Networking MCQs with Answers (Part 2) - For LTIMindtree CIS Training Exam

101. Which layer of OSI model converts data packets into frames?
Answer: Data Link Layer

102. What is the purpose of a MAC address?
Answer: To uniquely identify a network interface on a LAN

103. Which layer establishes, manages, and terminates sessions?
Answer: Session Layer

104. What is the size of an IPv4 address?
Answer: 32 bits

105. What is the size of an IPv6 address?
Answer: 128 bits

106. What protocol uses port 443?
Answer: HTTPS

107. What protocol is used to send emails?
Answer: SMTP

108. What protocol is used to receive emails?
Answer: POP3 or IMAP

109. What does TTL stand for in networking?
Answer: Time To Live

110. Which device operates at Layer 1 of OSI model?
Answer: Hub

111. What is the command to display IP configuration in Windows?
Answer: ipconfig

112. What is the command to display IP configuration in Linux?
Answer: ifconfig or ip addr show

113. Which protocol resolves hostnames to IP addresses?
Answer: DNS

114. Which address type is used for one-to-one communication?
Answer: Unicast

115. Which address type is used for one-to-many communication?
Answer: Multicast

116. Which protocol provides automatic IP configuration?
Answer: DHCP

117. Which protocol is used for remote login?
Answer: Telnet or SSH

118. What is the function of a router?
Answer: To forward packets between different networks

119. Which layer segments and reassembles data?
Answer: Transport Layer

120. Which protocol provides connectionless service?
Answer: UDP

121. What is the standard maximum transmission unit (MTU) for Ethernet?
Answer: 1500 bytes

122. What does DNS stand for?
Answer: Domain Name System

123. What is the main purpose of subnetting?
Answer: To divide a network into smaller logical networks

124. What is the IP address range for Class A?
Answer: 1.0.0.0 to 126.255.255.255

125. Which command checks route path to destination?
Answer: tracert or traceroute

126. What is loopback IP address?
Answer: 127.0.0.1

127. What protocol number is assigned to ICMP?
Answer: 1

128. Which layer is responsible for end-to-end delivery?
Answer: Transport Layer

129. What protocol uses port 23?
Answer: Telnet

130. What protocol uses port 22?
Answer: SSH

131. What is the binary equivalent of 255.255.255.0?
Answer: 11111111.11111111.11111111.00000000

132. Which topology connects each node to a central hub?
Answer: Star topology

133. Which topology has a single backbone cable?
Answer: Bus topology

134. Which topology connects nodes in a closed loop?
Answer: Ring topology

135. What does CSMA/CD stand for?
Answer: Carrier Sense Multiple Access with Collision Detection

136. Which protocol allows remote file access?
Answer: FTP or NFS

137. What is the use of SNMP?
Answer: To monitor and manage network devices

138. What protocol is used for secure file transfer?
Answer: SFTP

139. Which protocol is used to find MAC address from IP?
Answer: ARP

140. Which protocol is used to find IP from MAC?
Answer: RARP

141. Which OSI layer adds logical address to data?
Answer: Network Layer

142. Which OSI layer adds physical address?
Answer: Data Link Layer

143. Which OSI layer ensures reliable message delivery?
Answer: Transport Layer

144. Which port does DNS use?
Answer: 53

145. What is a broadcast address?
Answer: An address used to send data to all devices in a network

146. Which IP class is used for multicasting?
Answer: Class D

147. Which device reduces collision domain?
Answer: Switch

148. What is default mask for Class A?
Answer: 255.0.0.0

149. What is default mask for Class B?
Answer: 255.255.0.0

150. What is default mask for Class C?
Answer: 255.255.255.0

151. Which routing protocol uses shortest path first algorithm?
Answer: OSPF

152. What does RIP stand for?
Answer: Routing Information Protocol

153. What metric does RIP use?
Answer: Hop count

154. What metric does OSPF use?
Answer: Cost

155. Which routing protocol supports VLSM?
Answer: OSPF and EIGRP

156. Which layer is responsible for flow control?
Answer: Transport Layer

157. What does MTU stand for?
Answer: Maximum Transmission Unit

158. Which protocol is used for IP address to MAC address mapping?
Answer: ARP

159. Which IP address is reserved for testing purposes?
Answer: 127.0.0.1

160. What is a collision domain?
Answer: A network segment where data packets can collide

161. What is a broadcast domain?
Answer: A group of computers that can receive broadcast messages

162. What device breaks up collision domains?
Answer: Switch

163. What device breaks up broadcast domains?
Answer: Router

164. What is the function of a NIC?
Answer: Provides network connectivity to a computer

165. What is the purpose of STP?
Answer: To prevent network loops

166. What does VLAN stand for?
Answer: Virtual Local Area Network

167. What command displays routing table in Windows?
Answer: route print

168. What command displays routing table in Linux?
Answer: netstat -r or ip route

169. Which port does FTP use?
Answer: 20 and 21

170. What port does SMTP use?
Answer: 25

171. What port does POP3 use?
Answer: 110

172. What port does IMAP use?
Answer: 143

173. What does DHCP Discover message do?
Answer: Finds DHCP servers on the network

174. What type of address is 169.254.x.x?
Answer: APIPA (Automatic Private IP Address)

175. Which layer segments data into smaller units?
Answer: Transport Layer

176. What does UDP stand for?
Answer: User Datagram Protocol

177. What does ICMP stand for?
Answer: Internet Control Message Protocol

178. What is the function of the Network Layer?
Answer: Routing and logical addressing

179. What is the purpose of NAT?
Answer: To translate private IP addresses to public ones

180. What is CIDR?
Answer: Classless Inter-Domain Routing

181. Which protocol handles delivery acknowledgment?
Answer: TCP

182. Which layer handles compression?
Answer: Presentation Layer

183. Which protocol is used for time synchronization?
Answer: NTP

184. Which protocol is used for IP address management?
Answer: DHCP

185. What is the main difference between TCP and UDP?
Answer: TCP is connection-oriented, UDP is connectionless

186. What is the default gateway used for?
Answer: To send traffic outside the local network

187. What does the term bandwidth refer to?
Answer: The amount of data that can be transmitted in a given time

188. What is latency?
Answer: The time delay between request and response

189. What is jitter?
Answer: Variation in packet arrival time

190. What is throughput?
Answer: Actual rate of successful data transfer

191. What layer of OSI model adds headers and trailers?
Answer: Data Link Layer

192. What is the main function of the Physical Layer?
Answer: Transmission of raw bits over a physical medium

193. Which device operates on all OSI layers?
Answer: Network Firewall (depending on configuration)

194. Which layer is responsible for encryption?
Answer: Presentation Layer

195. Which topology is most fault tolerant?
Answer: Mesh topology

196. What is link aggregation?
Answer: Combining multiple network connections for redundancy and bandwidth

197. What is half-duplex communication?
Answer: Data transmission in one direction at a time

198. What is full-duplex communication?
Answer: Data transmission in both directions simultaneously

199. Which command clears DNS cache in Windows?
Answer: ipconfig /flushdns

200. What protocol provides web service over port 8080?
Answer: HTTP (alternate port)