Questões Capítulo 2 HCIA Access

Comunicação Óptica – Telemática

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1. ICMP is a link layer protocol. ICMP packets are triggered by the physical layer, and then responded by the IP layer or higher-layer protocols.

   A. TRUE

   B. FALSE

2. (Single Choice) Which of the following statements about 802.1Q is incorrect?

   A. The TPID value in an 802.1Q Ethemnet frame structure is 8100.

   B. Theoretically, the value range of VLAN IDs Is 0-4095.

   C. In the 802.1Q Ethernet frame structure, there are only 4 VLAN priorities.

   D. An 802.1Q Ethernet frame has four more bytes than a common Ethernet frame.

3. Generally, the transmission mode of the LAN is the bus type. The most commonly used protocol is the carrier sense multiple access with collision detection (CSMA/CD) protocol.

   A. TRUE

   B. FALSE

4. A computer in a local area network (LAN) determines whether a broadcast frame should be received by checking whether the MAC address of the frame is the same as the hardware address of the local computer.

   A. TRUE

   B. FALSE

5. Generally, MAC addresses are purchased from the IEEE and can be customized.

   A TRUE

   B. FALSE

6. In a project, the VLAN translation mode of the Internet access service is translate. The C-VLAN ID and S-VLAN ID must be planned to be the same.

A. TRUE

B. FALSE

7. (Single Choice) In a project, the VLAN translation mode is default, the planned C-VLAN ID is 100, and the planned S-VLAN [D is 10. Which one of the following statements about the VLAN tag after VLAN translation is correct?

A. There is only one VLAN tag, and the VLAN ID is 10.

B. There is only one VLAN tag, and the VLAN ID is 100.

C. There are two VLAN tags. The outer VLAN tag is 100 and the inner VLAN tag is 10.

D. There are two VLAN tags. The outer VLAN tag is 10 and the inner VLAN tag is 100.

8. (Single Choice) According to IEEE 802.1Q, where is the VLAN ID field in an Ethernet frame?

A. Before the source and destination MAC addresses

B. Between the source and destination MAC addresses

C. After the source and destination MAC addresses

D. Not fixed

9. (Multiple choices) The layers of the TCP/IP are not divided according to the Open System Interconnection (OSI) model. Among the seven layers of the OSI model, which of the following layers are not defined in TCP/IP?

A. Network layer

B. Data link layer

C. Presentation layer

D. Session layer

10. (Multiple choices) Which of the following methods can be used to implement comm nication between Ethernet switches across VLANs?

A. You can configure MSTP on a switch to implement inter-VLAN communication.

B. When different VLANs are on the same switch, you can set the IP address of the VLANIF interface to implement route forwarding.

C. Smart Link can be deployed on switches to Implement inter-VLAN communication.

D. When different VLANs are configured on different switches, you can configure hybrid or trunk interfaces to implement inter-VLAN communication.

11. (Multiple choices) Which of the following statements about VLANs during data service configuration are correct?

A. Generally, QinQ is used for data services, and inner tags are used to accurately identify different users.

B. When a single tag is used, the service VLAN ID must be the same as the user VLAN ID.

C. In FTTx planning, broadband users connected to the same PON port use the same outer VLAN.

D. User data can be mapped into different GEM ports according to different VLANs.

12. IEEE 802.1q is a formal standard for virtual bridged local area networks. It modifies the format of Ethernet frames. The tag is added in:

A. Between the source MAC address fleld and the destination MAC address field

B. Between the source MAC address field and the protocol type field

C. Between the source and destination IP addresses

D. Outermost layer of an Ethernet frame

13. Ethernet switches work in the ( ) layer the OSI model.

A. Physical layer

B. Data link layer

C. Network layer

D. Transport layer

14. Which of the following statements about 802.1Q Is Incorrect?

A. The TPID value in an 802.1Q Ethernet frame structure is 8100.

B. Theoretically, the value range of VLAN IDs is 0-4095.

C. In the 802. 10 Ethernet frame structure, there are only 4 VLAN priorities.

D. An 802.1Q Ethemet frame has four more bytes than a common Ethemet frame.

15. Which of the following items does not exist in a routing table?

A. Next hop address

B. Network address

C. Metric

D. MAC address

16. (Multiple choices) The layers of the TCP/IP are not divided according to the Open System Interconnection (OSI) model. Among the seven layers of the OSI model, which of the following layers are not defined in TCP/IP?

A. Network layer

B. Data link layer

C. Presentation layer

D. Session layer

17. (Multiple choice) Which of the following methods can be used to divide VLANs?

A. Based on port

B. Based on MAC address

C. Based on protocol

D. Based on physical location

18. (Multiple choices) Which of the following statements about VLANs during data service configuration are correct?

A. Generally. QinQ is used for data services, and inner tags are used to accurately identify different users.

B. When a single tag is used, the service VLAN ID must be the same as the user VLAN ID.

C. In FTTx planning, broadband users connected to the same PON port use the same outer VLAN.

D. User data can be mapped into different GEM ports according to different VLANs.

19. The QinQ technology effectively increases the number of VLANs by stacking two 802.1Q fields in Ethemet frames. The maximum number of available VLANs is ().

   A. 4000

   B. 4094

   C. 4094 x 4094

   D. 4000 x 4000

20. In the 802.1Q tag header, how many bits does a VLAN ID contain? How many VLANs can be specified?

   A. 4; 16

   B. 8; 256

   C. 10; 1024

   D. 12; 4098

21. For either Ethernet or xDSL, the transmission distance is limited when copper cables are used for signal access. Optical access greatly extends the access distance, covers a wider area, and is more scalable.

   A. TRUE

   B. FALSE

22. (Multiple choices) When data is configured on the OLT, which of the following attributes indicate that double VLAN tags need to be added?

   A. Common

   B. QinQ

   C. Smart

   D. Stacking

23. (Multiple choices) In data communication, which of the following modes can be used to transmit data on a line?

   A Simplex

B. Hal-duplex

C. Full-duplex

D. Auto-negotiation