



Computer Networks

1. A file is being transferred. The time required actually is 6- hours. The

mean time between crashes is 2- hours. The time required for the transfer is _____ hours if synchronization is not provided.

- a. 12 hours
- b. 3 hours
- c. Zero hours
- d. Infinite**

2. The information related to multi-programmed hosts is placed in the

header of _____ Layer

- a. Application layer
- b. Transport Layer**
- c. Session layer
- d. Network Layer.

3. The _____ Layer is a true end to end layer , from source to destination.

- a. Network Layer.
- b. Data Link Layer
- c. Data Layer
- d. Transport Layer**

4. The operation of subnet is controlled by _____

- a. Network Layer.**
- b. Data Link Layer
- c. Data Layer
- d. Transport Layer

5. Accounting Functions are the responsibility of _____ Layer

- a. Network Layer.**
- b. Data Link Layer
- c. Data Layer
- d. Transport Layer

6. Which one of the following is correct??

- a. Character - represented by One's Complement
- b. Character - represented by Two's Complement
- c. Integer - represented by ASCII
- d. Character - represented by Unicode**

7. Multiplexing and Demultiplexing of Network connections is by _____ Layer

- a. Network Layer.



- b. space division multiplexing
- c. frequency division multiplexing
- d. amplitude division multiplexing

137.What is PBX

- a. Public Branch eXchange
- b. Public Band exchange
- c. Private Branch eXchange**
- d. Public Band eXchange

138.A _____ provides a connection or a set of connection between switches.

- a. Transmission path
- b. Virtual path**
- c. Virtual circuit
- d. Virtual connection

139.A _____ is the physical connection between an end point and a switch or between two switches.

- a. Transmission path
- b. Virtual path
- c. Virtual circuit**
- d. Virtual connection



- b. Data Layer
- c. Data Link Layer
- d. Transport Layer**

8. Two sides cannot attempt the same operation at the same time.

This

property is accomplished by _____ Layer

- a. Session Layer**
- b. Transport Layer
- c. Physical Layer
- d. Network Layer

9. The number of layers in the OSI model is _____

- a. 5
- b. 4
- c. 7**
- d. 8

10. _____ Layer contains network virtual terminal

- a. Application layer**
- b. Session layer
- c. Presentation layer
- d. Data Link Layer

11. Presentation Layer is concerned with _____

- a. Synchronization
- b. Flow Control**
- c. Syntax and Semantics
- d. File Transfer.

12. Frame boundaries are recognized and created by _____ Layer.

- a. Application layer
- b. Data Link Layer
- c. Session layer**
- d. Network Layer.

13. Token Management is the function of _____ Layer.

- a. Application layer
- b. Data Link Layer
- c. Session layer
- d. Network Layer.**

14. The function of Physical Layer is _____

- a. Error correction and Detection
- b. Piggybacking
- c. Flow Control
- d. Determine number of volts to represent 1 or 0.**



15. Security and privacy are less of an issue for devices in a _ _ _ _ _

_ _ _ topology

- a. bus**
- b. mesh
- c. star
- d. tree

16. A network that contains multiple hubs is most likely configured in

a _ _ _

_ _ _ topology

- a. bus
- b. mesh
- c. star
- d. tree**

17. In a network with 25 computers, which topology would require the most extensive cabling.

- a. bus
- b. mesh**
- c. star
- d. tree

18. A television broadcast is an example of _ _ _ _ _ transmission

- a. Simplex**
- b. half-duplex
- c. full-duplex
- d. automatic

19. Which topology features a point-to-point line configuration?

- a. mesh**
- b. star
- c. bus
- d. ring

20. In a mesh topology, the relationship between one device and another is _

- _ _ _ _ _**
- a. primary-to-peer
- b. peer-to-primary
- c. primary-to-secondary
- d. peer-to-peer**

21. A cable break in a _ _ _ _ _ topology stops all transmission

- a. bus**
- b. mesh



- c. star
- d. primary

22. Which topology requires a central controller or hub?

- a. mesh
- b. star**
- c. bus
- d. ring

23. Which topology requires a multipoint connection?

- a. mesh
- b. star
- c. bus**
- d. ring

24. Communication between a computer and a keyboard involves _ _ _

_ _ _ transmission

- a. Simplex**
- b. half-duplex
- c. full-duplex
- d. automatic

25. A tree topology is a variation of a _ _ _ _ _ topology.

- a. mesh
- b. star**
- c. bus
- d. ring

26. In a _ _ _ _ _ topology, if there are n devices in a network, each device has n-1 port for cables

- a. mesh**
- b. star
- c. bus
- d. ring

27. A _ _ _ _ _ connection provides a dedicated link between two devices.

- a. point - to - point**
- b. multipoint
- c. primary
- d. Secondary

28. In a _ _ _ _ _ connection, more than two devices can share a single link. [02S07]

- a. point - to - point**
- b. multipoint

- c. primary
- d. Secondary



29. In _____ transmission, the channel capacity is shared by both communicating devices at all times.

- a. Simplex
- b. half-duplex
- c. full-duplex**
- d. automatic

30. Which Protocol is used for electronic mail ?

- a. TELNET
- b. NNTP
- c. HTTP
- d. SMTP**

31. The TCP/IP model has connection less communication in _____ Layer

- a. Transport Layer
- b. Internet layer**
- c. Presentation Layer
- d. Application Layer

32. The functions of internet Layer in TCP/IP are

- a. Flow Control and Error Control
- b. Congestion Control and Flow Control
- c. Packet Routing and Flow Control
- d. Congestion Control and Packet Routing**

33. The protocols used in Host to network layer of TCP/IP model are

- a. TEL NET and LAN
- b. ARPA NET and SAT NET**
- c. PACKET RADIO and IP
- d. LAN and IP

34. HTTP is acronym of

- a. Hyper Text Transfer Protocol**
- b. Hyper Test Transfer Protocol
- c. Hyper Text Transport Protocol
- d. Hyper Text Transport Program

35. The number of layers in TCP/IP model is _____

- a. 5**
- b. 4

- c. 6
- d. 7



36. Internet Layer in TCP/IP is _____

- a. Connection Oriented
- b. Can be Connection Oriented and connection less
- c. Connection less**
- d. Client Server type request

37. The protocol defined by internet layer in TCP/IP is _____

- a. TCP Protocol
- b. UDP Protocol
- c. SMTP
- d. IP Protocol**

38. Two protocols defined in Transport Layer of TCP/IP are _____

- a. TCP and IP
- b. TCP and UDP**
- c. UDP and IP
- d. TCP only

39. Which of the following is/are a connection oriented protocol(s)?? _

- a. TCP**
- b. UDP
- c. TCP and UDP
- d. Neither TCP nor UDP

40. UDP has the following properties

- a. Connection oriented and reliable
- b. Connection Less and reliable
- c. Connection less and Unreliable**
- d. Connection Oriented and Unreliable

41. Which of the following is the Layers of TCP/IP model?

- a. Physical, Network, Transport, Application
- b. Host to Network, Network, Presentation, Application
- c. Host to Network, Internet, Transport, Application**
- d. Physical, Internet, Session, Application

42. Which Layer contains High-level protocols in TCP/IP model?

- a. Application**
- b. Presentation
- c. Transport
- d. Internet

43. The IP in TCP/IP uses _____ bit addresses but IPX in Novell Netware uses _____ bit addresses



- a. 4, 12
- b. 12, 4
- c. 8, 16
- d. 16, 8

44. In the earlier ARPA NET each node of network consisted

- a. TIP & a host
- b. BBN & a host
- c. **IMP & a host**
- d. SAP & a host

45. Novell Netware is based on _ _ _ _ _

- a. **XNS**
- b. OSI
- c. TCP/IP
- d. TIP

46. The protocols used in Transport layer of Novell Netware _ _ _ _ _

- a. NCP & SAP
- b. NCP & IPX
- c. **NCP & SPX**
- d. NCP & TIP

47. IPX in Novell Netware is functionally similar to _ _ _ _ _ Protocol

- a. TCP
- b. **IP**
- c. UDP
- d. SAP

48. The address in Novell Netware contains

- a. **32-bit Network Number, 48-bit Machine Number & 16-bit Local address**
- b. 16-bit Network Number, 32-bit Machine Number & 48-bit Local address
- c. 48-bit Network Number, 16-bit Machine Number & 32-bit Local address
- d. 16-bit Network Number, 48-bit Machine Number & 32-bit Local address

49. The physical layer of Novell Netware consists of _ _ _ _ _ protocol

- a. IPX
- b. NCP
- c. SAP
- d. **ARC NET**

50. The connection oriented transport protocol in Novell Netware is _ _ _ _ _



a. NCP

- b. IPX
- c. SAP
- d. Ethernet

51. IPX is used in ----- layer of Novell Netware

- a. Application
- b. Transport

c. Network

- d. Physical

52. Expand SAP in Novell Netware

- a. Service access point
- b. Special Access Point
- c. Service access protocol

d. Service Advertising Protocol

53. Minicomputers in ARPANET are called

- a. ARPA Computers

b. IMP

- c. BBN
- d. DARPA Computers

54. Expand TIP in ARPA NET

- a. Touch Interest protocol

b. Terminal Interface protocol

- c. Transport International Protocol
- d. Terminal Interface protocol

55. ----- was created to organize machines into Domains and

map hostnames into IP addresses.

- a. BBN
- b. IMP
- c. TIP

d. DNS

56. Internet is based on ----- protocol stack.

- a. XNS
- b. IMP

c. TCP/IP

- d. SAP

57. The topology not used in LAN is -----

a. Ring

- b. Star
- c. Bus
- d. Mesh



58. When packets are small and all are equal sized then they are called _ _ _

- a. Frames
- b. Small Packets
- c. Cells**
- d. Atoms

59. Irregular topologies are used in _ _ _ _ _

- a. LAN
- b. WAN**
- c. MAN
- d. Broadcast Networks

60. Traditional LANs run at the speed of

- a. 100 to 1000 MBPS
- b. 1000 to 10000 MBPS
- c. 10 to 100 MBPS**
- d. 10 to 100 GBPS

61. Which of the following is not a characteristic of LAN

- a. Size**
- b. Transmission Technology
- c. Topology
- d. Routers

62. In static allocation of channel in LAN Broadcast Networks _ _ _ _

_ _ _ algorithm is used

- a. FCFS
- b. Round Robin**
- c. Shortest Frame first
- d. High priority first

63. In _ _ _ _ _ Network, there is a broadcast medium to which all

computers are attached

- a. MAN**
- b. LAN
- c. WAN
- d. Broadcast Networks

64. Privately owned networks are _ _ _ _ _

- a. MAN
- b. LAN**
- c. WAN
- d. Broadcast Networks

65. Worst-case time is bounded in _ _ _ _ _]

- a. LAN**



- b. MAN
- c. WAN
- d. Broadcast Networks

66. _ _ _ _ _ Broadcast Networks can be divided into Static and dynamic depending on channel allocation

- a. MAN
- b. LAN**
- c. Broadcast Networks
- d. WAN

67. Local Cable TV Network is an example for _ _ _ _ _

- a. WAN
- b. Broadcast
- c. LAN
- d. MAN**

68. The IEEE standard for DQDB is _ _ _ _ _

- a. 802.3
- b. 802.4
- c. 802.6**
- d. 802.5

69. Hosts in WAN are connected by _ _ _ _ _

- a. Communication Line
- b. Subnet**
- c. Router
- d. Another host Computer

70. Which one is not a transmission line?

- a. Circuits
- b. Channels
- c. Trunks
- d. Paths**

71. Satellite or ground radio is an example for _ _ _ _ _

- a. WAN**
- b. MAN
- c. LAN
- d. Broadcast Networks

72. LASERs face a inhibition on

- a. sunny day
- b. dry day
- c. windy day
- d. rainy day**



73. _____ transmission has more suitable for indoor wireless LANs

- a. radio
- b. micro wave
- c. infra red**
- d. light wave

74. _____ category twisted pairs are called as unshielded twisted pair

- a. Category 1
- b. Category 3**
- c. Category 5
- d. Category 3 & Category 5

75. Which of the following is not considered an important use of microwaves

- a. Industrial bands
- b. scientific bands
- c. medical bands
- d. entertainment bands**

76. The number of oscillations per second of an electromagnetic wave is

called its _____ and is measured in _____]

- a. wave length ,mts
- b. frequency,Hz**
- c. amplitude, mts
- d. time period, secs

77. The mode of transmission most suitable is _____

- a. twisted pair
- b. fibre optics
- c. wireless**
- d. coax

78. A modern application to connect the LANs in two buildings is through _____

_____ transmission]

- a. radio
- b. micro wave
- c. infra red
- d. light wave**

79. What is advantage of twists for a wire _____]

- a. Data lose
- b. Noise reduction**
- c. No noise
- d. Added noise



80. In fiber optics a pulse of light indicates _ _ _ _ _

- a. 1 bit**
- b. 0 bit
- c. 1 byte
- d. 8 bits

81. _ _ _ _ _ kind of coaxial cable is used for analog transmission

- a. Base band
- b. Broad band**
- c. Category 3
- d. Fiber

82. As we go from long-wave radio towards visible light, the waves behave

more and more like _ _ _ _ _ and less and less like _ _ _ _ _

- a. radio, light
- b. light., radio**
- c. radio , micro wave
- d. micro wave, light

83. Multipath fading _ _ _ _ _ the signal

- a. enhances
- b. adds to
- c. cancels**
- d. maximizes

84. In micro wave transmission concentrating all the energy into a small

beam using a parabolic antenna gives a _ _ _ _ _ signal to noise ratio

- a. lower
- b. higher**
- c. degraded
- d. subtle

85. Radio waves are _ _ _ _ _

- a. uni directional
- b. bi directional
- c. multidirectional
- d. omnidirectional**

86. The fundamental relation between frequency (f), wave length (l) and

speed(c)

- a. $f \cdot c = l$**
- b. $f/l = c$
- c. $l \cdot c = f$
- d. $f \cdot l = c$

87. Speed of light is

- a. $3 \cdot 10^8$ m/s**



- b. 3×10^8 cm/sec
- c. 3×10^9 m/s
- d. 3×10^9 cm/sec

88. In transparent Bridges, all the decisions are made by looking into

- a. Advertisement Tables
- b. Description Tables
- c. Hash Tables**
- d. Fragment Tables

89. If destination LAN is unknown in Transparent Bridges then we use

- a. Link State Routing
- b. Flooding**
- c. Shortest Path Routing
- d. Flow Based Routing

90. Which among the below of source routing bridges is complex?

- a. Hardware**
- b. Software
- c. Hybrid
- d. Remote

91. Configuration of _____ is manual

- a. Transparent
- b. Spanning Tree
- c. Remote
- d. Source Routing**

92. In LAN with token ring topology, _____ are used

- a. Transparent
- b. Spanning Tree
- c. Remote
- d. Source Routing**

93. A configuration of N LANs is linearly connected by 4 bridges. By the time we reach the Nth LAN how many discovery frames will be circulating?

- a. N_4
- b. 4**
- c. 4_N
- d. N



94. Which of the following is not an internetworking device?

- a. Bridge
- b. Repeater
- c. Router
- d. Cable**

95. What type of bridge must have its address table entered manually?

- a. Simple**
- b. Transparent
- c. Multi port
- d. Source routing

96. A bridge has access to the _____ address of a station on the same network.

- a. Physical**
- b. Network
- c. Service access point
- d. Logical

97. In source routing bridges _____ frame is used to discover the destination

- a. Discovery**
- b. Control
- c. Data
- d. Acknowledgement

98. LAN's can be connected by a device called _____

- a. Routers
- b. Modems
- c. Ethernet card
- d. Bridges**

99. In _____ all frames are given to the computer, not to those addressed

- a. Promiscuous mode**
- b. Miscues mode
- c. Normal mode
- d. Special Mode

100. _____ Algorithm is used in transparent bridges

- a. Forward Learning
- b. Backward Learning**
- c. Reverse Backward Learning
- d. Reverse Forward Learning

101. In transparent bridges the failures are handled by _____

- a. Host
- b. Bridge**
- c. Network layer
- d. Router

102. CSMA/CD and token bus user choose _____ bridge

- a. Source routing bridge
- b. Transparent bridge**
- c. Remote bridge
- d. Selective Bridges

103. _____ bridge operates in promiscuous mode]

- a. Transparent bridge**
- b. Selective flooding
- c. Source Routing
- d. Remote Bridges

104. In source routing bridges each LAN has a unique _____ bit no.

- a. 10
- b. 8
- c. 16
- d. 12**

105. Source routing bridges in the same LANs must have _____ bridge Number

- a. Same
- b. Different**
- c. Source
- d. Destination

106. Repeater function in the _____ layer

- a. Physical**
- b. Data link
- c. Network
- d. Transport

107. Bridges function in the _____ layer.

- a. Physical
- b. Data link**
- c. Network
- d. Transport

108. A repeater takes a weakened or corrupted signal and _____ it

- a. Amplifies
- b. Regenerates**
- c. Resample
- d. Reroute

109. The PSTN is an example of _____ network



- a. packet-switched
- b. circuit-switched**
- c. message-switched
- d. TSI

110. In _____, each packet of a message follows the same path from sender to receiver

- a. Circuit switching
- b. message switching
- c. a virtual approach to packet switching**
- d. The datagram approach to packet switching

111. In a time division switch, a _____ governs the destination of a packet stored in RAM

- a. TDM bus
- b. cross bar
- c. cross point
- d. control unit**

112. How many cross points are needed in a single stage switch with 40 inputs and 50 outputs

- a. 40
- b. 50
- c. 90
- d. 2000**

113. The _____ of a TSI controls the order of delivering of slot values that are stored in RAM

- a. cross bar
- b. cross point
- c. control unit
- d. transreceiver**

114. In _____ circuit switching, delivery of data is delayed because data must be stored and retrieved from RAM.

- a. Space-division
- b. time-division**
- c. virtual
- d. packet

115. To create a _____, combine crossbar switches in stages

- a. Multistage switch**
- b. cross point
- c. packet switch



d. TSI

116.In _____ each packet of a message need not follow the same

path From sender to receiver

- a. Circuit switching
- b. message switching
- c. a virtual approach to packet switching
- d. The datagram approach to packet switching**

117.An important property of circuit switching is the need to setup an endto-

end path _____ any data can be sent

- a. after
- b. before**
- c. along with which
- d. avoiding which

118.The elapsed time between the end of dialing and the start of ringing can

be a minimum of _____

- a. 1sec
- b. 10sec**
- c. 100sec
- d. 1000sec

119.A network using message switching is called _____

a. store-and-forward

- b. forward-and-store
- c. store-and-send
- d. send-and-store

120._____ Networks place a tight upper limit on block size, allowing

packets to be buffered in router main memory instead of on disk.

- a. Message switching
- b. circuit switching
- c. packet switching**
- d. store-and-forward

121.Which type of switching uses the entire capacity of a dedicated link?

- a. Circuit switching**
- b. datagram packet switching
- c. virtual circuit packet switching
- d. Message switching



122.The _____ is a device that connects n inputs to m outputs

- a. Cross point
- b. cross bar**
- c. modem
- d. RAM

123.In which type of switching do all the datagrams of a message follow the same channels of a path

- a. Circuit switching
- b. datagram packet switching
- c. virtual circuit packet switching**
- d. message switching

124.which ISDN plane is associated with signaling another D channel

- a. user**
- b. control
- c. management
- d. supervise

125.When you store and forward messages in B-ISDN, you are using

- _____ services
- a. Conversational
 - b. messaging**
 - c. retrieval
 - d. distributive

126.Commercial TV is an example of

- a. messaging services
- b. Conversational services**
- c. distributional services without user control
- d. distributional services with user control

127.The normal user interface to an ISDN is PRI or _____

- a. Bit Rate Interface**
- b. Basic Rate Interface
- c. Byte Rate Interface
- d. Broad Rate Interface

128.The reference point U is a specification for connecting the ISDN office with _____

- a. NT1**
- b. NT2
- c. TE1
- d. TE2

129.A banyan switch parsers the output line number from _____

- a. snake-like**

b. left to right

c. right to left

d. top to bottom



130. For n line, the complexity of a batcher switch grows like _____

a. $\log n$

b. n^2

c. $n \log n$

d. $n \log_2 n$

131. The ISDN equivalent of DTE is

a. TE1

b. TE2

c. NT1

d. TA

132. ISDN is an acronym for _____.

a. Information Services for Digital Networks

b. Internetwork System for Data Networks

c. Integrated Services Digital Network

d. Integrated Signals Digital Network

133. Which of the following channel types is not standardized

a. 4 kHz analog telephone channel

b. 64 kbps digital PCM channel for voice or data

c. 16 kbps digital channel

d. 16 kbps analog channel

134. Equipment that performs functions related to the OSI model's layers 1, 2

& 3 is called _____.

a. NT1

b. NT2

c. NT3

d. NT4

135. The key idea behind ISDN is that of the _____, a conceptual

pipe between the customer and the carrier through which bits flow

a. digital byte pipe

b. analog bit pipe

c. digital pipe

d. digital bit pipe

136. The digital bit pipe can support multiple independent channels by _____ of the bit stream.

a. time division multiplexing



- b. space division multiplexing
- c. frequency division multiplexing
- d. amplitude division multiplexing

137.What is PBX

- a. Public Branch eXchange
- b. Public Band exchange
- c. Private Branch eXchange**
- d. Public Band eXchange

138.A _____ provides a connection or a set of connection between switches.

- a. Transmission path
- b. Virtual path**
- c. Virtual circuit
- d. Virtual connection

139.A _____ is the physical connection between an end point and a switch or between two switches.

- a. Transmission path
- b. Virtual path
- c. Virtual circuit**
- d. Virtual connection

140.The VPI of a UNI is _____ bits in length

- a. 8**
- b. 12
- c. 16
- d. 24

141.The VPI of a NNI is _____ bits in length

- a. 8
- b. 12**
- c. 16
- d. 24

142.In a VP switch the _____ does not change while the _____ can change .

- a. VPI, VCI
- b. VCI, VPI**
- c. VP, VPC
- d. VPC, VP