**Module :9 Infrastructure services**

8- Host A and Host B sit in two different subnets. The path between the subnets of these two hosts runs through three different Layer 3 forwarding devices (routers and Layer 3 switches). A network engineer uses the APIC-EM Path Trace ACL Analysis tool to analyze the path used for Host A to send packets to Host B. Which part of the function is done specifically by the ACL Analysis or ACL Trace part of the tool? A. Discovery of the topology that exists between the two hosts B. Analysis of the Layer 3 forwarding decisions in the path from Host A to B C. Analysis of the Layer 2 forwarding decisions in the path from Host A to B D. Analysis of the impact of ACLs on the packets that would flow from Host A to B

**Answer D. Analysis of the impact of ACLs on the packets that would flow from Host A to B**  
**Explanation: The ACL Analysis tool examines how ACLs along the path affect traffic between the two hosts.**

9- Which IPv6 address is the equivalent of the IPv4 interface loopback address 127.0.0.1? A. ::1 B. :: C. 2000::/3 D. 0::/

**Answer A. ::1**  
**Explanation: ::1 is the reserved IPv6 loopback address, equivalent to IPv4's 127.0.0.1**

10- Which command is used to apply an ACL to an interface? A. access-group B. ip access-group C. ip access-list D. ip access-class E. access-class F. access-list

**Answer B. ip access-group**  
**Explanation: The ip access-group command is used in interface configuration mode to apply an ACL to filter traffic entering or exiting an interface.**

11- Which command and mode will successfully configure a hostname of R1 on a Cisco IOS router? A. Router(config)#name R1 B. Router# hostname R1 C. Router(config)#hostname R1 D. Router#name R1 E. Router>hostname R1 F. Router>name R1

**Answer** **C. Router(config)#hostname R1**  
**Explanation: The hostname command is used in global configuration mode (Router(config)#) to set the router's name**

12- Which of the following reserved IPv4 addresses has binary 0s in all of the host bit positions? A. Local broadcast address B. Loopback address C. Directed broadcast address D. Network address E. All zeros address

**Answer D. Network address  
Explanation: A network address has all host bits set to 0, representing the entire network rather than a specific host**