

Questions

- 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 in Computer Network?**
 - 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. Router operates in which layer of OSI Reference Model?**
 - a) Layer 1 (Physical Layer)
 - b) Layer 3 (Network Layer)
 - c) Layer 4 (Transport Layer)
 - d) Layer 7 (Application Layer)
- 4. What is the use of Bridge in Network?**
 - a) to connect LANs
 - b) to separate LANs
 - c) to control Network Speed
 - d) All of the above
- 5. ADSL is the abbreviation of**
 - a) Asymmetric Dual Subscriber Line
 - b) Asymmetric Digital System Line
 - c) Asymmetric Dual System Line
 - d) Asymmetric Digital Subscriber Line
- 6. What is the meaning of Bandwidth in Network?**
 - a) Transmission capacity of a communication channels
 - b) Connected Computers in the Network
 - c) Class of IP used in Network
 - d) None of Above
- 7. DNS is the abbreviation of**
 - a) Dynamic Name System
 - b) Dynamic Network System
 - c) Domain Name System
 - d) Domain Network Service
- 8. IPV4 Address is**
 - a) 8 bit
 - b) 16 bit
 - c) 32 bit
 - d) 64 bit
- 9. DHCP is the abbreviation of**
 - A. Dynamic Host Control Protocol
 - B. Dynamic Host Configuration Protocol
 - C. Dynamic Hyper Control Protocol
 - D. Dynamic Hyper Configuration Protocol
- 10. How many layers does OSI Reference Model has?**
 - a) 4
 - b) 5
 - c) 6
 - d) 7
- 11. Which of the following layer of OSI model also called end-to-end layer?**
 - a) Presentation layer
 - b) Network layer
 - c) Session layer
 - d) Transport layer
- 12. How many layers are in the TCP/IP model?**
 - a) 4 layers

- b) 5 layers
- c) 6 layers
- d) 7 layers

13. How many bits are there in the Ethernet address?

- a) 64 bits
- b) 48 bits
- c) 32 bits
- d) 16 bits

14. The last address of IP address represents

- a) Unicast address
- b) Network address
- c) Broadcast address
- d) None of above

15. Which of the following is correct regarding Class B Address of IP address

- a) Network bit – 16, Host bit – 16
- b) Network bit – 16, Host bit – 14
- c) Network bit – 18, Host bit – 16
- d) Network bit – 12, Host bit – 14

16. Each IP packet must contain

- a) Only Source address
- b) Only Destination address
- c) Source and Destination address
- d) Source or Destination address

17. Bridge works in which layer of the OSI model?

- a) Application layer
- b) Transport layer
- c) Network layer
- d) Datalink layer

18. _____ provides a connection-oriented reliable service for sending messages

- a) TCP
- b) IP
- c) UDP

- d) All of the above

19. Which layers of the OSI model are host-to-host layers?

- a) Transport, Session, Persentation, Application
- b) Network, Transport, Session, Presentation
- c) Datalink, Network, Transport, Session
- d) Physical, Datalink, Network, Transport

20. Which of the following IP address class is Multicast

- a) Class A
- b) Class B
- c) Class C
- d) Class D

21. What is the size of Network bits & Host bits of Class A of IP address?

- a) Network bits 7, Host bits 24
- b) Network bits 8, Host bits 24
- c) Network bits 7, Host bits 23
- d) Network bits 8, Host bits 23

22. What is the address size of IPv6 ?

- a) 32 bit
- b) 64 bit
- c) 128 bit
- d) 256 bit

23. Which of following provides reliable communication?

- a) TCP
- b) IP
- c) UDP
- d) All of the above

24. What is the minimum header size of an IP packet?

- a) 16 bytes
- b) 10 bytes
- c) 20 bytes
- d) 32 bytes

25. Why IP Protocol is considered as unreliable?

- a) A packet may be lost

- b) Packets may arrive out of order
- c) Duplicate packets may
- d) All of the above

26. What does Router do in a network?

- a) Forwards a packet to all outgoing links
- b) Forwards a packet to the next free outgoing link
- c) Determines on which outgoing link a packet is to be forwarded
- d) Forwards a packet to all outgoing links except the originated link

27. The Internet is an example of

- a) Cell switched network
- b) circuit switched network
- c) Packet switched network
- d) All of above

28. What does protocol defines?

- a) Protocol defines what data is communicated.
- b) Protocol defines how data is communicated.
- c) Protocol defines when data is communicated.
- d) All of above

29. What is the uses of subnetting?

- a) It divides one large network into several smaller ones
- b) It divides network into network classes
- c) It speeds up the speed of network
- d) None of above

30. Repeater operates in which layer of the OSI model?

- a) Physical layer
- b) Data link layer
- c) Network layer
- d) Transport layer

31. What is the size of MAC Address?

- a) 16-bits
- b) 32-bits
- c) 48-bits
- d) 64-bits

32. What is the benefit of the Networking?

- a) File Sharing
- b) Easier access to Resources
- c) Easier Backups
- d) All of the Above

33. Which of the following is not the Networking Devices?

- a) Gateways
- b) Linux
- c) Routers
- d) Firewalls

34. Which of the following can be Software?

- a) Routers
- b) Firewalls
- c) Gateway
- d) Modems

35. What is the use of Ping command?

- a) To test a device on the network is reachable
- b) To test a hard disk fault
- c) To test a bug in a Application
- d) To test a Printer Quality

36. Routing tables of a router keeps track of

- a) MAC Address Assignments
- b) Port Assignments to network devices
- c) Distribute IP address to network devices
- d) Routes to use for forwarding data to its destination

37. Layer-2 Switch is also called

- a) Multiport Hub
- b) Multiport Switch
- c) Multiport Bridge

- d) Multiport NIC
- 38. MAC Address Is the example of**
- a) Transport Layer
 - b) Data Link Layer
 - c) Application Layer
 - d) Physical Layer
- 39. Difference between T568A and T568B is**
- a) Difference in wire color
 - b) Difference in number of wires
 - c) Just different length of wires
 - d) Just different manufacturer standards
- 40. The meaning of Straight-through Cable is**
- a) Four wire pairs connect to the same pin on each end
 - b) The cable Which Directly connects Computer to Computer
 - c) Four wire pairs not twisted with each other
 - d) The cable which is not twisted
- 41. What is the Demilitarized Zone?**
- a) The area between firewall & connection to an external network
 - b) The area between ISP to Military area
 - c) The area surrounded by secured servers
 - d) The area surrounded by the Military
- 42. Which of the following is not the External Security Threats?**
- a) Front-door Threats
 - b) Back-door Threats
 - c) Underground Threats
 - d) Denial of Service (DoS)
- 43. What is the full form of RAID ?**
- a) Redundant Array of Independent Disks
- b) Redundant Array of Important Disks
- c) Random Access of Independent Disks
- d) Random Access of Important Disks
- 44. What Is the maximum header size of an IP packet?**
- a) 32 bytes
 - b) 64 bytes
 - c) 30 bytes
 - d) 60 bytes
- 45. What is the usable size of Network bits in Class B of IP address?**
- a) 04
 - b) 08
 - c) 14
 - d) 16
- 46. What do you mean by broadcasting in Networking?**
- a) It means addressing a packet to all machine
 - b) It means addressing a packet to some machine
 - c) It means addressing a packet to a particular machine
 - d) It means addressing a packet to except a particular machine
- 47. In which type of RAID, data is mirrored between two disks.**
- a) RAID 0
 - b) RAID 1
 - c) RAID 2
 - d) RAID 3
- 48. What is the size of Host bits in Class B of IP address?**
- a) 04
 - b) 08
 - c) 16
 - d) 32
- 49. Which of the following protocol is/are defined in Transport layer?**
- a) FTP

- b) TCP
- c) UDP
- d) B & C

50. Which of the following is/are Protocols of Application?

- a) FTP
- b) DNS
- c) Telnet
- d) All of above

51. What does the port number in a TCP connection specify?

- a) It specifies the communication process on the two end systems
- b) It specifies the quality of the data & connection
- c) It specifies the size of data
- d) All of the above

52. Which of the following is correct in VLSM?

- a) Can have subnets of different sizes
- b) Subnets must be in same size
- c) No required of subnet
- d) All of above

53. . What is the IP Address range of APIPA?

- a) 169.254.0.1 to 169.254.0.254
- b) 169.254.0.1 to 169.254.0.255
- c) 169.254.0.1 to 169.254.254.254
- d) 169.254.0.1 to 169.254.255.255

54. Which of the following is correct in CIDR?

- a) Class A includes Class B network
- b) There are only two networks
- c) There are high & low class network
- d) There is no concept of class A, B, C networks

55. The class-based addressing is also known as

- a) Modern Model
- b) Classful Model
- c) Classless Model
- d) Heterogeneous Model

56. What is the size of Source and Destination IP address in IP header?

- a) 4 bits
- b) 8 bits
- c) 16 bits
- d) 32 bits

57. Which of the following is reliable communication?

- a) TCP
- b) IP
- c) UPD
- d) All of them

58. What is the typical range of Ephemeral ports?

- a) 1 to 80
- b) 1 to 1024
- c) 80 to 8080
- d) 1024 to 65535

59. What is the purpose of the PSH flag in the TCP header?

- a) Typically used to indicate end of message
- b) Typically used to indicate beginning of message
- c) Typically used to push the message
- d) Typically used to indicate stop the message

60. What is the natural mask for a class C Network?

- a) 255.255.255.1
- b) 255.255.255.0
- c) 255.255.255.254
- d) 255.255.255.255

61. When collection of various computers seems a single coherent system to its client, then it is called

- a) computer network
 b) distributed system
 c) both (a) and (b)
 d) none of the mentioned
- 62. In computer network nodes are**
- the computer that originates the data
 - the computer that routes the data
 - the computer that terminates the data
 - all of the mentioned
- 63. Which one of the following computer network is built on the top of another network?**
- prior network
 - chief network
 - prime network
 - overlay network
- 64. Two devices are in network if**
- a process in one device is able to exchange information with a process in another device
 - a process is running on both devices
 - PIDs of the processes running of different devices are same
 - none of the mentioned
- 65. Bluetooth is an example of**
- personal area network
 - local area network
 - virtual private network
 - none of the mentioned
- 66. Communication channel is shared by all the machines on the network in**
- broadcast network
 - unicast network
 - multicast network
 - none of the mentioned
- 67. A _____ is a device that forwards packets between networks by processing**
- the routing information included in the packet.**
- bridge
 - firewall
 - router
 - all of the mentioned
- 68. A list of protocols used by a system, one protocol per layer, is called**
- protocol architecture
 - protocol stack
 - protocol suit
 - none of the mentioned
- 69. Network congestion occurs**
- in case of traffic overloading
 - when a system terminates
 - when connection between two nodes terminates
 - none of the mentioned
- 70. Which one of the following extends a private network across public networks?**
- local area network
 - virtual private network
 - enterprise private network
 - storage area network
- 71. If an Optical Carrier is represented as OC-n, generally the link speed equals(in Mbps),**
- $n \times 39.8$
 - $n \times 51.8$
 - $2n \times 51.8$
 - None of the mentioned
- 72. Fiber optics posses following properties**
- Immune electromagnetic interference
 - Very less signal attenuation
 - Very hard to tap
 - All of the mentioned
- 73. Coaxial cable consists of _____ concentric copper conductors.**
- 1
 - 2

- c) 3
- d) 4

74. UTP is commonly used in

- a) DSL
- b) FTP
- c) HTTP
- d) None of the mentioned

75. Which of this is not a guided media ?

- a) Fiber optical cable
- b) Coaxial cable
- c) Wireless LAN
- d) Copper wire

76. Geostationary satellites

- a) Are placed at a fixed point above the earth
- b) Rotate the earth about a fixed axis
- c) Rotate the earth about a varying axis
- d) All of the mentioned

77. Radio channels are attractive medium because

- a) Can penetrate walls
- b) Connectivity can be given to mobile user
- c) Can carry signals for long distance
- d) All of the mentioned

78. Terrestrial radio channels are broadly classified into _____ groups.

- a) 2
- b) 3
- c) 4
- d) 1

79. A piece of icon or image on a web page associated with another webpage is called

- a) url
- b) hyperlink
- c) plugin
- d) none of the mentioned

80. Dynamic web page

a) is same every time whenever it displays

- b) generates on demand by a program or a request from browser**
- c) both (a) and (b)
- d) none of the mentioned

81. What is a web browser?

- a) a program that can display a web page**
- b) a program used to view html documents
- c) it enables user to access the resources of internet
- d) all of the mentioned

82. Common gateway interface is used to

- a) generate executable files from web content by web server**
- b) generate web pages
- c) stream videos
- d) none of the mentioned

83. URL stands for

- a) unique reference label**
- b) uniform reference label
- c) uniform resource locator
- d) unique resource locator

84. AJAX stands for

- a) asynchronous javascript and xml**
- b) advanced JSP and xml
- c) asynchronous JSP and xml
- d) advanced javascript and xml

85. What is document object model (DOM)?

- a) convention for representing and interacting with objects in html documents**
- b) application programming interface
- c) hierarchy of objects in ASP.NET
- d) none of the mentioned

86. An alternative of javascript on windows platform is

- a) VBScript**

b) ASP.NET

c) JSP

d) none of the mentioned

87. Which one of the following is not used to generate dynamic web pages?

a) PHP

b) ASP.NET

c) JSP

d) none of the mentioned

88. A web cookie is a small piece of data

a) sent from a website and stored in user's web browser while a user is browsing a website

b) sent from user and stored in the server while a user is browsing a website

c) sent from root server to all servers

d) none of the mentioned

89. In HTTP pipelining

a) multiple HTTP requests are sent on a single TCP connection without waiting for the corresponding responses

b) multiple HTTP requests can not be sent on a single TCP connection

c) multiple HTTP requests are sent in a queue on a single TCP connection

d) none of the mentioned

90. HTTP client requests by establishing a _____ connection to a particular port on the server.

a) user datagram protocol

b) transmission control protocol

c) broader gateway protocol

d) none of the mentioned

91. In the network HTTP resources are located by

a) uniform resource identifier

b) unique resource locator

c) unique resource identifier

d) none of the mentioned

92. HTTP is _____ protocol.

a) application layer

b) transport layer

c) network layer

d) none of the mentioned

93. Multiple object can be sent over a TCP connection between client and server in

a) persistent HTTP

b) nonpersistent HTTP

c) both (a) and (b)

d) none of the mentioned

94. FTP server listens for connection on port number

a) 20

b) 21

c) 22

d) 23

95. In FTP protocol, client contacts server using _____ as the transport protocol.

a) transmission control protocol

b) user datagram protocol

c) datagram congestion control protocol

d) stream control transmission protocol

96. In which mode FTP, the client initiates both the control and data connections.

a) active mode

b) passive mode

c) both (a) and (b)

d) none of the mentioned

97. The file transfer protocol is built on

a) data centric architecture

b) service oriented architecture

c) client server architecture

d) none of the mentioned

98. In file transfer protocol, data transfer can be done in

- a) stream mode
 - b) block mode
 - c) compressed mode
 - d) all of the mentioned
- 99. Ethernet frame consists of**
- a) MAC address
 - b) IP address
 - c) both (a) and (b)
 - d) none of the mentioned
- 100. What is autonegotiation?**
- a) a procedure by which two connected devices choose common transmission parameters
 - b) a security algorithm
 - c) a routing algorithm
 - d) none of the mentioned
- 101. MAC address is of**
- a) 24 bits
 - b) 36 bits
 - c) 42 bits
 - d) 48 bits
- 102. What is stat frame delimiter (SFD) in ethernet frame?**
- a) 10101010
 - b) 10101011
 - c) 00000000
 - d) 11111111
- 103. Ethernet in metropolitan area network (MAN) can be used as**
- a) pure ethernet
 - b) ethernet over SDH
 - c) ethernet over MPLS
 - d) all of the mentioned
- 104. A point-to-point protocol over ethernet is a network protocol for**
- a) encapsulating PPP frames inside ethernet frames
 - b) encapsulating ethernet frames inside PPP frames
 - c) for security of ethernet frames
 - d) for security of PPP frames
- 105. High speed ethernet works on**
- a) coaxial cable
 - b) twisted pair cable
 - c) optical fiber
 - d) none of the mentioned
- 106. The maximum size of payload field in ethernet frame is**
- a) 1000 bytes
 - b) 1200 bytes
 - c) 1300 bytes
 - d) 1500 bytes
- 107. What is interframe gap?**
- a) idle time between frames
 - b) idle time between frame bits
 - c) idle time between packets
 - d) none of the mentioned
- 108. An ethernet frame that is less than the IEEE 802.3 minimum length of 64**
- octets is called
 - a) short frame
 - b) run frame
 - c) mini frame
 - d) man frame
- 109. Physical or logical arrangement of network is**
- a) Topology
 - b) Routing
 - c) Networking
 - d) None of the mentioned
- 110. In this topology there is a central controller or hub**
- a) Star
 - b) Mesh
 - c) Ring
 - d) Bus
- 111. This topology requires multipoint connection**
- a) Star
 - b) Mesh
 - c) Ring
 - d) Bus
- 112. Data communication system spanning states, countries, or the whole world is**

- a) LAN
- b) WAN
- c) MAN
- d) None of the mentioned

113. Data communication system within a building or campus is

- a) LAN
- b) WAN
- c) MAN
- d) None of the mentioned

114. Expand WAN

- a) World area network
- b) Wide area network
- c) Web area network
- d) None of the mentioned

115. In TDM, slots are further divided into _____

- a) Seconds
- b) Frames
- c) Packets
- d) Bits

116. _____ is the multiplexing technique that shifts each signal to a different carrier frequency.

- a) FDM
- b) TDM
- c) Both FDM & TDM
- d) PDM

117. A local telephone network is an example of a _____ network

- a) Packet switched
- b) Circuit switched
- c) both of the mentioned
- d) none of the mentioned

118. Most packet switches use this principle

- a) Stop and wait
- b) Store and forward
- c) Both of the mentioned
- d) None of the mentioned

119. If there are N routers from source to destination, total end to end delay in sending packet

$P(L \rightarrow \text{number of bits in the packet})$

$R \rightarrow \text{transmission rate}$)

- a) N
- b) $(N^*L)/R$
- c) $(2N^*L)/R$
- d) L/R

120. Method(s) to move data through a network of links and switches

- a) Packet switching
- b) Circuit switching
- c) Line switching
- d) Both a and b

121. The resources needed for communication between end systems are reserved for the duration of session between end systems in _____

- a) Packet switching
- b) Circuit switching
- c) Line switching
- d) Frequency switching

122. As the resources are reserved between two communicating end systems in circuit switching, this is achieved

- a) authentication
- b) guaranteed constant rate
- c) reliability
- d) store and forward

123. In _____ resources are allocated on demand.

- a) packet switching
- b) circuit switching
- c) line switching
- d) frequency switching

124. The data field can carry which of the following?

- a) TCP segemnt
- b) UDP segment
- c) ICMP messages
- d) None of the mentioned

125. If the value in protocol field is 17, the transport layer protocol used is ____.

- a) TCP
- b) UDP
- c) Either of the mentioned
- d) None of the mentioned

126. The TTL field has value 10. How many routers (max) can process this datagram?

- a) 11
- b) 5
- c) 10
- d) 1

127. Which of the following field in IPv4 datagram is not related to fragmentation?

- a) Flags
- b) Offset
- c) TOS
- d) Identifier

128. Which of the following is not applicable for IP?

- a) Error reporting
- b) Handle addressing conventions
- c) Datagram format
- d) Packet handling conventions

129. What should be the flag value to indicate the last fragment?

- a) 0
- b) 1
- c) TTL value
- d) None of the mentioned

130. Which of these is not applicable for IP protocol?

- a) is connectionless
- b) offer reliable service
- c) offer unreliable service
- d) None of the mentioned

131. Fragmentation has following demerits

- a) complicates routers
- b) open to DOS attack

- c) overlapping of fragments.
- d) All of the mentioned

132. Which field helps to check rearrangement of the fragments?

- a) offset
- b) flag
- c) TTL
- d) identifier

133. The size of IP address in IPv6 is

- a) 4bytes
- b) 128bits
- c) 8bytes
- d) 100bits

134. The header length of an IPv6 datagram is ____.

- a) 10bytes
- b) 25bytes
- c) 30bytes
- d) 40bytes

135. 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

136. IPv6 does not use _____ type of address

- a) Broadcast
- b) Multicast
- c) Anycast
- d) None of the mentioned

137. These are the features present in IPv4 but not in IPv6.

- a) Fragmentation
- b) Header checksum
- c) Options
- d) All of the mentioned

138. The _____ field determines the lifetime of IPv6 datagram

- a) Hop limit
- b) TTL
- c) Next header
- d) None of the mentioned

139. Dual-stack approach refers to

- a) Implementing Ipv4 with 2 stacks
- b) Implementing Ipv6 with 2 stacks
- c) Node has both IPv4 and IPv6 support
- d) None of the mentioned

140. Suppose two IPv6 nodes want to interoperate using IPv6 datagrams but 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

141. Teredo is an automatic tunneling technique. In each client the obfuscated IPv4 address is represented by bits

- a) 96 to 127
- b) 0 to 63
- c) 80 to 95
- d) 64 to 79

142. What is internet?

- a) a single network
- b) a vast collection of different networks
- c) interconnection of local area networks
- d) none of the mentioned

143. ISP exchanges internet traffic between their networks by

- a) internet exchange point
- b) subscriber end point
- c) ISP end point
- d) none of the mentioned

144. Internet access by transmitting digital data over the wires of a local telephone network is provided by

- a) leased line

b) digital subscriber line

c) digital signal line

d) none of the mentioned

145. To join the Internet, the computer has to be connected to a

- a) internet architecture board
- b) internet society
- c) internet service provider
- d) none of the mentioned

146. Which one of the following protocol is not used in internet?

- a) HTTP
- b) DHCP
- c) DNS
- d) none of the mentioned

147. IPv6 addresses have a size of

- a) 32 bits
- b) 64 bits
- c) 128 bits
- d) 265 bits

148. Internet works on

- a) packet switching
- b) circuit switching
- c) both (a) and (b)
- d) none of the mentioned

149. Which one of the following is not an application layer protocol used in internet?

- a) remote procedure call
- b) internet relay chat
- c) resource reservation protocol
- d) none of the mentioned

150. Which protocol assigns IP address to the client connected in the internet?

- a) DHCP
- b) IP
- c) RPC
- d) none of the mentioned

151. Which one of the following is not used in media access control?

- a) ethernet
- b) digital subscriber line

c) fiber distributed data interface
d) none of the mentioned

152. DHCP (dynamic host configuration protocol) provides _____ to the client.

- a) IP address
- b) MAC address
- c) url
- d) none of the mentioned

153. DHCP is used for

- a) IPv6
- b) IPv4
- c) both (a) and (b)
- d) none of the mentioned

154. DHCP uses UDP port _____ for sending data to the server.

- a) 66
- b) 67
- c) 68
- d) 69

155. IP assigned for a client by DHCP server is

- a) for a limited period
- b) for unlimited period
- c) not time dependent
- d) none of the mentioned

156. The DHCP server

- a) maintains a database of available IP addresses
- b) maintains the information about client configuration parameters
- c) grants a IP address when receives a request from a client
- d) all of the mentioned

157. The DHCP server can provide the _____ of the IP addresses.

- a) dynamic allocation
- b) automatic allocation
- c) static allocation
- d) all of the mentioned

158. DHCP client and servers on the same subnet communicate via

- a) UDP broadcast
- b) UDP unicast
- c) TCP broadcast
- d) TCP unicast

159. After obtaining the IP address, to prevent the IP conflict the client may use

- a) internet relay chat
- b) broader gateway protocol
- c) address resolution protocol
- d) none of the mentioned

160. What is DHCP snooping?

- a) techniques applied to ensure the security of an existing DHCP infrastructure
- b) encryption of the DHCP server requests
- c) algorithm for DHCP
- d) none of the mentioned

161. If DHCP snooping is configured on a LAN switch, then clients having specific _____ can access the network.

- a) MAC address
- b) IP address
- c) both (a) and (b)
- d) none of the mentioned

162. Which of this is not a constituent of residential telephone line?

- a) A high-speed downstream channel
- b) A medium-speed downstream channel
- c) A low-speed downstream channel
- d) None of the mentioned

163. In DSL telco provides these services

- a) Wired phone access
- b) ISP
- c) All of the mentioned
- d) None of the mentioned

164. The function of DSLAM is

- a) Convert analog signals into digital signals
- b) Convert digital signals into analog signals
- c) Amplify digital signals
- d) None of the mentioned

165. The following term is not associated with DSL

- a) DSLAM
- b) CO
- c) Splitter
- d) CMTS

166. These factors affect transmission rate in DSL

- a) The gauge of the twisted-pair line
- b) Degree of electrical interference
- c) Shadow fading
- d) Both a and b

167. ONT is connected to splitter using

- a) High speed fibre cable
- b) HFC
- c) Optical cable
- d) None of the mentioned

168. Home Access is provided by

- a) DSL
- b) FTTP
- c) Cable
- d) All of the mentioned

169. StarBand provides

- a) FTTH internet access
- b) Cable access
- c) Telephone access
- d) Satellite access

170. Among the optical-distribution architectures that is essentially switched ethernet is

- a) AON
- b) PON
- c) NON
- d) None of the mentioned

171. Choose the statement which is not applicable for cable Internet access

- a) It is a shared broadcast medium
- b) It includes HFCs
- c) Cable modem connects home PC to Ethernet port
- d) Analog signal is converted to digital signal in DSLAM

172. HFC contains

- a) Fibre cable
- b) Coaxial cable
- c) Both of the mentioned
- d) None of the mentioned

173. 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

174. Which transmission media has the highest transmission speed in a network?

- a) coaxial cable
- b) twisted pair cable
- c) optical fiber
- d) electrical cable

175. Bits can be send over guided and unguided media as analog signal by

- a) digital modulation
- b) amplitude modulation
- c) frequency modulation
- d) phase modulation

176. The portion of physical layer that interfaces with the media access control sublayer is called

- a) physical signalling sublayer
- b) physical data sublayer
- c) physical address sublayer
- d) none of the mentioned

177. 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

178. In asynchronous serial communication the physical layer provides

- a) start and stop signalling
- b) flow control
- c) both (a) and (b)
- d) none of the mentioned

179. The physical layer is responsible for

- a) line coding
- b) channel coding
- c) modulation
- d) all of the mentioned

180. The physical layer translates logical communication requests from the _____ into hardware specific operations.

- a) data link layer
- b) network layer
- c) trasnport layer
- d) application layer

181. A single channel is shared by multiple signals by

- a) analog modulation
- b) digital modulation
- c) multiplexing
- d) none of the mentioned

182. Wireless transmission can be done via

- a) radio waves
- b) microwaves
- c) infrared
- d) all of the mentioned

183. The network layer concerns with

- a) bits
- b) frames

- c) packets
- d) none of the mentioned

184. 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

185. Which one of the following routing algorithm can be used for network layer design?

- a) shortest path algorithm
- b) distance vector routing
- c) link state routing
- d) all of the mentioned

186. In virtual circuit network each packet contains

- a) full source and destination address
- b) a short VC number
- c) both (a) and (b)
- d) none of the mentioned

187. The 4 byte IP address consists of

- a) network address
- b) host address
- c) both (a) and (b)
- d) none of the mentioned

188. Multidestination routing which of the following is not correct

- a) is same as broadcast routing
- b) contains the list of all destinations
- c) data is not sent by packets
- d) none of the mentioned

189. A subset of a network that includes all the routers but contains no loops is called

- a) spanning tree
- b) spider structure
- c) spider tree
- d) none of the mentioned

190. Which one of the following algorithm is not used for congestion control?

- a) traffic aware routing
- b) admission control
- c) load shedding
- d) none of the mentioned

191. The network layer protocol of internet is

- a) ethernet
- b) internet protocol
- c) hypertext transfer protocol
- d) none of the mentioned

192. ICMP is primarily used for

a) error and diagnostic functions

- b) addressing
- c) forwarding
- d) none of the mentioned

193. 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

194. An endpoint of an inter-process communication flow across a computer network is called

- a) socket
- b) pipe
- c) port
- d) none of the mentioned

195. 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

196. 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

197. 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

198. Socket-style API for windows is called

- a) wsock
- b) winsock
- c) wins
- d) none of the mentioned

199. 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

200. A _____ is a TCP name for a transport service access point.

- a) port
- b) pipe
- c) node
- d) none of the mentioned

201. 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

202. 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

203. 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

204. 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

205. 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

206. 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

207. The ASCII encoding of binary data is called

- a) base 64 encoding
- b) base 32 encoding

- c) base 16 encoding
- d) base 8 encoding

208. Which one of the following is an internet standard protocol for managing devices on IP network?

- a) dynamic host configuration protocol
- b) simple network management protocol
- c) internet message access protocol
- d) media gateway protocol

209. Which one of the following is not an application layer protocol?

- a) media gateway protocol
- b) dynamic host configuration protocol
- c) resource reservation protocol
- d) session initiation protocol

210. Which protocol is a signalling communication protocol used for controlling multimedia communication sessions?

- a) session initiation protocol
- b) session modelling protocol
- c) session maintenance protocol
- d) none of the mentioned

211. 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

212. When displaying a web page, the application layer uses the

- a) HTTP protocol
- b) FTP protocol

- c) SMTP protocol
- d) none of the mentioned

213. This is not a application layer protocol

- a) HTTP
- b) SMTP
- c) FTP
- d) TCP

214. The packet of information at the application layer is called

- a) Packet
- b) Message
- c) Segment
- d) Frame

215. This is one of the architecture paradigm

- a) Peer to peer
- b) Client-server
- c) HTTP
- d) Both a and b

216. Application developer has permission to decide the following on transport layer side

- a) Transport layer protocol
- b) Maximum buffer size
- c) Both of the mentioned
- d) None of the mentioned

217. Application layer offers _____ service

- a) End to end
- b) Process to process
- c) Both of the mentioned
- d) None of the mentioned

218. E-mail is

- a) Loss-tolerant application
- b) Bandwidth-sensitive application
- c) Elastic application
- d) None of the mentioned

219. Pick the odd one out

- a) File transfer
- b) File download
- c) E-mail

- d) Interactive games

220. 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

221. 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

222. This is a time-sensitive service

- a) File transfer
- b) File download
- c) E-mail
- d) Internet telephony

223. Transport services available to applications in one or another form

- a) Reliable data transfer
- b) Timing
- c) Security
- d) All of the mentioned

224. Electronic mail uses this Application layer protocol

- a) SMTP
- b) HTTP
- c) FTP
- d) SIP

225. The number of objects in a Web page which consists of 4 jpeg images and HTML text is _____

- a) 4
- b) 1
- c) 5
- d) None of the mentioned

226. The default connection type used by HTTP is _____

- a) Persistent
- b) Non-persistent

- c) Either of the mentioned
- d) None of the mentioned

227. The time taken by a packet to travel from client to server and then back to the client is called _____

- a) STT
- b) RTT
- c) PTT
- d) None of the mentioned

228. The HTTP request message is sent in _____ part of three-way handshake.

- a) First
- b) Second
- c) Third
- d) None of the mentioned

229. In the process of fetching a web page from a server the HTTP request/response takes _____ RTTs.

- a) 2
- b) 1
- c) 4
- d) 3

230. The first line of HTTP request message is called _____

- a) Request line
- b) Header line
- c) Status line
- d) Entity line

231. The values GET, POST, HEAD etc are specified in _____ of HTTP message

- a) Request line
- b) Header line
- c) Status line
- d) Entity body

232. The _____ method when used in the method field, leaves entity body empty.

- a) POST
- b) GET
- c) Both of the mentioned

- d) None of the mentioned

233. The HTTP response message leaves out the requested object when _____ method is used

- a) GET
- b) POST
- c) HEAD
- d) PUT

234. Find the oddly matched HTTP status codes

- a) 200 OK
- b) 400 Bad Request
- c) 301 Moved permanently
- d) 304 Not Found

235. Which of the following is not correct ?

- a) Web cache doesn't have its own disk space
- b) Web cache can act both like server and client
- c) Web cache might reduce the response time
- d) Web cache contains copies of recently requested objects

236. The conditional GET mechanism

- a) Imposes conditions on the objects to be requested
- b) Limits the number of response from a server
- c) Helps to keep a cache up-to-date
- d) None of the mentioned

237. Which of the following is present in both an HTTP request line and a status line?

- a) HTTP version number
- b) URL
- c) Method
- d) None of the mentioned

238. Ping can

- a) Measure round-trip time
- b) Report packet loss
- c) Report latency
- d) All of the mentioned

239. Ping sweep is a part of

- a) Traceroute
- b) Nmap
- c) Route
- d) Ipconfig

240. ICMP is used in

- a) Ping
- b) Traceroute
- c) Ifconfig
- d) Both a and b

241. _____ command is used to manipulate TCP/IP routing table.

- a) route
- b) Ipconfig
- c) Ifconfig
- d) Traceroute

242. If you want to find the number of routers between a source and destination, the utility to be used is

- a) route
- b) Ipconfig
- c) Ifconfig
- d) Traceroute

243. Which of the following is related to ipconfig in Microsoft Windows ?

- a) Display all current TCP/IP network configuration values
- b) Modify DHCP settings
- c) Modify DNS settings
- d) All of the mentioned

244. This allows to check if a domain is available for registration.

- a) Domain Check
- b) Domain Dossier
- c) Domain Lookup
- d) None of the mentioned

245. Choose the wrong statement

- a) Nslookup is used to query a DNS server for DNS data
- b) Ping is used to check connectivity

c) Pathping combines the functionality of ping with that of route

d) Ifconfig can configure TCP/IP network interface parameters

246. The password is sent to the server using _____ command

- a) PASSWD
- b) PASS
- c) PASSWORD
- d) None of the mentioned

247. Mode of data transfer in FTP, where all the is left to TCP

- a) Stream mode
- b) Block mode
- c) Compressed mode
- d) None of the mentioned

248. Find the FTP reply whose message is wrongly matched

- a) 331 – Username OK, password required
- b) 425 – Can't open data connection
- c) 452 – Error writing file
- d) 452 – Can't open data connection

249. The commands, from client to server, and replies, from server to client, are sent across the control connection in _____ bit ASCII format

- a) 8
- b) 7
- c) 3
- d) 5

250. FTP server

- a) Maintains state
- b) Is stateless
- c) Has single TCP connection for a file transfer
- d) None of the mentioned

251. If 5 files are transferred from server A to client B in the same

session. The number of TCP connection between A and B is

- a) 5
- b) 10
- c) 2
- d) 6

252. Identify the incorrect statement Protocol

- a) FTP stands for File Transfer
- b) FTP uses two parallel TCP connections
- c) FTP sends its control information in-band
- d) FTP sends exactly one file over the data connection

253. FTP uses _____ parallel TCP connections to transfer a file

- a) 1
- b) 2
- c) 3
- d) 4

254. FTP is built on _____ architecture

- a) Client-server
- b) P2P
- c) Both of the mentioned
- d) None of the mentioned

255. Expansion of FTP is

- a) Fine Transfer Protocol
- b) File Transfer Protocol
- c) First Transfer Protocol
- d) None of the mentioned

256. The attackers a network of compromised devices known as

- a) Internet
- b) Botnet
- c) Telnet
- d) D-net

257. Which of the following is a form of DoS attack?

- a) Vulnerability attack
- b) Bandwidth flooding
- c) Connection flooding
- d) All of the mentioned

258. The DoS attack is which the attacker establishes a large number of half-open or fully open TCP connections at the target host

- a) Vulnerability attack
- b) Bandwidth flooding
- c) Connection flooding
- d) All of the mentioned

259. The DoS attack is which the attacker sends deluge of packets to the targeted host

- a) Vulnerability attack
- b) Bandwidth flooding
- c) Connection flooding
- d) All of the mentioned

260. Packet sniffers involve

- a) Active receiver
- b) Passive receiver
- c) Both of the mentioned
- d) None of the mentioned

261. Firewalls are often configured to block

- a) UDP traffic
- b) TCP traffic
- c) Both of the mentioned
- d) None of the mentioned

262. Sniffers can be deployed in

- a) Wired environment
- b) WiFi
- c) Ethernet LAN
- d) All of the mentioned

263. When a DNS server accepts and uses incorrect information from a host that has no authority giving that information, then it is called

- a) DNS lookup
- b) DNS hijacking
- c) DNS spoofing
- d) none of the mentioned

264. PGP encrypts data by using a block cipher called

- a) International data encryption algorithm
- b) private data encryption algorithm
- c) intranet data encryption algorithm
- d) none of the mentioned

265. Pretty good privacy (PGP) is used in

- a) browser security
- b) email security
- c) FTP security
- d) none of the mentioned

266. Extensible authentication protocol is authentication framework frequently used in

- a) wired personal area network
- b) wireless networks
- c) wired local area network
- d) none of the mentioned

267. 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

268. WPA2 is used for security in

- a) ethernet
- b) bluetooth
- c) wi-fi
- d) none of the mentioned

269. 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

270. Network layer firewall works as

- a) frame filter

- b) packet filter
- c) both (a) and (b)
- d) none of the mentioned

271. In tunnel mode IPsec protects the

- a) entire IP packet
- b) IP header
- c) IP payload
- d) none of the mentioned

272. IPSec is designed to provide the security at the

- a) transport layer
- b) network layer
- c) application layer
- d) session layer

273. 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

274. 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

275. 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

276. 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

277. 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

278. 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

279. Mostly _____ is used in wireless LAN.

- a) time division multiplexing
- b) orthogonal frequency division multiplexing
- c) space division multiplexing
- d) none of the mentioned

280. 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

281. 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

282. What is WPA?

- a) wi-fi protected access
- b) wired protected access
- c) wired process access
- d) wi-fi process access

283. WiMAX stands for

- a) wireless maximum communication
- b) worldwide interoperability for microwave access

- c) worldwide international standard for microwave access
- d) none of the mentioned

284. WiMAX provides

- a) simplex communication
- b) half duplex communication
- c) full duplex communication
- d) none of the mentioned

285. WiMAX uses the

- a) orthogonal frequency division multiplexing
- b) time division multiplexing
- c) space division multiplexing
- d) all of the mentioned

286. Which one of the following modulation scheme is supported by WiMAX?

- a) binary phase shift keying modulation
- b) quadrature phase shift keying modulation
- c) quadrature amplitude modulation
- d) all of the mentioned

287. WiMAX MAC layer provides an interface between

- a) higher transport layers and physical layer
- b) application layer and network layer
- c) data link layer and network layer
- d) none of the mentioned

288. For encryption, WiMAX supports

- a) advanced encryption standard
- b) triple data encryption standard
- c) both (a) and (b)
- d) none of the mentioned

289. WiMAX provides

- a) VoIP services
- b) IPTV services

- c) both (a) and (b)
d) none of the mentioned
- 290. Devices that provide the connectivity to a WiMAX network are known as**
- subscriber stations
 - base stations
 - gateway
 - none of the mentioned
- 291. WiMAX is mostly used for**
- local area network
- b) metropolitan area network
c) personal area network
d) none of the mentioned
- 292. Which one of the following frequency is not used in WiMAX for communication?**
- 2.3 GHz
 - 2.4 GHz
 - 2.5 GHz
 - 3.5 GHz

Answer Sheet

1	A	2	C	3	B	4	A	5	D	6	A	7	C	8	C	9	B
10	D	11	D	12	A	13	B	14	C	15	A	16	C	17	D	18	A
19	A	20	D	21	B	22	C	23	A	24	C	25	D	26	C	27	C
28	D	29	A	30	A	31	C	32	D	33	B	34	B	35	A	36	C
37	C	38	B	29	D	40	A	41	A	42	C	43	A	44	D	45	C
46	A	47	B	48	C	49	D	50	D	51	A	52	A	53	C	54	D
55	A,B	56	D	57	A	58	D	59	A	60	B	61	B	62	D	63	D
64	A	65	A	66	A	67	C	68	B	69	A	70	B	71	B	72	D
73	B	74	A	75	C	76	A	77	D	78	D	79	B	80	B	81	D
82	A	83	C	84	A	85	A	86	A	87	D	88	A	89	A	90	B
91	A	92	A	93	A	94	B	95	A	96	B	97	C	98	D	99	A
100	A	101	D	102	B	103	D	104	A	105	C	106	D	107	A	108	B
109	A	110	A	111	D	112	B	113	A	114	B	115	B	116	A	117	B
118	B	119	B	120	D	121	B	122	B	123	A	124	C	125	B	126	C
127	C	128	A	129	A	130	B	131	D	132	A	133	B	134	D	135	C
136	A	137	D	138	A	139	C	140	B	141	A	142	B	145	A	144	B
145	C	146	D	147	C	148	A	149	C	150	A	151	D	152	A	153	C
154	B	155	A	156	D	157	D	158	A	159	C	160	A	161	C	162	C
163	C	164	A	165	D	166	D	167	C	168	D	169	D	170	A	171	D
172	C	173	A	174	C	175	A	176	A	177	D	178	C	179	D	180	A
181	C	182	D	183	C	184	D	185	D	186	B	187	C	188	C	189	A
190	D	191	B	192	A	193	A	194	A	195	D	196	A	197	C	198	B
199	A	200	A	201	B	202	A	203	A	204	C	205	D	206	A	207	A
208	B	209	C	210	A	211	C	212	A	213	D	214	B	215	D	216	C
217	A	218	C	219	D	220	D	221	C	222	D	223	D	224	A	225	C
226	A	227	B	228	C	229	B	230	A	231	A	232	B	233	C	234	D
235	A	236	C	237	A	238	D	239	B	240	D	241	A	242	D	243	D
244	A	245	C	246	B	247	A	248	D	249	B	250	A	251	D	252	C
253	B	254	A	255	B	256	B	257	D	258	C	259	B	260	B	261	A
262	D	263	C	264	A	265	B	266	B	267	A	268	C	269	A	270	B
271	A	272	B	273	A	274	A	275	B	276	A	277	C	278	A	279	B
280	A	281	A	282	A	283	B	284	C	285	A	286	D	287	A	288	C
289	C	290	A	291	B	292	B										