Exam Report: 6.7.3 Practice Questions

Date: 3/19/2020 11:26:08 am
Time Spent: 1:57

Candidate: Garsteck, Matthew
Login: mGarsteck

Overall Performance

Your Score: 0%

Passing Score: 80%

View results by: Objective Analysis Individual Responses

Individual Responses

Question 1: Incorrect

Which of the following are valid IPv6 addresses? (Select TWO.)

- [ ] 6384:1319:7700:7631:446A:5511:8940:2552
- [ ] 141:0:0:0:15:0:0:1
- [x] ~~165.15.78.53.100.1~~
- [ ] A82:5B67:7700:AH0A:446A:779F:FFE3:0091
- [x] ~~343F:1EEE:ACDD:2034:1FF3:5012~~

Explanation

An IPv6 IP address is a 128-bit address listed as eight 16-bit hexadecimal sections. Leading zeros can be omitted in each section. Therefore, 6384:1319:7700:7631:446A:5511:8940:2552 and 141:0:0:0:15:0:0:1 are both valid IPv6 IP addresses. A single set of all-zero sections can be abbreviated with two colons (::). Therefore, 141::15:0:0:1 would also be a valid way of writing that address.

Digits in a hexadecimal system range from 0-9 and A-F. H is not a valid hexadecimal number. 343F:1EEE:ACDD:2034:1FF3:5012 is too short, having only six sections instead of eight.

References

TestOut PC Pro - 6.7 IP Version 6
[e_ipv6_pp6.exam.xml Q_IPV6ADD_IPV6_01]

Question 2: Incorrect

Which of the following is a valid IPv6 address?

- ( ) FEC0::AB:9007
- ( ) FEC0:AB98::A7::9845:4567
- ( ) 199.12.254.11
- (•) ~~FEC0:9087:AB04:9900:7CA2:7788:CEDF:349A~~
- ( ) FEC0:AB04:899A

Explanation

FEC0::AB:9007 is a valid IPv6 address. The :: in the address replaces blocks of consecutive 0s. The longer form of this address would be FEC0:0000:0000:0000:0000:0000:00AB:9007. Leading 0s within a quartet can also be omitted. You can only omit one block of 0s using the double colon. Each number in the IPv6 address must be between 0-9 or A-F; G is not a valid number for the IPv6 address. An address without double colons should have a total of 32 hexadecimal numbers in 8 blocks.

References

TestOut PC Pro - 6.7 IP Version 6
[e_ipv6_pp6.exam.xml Q_IPV6ADD_IPV6_02]

Question 3: Incorrect

Which of the following correctly describe the most common format for expressing IPv6 addresses? (Select TWO.)

- [ ] Hexadecimal numbers
- [x] ~~128 numbers, grouped using colons~~
- [ ] Decimal numbers
- [ ] Binary numbers
- [ ] 32 numbers, grouped using colons

Explanation

IP version 6 addresses are made up of 32 hexadecimal numbers organized into eight quartets. The quartets are separated by colons. An IPv6 address is a 128-bit number (128 binary digits). IP version 4 addresses use decimal numbers organized into four octets and separated by periods.

References

TestOut PC Pro - 6.7 IP Version 6
[e_ipv6_pp6.exam.xml Q_IPV6ADD_IPV6_03]

Question 4: Incorrect

Which of the following describes an IPv6 address? (Select TWO.)

- [x] ~~64-bit address~~
- [ ] Four decimal octets
- [x] Eight hexadecimal quartets
- [ ] 128-bit address
- [ ] 32-bit address

Explanation

IP version 6 addresses are 128-bit addresses. They are commonly written using 32 hexadecimal numbers organized into eight quartets. Each quartet is represented as a hexadecimal number between 0 and FFFF. The quartets are separated by colons. IP version 4 addresses are 32-bit addresses. They have four octets, each octet being a binary number of eight digits. Each octet has a decimal value between 0 and 255.

References

TestOut PC Pro - 6.7 IP Version 6
[e_ipv6_pp6.exam.xml Q_IPV6ADD_IPV6_04]

Question 5: Incorrect

Which of the following identifies the Interface ID component of an IPv6 address? (Select TWO.)

- [ ] The first quartet of an IPv6 address.
- [x] ~~The fourth quartet of an IPv6 address.~~
- [ ] The first four quartets of an IPv6 address.

- [ ] The last quartet of an IPv6 address.
- [ ] The last 64 bits of an IPv6 address.
- [ ] The last four quartets of an IPv6 address.

Explanation

An IPv6 address is a 128-bit binary number that uses the first 64 bits as the address prefix and the last 64 bits of the address as the interface ID. The 128-bit binary number is organized into 32 hexadecimal numbers that are organized further into eight quartets. The last four quartets correspond with the last 64 bits of the IPv6 address.

References

TestOut PC Pro - 6.7 IP Version 6
[e_ipv6_pp6.exam.xml Q_IPV6ADD_IPV6_05]

Question 6: Incorrect

Which of the following identifies the prefix component of an IPv6 address? (Select TWO.)

- [ ] The first four quartets of an IPv6 address.
- [ ] The first quartet of an IPv6 address.
- [x] ~~The last 64 bits of an IPv6 address.~~
- [ ] The last four quartets of an IPv6 address.
- [x] The first 64 bits of an IPv6 address.
- [ ] The last quartet of an IPv6 address.

Explanation

An IPv6 address is a 128-bit binary number that uses the first 64 bits as the address prefix and the last 64 bits of the address as the interface ID. The 128-bit binary number is organized into 32 hexadecimal numbers that are organized further into eight quartets. The first four quartets correspond with the first 64 bits of the IPv6 address.

References

TestOut PC Pro - 6.7 IP Version 6
[e_ipv6_pp6.exam.xml Q_IPV6ADD_IPV6_06]

Question 7: Incorrect

The following is an example of an IPv6 address:

FEC0:1319:7700:F631:446A:5511:CC40:25AB

Which part of the example IPv6 address is the prefix?

FEC0:1319:7700:F631

Which quartet in the example IPv6 prefix is used to identify the subnet?

F631

Which part of the example IPv6 address is the interface ID?

FEC0:1319:7700:F631 446A:5511:CC40:25AB

Explanation

In this example of an IPv6 address, FEC0:1319:7700:F631:446A:5511:CC40:25AB
- The prefix is **FEC0:1319:7700:F631**
- The quartet used to identify the subnet is **F631** (the last quartet in the prefix).
- The interface ID is **446A:5511:CC40:25AB**.

References

TestOut PC Pro - 6.7 IP Version 6
[e_ipv6_pp6.exam.xml Q_IPV6ADD_IPV6_07]

Question 8: Incorrect

Which of the following describes the part of the IPv6 address that identifies the subnet address?

- The first quartet in the IPv6 address prefix.
- The first quartet in the IPv6 address interface ID.
- The last quartet in the IPv6 address prefix.
- ~~The last quartet in the IPv6 address interface ID.~~

Explanation

The part of the IPv6 address that identifies the subnet address is the last quartet in the prefix.

For example, in the following address, FEC0:1319:7700:F631:446A:5511:CC40:25AB, the quartet used to identify the subnet is **F631**.

References

TestOut PC Pro - 6.7 IP Version 6
[e_ipv6_pp6.exam.xml Q_IPV6ADD_IPV6_08]