PDU at the _____ layer
    a) Physical
    b) network
    c) LLC
    d) MAC

75. A 100Base-T Ethernet LAN has a data rate of _____ Mbps.
    a) 1
    b) 10
    c) 100
    d) 1000

B. Fill up the blanks [15 (3 from each unit)]

1. In simplex transmission data can be transmitted in _____ direction.
2. The fourth layer of an OSI model is _____ layer.
3. Information that has discrete states is _____ signal.
4. Guided media transmission is done physical medium of through a cable where as _____ is data signals that flow through the air.
5. _____ cables are made up of glass or plastic and transmit signals in the form of light.
6. The sharing of a medium and its link by two or more devices is called _____ .
7. Stop-And-Wait is also known as _____ behavior
8. The full form of CRC is _____.
9. The data link layer takes the packets from _____ layer and encapsulates them into frames for transmission
10. In IPV4, B class ranges from _____ to _____.
11. The combination of an IP address and a port number is called a _____ address.
12. _____ provides process-to-process, full-duplex, and connection-oriented service.
13. There are two types of DNS messages _____ and _____ .
14. _____ is a client/server application that allows as usr to log on to a remote machine, giving the user access to the remote system.
15. _____ is a language used to create static web pages.

Key Answers

A. Multiple choice questions

1. d)	2. c)	3. d)	4. a)	5. c)	6. a)	7. d)
8. c)	9. d)	10. b)	11. b)	12. c)	13. b)	14. b)
15. c)	16. c)	17. a)	18. c)	19. a)	20. c)	21. d)
22. b)	23. d)	24. a)	25. d)	26. c)	27. b)	28. c)
29. a)	30. c)	31. a)	32. a)	33. c)	34. b)	35. b)
36. d)	37. b)	38. b)	39. d)	40. d)	41. b)	42. a)
43. a)	44. b)	45. b)	46. a)	47. c)	48. b)	49. b)
50. a)	51. d)	52. d)	53. a)	54. d)	55. b)	56. c)
57. d)	58. c)	59. c)	60. a)	61. c)	62. a)	63. b)
64. b)	65. b)	66. b)	67. a)	68. a)	69. c)	70. d)
71. b)	72. c)	73. d)	74. d)	75. c)		

B. Fill up the blanks key answers

1. one
2. transport
3. digital
4. unguided media
5. Fibre optics
6. multiplexing
7. pingpong
8. cyclic redundancy check
9. network
10. 128 to 191
11. socket
12. TCP
13. Queries and responses
14. TELNET
15. HTML