**Exam A**

**QUESTION 1**

Which technology supports the stateless assignment of IPv6 addresses?(Choose two.)

哪些技术支持无状态任务的IPv6地址？

1. DNS
2. DHCPv6
3. DHCP
4. Autoconfiguration

**QUESTION 2**

**QUESTION 21**

What will happen if a private IP address is assigned to a public interface connected to an ISP?

ISP : Internet Service Provider(互联网服务提供商)

1. Addresses in a private range will be not routed on the Internet backbone.
2. Only the ISP router will have the capability to access the public network.
3. The NAT process will be used to translate this address in a valid IP address.
4. Several automated methods will be necessary on the private network.
5. A conflict of IP addresses happens, because other public routers can use the same range.

**QUESTION 33**

What are three benefits of implementing vlans?(choose three)

1. A more efficient use of bandwidth can be achieved allowing many physical groups to use the same network infrastructure
2. Broadcast storms can be mitigated by decreasing the number of broadcast domains,thus increasing their size.
3. A higher level of network security can be reached by separating sensitive data traffic from other network traffic.
4. Port-based vlans increase switch-port use efficient,thanks to 802.1Q trunks
5. A more efficient use of bandwidth can be achieved allowing many logical networks to use the same network infrastructure.
6. Broadcast storms can be mitigated by increasing the number of broadcast domains,thus reducing their size.
7. VLANs make it easier for IT staff to configure new logical groups,because the vlans all belong to the same broadcast domain.

**QUESTION 34**

Which three statements accurately describe layer 2 Ethernet switches?(choose three)

1. Microsegmentation decreases the number of collisions on the network.

A为分割减少冲突的数量，这里是冲突并不是冲突域

1. if a switch receives a frame for an unkown destination,it uses ARP to resolve the address.

B收到未知目的帧会产生泛洪

1. Spanning Tree Protocol allows switches to automatically share vlan information.

C这是vtp的特性，不是stp的

1. In a properly functioning network with redundant switched paths,each switched aegment will contain one root bridge with all its ports in the forwarding state.All other switches in that broadcast domain will have only one root port.

D在一个能够正常运行的网络冗余交换路径，每一个交换网段将包括一个跟桥。所有端口都在转发状态，其 他本广播域的交换机有一个根端口。正确

1. Establishing vlans increases the number of broadcast domains.

E.VLAN增加了广播域。正确

1. Switches that are configured with vlans make forwarding decisions based on both layer 2 and layer 3 address information.

F vlan使转发基于二层和三层IP。题目要求对2层交换机的描述，二层交换机不能基于3层IP转发

**QUESTION 35**

Which two correctly describe steps in the OSI data encapsulation process? (Choose two.)

OSI: 开放系统互联(Open System Interconnection) OSI七层模型

1. The transport layer divides a data stream into segments and may add reliability and flow control information.
2. The data link layer adds physical source and destination addresses and an FCS to the segment.
3. Packets are created when the network layer encapsulates a frame with source and destination host addresses and protocol-related control information.
4. Packets are created when the network layer adds Layer 3 addresses and control information to a segment.
5. The presentation layer translates bits into voltages for transmission across the physical link.

**QUESTION 75**

Which switching method duplicates the first six bytes of a frame before making a switching decision?

1. fragment-free switching
2. store and-forward switching
3. cut through switching
4. ASIC switching