**Module 9: Networking**

**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?**

* **Answer**: **D. Analysis of the impact of ACLs on the packets that would flow from Host A to B**
* Explanation: The **ACL Analysis** or **ACL Trace** tool in APIC-EM specifically analyzes how Access Control Lists (ACLs) impact the flow of packets between Host A and Host B. It shows how ACLs might permit or deny traffic along the path.

**9. Which IPv6 address is the equivalent of the IPv4 interface loopback address 127.0.0.1?**

* **Answer**: **A. ::1**
* Explanation: The IPv6 equivalent of the IPv4 loopback address 127.0.0.1 is ::1. This is the reserved address for loopback in IPv6.

**10. Which command is used to apply an ACL to an interface?**

* **Answer**: **B. ip access-group**
* Explanation: The ip access-group command is used in **interface configuration mode** to apply an Access Control List (ACL) to a specific interface in Cisco devices.

**11. Which command and mode will successfully configure a hostname of R1 on a Cisco IOS router?**

* **Answer**: **C. Router(config)#hostname R1**
* Explanation: To configure a hostname on a Cisco router, the hostname command is used in **global configuration mode**. The correct syntax is hostname R1.

**12. Which of the following reserved IPv4 addresses has binary 0s in all of the host bit positions?**

* **Answer**: **D. Network address**
* Explanation: The **network address** is the reserved address where all the host bits are set to 0 in the IPv4 address. This address identifies the network itself and is not assigned to any specific device.