

HCIA TRAINING

APRIL 2020

EXERCISE 3

QUESTION 1

(Single Choice) () combines “multiple” ports to form an aggregation group. It can be used to balance the traffic among member ports and improve the connection reliability.

A. Port Aggregation --Also called ETH-Trunk/link aggregation

B. Port binding

C. Port load balance

D. Port group

Correct Answer: A

QUESTION 2

(Multiple Choice) What benefits does port aggregation yield?

☒ A. Improves link bandwidth

☒ B. Implements load sharing

☒ C. Improves network reliability

D. Facilitates data copy for analysis

Correct Answer: ABC

QUESTION 3

(Single Choice) () What is the maximum number of member interfaces supported by a single Eth-Trunk?

A. 6

☒ B. 8

C. 10

D. 12

Correct Answer: B

QUESTION 4

(Multiple Choice) () The Eth-Trunk frame forwarding mechanism used to prevent changes in the data sequence forwards frames based on which of the following parameters?

A. The same source or destination IP address

B. The same source or destination MAC address.

C. The same protocol type.

D. The same source or destination port number.

Correct Answer: AB

QUESTION 5

(Single Choice) () In Layer 2 mode, the transmission rate of an Eth-Trunk interface is determined by which of the following?

A. Maximum number of Up member links

B. Minimum number of Up member links

C. Number of Up member interfaces

D. Number of interfaces.

Correct Answer: AC

QUESTION 6

(Single Choice) () The network administrator wishes to forward data over an Eth-trunk, however associated member interfaces operate at different rates. In terms of the resulting behavior, which of the following is true?

- A. The two switches will not be able to communicate.
- B. The higher rate member interfaces may incur packet loss.
- C. The Eth-Trunk will work normally.
- D. The lower rate member interfaces may incur packet loss.

Correct Answer: D

QUESTION 7

(Multiple Choice) () The network administrator attempts to add interface G0/0/1 on Switch A to Eth-trunk 1, however the command fails. Which of the following may cause this?

- A. The interface is operating in half-duplex mode.
- B. The interface has been shutdown.
- C. The interface is already associated with another Eth-trunk.
- D. The interface is an access port.

Correct Answer: CD

QUESTION 8

(Single Choice) According to IEEE802.1Q, where is VLAN ID in the tagged Ethernet frame?

- A. Not fixed
- B. In front of the source MAC address and destination MAC address
- C. Behind the source MAC address and destination MAC address
- D. Between the source MAC address and destination MAC address

Correct Answer: C

QUESTION 9

(Single Choice) A VLAN can be considered as a ().

- A. Collision domain
- B. Broadcast domain
- C. Management domain
- D. Blocking domain

Correct Answer: B

QUESTION 10

(Single Choice) Which of the following standards is defined by IEEE to regulate the implementation of VLAN between switches?

- A. 802.1x
- B. 802.1d
- C. 802.1q
- D. 802.3

Correct Answer: C

QUESTION 11

(Single Choice) Which of the following technologies can reduce the scope of broadcast domain?

- A. VLAN
- B. Trunk
- C. RARP
- D. STP

Correct Answer: A

QUESTION 12

(Single Choice) For VLAN link type, the link between a switch and a PC is ().

- A. Access link
- B. Trunk link
- C. Hybrid link
- D. ISL link

Correct Answer: A

QUESTION 13

(Single Choice) A switch supports 802.1Q protocol, what is the maximum number of VLAN it can support?

- A. 512
- B. 1024
- C. 2048
- D. 4096

Correct Answer: D

QUESTION 14

(Single Choice) VLAN is short for?

- A. Virtual local area network
- B. Virtual long area network
- C. Virtual local area networking
- D. Virtual long area networking

Correct Answer: A

QUESTION 15

(Multiple Choice) Which of the following are the formats of Ethernet frame in the switching network?

- A. Untagged frame
- B. Token frame
- C. Tagged frame
- D. FDDI frame

Correct Answer: AC

QUESTION 16

(Multiple Choice) To implement network layer capability on the VLAN interface, we need to configure () on VLAN interface.

- A. IP address
- B. MAC address
- C. Subnet mask
- D. IP prefix

Correct Answer: AC

QUESTION 17

(Single Choice) On VRP platform, what is the function for command "interface vlan-interface vlan-id"?

- A. Create a VLAN
- B. Create or enter VLAN interface
- C. Configure VLAN for an interface
- D. No such command

Correct Answer: B

QUESTION 18

(Single Choice) How many bytes does a VLAN tag consist of?

- A.2
- B.3
- C.4
- D.5

Correct Answer: C

QUESTION 19

(Multiple Choice) After the VLAN function is introduced to the Ethernet, the ports on a switch can be classified into ().

- A.Access port
- B.Trunk port
- C.Hybrid port
- D.None port

Correct Answer: ABC

QUESTION 20

(Single Choice) A Trunk port always sends tagged frames to the peer equipment.

- T.True
- F.False

Correct Answer: F

QUESTION 21

(Single Choice) A VLAN in the Ethernet is used to separate ().

- A.Layer 2 unicast domain
- B.Layer 2 broadcast domain
- C.Layer 2 multicast domain
- D.Layer 2 MAC address

Correct Answer: B

QUESTION 22

(Single Choice) During frame forwarding, a switch checks the VLAN tag carried in an Ethernet frame and then determines whether to forward the Ethernet frame through a port if the VLAN tag is a () of this port.

- A.Permitted tag
- B.Default PVID
- C.MAC address equivalence
- D.STP disable state

Correct Answer: A

QUESTION 23

(Multiple Choice) After an Ethernet frame uses a VLAN tag, the Ethernet frame can be expressed in two formats, namely, () and () in a switched network.

- A.Untagged frame
- B.Tagged frame
- C.Row frame
- D.Column frame

Correct Answer: AB

QUESTION 24

(Single Choice) VLAN tagged frame has extra () bytes compared with standard Ethernet frame?

- A.4
- B.32
- C.12
- D.8

Correct Answer: A

QUESTION 25

(Single Choice) How many bits are used to identify the VLAN id of the data frame?

- A.4
- B.32
- C.12
- D.8

Correct Answer: C

QUESTION 26

(Single Choice) The fixed value of the TPID field in VLAN tag is ().

- A.0x8100
- B.0x0800
- C.0x0806
- D.0x9100

Correct Answer: A

QUESTION 27

(Multiple Choice) Which of the following are the advantages of VLAN compared with traditional LAN technology?

- A.Lower cost for relocation and changes
- B.Isolate broadcast domain and control the broadcast packets
- C.Improve the network security
- D.Enhance the network high available

Correct Answer: ABC

QUESTION 28

(Single Choice) A port of the switch belongs to VLAN 5. If VLAN 5 is removed by using command "undo vlan 5", then which VLAN does this port belong?

- A.0
- B.1
- C.1023
- D.1024

Correct Answer: B

QUESTION 29

(Multiple Choice) Which of the following methods can realize communication between VLANs at network layer?

- A.STP
- B.GVRP
- C.L2 Switch+Router
- D.L3 Switch

Correct Answer: CD

QUESTION 30

(Single Choice) Workstation A and workstation B are respectively connected to two ports of a switch. Assume the MAC table of the switch is empty now. Which of the following statements is true as soon as the switch receives the first packet sent by Workstation A to Workstation B?

- A.The switch will learn address of A
- B.The switch will learn address of B
- C.The switch will not learn any address
- D.The switch will learn addresses of both A and B

Correct Answer: A

QUESTION 31

(Multiple Choice) Which of the following descriptions are correct about VLAN interface?

- A.A virtual interface is required to be created for the VLAN if we want to assign an IP address for that VLAN,
- B.Two VLAN interfaces on the same switch can be assigned with the same IP address
- C.The VLAN interface number must be the same with VLAN ID
- D.The VLAN interface can be configured for the non-existed VLAN

Correct Answer: AC

QUESTION 32

(Multiple Choice) An access port on a switch generally connects to a port on a computer. Which of the following statements are true?

- A.After receiving a tag packet, the switch forwards it directly.
- B.The default VLAN of an access port is the VLAN where the port is located. You do not need to manually configure a default VLAN for an access port.
- C.An access port can belong to only one VLAN.
- D.After receiving an untag packet, the access port attaches its PVID information to the packet.

Correct Answer: BCD

QUESTION 33

(Single Choice) What action does a Trunk port take after it receives an untag packet?

- A.Discards the packet directly.
- B.Attaches its trunk VLAN ID to the packet and then sends out the packet.
- C.Sends out the packet directly without adding the tag information to the packet.
- D.Attaches its PVID information to the packet and then sends out the packet.

Correct Answer: D

QUESTION 34

(Multiple Choice) Which of the following statements are true after a Trunk port receives a tag packet?

- A.Checks whether the Trunk port allows the tag packet to pass through.
- B.Transparently transmits the tag packet.
- C.Discards the tag packet directly if the Trunk port does not allow the tag packet to pass through.
- D.Attaches its PVID information to the packet and then sends out the packet.

Correct Answer: AC

QUESTION 35

(Multiple Choice) Which of the following statements about VLAN communication are true?

- A.One-arm routing can be configured for a Layer 3 switch only by using a router to implement VLAN communication.
- B.One-arm routing can be configured for a Layer 2 switch only by using a router to implement VLAN communication.

C.Layer 3 VLAN interfaces can be configured on a Layer 3 switch to implement VLAN communication.

D.Layer 3 VLAN interfaces can be configured on a Layer 2 switch to implement VLAN communication.

Correct Answer: BC

QUESTION 36

(Multiple Choice) Which of the following statements about the advantages of the VLAN function are true?

A.The VLAN function reduces network costs by reducing the number of physical ports on switches.

B.The VLAN function improves network security by identifying users that are allowed to access sensitive data and applications.

C.The VLAN function improves network performance by implementing flow control and using the window advertisement mechanism.

D.The VLAN function divides a network into several small logical networks, reducing the impact of a broadcast storm on a network.

Correct Answer: BC

QUESTION 37

(Multiple Choice) A frame tag adds () to each frame so that the frame can be transmitted through Trunk ports on switches.

A.Destination MAC address

B.Source MAC address of a switch

C.VLAN ID

D.Bridge ID of a switch

Correct Answer: C

QUESTION 38

(Multiple Choice) Which of the following are the features of the default VLAN setting in a switch configuration?

A.The default VLAN cannot be deleted manually.

B.By default, the ports on all switches are member ports of a default VLAN.

C.A default VLAN must be created before a port is allocated to a VLAN.

D.The IP address configured for a switch is applied only to a member port in the default VLAN.

Correct Answer: AB

QUESTION 39

(Multiple Choice) Which of the following statements about VLAN are true?

A.In the switch configuration, if the default VLAN is VLAN 1, it cannot be deleted or renamed.

B.A switch supports a maximum number of 255 VLANs.

C.A "single" access port can pass through "multiple" VLANs.

D."Multiple" VLANs can pass through a "single" trunk.

Correct Answer: AD

QUESTION 40

(Single Choice) Switch-A and Switch-B are configured with ports in VLANs for R&D Department, Sales Department, Product Department, Financial Department, and HR Department. Each VLAN contains 20 users. In this case, how many subnets at least are required to provide routes between all VLANs?

A.5

B.20

C.50

D.100

Correct Answer: A

QUESTION 41

(Single Choice) Of all the VLAN grouping methods, the grouping method by IP address is called () VLAN.

- A.Port-based
- B.Route-based
- C.MAC address-based
- D.Policy-based

Correct Answer: B

QUESTION 42

(Single Choice) Which VLAN does an access port of a switch belong to?

- A.The only defined VLAN
- B.The VLAN with the greatest No.
- C.All VLANs
- D.The VLAN with the smallest No.

Correct Answer: A

QUESTION 43

(Single Choice) A network administrator wants to divide the hosts in building A into VLAN 3 and VLAN 5. Which of the following statements about VLAN configuration is true?

- A.VLAN information is saved automatically in the starting configuration.
- B.After VLAN 3 and VLAN 5 are created manually, the default VLAN is removed automatically.
- C.The network administrator can create a VLAN either in the global view or in the VLAN view.
- D.The two VLANs can be named BUILDING_A to differentiate them from the VLANs in other geographical areas.

Correct Answer: C

QUESTION 44

(Multiple Choice) Which of the following statements are true in the process of deleting a VLAN?

- A.The member port of a VLAN becomes inactive after the VLAN is deleted.
- B.When a routing-based interface (Vlanif) is available for a VLAN, the Vlanif interface must be deleted before the VLAN is deleted.
- C.A network administrator can delete a VLAN either in the global view or in the VLAN view.
- D.A VLAN can be deleted only after its member port is allocated to another VLAN.

Correct Answer: BC

QUESTION 45

(Multiple Choice) Which of the following statements about the process of creating a VLAN are true?

- A.The member port of this VLAN enters the active state immediately.
- B.A routing-based interface (Vlanif) can be created for a VLAN only after the VLAN is created.
- C.A network administrator can create a VLAN either in the global view or in the VLAN view.
- D.A VLAN can be created only after its member port is allocated to another VLAN

Correct Answer: BC

QUESTION 46

(Multiple Choice) Which of the following steps are necessary to configure a port to the specified vlan in SYSTEM view?

- A.Enter the VLAN view
- B.Specify proportion of broadcast storm for VLAN
- C.Specify description for VLAN or VLAN interface
- D.Assign VLAN for the Ethernet port

Correct Answer: AD

QUESTION 47

(Single Choice) Information below shows the partial interface configuration on a Huawei switch. According to this configuration, PVID of this interface is ().

[Quidway\]display interface Ethernet 1/0/1

Mdi type: auto

Port link-type: access

Tagged VLAN ID: none

Untagged VLAN ID: 5

A.0

B.1

C.5

D.Not able to interpret the PVID from the information given

Correct Answer: C

QUESTION 48

(Single Choice) Which of the following ports can be configured to permit VLAN to pass?

A.Trunk

B.Access

C.Hybrid

D.Normal

Correct Answer: AC

QUESTION 49

(Multiple Choice) A trunk port is configured to permit vlan 3, vlan4 and vlan 5 to pass. The frames of vlan 3 and vlan 4 are tagged but the frames of VLAN 5 are untagged. Which of the following may cause the problem?

A.Port PVID is 5

B.Port PVID is 3 and 4

C.Only the command "port trunk permit vlan 3 4 "was configured for the trunk port.

D.GVRP is enabled on this port

Correct Answer: A

QUESTION 50

(Multiple Choice) Which of the following descriptions about access-link are correct?

A.When access port receives a frame without 802.1Q tag header, the default PVID will be added to the frame.

B.When access port receives a frame with VLAN ID in 802.1Q tag header different from the default PVID, VLAN ID in 802.1Q tag header is changed to the default PVID.

C.When access port sends a frame, 802.1Q tag header is removed and standard Ethernet frame is sent.

D.When access port sends a frame, 802.1Q tag header is kept and a tagged frame is sent

Correct Answer: AC

QUESTION 51

(Multiple Choice) Which of the following descriptions about trunk link are correct?

A.When trunk port receives a frame without 802.1Q tag header, the default PVID will be added to the frame.

B.When trunk port receives a frame with 802.1Q tag header, no changes is done on the frame.

C.When trunk port sends a frame whose VLAN ID is not same as default PVID, the frame is sent directly.

D. When trunk port sends a frame whose VLAN ID is same as the default PVID, no modification is done on the tag.

Correct Answer: ABC

QUESTION 52

(Multiple Choice) To make sure all hosts belonging to the same VLAN can receive the broadcast packets sent to this VLAN, which of the following operations are needed on the switch?

- A. Send the packets out of all ports of the switch.
- B. Send the packets out of other ports that belong to the same VLAN.
- C. Send the packets to all trunk links that allow this VLAN to pass.
- D. Send the packets to all trunk links.

Correct Answer: BC

QUESTION 53

(Single Choice) When the value of the two-byte TPID field in an Ethernet frame header is 0x8100, it indicates that this frame carries an () tag.

- A. 802.1P
- B. 802.1Q
- C. 802.1D
- D. 802.1S

Correct Answer: B

QUESTION 54

(Single Choice) All Ethernet frames in a switch flow in the form of ().

- A. BPDU
- B. PVID
- C. Untagged frame
- D. Tagged frame

Correct Answer: D

QUESTION 55

(Single Choice) A switch is based on port-based VLAN IDs. When the switch receives untagged frames, the VLAN ID is determined by ().

- A. BPDU
- B. PVID
- C. MAC mapping table
- D. IP Address

Correct Answer: B

QUESTION 56

(Single Choice) Direct interconnection of traffic with different VLANs is not allowed. Such traffic must be transmitted based on ().

- A. Port isolation
- B. MAC addresses
- C. VLAN routing
- D. VLAN switching

Correct Answer: C

QUESTION 57

(Single Choice) On huawei router, Before you configure the IP address of an Ethernet sub-port, you need to configure ().

- A. MAC address
- B. VLAN encapsulation
- C. Global GVRP
- D. Port GVRP

Correct Answer: B

QUESTION 58

(Multiple Choice) Which of the following methods can realize communication between VLANs at network layer?

- A. STP
- B. GVRP
- C. L2 Switch+Router
- D. L3 Switch

Correct Answer: CD

QUESTION 59

(Multiple Choice) Which of the following descriptions are correct about VLAN interface?

- A. A virtual interface is required to be created for the VLAN if we want to assign an IP address for that VLAN,
- B. Two VLAN interfaces on the same switch can be assigned with the same IP address
- C. The VLAN interface number must be the same with VLAN ID
- D. The VLAN interface can be configured for the non-existed VLAN

Correct Answer: AC

QUESTION 60

(Multiple Choice) Which of the following statements about VLAN communication are true?

- A. One-arm routing can be configured for a Layer 3 switch only by using a router to implement VLAN communication.
- B. One-arm routing can be configured for a Layer 2 switch only by using a router to implement VLAN communication.
- C. Layer 3 VLAN interfaces can be configured on a Layer 3 switch to implement VLAN communication.
- D. Layer 3 VLAN interfaces can be configured on a Layer 2 switch to implement VLAN communication.

Correct Answer: BC

QUESTION 61

(Single Choice) Of all the VLAN grouping methods, the grouping method by IP address is called () VLAN.

- A. port-based
- B. route-based
- C. MAC address-based
- D. policy-based

Correct Answer: B

QUESTION 62

(Multiple Choice) Of all the VLAN grouping methods, the grouping method by IP address is called () VLAN.

- A. The member port of a VLAN becomes inactive after the VLAN is deleted.
- B. When a routing-based interface (Vlanif) is available for a VLAN, the Vlanif interface must be deleted before the VLAN is deleted.

- C.A network administrator can delete a VLAN either in the global view or in the VLAN view.
- D.A VLAN can be deleted only after its member port is allocated to another VLAN.

Correct Answer: BC

QUESTION 63

(Multiple Choice) Which of the following statements about the process of creating a VLAN are true?

- A.The member port of this VLAN enters the active state immediately.
- B.A routing-based interface (Vlanif) can be created for a VLAN only after the VLAN is created.
- C.A network administrator can create a VLAN either in the global view or in the VLAN view.
- D.A VLAN can be created only after its member port is allocated to another VLAN.

Correct Answer: BC

QUESTION 64

(Single Choice) HDLC is ISO standard link layer protocol and it is used to encapsulate data transmitted on asynchronous link.

T.True

F.False

Correct Answer: F

QUESTION 65

(Single Choice) HDLC is a type of bit stream-oriented protocol used at Data Link Layer and it can transparently transmit data consisting of different collections of characters.

T.True

F.False

Correct Answer: T

QUESTION 66

(Single Choice) All the protocols in the standard HDLC protocol suite run on synchronous serial line.

T.True

F.False

Correct Answer: T

QUESTION 67

(Single Choice) According to OSI reference model, which layer does PPP reside at?

- A.Physical layer
- B.Data link layer
- C.Network layer
- D.Transport layer

Correct Answer: B

QUESTION 68

(Single Choice) PAP requires ()-way hand-shake.

A.Two

B.Three

C.Four

D.One

Correct Answer: A

QUESTION 69

(Single Choice) Which of the following protocols requires three-way handshake and allows only username to be transmitted through network while keeping the password secret?

A.PAP

B.CHAP

C.MD5

D.TCP

Correct Answer: B

QUESTION 70

(Single Choice) Which of the following descriptions about PAP and CHAP is correct?

A.PAP authentication requires three-way handshake

B.CHAP authentication requires two-way handshake

C.PAP authentication uses plain text to send authentication message

D.CHAP authentication uses plain text to send authentication message

Correct Answer: C

QUESTION 71

(Single Choice) On VRP platform, which of the following commands is used to configure PPP authentication method as PAP?

A.ppp pap

B.ppp chap

C.ppp authentication-mode pap

D.ppp authentication-mode chap

Correct Answer: C

QUESTION 72

(Single Choice) Which layer is the PPP protocol located in the TCP/IP protocol stack?

A.Physical Layer

B.Data Link Layer

C.Network Layer

D.Transport Layer

Correct Answer: B

QUESTION 73

(Single Choice) In the PPP protocol, CHAP authentication involves exchange of three types of packets at different times, namely, Challenge, Response, and Success/Failure packets.

T.True

F.False

Correct Answer: T

QUESTION 74

(Multiple Choice) Which of the following PPP protocols are classified into the NCP protocol?

A.IPv6CP

B.ICMP

C.IPCP

D.TCP

Correct Answer: AC

QUESTION 75

(Single Choice) The PPP protocol provides a standard method of transmitting datagrams of different protocols on a point-to-point link. It is a point-to-point communication protocol widely used at the present time.

T.True

F.False

Correct Answer: T

QUESTION 76

(Single Choice) After a PPP connection is established, the VRP platform sends Echo-Request packets at the interval of () seconds by default.

- A.1
- B.5
- C.10
- D.60

Correct Answer: C

QUESTION 77

(Single Choice) What function does the NCP protocol can provide for a PPP connection?

- A.Error detection
- B.User identifier authentication
- C.Carrying of "multiple" Layer 3 protocols
- D.Congestion control

Correct Answer: C

QUESTION 78

(Single Choice) In the PPP protocol, CHAP authentication involves exchange of three types of packets at different times. To match the Request packet with a Reply packet, each packet contains an Identifier field. In each authentication process, all the packets use the same Identifier information.

- T.True
- F.False

Correct Answer: T

QUESTION 79

(Multiple Choice) Which of the following components are defined by PPP protocol?

- A.Data encapsulation
- B.Data encryption
- C.Link Control Protocol(LCP)
- D.Network Control Protocol(NCP)

Correct Answer: ACD

QUESTION 80

(Multiple Choice) PPP protocol consists of three types of protocols, they are ().

- A.PPPOE
- B.LCP(Link Control Protocol)
- C.NCP(Network Control Protocol)
- D.PPP extension protocol

Correct Answer: BCD

QUESTION 81

(Single Choice) RTA connects with RTB through interface Serial0. The configuration on RTA is as follow:

```
[RTA]aaa
[RTA-aaa]local-user huawei password simple quidway
[RTA-aaa]local-user huawei service-type ppp
[RTA]interface Serial 0
[RTA-Serial0]link-protocol ppp
[RTA-Serial0]ppp authentication-mode pap
[RTA-Serial0]ip address 10.1.1.1 30
```

The configuration on RTB is as follow:

```
[RTB]interface Serial 0
[RTB-Serial0]link-protocol ppp
[RTB-Serial0]ppp pap local-user huawei password simple hello
[RTB-Serial0]ip address 10.1.1.2 30
```

With the configuration above, RTA and RTB are able to communicate with each other.

T.True

F.False

Correct Answer: F

QUESTION 82

(Single Choice) One of the significant features of the PPP protocol is the authentication function. With this function, the two ends of a link can negotiate with each other to use which authentication protocol and then perform authentication. A PPP connection is established only when the authentication is successful.

T.True

F.False

Correct Answer: T

QUESTION 83

(Multiple Choice) Which of the following statements are true?

A.LCP negotiates on authentication information.

B.CHAP performs authentication by exchanging packets twice.

C.IPCP can be used to negotiate on IP addresses and compress information.

D.PAP is used for user authentication

Correct Answer: CD

QUESTION 84

(Multiple Choice) Which of the following functions does LCP provide?

A.Negotiates to establish links.

B.Negotiates to use which Layer 3 protocols.

C.Disconnects a link when the idle timer of the link expires.

D.Tests a link to check the link quality and thus to determine whether a link can be established.

Correct Answer: ACD

QUESTION 85

(Multiple Choice) Which of the following packets belong to CHAP authentication protocol?

A.Challenge

B.Request

C.Response

D.Success

E.Failure

Correct Answer: ACDE

QUESTION 86

(Single Choice) RTA connects with RTB through interface Serial0. The configuration on RTA is as follow:

```
[RTA]aaa
[RTA-aaa]local-user huawei password cipher hello
[RTA-aaa]local-user huawei service-type ppp
[RTA]interface Serial 0
[RTA-Serial0]link-protocol ppp
[RTA-Serial0]ppp authentication-mode chap
[RTA-Serial0]ip address 10.1.1.1 30
```

The configuration on RTB is as follow:

```
[RTB]interface Serial 0
[RTB-Serial0]link-protocol ppp
[RTB-Serial0]ppp chap user huawei
[RTB-Serial0]ppp chap password cipher hello
[RTB-Serial0]ip address 10.1.1.2 30
```

With the configuration above, RTA and RTB are able to communicate with each other.

T.True

F.False

Correct Answer: T

QUESTION 87

(Multiple Choice) When you configure PPP authentication method as PAP, which of the following operations are necessary?

- A.Add the user name and password of the authenticated party to local user list
- B.Configure the encapsulation type of the interface connected to the peer as PPP.
- C.Configure PPP authentication method as CHAP
- D.On the authenticated party end, configure the user name and password that are sent to authenticator

Correct Answer: ABD

QUESTION 88

(Single Choice) In the PPP protocol, the dynamic negotiation is the same as the static negotiation in the IPCP flow. That is, in either dynamic or static negotiation, allocation of IP addresses is completed after one Config-Request dialog.

T.True

F.False

Correct Answer: F

QUESTION 89

(Single Choice) How many bytes does the Maximum Receive Unit (MRU) of PPP consist of by default?

- A.1024
- B.1500
- C.1518
- D.8096

Correct Answer: B

QUESTION 90

(Single Choice) Which of the following protocol is required in negotiation to compress the TCP/IP packet header for a PPP link?

- A.LCP
- B.PAP
- C.IPCP
- D.CHAP

Correct Answer: C

QUESTION 91

(Multiple Choice) In network switching technology, circuit switching technology is based on the PSTN switching technology. Which of the following statements about circuit switching are correct?

- A.Low delay
- B.Transparent transmission, which means no modification on user data
- C.Fixed bandwidth, utilization rate for the network resource is high

D.Ensure the Quality of service

Correct Answer: ABD

QUESTION 92

(Single Choice) What function does the NCP protocol can provide for a PPP connection?

- A. Error detection
- B. User identifier authentication
- C. Carrying of “multiple” Layer 3 protocols
- D. Congestion control

Correct Answer: C

QUESTION 93

(Single Choice) In the PPP protocol, CHAP authentication involves exchange of three types of packets at different times. To match the Request packet with a Reply packet, each packet contains an Identifier field.

In each authentication process, all the packets use the same Identifier information.

T.True

F.False

Correct Answer: T

QUESTION 94

(Multiple Choice) Which of the following components are defined by PPP protocol?

- A. Data encapsulation
- B. Data encryption
- C. Link Control Protocol(LCP)
- D. Network Control Protocol(NCP)

Correct Answer: ACD

QUESTION 95

(Multiple Choice) PPP protocol consists of three types of protocols, they are ().

- A. PPPOE
- B. LCP(Link Control Protocol)
- C. NCP(Network Control Protocol)
- D. PPP extension protocol

Correct Answer: BCD

QUESTION 96

(Single Choice) One of the significant features of the PPP protocol is the authentication function. With this function, the two ends of a link can negotiate with each other to use which authentication protocol and then perform authentication. A PPP connection is established only when the authentication is successful.

T.True

F.False

Correct Answer: T

QUESTION 97

(Single Choice) In the PPP protocol, which of the following encryption algorithms is used by CHAP?

- A. DES
- B. MD5
- C. AES
- D. None

Correct Answer: B

QUESTION 98

(Multiple Choice) Which of the following packets belong to CHAP authentication protocol?

- A. Challenge
- B. Request
- C. Response
- D. Success
- E. Failure

Correct Answer: ACDE

QUESTION 100

(Multiple Choice) When you configure PPP authentication method as PAP, which of the following operations are necessary?

- A. Add the user name and password of the authenticated party to local user list
- B. Configure the encapsulation type of the interface connected to the peer as PPP.
- C. Configure PPP authentication method as CHAP
- D. On the authenticated party end, configure the user name and password that are sent to authenticator

Correct Answer: ABD

QUESTION 102

(Single Choice) In the PPP protocol, the dynamic negotiation is the same as the static negotiation in the IPCP flow. That is, in either dynamic or static negotiation, allocation of IP addresses is completed after one Config-Request dialog.

- T.True
- F.False

Correct Answer: F

QUESTION 103

Single Choice) How many bytes does the Maximum Receive Unit (MRU) of PPP consist of by default?

- A. 1024
- B. 1500
- C. 1518
- D. 8096

Correct Answer: B

QUESTION 106

(Single Choice) Which of the following protocol is required in negotiation to compress the TCP/IP packet header for a PPP link?

- A. LCP
- B. PAP
- C. IPCP
- D. CHAP

Correct Answer: C

QUESTION 107

(Single Choice) In the Internet, two technologies are widely used to access services and support both dial-up connections and connections through private lines. One of them is ADSL. What is the other technology?

- A.LAN
- B.WAN
- C.MSTP
- D.Metro

Correct Answer: A

QUESTION 108

(Multiple Choice) Which of the following statements are correct about NAT?

- A. NAT is the abbreviation for "Network Address Translation"
- B. NAT is used for translation between private network address and public network address.
- C. When hosts inside a private network access the outside network, NAT is not needed at all.
- D. NAT provides an effective way to solve the problem of insufficient IP address.

Correct Answer: ABD

QUESTION 109

(Single Choice) Which of the following technologies can allow a host with IP address 10.0.0.1 to access the internet?

- A. Static route
- B. Dynamic route
- C. Route import
- D. NAT

Correct Answer: D

QUESTION 110

(Single Choice) Which of the following problems can be solved by NAT?

- A. Saving Internet public address
- B. Improving the forwarding performance of routers
- C. Enhancing the security of data transmission
- D. Protecting computers from viruses attacks

Correct Answer: A

QUESTION 111

(Single Choice) What type of network addresses can be translated by NAT?

- A. IP
- B. IPX
- C. AppleTalk
- D. DECNET

Correct Answer: A

QUESTION 112

(Single Choice) Which of the following problems can be solved by NAT?

- A. Saving Internet public address
- B. Improving the forwarding performance of routers
- C. Enhancing the security of data transmission
- D. Protecting computers from viruses attacks

Correct Answer: A

QUESTION 113

(Multiple Choice) What type of network addresses can be translated by NAT?

- A. IP
- B. IPX
- C. AppleTalk
- D. DECNET

Correct Answer: A

QUESTION 114

(Single Choice) This type of firewall directly obtains the information such as source IP address, destination IP address, source TCP/UDP port, destination TCP/UDP port and protocol number in the packet header and filters the packets based on the defined policy. Which of the following is the firewall described above

- A. Packet filtering firewall
- B. Proxy firewall
- C. Stateful firewall
- D. Link-layer firewall

Correct Answer: A

QUESTION 115

(Multiple Choice) Which of the following are the disadvantages of packet filtering firewall?

- A. Complicated configuration and can result in a lot of problems due to mis-configuration
- B. As the complexity and length of ACL increase, its performance will degrade greatly
- C. Simple configuration
- D. Low overhead, high processing speed

Correct Answer: AB

QUESTION 116

(Multiple Choice) Packet filtering firewall filters packet based on quintuplet. Which of the following are the components of quintuplet?

- A. IP address
- B. Protocol number
- C. Port number
- D. Application program
- E. MAC address

Correct Answer: ABC

QUESTION 117

(Multiple Choice) What of the following statements is correct regarding access control list types and ranges?

- A. A basic ACL value ranges from 1000-2999
- B. An advanced ACL value ranges from 3000-4000
- C. A layer 2 ACL value ranges from 4000-4999
- D. An interface ACL value ranges 1000-2000

Correct Answer: C

QUESTION 118

(Single Choice) Which of the following parameters is not used by Advanced ACL?

- A. source interface
- B. destination port number
- C. protocol number
- D. time-range

Correct Answer: A

QUESTION 119

(Multiple Choice) [RTA]acl 2002

[RTA-acl-basic-2002]rule permit source 20.1.1.1 0

[RTA-acl-basic-2002]rule permit source 30.1.1.1 0

Refer to the configuration output. A network administrator configured the ACL on router RTA, as shown. Which of the following statements regarding the rule order are correct?

- A. The rule-number of the first rule is 1
- B. The rule-number of the first rule is 5
- C. The rule-number of the second rule is 2
- D. The rule-number of the second rule is 10

Correct Answer: BD

QUESTION 120

(Multiple Choice) Following a failure of services in the network, an administrator discovered that the configuration in one of the enterprise routers had been changed. What actions can be taken by the administrator to prevent further changes?

- A. The administrator should limit access by setting the login privilege of users to 0.
- B. The administrator should configure AAA to manage user authorization on the router.
- C. The administrator should configure an ACL to allow only the administrator to manage the router.
- D. The administrator should configure port-security on the router

Correct Answer: ABC

QUESTION 121

(Multiple Choice) Assume that a user is Telneting a router. In this case, which of the following statements are true?

- A. The router authenticates the user password.
- B. The router may perform local authentication based on AAA.
- C. The router may perform remote authentication based on AAA.
- D. The router does not authenticate the user.

Correct Answer: ABCD

QUESTION 122

(Multiple Choice) An administrator currently manages AR2200 devices in the network through a single password, however the company wishes to introduce another two administrators and provide unique user credentials and privilege levels for telnet access to the network devices. What action can be taken? (Three Answers)

- A. Configure three users under the AAA-view, and assign each a different password.
- B. The authentication mode must be changed to AAA.
- C. Each administrator must be assigned a privilege level.
- D. A public IP address must be assigned to each user for telnet access.

Correct Answer: ABC

QUESTION 123

(Multiple Choice) Which of the following authentication methods are supported for Telnet users?

- A. Password authentication
- B. AAA local authentication
- C. MD5 authentication
- D. No authentication

Correct Answer: ABD

QUESTION 124

(Single Choice) The users who log on the router through Telnet are not permitted to configure IP address. What is the possible reason?

- A. Communication failures occur between the user and the router.
- B. The authentication mode of Telnet is set incorrectly.
- C. Privilege level of Telnet is set incorrectly.
- D. SNMP parameters are set incorrectly.

Correct Answer: C

QUESTION 125

(Multiple Choice) A virtual private network (VPN) can be divided into different parts by layer. What are these parts?

- A.L2VPN
- B.L3VPN
- C.VPDN
- D.GRE VPN

Correct Answer: ABC

QUESTION 126

(Multiple Choice) If AH and ESP are both required to protect data streams between IPsec peers, how many Security Associations (SA) are required in total?

- A.1
- B.2
- C.3
- D.4

Correct Answer: D

QUESTION 127

(Single Choice) Two routers establish an IPsec tunnel, which of the following does not need to be the same on both peering devices?

- A. Encapsulation mode
- B. Transform mode
- C. Proposal name
- D. authentication algorithm

Correct Answer: C

QUESTION 128

(Multiple Choice) The data is transmitted using IPsec tunnel mode. The fields of which headers will be authenticated?

- A. TCP and Data
- B. Origin IP, TCP and Data
- C. AH, Origin IP, TCP and Data
- D. The fields of all headers

Correct Answer: C

QUESTION 129

(Multiple Choice) IPsec VPN uses ESP to encrypt which fields ?

- A. TCP, Data and ESP Trailer
- B. ESP, TCP and Data
- C. ESP, TCP, Data and ESP Trailer
- D. ESP, TCP, Data, ESP Trailer and ESP Auth

Correct Answer: A

QUESTION 130

(Multiple Choice) RTA and RTB have established a GRE tunnel, but only RTA has enabled the keepalive function. When RTB receive a keepalive message from RTA, how will RTB respond?

- A. RTB will discard the keepalive message.
- B. RTB will record receipt of the keepalive message but won't reply
- C. RTB will send a keepalive in response.

D. RTB will send a keepalive reply and begin to actively send keepalive messages.

Correct Answer: C

QUESTION 131

(Multiple Choice) Two hosts communicate through a GRE tunnel. When the GRE tunnel is up, the network administrator configures a static route on RTA to route packets to Host B. Which of the following commands will achieve this?

- A. ip route-static 10.1.2.0 24 GigabitEthernet0/0/1
- B. ip route-static 10.1.2.0 24 200.2.2.1
- C. ip route-static 10.1.2.0 24 200.1.1.1
- D. ip route-static 10.1.2.0 24 tunnel 0/0/1

Correct Answer: D

QUESTION 132

(Multiple Choice) which version of SNMP supports data encryption?

- A. SNMPv1
- B. SNMPv2
- C. SNMPv2c
- D. SNMPv3

Correct Answer: D

QUESTION 133

(Single Choice) Which of the following statements regarding traps in SNMP is correct?

- A. Traps are transmitted using UDP to destination port number 162.
- B. Traps are transmitted using UDP to destination port number 161.
- C. Traps are transmitted using TCP to destination port number 162.
- D. Traps are transmitted using TCP to destination port number 161.

Correct Answer: A

QUESTION 134

(Single Choice) The Network Management Station uses SNMP to manage devices, which SNMP message is sent when an SNMP registered abnormal event occurs?

- A. get-response
- B. set-request
- C. trap
- D. get-request

Correct Answer: C

QUESTION 135

(Multiple Choice) eSight supports which of the following SNMP versions in order to manage devices?

- A. SNPMv1
- B. SNPMv2
- C. SNPMv2c
- D. SNPMv3

Correct Answer: ACD

QUESTION 136

(Multiple Choice) Which of the following formats represent an accurate condensing of the IPv6 address 2031:0000:720C:0000:0000:09E0:839A:130B?

- A. 2031:0:720C:0:0:9E0:839A:130B
- B. 2031:0:720C:0:0:9E:839A:130B
- C. 2031::720C::9E0:839A:130B

D. 2031:0:720C::9E0:839A:130B

Correct Answer: AD

QUESTION 137

(Multiple Choice) Which of the following IPv6 addresses can be configured on a router's interface?

A. fe80:13dc::1/64

B. ff00:8a3c::9b/64

C. ::1/128

D. 2001:12e3:1b02::21/64

Correct Answer: AD

QUESTION 138

(Single Choice) The IPv6 address architecture does not include which of the following address types?

A. unicast

B. multicast

C. broadcast

D. anycast

Correct Answer: C

QUESTION 139

(Multiple Choice) Which of the following descriptions regarding IPv6 addresses are correct?

A. IPv6 addresses are 64 bits in length.

B. IPv6 addresses are 128 bits in length.

C. IPv6 extension headers are processed in order.

D. IPv6 extension headers are processed randomly.

Correct Answer: BC

QUESTION 140

(Single Choice) Interface G0/0/1 on RTA contains a MAC address of 00e0-fc03-aa73 and is configured with the IPv6 address 2001::2E0:FCFF:FE03:AA73. Which method is most likely to have been used to configure the interface IPv6 address?

A. DHCPv6

B. Auto-link

C. ARP

D. EUI-64

Correct Answer: D

QUESTION 141

(Single Choice) Interface G0/0/1 on RTA contains a MAC address of 00e0-fc03-aa73 and is configured with the IPv6 address 2001::2E0:FCFF:FE03:AA73. Which method is most likely to have been used to configure the interface IPv6 address?

A. DHCPv6

B. Auto-link

C. ARP

D. EUI-64

Correct Answer: D

QUESTION 142

(Multiple Choice) Which of the following formats represent an accurate condensing of the IPv6 address 2031:0000:720C:0000:0000:09E0:839A:130B?

A. 2031:0:720C:0:0:9E0:839A:130B

B. 2031:0:720C:0:0:9E:839A:130B

- C. 2031::720C::9E0:839A:130B
- D. 2031:0:720C::9E0:839A:130B

Correct Answer: AD

QUESTION 143

(Multiple Choice) Which of the following IPv6 addresses can be configured on a router's interface?

- A. fe80:13dc::1/64
- B. ff00:8a3c::9b/64
- C. ::1/128
- D. 2001:12e3:1b02::21/64

Correct Answer: AD

QUESTION 144

(Single Choice) Interface G0/0/1 on RTA contains a MAC address of 00e0-fc03-aa73 and is configured with the IPv6 address 2001::2E0:FCFF:FE03:AA73. Which method is most likely to have been used to configure the interface IPv6 address?

- A. DHCPv6
- B. Auto-link
- C. ARP
- D. EUI-64

Correct Answer: D

QUESTION 145

(Single Choice) In a network supporting IPv6, OSPF no longer supports which feature?

- A. multiple areas
- B. Router-ID
- C. authentication
- D. multicast updates

Correct Answer: C

QUESTION 146

(Single Choice) Two routers are configured with OSPFv3. OSPFv3 is enabled on all interfaces of each router. Which of the following is true in the event that the network administrator does not configure a Router-ID?

- A. The IP address of the loopback 0 interface will be used as the router ID
- B. The IP address of the loopback 1 interface will be used as the router ID
- C. The IP address of interface G0/0/0 will be used as the router ID
- D. No router ID will be assigned to the router.

Correct Answer: D

QUESTION 147

(Multiple Choice) A DHCP Unique Identifier (DUID) in DHCPv6 can be configured in VRP using which formats?

- A. DUID-LL
- B. DUID-LLT
- C. DUID-EN
- D. DUID-LLC

Correct Answer: AB