1. \*\*Cisco 2960 Switch Configuration:\*\*

- \*\*Question:\*\* What is the effect of issuing the BranchSw# configure terminal command?

- \*\*Answer:\*\* It enters the global configuration mode, allowing you to configure the switch's settings.

2. \*\*Switch Component for Packet Handling:\*\*

- \*\*Question:\*\* Which switch component reduces the amount of packet handling time inside the switch?

- \*\*Answer:\*\* The ASIC (Application-Specific Integrated Circuit) reduces packet handling time inside the switch, optimizing performance.

4. \*\*Impact of Adding a Layer 2 Switch:\*\*

- \*\*Question:\*\* Which impact does adding a Layer 2 switch have on a network?

- \*\*Answer:\*\* Adding a Layer 2 switch increases the size of the broadcast domain in the network.

5. \*\*Switch Buffers and Network Performance:\*\*

- \*\*Question:\*\* How do switch buffers affect network performance?

- \*\*Answer:\*\* Switch buffers store frames received, preventing frame discarding during network congestion, improving performance.

6. \*\*Switch Table Information from Frames:\*\*

- \*\*Question:\*\* What information is added to the switch table from incoming frames?

- \*\*Answer:\*\* Destination MAC address and incoming port number are added to the switch table from incoming frames.

7. \*\*Cut-Through Switching:\*\*

- \*\*Question:\*\* Which characteristic describes cut-through switching?

- \*\*Answer:\*\* Cut-through switching forwards frames without any error checking, reducing latency.

8. \*\*Switch Characteristic for Network Congestion:\*\*

- \*\*Question:\*\* Which switch characteristic helps keep traffic local and alleviates network congestion?

- \*\*Answer:\*\* High port density is a switch characteristic that keeps traffic local and helps alleviate network congestion.

9. \*\*VLAN Supporting Untagged Traffic:\*\*

- \*\*Question:\*\* What type of VLAN supports untagged traffic?

- \*\*Answer:\*\* The native VLAN supports untagged traffic on a trunk port.

12. \*\*Inter-VLAN Communication with Router-on-a-Stick:\*\*

- \*\*Question:\*\* A high school uses VLAN15 for the laboratory network and VLAN30 for the faculty network. What is required to enable communication between these two VLANs while using the router-on-a-stick approach?

- \*\*Answer:\*\* To enable communication between these VLANs, a router with at least two LAN interfaces is needed for inter-VLAN routing.

18. \*\*Native VLAN Characteristics:\*\*

- \*\*Question:\*\* Which two characteristics describe the native VLAN?

- \*\*Answer:\*\* The native VLAN provides a common identifier to both ends of a trunk and is designed to carry traffic generated by users (default VLAN).

19. \*\*Ports After VLAN Deletion:\*\*

- \*\*Question:\*\* What happens to switch ports after the VLAN to which they are assigned is deleted?

- \*\*Answer:\*\* When a VLAN is deleted, the ports assigned to that VLAN are reassigned to VLAN1, the default VLAN.

20. \*\*Configuring a Voice VLAN:\*\*

- \*\*Question:\*\* Which four steps are needed to configure a voice VLAN on a switch port?

- \*\*Answer:\*\* To configure a voice VLAN, add a voice VLAN, ensure voice traffic is tagged, assign a data VLAN, and assign the voice VLAN.

21. \*\*Broadcast Frame in Multi-VLAN Network:\*\*

- \*\*Question:\*\* A network contains multiple VLANs spanning multiple switches. What happens when a device in VLAN 20 sends a broadcast Ethernet frame?

- \*\*Answer:\*\* Only devices in the same VLAN (VLAN 20) see the broadcast frame.

23. \*\*Disabling DTP for LAN Management:\*\*

- \*\*Question:\*\* Under which two occasions should an administrator disable DTP while managing a local area network?

- \*\*Answer:\*\* Disable DTP when connecting a Cisco switch to a non-Cisco switch and on links that should not be trunking.

24. \*\*Setting the BOOT Environment Variable:\*\*

- \*\*Question:\*\* Which command is used to set the BOOT environment variable that defines where to find the IOS image file on a switch?

- \*\*Answer:\*\* The "boot system" command is used to set the BOOT environment variable to specify the location of the IOS image file.

26. \*\*SVI Inter-VLAN Routing:\*\*

- \*\*Question:\*\* Which two statements are correct with respect to SVI inter-VLAN routing?

- \*\*Answer:\*\* Virtual interfaces support subinterfaces, and SVIs eliminate the need for a default gateway in the hosts.

27. \*\*VLAN for Untagged Traffic on Trunk Port:\*\*

- \*\*Question:\*\* Which type of VLAN is used to designate which traffic is untagged when crossing a trunk port?

- \*\*Answer:\*\* The native VLAN designates untagged traffic when crossing a trunk port.

31. \*\*Missing Parameter in Router Configuration:\*\*

- \*\*Question:\*\* Refer to the exhibit. What is the missing parameter that is shown as the highlighted question mark in the graphic?

- \*\*Answer:\*\* The missing parameter is the VLAN number, used in VLAN configuration.

32. \*\*Alleviating Network Congestion:\*\*

- \*\*Question:\*\* Which solution would help a college alleviate network congestion due to collisions?

- \*\*Answer:\*\* Using a high port density switch can alleviate network congestion caused by collisions.