4 Correct
11 Incorrect
0 Left

Choose a question no.

1 2 3 4 5
6 7 8 9 10
11 12 13 14 15

Question No. 1 +1 0

The maximum number of IPv4 addresses is

A. 2^{24} Your answer is wrong!
B. 2^{32} Correct answer!

Explanation

IPv4 uses 32-bit addresses which limits the address space to 4,294,967,296 (2^{32}) addresses.

C. 2^{128}
D. 2^{64}

Question No. 2 +1 0

Which of the following is not a limitation of IPv4 addresses?

A. IPv4 suffers from IP Address depletion. Your answer is wrong!
B. IPv4 lacks end-to-end connectivity.
C. IPv4 fits for small topology drawing. Correct answer!

Explanation

One of the advantages of having IPv4 is that, it can be suitable for small topology drawing. IPv4 actually suffers from IP address depletion, lacks end-to-end connectivity and it cannot handle the massive routing table expansion of the internet routers.

D. IPv4 cannot handle internet routing table expansion.

Question No. 3 +1 0

Which of the following is incorrect about Network Address Translation (NAT)?

A. NAT is a process in which one or more local IP address is translated into one or more Global IP address and vice versa.
B. NAT results in switching path delays. Your answer is wrong!
C. Certain applications will not function while NAT is enabled
D. Routers will do NAT translations without configuration. Correct answer!

Explanation

NAT enabled routers only can do NAT translations and it must be configured with the necessary translation details. NAT is a method of mapping an IP address space into another by modifying network address information in the IP header of packets while they are in transit across a traffic routing device (router). Hence NAT will certainly have delays and few applications will not function while NAT is enabled.

Question No. 4 +1 0

Port Address Translation (PAT) is also termed as

A. Static NAT
B. Dynamic NAT
C. NAT Overload Your answer is correct!

Explanation

PAT is also called as NAT Overload because PAT is an extension of Network Address Translation (NAT) that permits multiple devices on a LAN to be mapped to a single public IP address to conserve IP addresses.

D. None of the above

Question No. 5 +1 0

In _____ type of NAT, one or more private IP addresses can be mapped to one public IP address.

A. Static NAT
B. Dynamic NAT Your answer is wrong!
C. PAT Correct answer!

Explanation

Port Address Translation (PAT) is an extension of Network Address Translation (NAT) that permits multiple devices on a LAN to be mapped to a single public IP address to conserve IP addresses.

D. None of the above

Question No. 6 +1 0

Which of the following is incorrect about NAT?

A. NAT does not conserve IPv4 addresses. Correct answer!

Explanation

NAT has become a popular and essential tool in conserving global address space in the face of IPv4 address exhaustion. One Internet-routable IP address of a NAT gateway can be used for an entire private network.

B. Static NAT creates a fixed translation of private addresses to public addresses Your answer is wrong!
C. Static NAT allows the user to configure one-to-one translations.
D. NAT helps to reuse private IP addresses

Question No. 7 +1 0

The header length of an IPv6 datagram is _____

A. 10 bytes
B. 25 bytes Your answer is wrong!
C. 30 bytes
D. 40 bytes Correct answer!

Explanation

IPv6 datagram has fixed base header length of 40 bytes, which results in faster processing of the IPv6 datagram. There is one fixed base header and optional extension headers which may or may not exist. The fixed header contains the mandatory essential information about the packet while the optional extension headers contain the optional information.

Question No. 8 +1 0

The traffic class field of IPv6 is similar to which field in the IPv4 header?

A. Fragmentation field
B. Fast switching Your answer is wrong!
C. TOS field Correct answer!

Explanation

The traffic class field is used to specify the priority of the IP packet which is a similar functionality to the Type of Service (TOS) field in the IPv4 header.

D. Option field

Question No. 9 +1 0

Which of the following type of addressing is not supported by IPv6?

A. Broadcast Correct answer!

Explanation

There is no broadcast address in IPv6. Instead, there is an anycast address in IPv6. An IPv6 anycast address is an address that is assigned to more than one interface. Typically, the address belongs to different nodes. A packet that is sent to an anycast address is routed to the nearest interface that has the address.

B. Anycast
C. Multicast Your answer is wrong!
D. Unicast

Question No. 10 +1 0

A. Hop limit — Your answer is correct!

Explanation

Hop Limit field is same as TTL in IPv4 packets. It indicates the maximum number of intermediate nodes IPv6 packet is allowed to travel. Its value gets decremented by one, by each node that forwards the packet and packet is discarded if value decrements to 0.

B. TTL

C. Next header

D. Type of traffic

Question No. 11 +1 0

The size of an IP address in IPv6 is _____

A. 4 bytes

B. 128 bits — Correct answer!

Explanation

IPv4 addresses are 32 bits long and IPv6 addresses are 128 bits long.

C. 128 bytes — Your answer is wrong!

D. 100 bits

Question No. 12 +1 0

Which of the following is incorrect about IPv6 header format?

A. Version field is of 4 bits.

B. Flow Label field is of 20 bits.

C. Next Header field is of 16 bits. — Your answer is correct!

Explanation

Next Header field in IPv6 is of 8 bits. The equivalent field to Next Header of IPv6 is the Protocol field in IPv4.

D. Payload length field is of 16 bits

Question No. 13 +1 0

Which of the following is NOT correct about IPv6 address?

A. IPv6 supports real time applications.

B. IPv6 has increased address space when compared to IPv4. — Your answer is wrong!

C. IPv6 cannot be routed on IPv4 networks. — Correct answer!

Explanation

IPv6 can be routed on the current IPv4 Networks, but special things must be done in order for the IPv4 addressing to work. There are 4 main methodologies to executing this task, which then have specific implementations. The methods are dual stack, tunneling, translation, and gateway.

D. IPv6 has improved packet handling.

Question No. 14 +1 0

Which of the following is an incorrect IPv6 address?

A. 2001::1

B. FE80:0000:0000:0:0123:4567:89AB:CDEF:1010 — Your answer is correct!

Explanation

An IPv6 address has 8 hextets represented in hexa-decimal. Hextet is used to refer to a segment of 16 bits or four hexadecimals and IPv6 addresses can be written in either lowercase or uppercase. (::) is used to represent contiguous 0s.

C. 2003:DEAD:CAFE:cafe:ab33:46:abab:62

D. 2003:dead:bef:4dad:ab33:46:abab:62

Question No. 15 +1 0

Which of the following is an incorrect IPv6 address?

A. FE80:FE80::1

B. 2001::CAFE

C. 2001:0DB8::ABCD::1234 — Correct answer!

Explanation

(::) is used to represent contiguous 0s but it can appear only once in a valid IPv6 address.

D. 2001:DB8:0:0:ABCD: :100 — Your answer is wrong!