

Mark all the options you think are correct.

1. In ICMPv6, which packet is generally sent to all the devices of a network to provide the details of the prefix of that network?
 - A. Router advertisement ★
 - B. Neighbor advertisement
 - C. None of the other options
 - D. Router solicitation
2. The Header Checksum in IPv6
 - A. has been removed ★
 - B. has been taken of a similar length than IPv4 (16 bits)
 - C. has been moved in an extension header
 - D. has been provided extra bits (32 bits)
3. Which of the following is a type of packet NOT intended for realizing the IPv6 Neighbor Discovery?
 - A. Neighbor Advertisement Message
 - B. Router Solicitation Message
 - C. Echo Request ★
 - D. Neighbor Solicitation Message
4. The Internet Header Length (IHL) field of the IPv4 header packet, in the IPv6 header packet
 - A. has the same name and meaning
 - B. has been substituted by the Total Length field
 - C. has been removed ★
 - D. has been substituted by the Next Header field
5. Which of the following IPv6 addresses is NOT a Link-Local multicast address?
 - A. FF02::1
 - B. FF12::BABA:1234
 - C. FF05::1:3 ★
 - D. FF18::BABA:1234 ★
6. Which type of addresses are generally involved in IPv6 to realize the Router Advertisement mechanism?
 - A. Multicast link-local ★
 - B. Unicast link-local ★
 - C. Broadcast link-local
 - D. GUA
7. Mark the most likely wrong associations of IPv6 addresses, given that:

A=2001:DB8:1000::1
B=FE80::FE99:47FF:FE75:C3E0
C=2001:DB8:CAFE:1:50A5:8A35:A5BB:66E1
D=2001:DB8:CAFE:1:FE99:47FF:FE75:C3E0
 - A. B: Link-local with EUI-64, D: GUA via SLAAC with EUI-64
 - B. C: GUA via SLAAC with EUI-64, D: link-local with EUI-64 ★
 - C. A: static GUA, C: GUA via SLAAC with random IID
 - D. A: GUA via SLAAC with random IID, B: Link-local with EUI-64 ★
8. Which of the following types of packets are used in IPv6 to realize the same mechanism of ARP in IPv4?
 - A. Neighbor Advertisement Message ★
 - B. Router Advertisement Message
 - C. Router Solicitation Message
 - D. Neighbor Solicitation Message ★
9. What is true with respect to ICMPv6?
 - A. When a host receives a packet for a port not in listening, it sends a Destination Unreachable, No route to destination message
 - B. When a host wants to ping another host, it keeps sending Echo Request packets with increasing Hop Limit field
 - C. When a host needs to know the MAC address related to a IPv6 address, it sends a multicast message ★
 - D. When a host connects to a new network, it sends a Router Solicitation packet ★
10. ICMPv6 Router Solicitation messages are sent
 - A. by IPv6 devices as part of the Neighbor Discover protocol
 - B. by IPv6 devices for requesting a Router Advertisement message ★
 - C. by IPv6 routers to announce the prefix of a network
 - D. by IPv6 devices for requesting the MAC address of another device in the network
11. What is the IPv6 equivalent of an IPv4 broadcast address within a network?
 - A. FF02::1 ★
 - B. FF02::2
 - C. FE80::1
 - D. FF11::1
12. In which of the following details do IPv4 and IPv6 differ?
 - A. The number of header fields ★
 - B. Only one of them has a header field that is decremented every time the packet is forwarded
 - C. The number of IP addresses in the header
 - D. The length of the header ★