

HCIA TRAINING

APRIL 2020

EXERCISE 2

QUESTION 1

(Single Choice) Which of the following protocols provides error report and send information about the IP datagram processing status back to the source?

- A.TCP
- B.UDP
- C.ICMP
- D.IGMP

Correct Answer: C

QUESTION 2

(Single Choice) Which of the following protocols is a management protocol used at Network Layer to provide IP information service by embedding the protocol information in IP packets?

- A.ARP
- B.IP
- C.ICMP
- D.802.2

Correct Answer: C

QUESTION 3

(Single Choice) Which of the following is the abbreviation for ICMP?

- A.Internal Control Mail Protocol
- B.Intranet Control Message Protocol
- C.internet connection Message Protocol
- D.Internet Control Message Protocol

Correct Answer: D

QUESTION 4

(Multiple Choice) The protocol number of ICMP is ()

- A.1
- B.6
- C.17
- D.22

Correct Answer: A

QUESTION 4

(Single Choice) Which of the following operations can be used to verify the failure of installation or running of TCP/IP protocol?

- A.Ping 10.1.1.1
- B.Ping 127.0.0.1
- C.Ping 169.254.1.1
- D.Ping 192.168.1.1

Correct Answer: B

QUESTION 5

(Single Choice) Which of the following applications can be used to detect the path along which the data packets are transmitted from the source to the destination?

- A.Route
- B.Nestat
- C.Tracert
- D.Send

Correct Answer: C

QUESTION 6

(Single Choice) The ICMP protocol (RFC792) is not applied to Application Layer but Network Layer.

T.True

F.False

Correct Answer: T

QUESTION 7

8. (Single Choice) Which bytes in an ICMP packet use a unified format and consist of the Type, Code, and Checksum fields?

A.First 3 bytes

B.First 4 bytes

C.First 5 bytes

D.First 8 bytes

Correct Answer: B

QUESTION 8

(Single Choice) Which of the following statements about the ICMP protocol is true?

A.The ICMP protocol searches for IP addresses based on MAC addresses.

B.The ICMP protocol translates the IP address of a public network into the IP address of a private network.

C.The ICMP protocol monitors errors generated in datagram transmission.

D.The ICMP protocol allocates and manages IP addresses in a network in a uniform manner.

Correct Answer: C

QUESTION 9

(Single Choice) In which type of packet is an ICMP packet generally advertised during IP packet processing?

A.Delay

B.Error

C.Jitter

D.Source IP address

Correct Answer: B

QUESTION 10

(Single Choice) Which of the following fields is used to check an ICMP packet?

A.Checksum field in the ICMP packet

B.Header checksum field in an IP datagram

C.Code field in the ICMP packet

D.Type field in the ICMP packet

Correct Answer: A

QUESTION 11

(Single Choice) The IP protocol is a kind of unreliable protocol and offers no error detection. To provide error detection, which of the following must the IP protocol work with?

A.ARP

B.ICMP

C.TCP

D.UDP

Correct Answer: C

QUESTION 12

(Multiple Choice) Which of the following applications use ICMP protocol?

A.Ping

B.Tracert

C.Igmp

D.Arp

Correct Answer: ABD

QUESTION 13

(Single Choice) When certain fields in the header of a received datagram have incorrect values, this datagram is discarded and a certain ICMP packet is sent to the source. Which type of ICMP packet is sent to the source?

- A.Destination Unreachable packet
- B.Source Quench packet
- C.Parameter Problem packet
- D.Redirect packet

Correct Answer: C

QUESTION 14

(Single Choice) When a router or host discards data because of data congestion, which type of ICMP packet does the router or host send to the source?

- A.Destination Unreachable packet
- B.Source Quench packet
- C.Parameter Problem packet
- D.Redirect packet

Correct Answer: B

QUESTION 15

(Single Choice) Which of the following is the most common method used to check the connectivity between an IP network and a host, for example, the connectivity between routers and the connectivity between a router and a host?

- A.DNS
- B.FTP
- C.PING
- D.TFTP

Correct Answer: C

QUESTION 16

(Single Choice) A series of packets are used in a Ping test to determine whether delay and packet loss occur in communication. Which of the following represents the packet used in a Ping test?

- A.FTP
- B.Tracert
- C.ICMP
- D.Telnet

Correct Answer: C

QUESTION 17

(Multiple Choice) Which of the following protocols are not used in a Tracert process?

- A.TCP
- B.UDP
- C.ICMP
- D.ARP

Correct Answer: AD

QUESTION 18

(Multiple Choice) Which of the following statements about Ping and Tracert are true?

- A.Both Ping and Tracert can be used to test network connectivity.
- B.Ping can be used to specify the source IP address of a packet.
- C.Ping is often used to obtain the path for forwarding a datagram.
- D.Tracert can be used to determine a faulty point.

Correct Answer: ABD

QUESTION 19

(Single Choice) Which type of packet does a Ping application send?

- A.TCP Request packet
- B.TCP Reply packet
- C.ICMP Request packet
- D.ICMP Reply packet

Correct Answer: C

QUESTION 20

(Single Choice) The Tracert application is usually used in data network commissioning. In this case, how many types of ICMP packets are involved in a Tracert application?

- A.2
- B.3
- C.4
- D.6

Correct Answer: A

QUESTION 21

(Single Choice) What is the function of ARP?

- A.Map port number to IP address
- B.Map MAC address to IP address
- C.Broadcast IP address
- D.Map IP address to Mac address

Correct Answer: D

QUESTION 22

(Single Choice) What is the function of RARP?

- A.Map source IP address to MAC address
- B.Map destination IP address to MAC address
- C.Map destination MAC address to IP address
- D.Map source MAC address to IP address

Correct Answer: D

QUESTION 23

(Single Choice) Which category does the ARP protocol belong to?

- A.Unicast
- B.Multicast
- C.Anycast
- D.Broadcast

Correct Answer: D

QUESTION 24

(Single Choice) An RARP request packet is sent by means of broadcast. How is an RARP Reply packet sent to save network resources?

- A.Unicast
- B.Multicast
- C.Anycast
- D.Broadcast

Correct Answer: A

QUESTION 25

(Single Choice) Which of the following protocols provides connection oriented transmission service?

- A.IP
- B.IPv6
- C.TCP
- D.UDP

Correct Answer: C

QUESTION 26

(Multiple Choice) Which of the following protocols reside at transport layer?

- A.IP
- B.TCP
- C.UDP
- D.SNMP

Correct Answer: BC

QUESTION 27

(Single Choice) What is the port number of DNS?

A.21

B.23

C.53

D.80

Correct Answer: C

QUESTION 28

(Single Choice) Which of the following is the correct sequence about the data encapsulation process?

A.Segment->Packet->Frame->Bit->Data

B.Bit ->Segment ->Packet->Frame->Data

C.Data->Packet->Segment ->Frame->Bit

D.Data->Segment->Packet->Frame->Bit

Correct Answer: D

QUESTION 29

(Single Choice) Which of the following is the function of session layer?

A.Provide encryption and decryption

B.Provide data transformation and data format

C.Establish connection between hosts

D.Establish maintain and terminate session

Correct Answer: D

QUESTION 30

(Single Choice) Compared with OSI reference model, which of the following is not defined in TCP/IP protocol stack?

A.Data link layer and network layer

B.Network layer and transport layer

C.Session layer and presentation layer

D.Transport layer and session layer

Correct Answer: C

QUESTION 31

(Single Choice) RPC, NFS and SQL protocols reside at the () of the OSI reference model.

A.Network layer

B.Transport layer

C.Session layer

D.Presentation layer

Correct Answer: C

QUESTION 32

(Multiple Choice) According to OSI reference model, which of the following functions belong to presentation layer?

A.Data encryption

B.Data compression

C.Session control

D.Data format transformation

Correct Answer: ABD

QUESTION 33

(Single Choice) In the OSI reference model, one layer processes requests and responses initiated by applications of different devices. Which of the following layers stands for this layer?

A.Data Link Layer

B.Session Layer

C.Network Layer

D.Application Layer

Correct Answer: B

QUESTION 34

(Single Choice) In the OSI reference model, one layer provides network services through applications in addition to communications between different applications. Which of the following layers

- A.Data Link Layer
- B.Session Layer
- C.Network Layer
- D.Application Layer

Correct Answer: D

QUESTION 35

(Single Choice) Similar to the OSI reference model, the TCP/IP model also contains several layers. How many layers does the TCP/IP model contain?

- A.Four
- B.Five
- C.Six
- D.Seven

Correct Answer: A

QUESTION 36

(Multiple Choice) Which of the following are the functions of transport layer?

- A.Segment upper layer data
- B.Establish end to end connection
- C.Transmit data from one host to another host
- D.Ensure ordered, reliable, and correct transmission
- E.addressing

Correct Answer: ABCD

QUESTION 37

(Single Choice) According to OSI reference model, when receiver can not process more data, which layer is responsible for sending stop message to the transmitter?

- A.Physical layer
- B.Transport layer
- C.Session layer
- D.Presentation layer

Correct Answer: B

QUESTION 38

(Single Choice) Which protocol does an application (such as SNMP or RADIUS) that focuses on transmission efficiency use at Transport Layer?

- A.TCP
- B.UDP
- C.ICMP
- D.HDLC

Correct Answer: B

QUESTION 39

(Single Choice) Which of the following protocols provides a reliability mechanism and can be used as a transport-level protocol?

- A.TCP
- B.UDP
- C.ICMP
- D.HDLC

Correct Answer: A

QUESTION 40

(Single Choice) Which of the following protocols is a transport-level protocol based on TCP, translates a domain name into an IP address, and manages domain names in a distributed manner?

- A.TCP
- B.UDP
- C.DNS
- D.HTTP

Correct Answer: C

QUESTION 41

(Single Choice) Which of the following protocols is used to transfer Web pages in the Internet?

- A.TCP
- B.UDP
- C.DNS
- D.HTTP

Correct Answer: D

QUESTION 42

(Multiple Choice) Which protocols are defined by the TCP/IP model to transmit and receive mails?

- A.SMTP
- B.POP3
- C.DNS
- D.HTTP

Correct Answer: AB

QUESTION 43

(Single Choice) Which of the following protocols authenticates a user remotely, authorizes the user access, and performs charging?

- A.SMTP
- B.RADIUS
- C.DNS
- D.HTTP

Correct Answer: B

QUESTION 44

(Multiple Choice) TCP is a connection oriented and reliable transport layer protocol. Which of the following are used to ensure the transmission reliability?

- A.Acknowledgement
- B.Buffering
- C.Source quench messages
- D.Retransmit

Correct Answer: AD

QUESTION 45

(Single Choice) A TCP packet consists of a maximum of 60 bytes. How many bytes does a TCP packet header consist of after the Option field is deducted?

- A.8
- B.20
- C.30
- D.40

Correct Answer: B

QUESTION 46

(Single Choice) The TCP protocol assigns a source port No. to each application. How many bytes does the source port No. in the TCP packet header consist of?

- A.1
- B.2
- C.4
- D.8

Correct Answer: B

QUESTION 47

(Multiple Choice) Which of the following fields are contained in a TCP packet header?

- A.Source Port
- B.Destination Port
- C.Sequence Number
- D.CRC32

Correct Answer: ABC

QUESTION 48

(Single Choice) Which of the following ranges represents the size of a maximum transfer unit (MTU) packet?

- A.64–1518
- B.60–1518
- C.64–1480
- D.60–1480

Correct Answer: A

QUESTION 49

(Single Choice) The TTL field in an IP header specifies the number of routers that a datagram is allowed to traverse. After the datagram traverses a router, the TTL value is deducted by 1. When the TTL reaches a certain value, the datagram is discarded. Which of the following represents this value?

- A.Sender
- B.Receiver
- C.Harddisk
- D.Message
- E.Protocol

Correct Answer: A

QUESTION 50

(Single Choice) Defragmentation can occur at either the original transmitter or an intermediate router. Where is an IP datagram is reassembled after it is defragmented?

- A.In the process in which the packet is looped back
- B.On the next router
- C.On an intermediate router
- D.At the destination of the packet

Correct Answer: D

QUESTION 51

(Multiple Choice) Which of the following statements about TCP connection establishment are true?

- A.A TCP connection is established after three-way handshake is done.
- B.Three-way handshake can resolve the delay problem with packet data transmission.
- C.The three-way handshake helps guarantee the reliability of data switching.
- D.The three-way handshake cannot guarantee the security of data switching.

Correct Answer: AC

QUESTION 52

(Single Choice) Tracert is an application based on application layer, which transport layer protocol is used by Tracert?

- A.ICMP
- B.ARP
- C.TCP
- D.UDP

Correct Answer: D

QUESTION 53

(Single Choice) What is the main function of DNS?

- A.Domain Name Resolution
- B.Remote Access
- C.File Transfer

D.Mail Transfer

Correct Answer: A

QUESTION 54

(Single Choice) Which of the following is the default TCP port number used by HTTP?

A.80

B.8080

C.110

D.25

Correct Answer: A

QUESTION 55

(Single Choice) Which protocol does FTP use to provide reliable data transmission?

A.RTP

B.SIP

C.UDP

D.TCP

Correct Answer: D

QUESTION 56

(Single Choice) Which of the following protocols is used to send email on the internet?

A.SMTP

B.MSTP

C.FTP

D.TFTP

Correct Answer: A

QUESTION 57

(Single Choice) Which TCP port number is used by SMTP by default to send e-mail message?

A.21

B.23

C.25

D.53

Correct Answer: C

QUESTION 58

(Single Choice) POP (Post Office Protocol) is used for receiving E-mail. Which TCP port numbers does it use by default?

A.110

B.53

C.21

D.23

Correct Answer: A

QUESTION 59

(Single Choice) In data communications, the data format must be determined and agreed by the information creator and the information receiver before the data is transmitted.

T.True

F.False

Correct Answer: T

QUESTION 60

(Multiple Choice) Which of the following products use the VRP platform as the core engine of their software?

A.Router

B.Ethernet switch

C.Service gateway

D.LTE

Correct Answer: ABC

QUESTION 61

(Single Choice) VRP uses a component-based system architecture. It provides various functions and features in addition to application-based scalability and customization.

T.True

F.False

Correct Answer: T

QUESTION 62

(Multiple Choice) What functions does VRP provide?

A.Provides a unified user interface and a unified management window.

B.Provides the functions of a control plane.

C.Defines interfaces of a forwarding plane.

D.Blocks communication between a forwarding plane and the VRP control plane.

Correct Answer: ABC

QUESTION 63

(Single Choice) Which component of the VRP platform provides user authentication charging and user policy management?

A.Service control plane

B.Versatile control plane

C.System management plane

D.None of the above

Correct Answer: A

QUESTION 64

(Multiple Choice) Which of the following methods can be used to upgrade the VRP software?

A.WEB

B.FTP

C.TFTP

D.X-modem

Correct Answer: BCD

QUESTION 65

(Single Choice) When VRP platform is configured as TFTP client, it can transmit files in binary mode and ASCII mode.

T.True

F.False

Correct Answer: F

QUESTION 66

(Multiple Choice) Which of the following protocols can be used to upgrade VRP?

A.FTP

B.TFTP

C.TELNET

D.XMODEM

Correct Answer: ABD

QUESTION 67

(Multiple Choice) Which of the following is abbreviation of VRP?

A.Versatile Routine Platform

B.Virtual Routing Platform

C.Virtual Routing Plane

D.Versatile Routing Platform

Correct Answer: D

QUESTION 70

(Multiple Choice) On Huawei VRP platform, which of the following can be used to invoke the history command saved by the command line interface?

A. Up cursor key < ↑ >

- B. Left cursor key < ← >
- C. Ctrl+P
- D. Ctrl+U

Correct Answer: AC

QUESTION 71

(Single Choice) Which of the following commands is used to enter the system-view from the user view on a Huawei router?

- A. system-view
- B. enable
- C. configure terminal
- D. interface system

Correct Answer: A

QUESTION 72

(Single Choice) On VRP platform, the command lines are classified into four levels in increasing priority: Visit level, Monitoring level, Configuration level, and Management level. At which level, the operator is permitted to configure service but is not permitted to operate the file system?

- A. Visit level
- B. Monitoring level
- C. Configuration level
- D. Management level

Correct Answer: C

QUESTION 73

(Single Choice) Which of the following statements about the command view of VRP are true?

- A. The System-view command can switch a view from the user view to the system view.
- B. A service command can switch a view from the system view to the corresponding service view.
- C. The Quit command can switch a view from the system view to the user view.
- D. Different views may have different commands.

Correct Answer: ABCD

QUESTION 74

(Single Choice) Which of the following must be used to establish the configuration environment when a router is powered on for the first time?

- A. SSL
- B. SSH
- C. Console port
- D. Telnet

Correct Answer: C

QUESTION 75

(Single Choice) Which of the following parameter settings for terminal emulation are correct when configuring a Huawei router through the Console port?

- A. 4800bps, 8 data bits, 1 stop bits, odd parity check, and no flow control
- B. 9600bps, 8 data bits, 1 stop bits, no parity check, and no flow control
- C. 9600bps, 8 data bits, 1 stop bits, even parity check, and hardware flow control
- D. 19200bps, 8 data bits, 1 stop bits, no parity check, and no flow control

Correct Answer: B

QUESTION 76

(Single Choice) Which of the following commands can be used to view the current configurations on a Quidway router?

- A. display current-configuration
- B. display saved-configuration
- C. view saved-configuration
- D. show startup-configuration

Correct Answer: A

QUESTION 77

(Multiple Choice) Which of the following storage devices are supported by Huawei Quidway router?

- A. SDRAM
- B. NVRAM
- C. Flash
- D. Hard Disk
- E. CF Card

Correct Answer: ABCE

QUESTION 78

(Single Choice) Which of the following storage devices is used to store the startup configuration files in a router?

- A. SDRAM
- B. NVRAM
- C. Flash
- D. BootROM

Correct Answer: B

QUESTION 79

(Single Choice) The operation deleting the configuration files saved in the storage devices will become effective after rebooting the router.

- T.True
- F.False

Correct Answer: T

QUESTION 80

(Single Choice) On VRP platform, the command lines are classified into four levels in increasing priority: Visit level, Monitoring level, Configuration level, and Management level. At which level, the operator is permitted to configure service but is not permitted to operate the file system?

- A. Visit level
- B. Monitoring level
- C. Configuration level
- D. Management level

Correct Answer: C

QUESTION 81

(Single Choice) An administrator has been requested to replace the configuration file of a router in the network. The administrator has been instructed that after logging into the router, he must first permanently erase the current configuration file config.zip from the system. Which command should he use to achieve this?

- A. delete /force config.zip
- B. delete /unreserved config.zip
- C. reset config.zip
- D. clear config.zip

Correct Answer: B

QUESTION 82

(Multiple Choice) Which of the following products use the VRP platform as the core engine of their software?

- A. Router
- B. Ethernet switch
- C. Service gateway
- D. LTE

Correct Answer: ABC

QUESTION 83

(Single Choice) VRP uses a component-based system architecture. It provides various functions and features in addition to application-based scalability and customization.

- T.True

F.False

Correct Answer: T

QUESTION 84

(Multiple Choice) What functions does VRP provide?

- A. Provides a unified user interface and a unified management window.
- B. Provides the functions of a control plane.
- C. Defines interfaces of a forwarding plane.
- D. Blocks communication between a forwarding plane and the VRP control plane.

Correct Answer: ABC

QUESTION 85

(Multiple Choice) Which component of the VRP platform provides user authentication charging and user policy management?

- A. Service control plane
- B. Versatile control plane
- C. System management plane
- D. None of the above

Correct Answer: A

QUESTION 86

(Single Choice) On VRP platform, the command lines are classified into four levels in increasing priority: Visit level, Monitoring level, Configuration level, and Management level. At which level, the operator is permitted to configure service but is not permitted to operate the file system?

- A. Visit level
- B. Monitoring level
- C. Configuration level
- D. Management level

Correct Answer: C

QUESTION 87

(Single Choice) <Huawei>display startup

MainBoard:

<i>Startup system software:</i>		<i>sd1:/ar2220-v200r003c00spc200.cc</i>
<i>Next startup system software:</i>		<i>sd1:/ar2220-v200r003c00spc200.cc</i>
<i>Backup system software for next startup:</i>	<i>null</i>	
<i>Startup saved-configuration file:</i>		<i>null</i>
<i>Next startup saved-configuration file:</i>	<i>null</i>	
<i>Startup license file:</i>		<i>null</i>
<i>Next startup license file:</i>		<i>null</i>
<i>Startup patch package:</i>		<i>null</i>
<i>Next startup patch package:</i>	<i>null</i>	
<i>Startup voice-files:</i>		<i>null</i>
<i>Next startup voice-files:</i>		<i>null</i>

Refer to the display output. Which statement is false?

- A. The current configuration file has not been saved.
- B. The current startup system software is ar2220-v200r003c00spc200.cc
- C. The next startup system software cannot be changed.
- D. The next startup system software can be changed by using the "startup system software <startup-software-name>.cc

Correct Answer: C

QUESTION 88

(Single Choice) Which of the following must be used to establish the configuration environment when a router is powered on for the first time?

- A. SSL

- B. SSH
 - C. Console port
 - D. Telnet
- Correct Answer: C

QUESTION 89

(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 90

(Single Choice) <Quidway>display mac-address

```
-----  
MAC Address  VLAN/VSF   Learned-From   Type  
-----  
5489-98ec-f018 1/-      GE0/0/13      dynamic  
-----
```

Total items displayed = 1

Refer to the graphic. A switch attempts to forward a frame to the MAC destination 5489-98ec-f01. What operation will occur on the switch?

- A. The switch will send a request to obtain the MAC address of 5489-98ec-f011.
- B. The switch will report that the destination is unreachable and report this to the source.
- C. The switch will flood the frame via all ports, with exception of the port on which the frame was received.
- D. The switch will drop the frame because it does not have an entry in its MAC address table

Correct Answer: C

QUESTION 91

(Single Choice) A server is linked to port interface G0/0/1 of a switch. The administrator wishes to allow only this server to be linked to this interface on the switch. Which method can be used to achieve this?

- A. Configure a static ARP entry using the server's IP address and MAC address in the switch.
- B. Configure a static MAC address binding entry of the server's MAC address and the interface in the switch.
- C. Configure the default gateway of the switch to be the same as the server's IP address.
- D. It is not possible to enable a single device to be associated with an interface.

Correct Answer: B

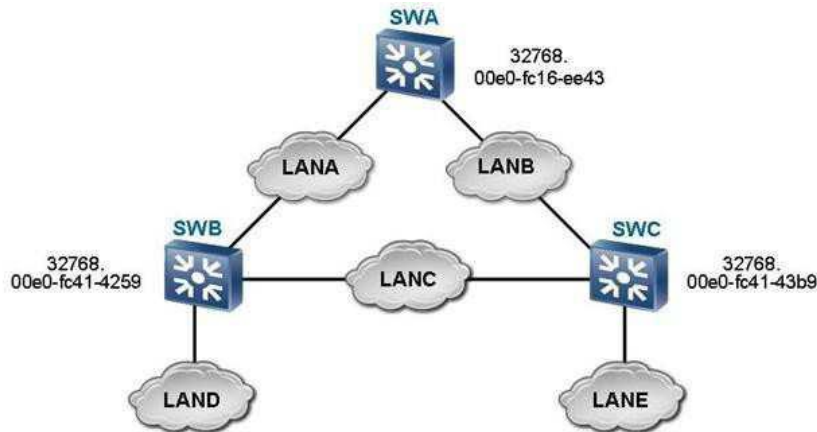
QUESTION 92

(Single Choice) An administrator connects two switches together in a local enterprise network. The ports of one switch support Fast Ethernet, while the ports of the other switch support Gigabit Ethernet. Hosts connected to one switch are able to communicate, however communication between the two switches fails. What is the possible reason for this?

- A. The ports have disabled auto-negotiation.
- B. One port is supporting auto-negotiation, while auto-negotiation is disabled on the port of the other switch.
- C. The port of one switch is operating using half duplex mode, while the port of the other switch is using full duplex mode.
- D. A Fast Ethernet port cannot communicate directly with a Gigabit Ethernet port.

Correct Answer: A

QUESTION 93



(Single Choice) As shown in the figure, which switch is the root switch according to the configuration?

- A. SWA
- B. SWB
- C. SWC
- D. None of the above

Correct Answer: A

QUESTION 94

(Single Choice) On an RSTP network, when an edge port is in protected state, what operation is performed after the edge port receives BPDUs?

- A. The edge port forwards BPDUs.
- B. The edge port discards BPDUs.
- C. The edge port is shut down.
- D. The edge port obtains required information from BPDUs.

Correct Answer: C

QUESTION 95

(Single Choice) On an STP network, after the network topology changes, which BPDUs are sent during flooding of topology change information on the entire network?

- A. BPDUs with the TCN flag
- B. BPDUs with the TCA flag
- C. BPDUs with the TC flag
- D. All of the above

Correct Answer: D

QUESTION 96

(Multiple Choice) Which ports defined by RSTP cannot work in Forwarding state?

- A. Root Port
- B. Designated Port
- C. Backup Port
- D. Alternate Port

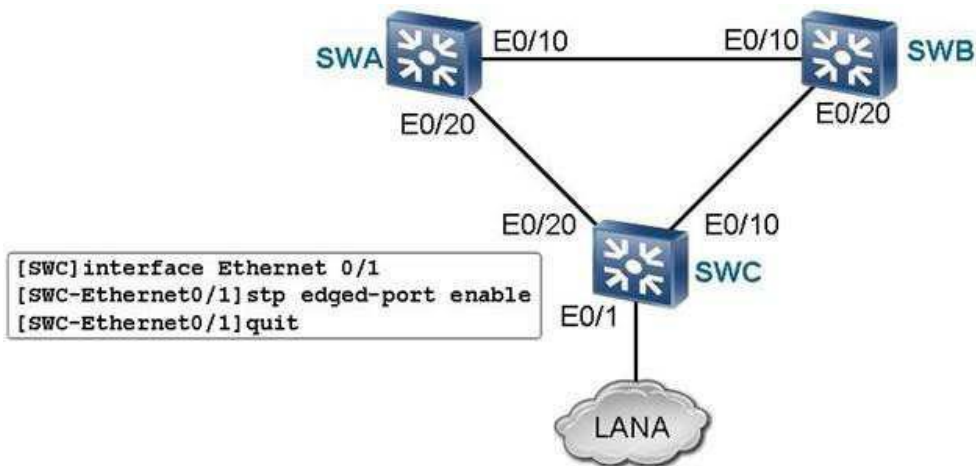
Correct Answer: CD

QUESTION 97

(Multiple Choice) On the RSTP network as shown in the figure, what is the port role of SWC E0/1 according to the configuration?

- A. Designated port
- B. Root port
- C. Alternate port
- D. Edge port

Correct Answer: AD



QUESTION 98

(Single Choice) STP is short for ?

- A.Rapid spanning tree protocol
- B.Shortest path tree protocol
- C.Spanning tree protocol
- D.Sharing tree protocol

Correct Answer: C

QUESTION 99

(Single Choice) The standard for STP defined by IEEE is ().

- A.802.3
- B.802.11b
- C.802.1D
- D.802.1Q

Correct Answer: C

QUESTION 100

(Single Choice) In OSI reference model, Layer 2 LAN switch operates at ().

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

Correct Answer: C

QUESTION 101

(Single Choice) The main idea of STP is to generate a loop-free tree by exchanging a special kind of message between bridges. This message is called ().

- A.Configuration BPDU
- B.TCN BPDU
- C.Hello BPDU
- D.Update BPDU

Correct Answer: A

QUESTION 102

(Multiple Choice) Which of the following are the interface states of STP?

- A.Disabled
- B.Blocking
- C.Shut down
- D.Learning
- E.Forwarding

Correct Answer: ABDE

QUESTION 103

(Single Choice) On Huawei switches running STP, the default value of forward delay is () seconds.

- A.10
- B.15
- C.20
- D.30

Correct Answer: B

QUESTION 105

(Single Choice) Which of the following descriptions about learning state in STP is incorrect?

- A.The port in learning state can receive and send BPDU
- B.The port in learning state can learn the source MAC address of data packet
- C.The port in learning state can only learn the source MAC address but cannot transmit the data packet.
- D.The port in learning state can forward part of the data packet

Correct Answer: D

QUESTION 106

(Single Choice) Which of the following descriptions about blocking state in STP is incorrect?

- A.The port in blocking state can receive BPDU
- B.The port in blocking state does not learn source MAC address of data packet
- C.The port in blocking state does not forward data packets
- D.The port in blocking state does not receive any data packets

Correct Answer: D

QUESTION 107

(Single Choice) STP uses () timer to prevent from temporary loop when the link is fault?

- A.Hello Time
- B.Forward Delay
- C.Max Age
- D.Message Age

Correct Answer: B

QUESTION 108

(Single Choice) Devices need to exchange information and parameters in order to calculate a spanning tree. Such information and parameters are encapsulated into a certain unit when they are exchanged between devices. Which type of unit are the information and parameters encapsulated into?

- A.TCP BPDU
- B.Configured BPDU
- C.Configured STP
- D.Configured RSTP

Correct Answer: B

QUESTION 109

11. (Single Choice) How many root bridges does the STP protocol select from all the network bridges when calculating a spanning tree?

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

Correct Answer: A

QUESTION 110

(Single Choice) Which attribute is selection of a root bridge based on when the spanning tree is calculated by the STP?

- A.Bridge ID
- B.Path Cost
- C.Port Cost

D.Port ID

Correct Answer: A

QUESTION 112

(Single Choice) Root bridges provide root ports and designated ports.

T.True

F.False

Correct Answer: F

QUESTION 113

(Single Choice) There may be "multiple" paths between a non-root bridge and a root bridge. Each of the paths has its own total cost, which is the sum of the port costs of all egress ports on the path.

T.True

F.False

Correct Answer: T

QUESTION 114

(Single Choice) STP calculates the overall cost of each path between a non-root bridge and a root bridge. What is a port on the non-root bridge called on the path that has the minimum overall cost?

A.Designated port

B.Root port

C.Common port

D.Queue port

Correct Answer: B

QUESTION 115

(Single Choice) In STP calculation, a port identifier consists of two parts: one-byte () and one-byte port number.

A.Port priority

B.Link priority

C.Bridge MAC address

D.Port MAC address

Correct Answer: A

QUESTION 116

(Multiple Choice) The existence of loop in switched network can lead to ().

A.Broadcast storm

B.Route self-loop

C.Destination unreachable

D.Unstable MAC address table

Correct Answer: AD

QUESTION 117

(Single Choice) Which of the following statements regarding layer-2 switch is incorrect?

A.Learn MAC address automatically

B.Layer-3 header is modified before the received packet is transmitted

C.Layer-2 header is modified before the received packet is transmitted.

D.Layer-2 LAN switch operates at data link layer

Correct Answer: B

QUESTION 118

(Multiple Choice) Which of the following are the functions of STP in switched network?

A.Improve bridge network availability by providing physical path redundancy

B.Improve bridge network availability by providing logical path redundancy

C.Eliminate the possible loops by blocking the redundant paths

D.Activate the redundant backup path when the active path becomes faulty.

Correct Answer: ACD

QUESTION 119

(Multiple Choice) Which of the following descriptions about STP are incorrect?

- A.A layer-2 switching network can have only one designated switch
- B.All the ports of the root switch are root port
- C.All the ports of the root switch are designated port
- D.The switch with the smallest priority value is elected as non-root switch

Correct Answer: ABD

QUESTION 120

(Multiple Choice) In STP, the bridge ID consists of two parts. They are () and ().

- A.Switch priority
- B.Switch Port ID
- C.Switch MAC address
- D.Switch IP address

Correct Answer: AC

QUESTION 121

(Single Choice) In STP, what is the length of bridge ID?

- A.8 bits
- B.32 bits
- C.48 bits
- D.64 bits

Correct Answer: D

QUESTION 122

(Single Choice) Which of the following descriptions about STP is incorrect?

- A.STP can manage the redundant links
- B.STP can block redundant links to eliminate loops
- C.STP can prevent from temporary loss of connectivity
- D.STP can make LAN switch operates normally in a switched network environment with loops

Correct Answer: C

QUESTION 123

(Single Choice) Which of the following descriptions about port state transition of STP are incorrect?

- A.Forwarding state can transit to Blocking state directly
- B.Learning state can transit to Blocking state directly
- C.Learning state can transit to Forwarding state directly
- D.Blocking state can transit to Forwarding state directly

Correct Answer: D

QUESTION 124

(Single Choice) During STP calculation, STP selects a designated port and bridge for each network segment. In this selection process, STP first compares () of the port connected to the network segment and selects the one with the lowest number.

- A.Link priority
- B.Root path cost
- C.Port identifier
- D.Port MAC address

Correct Answer: B

QUESTION 125

(Multiple Choice) Which of the following ports are defined by STP and indicate that Physical Layer and Data Link Layer are working normally and STP is enabled at ports on a device?

- A.Root Port
- B.Designated Port
- C.Alternate Port
- D.Disable Port

Correct Answer: ABC

QUESTION 126

(Single Choice) During STP calculation, when a port is in a certain state, it neither forwards any data frame nor learns MAC address tables. It takes part in only spanning tree calculation in addition to receiving and sending STP protocol packets. Which state does the abovementioned state refer to?

- A.Listening
- B.Blocking
- C.Learning
- D.Forwarding

Correct Answer: A

QUESTION 127

(Single Choice) During STP calculation, when a port is in a certain state, it neither forwards any data frame nor learns MAC address tables. Instead, it only receives and processes STP protocol packets. Which state does the abovementioned state refer to?

- A.Listening
- B.Blocking
- C.Learning
- D.Forwarding

Correct Answer: B

QUESTION 128

(Single Choice) Workstation A and workstation B are connected to two different switch ports respectively. Assume that workstation B hasn't sent any packet yet. Which of the following statements is true when workstation A starts sending the first packet to workstation B?

- A.The destination port of workstation B is not found in switch's MAC table an the packet is discarded
- B.The switch learns the address of workstation B and sends the packet to the port that is connected with B
- C.The switch learns address of workstation A and broadcasts the packet out of all the ports
- D.The switch learns address of workstation A and broadcasts the packet out of all the ports except for the port that received the packet

Correct Answer: D

QUESTION 129

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

- A.A network can have only one root switch
- B.All the ports of the root switch are root port
- C.All the ports of the root switch are designated port
- D.The switch with the smallest priority value is elected as the root switch

Correct Answer: ACD

QUESTION 130

(Multiple Choice) In STP, the role of switch port includes ()

- A.Root port
- B.Backup root port
- C.Optional port
- D.Alternate port
- E.Designated port

Correct Answer: ADE

QUESTION 131

(Multiple Choice) Which of the following are the advantages of RSTP compared with STP?

- A.A new root port is elected on the non-root switch and the previous old root port is no longer in forwarding state. Moreover the designated port of the segment which connects with the new root port already starts to forward the data. In this case, the new root port can enter forwarding state immediately.
- B.Once a port of the switch which is configured as edge port has been enabled, it will become designated port immediately and transit to forwarding state.
- C.If the designated port is connected with P2MP link, it can make a handshake with the connected bridge and enter the forwarding state immediately after it receives the response.

D.If the designated port is connected with P2P link, it can make a handshake with the connected bridge and enter the forwarding state immediately after it receives the response.

Correct Answer: ABD

QUESTION 132

(Multiple Choice) Which of the following are disadvantages of “single” spanning tree?

- A.Hosts belong to the same VLAN connected to different switches may not be able to communicate each other
- B.Load balancing can not be implemented
- C.Convergence is slow
- D.Sub-optimal path may exist

Correct Answer: ABD

QUESTION 133

(Single Choice) As specified by the RSTP protocol, when a designated port fails, which type of port will function as a new designated port and enters the forwarding state without any delay?

- A.Forwarding Port
- B.Alternate Port
- C.Backup Port
- D.Edge Port

Correct Answer: C

QUESTION 134

(Single Choice) As specified by the RSTP protocol, when a root port fails, which type of port will function as a new root port and enters the forwarding state without any delay?

- A.Forwarding Port
- B.Alternate Port
- C.Backup Port
- D.Edge Port

Correct Answer: B

QUESTION 135

(Single Choice) In the RSTP standard, a port is able to connect to a terminal directly and enter the forwarding state without delay. Which of the following ports represents such a port?

- A. Fast port
- B. Backup port
- C. Root port
- D. Edge port

Correct Answer: D

QUESTION 136

(Single Choice) IGP is the protocol which is used in ()

- A.An area
- B.A LAN
- C.An Autonomous System
- D.Within the range of classful address

Correct Answer: C

QUESTION 137

(Single Choice) Which of the following statements regarding routing protocol is correct?

- A.A protocol that allows the data packets transmitted between hosts.
- B.A method that defines the format and function of the fields for data packet
- C.A protocol that achieves route selection through an algorithm
- D.A protocol that defines the mode and time of the binding of MAC address and IP address

Correct Answer: C

QUESTION 138

(Multiple Choice) Which of the following statements regarding the function of a router are correct?

- A.Connecting same networks.

- B.Segmenting the packet so that the forwarding is easier
- C.Forwarding the packet from one network to another
- D.Addressing

Correct Answer: BCD

QUESTION 139

(Multiple Choice) Which of the following statements regarding the routing table are correct?

- A.The next hop in the routing table is redundant because the outgoing interface can be used for packet forwarding.
- B.The routes from generated by different protocols have different preferences.
- C.The costs of different routing protocols are comparable.
- D.The costs of different routing protocols are not comparable

Correct Answer: BD

QUESTION 140

(Multiple Choice) Which of the following are the sources of the routes in the routing table?

- A.Some routes are generated during the startup of the router.
- B.Some routes are generated according to the data link layer protocol
- C.Some routes are configured manually by the administrator
- D.Some routes are generated by dynamic routing protocols

Correct Answer: BCD

QUESTION 141

(Multiple Choice) Which of the following items are used to select the best route when a router has "multiple" routes to the same destination?

- A.Preference of the route
- B.Advertiser of the route
- C.Cost of the route
- D.TTL of the route

Correct Answer: AC

QUESTION 142

(Multiple Choice) Which of the following protocols are routing protocols?

- A.RIP
- B.OSPF
- C.PPP
- D.IPX

Correct Answer: AB

QUESTION 143

(Multiple Choice) Which of the following statements regarding the route preference are correct?

- A.It is used by RIP and OSPF only
- B.It is used by all routing protocols
- C.It is an important factor for route selection
- D.The default preference value of direct route is 0

Correct Answer: BCD

QUESTION 144

(Single Choice) What do we call the routes in the routing table that have the same cost to the same destination?

- A.Equivalent routes
- B.Sub-optimal routes
- C.Multipath routes
- D.Default routes

Correct Answer: A

QUESTION 145

(Multiple Choice) According to the algorithms, routing protocols fall into two categories. They are ()

- A.IGP
- B.EGP

C.Distance Vector

D.Link-state

Correct Answer: CD

QUESTION 146

(Multiple Choice) Which of the following items are the contents of the routing table?

A.Destination

B.Cost, Interface, and Next hop

C.Node

D.Router

Correct Answer: AB

QUESTION 147

(Single Choice) Each router forwards only the packets received by the local station through the optimal path. The packet is forwarded by different routers on the path in a relay mode.

T. True

F.False

Correct Answer: T

QUESTION 148

(Multiple Choice) A routing table can be formed by using different methods. Which of the following protocols are used to form a routing table?

A.Static routing protocol

B.Dynamic routing protocol

C.Application-level protocol

D.Transport-level protocol

Correct Answer: AB

QUESTION 149

(Multiple Choice) What functions does a router mainly provide?

A.Check the destination address in a datagram.

B.Determine the information source.

C.Discover possible routes.

D.Verify and maintain route information.

Correct Answer: ACD

QUESTION 150

(Multiple Choice) When the value of the proto field of a route in a routing table is direct, it indicates that this route is a ().

A.Route discovered by the protocol at the link layer

B.Port route

C.Direct route

D.Default route

Correct Answer: ABD

QUESTION 151

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

A.A route discovered by a protocol at the link layer need not be maintained.

B.A protocol at the link layer can discover only a route to a loopback address.

C.A protocol at the link layer can discover only a route in a network segment connected directly to a port.

D.A protocol at the link layer can discover only a route across different network segments.

Correct Answer: AC

QUESTION 152

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

A.The calculation method of the preference and cost in the routing table are same.

B.The calculation of cost may be based on "single" link attribute or several link attributes such as delay, hop count, bandwidth and etc.

C. When several dynamic routing protocols have the best routes to the same destination, all these routes will be added to the routing table.

D. Some of the dynamic routing protocols calculate the best path based on the cost value. However, different routing protocols calculate the metric in different ways.

Correct Answer: BD

QUESTION 153

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

A. The preferences for each static routes entry can be different.

B. By default, OSPF is more preferred to RIP.

C. The greater the cost, the better the route is.

D. For those routes to the same destination on VRP platform, the one with higher preference value is more preferred over the one with lower preference value.

Correct Answer: CD

QUESTION 154

(Multiple Choice) Which of the following factors may result in routing loops?

A. Temporary routing loops that occur during route convergence

B. Link-state routing protocol algorithms

C. Loop avoidance information is lost when the routes are imported between two different routing domains

D. Configuration errors

Correct Answer: ACD

QUESTION 155

(Multiple Choice) Routing metric is a value that measures the cost of the route to the designated destination and it is used to calculate the best path. Which of the following factors can affect the metric of a route?

A. Delay/bandwidth

B. Line occupation ratio

C. CPU of the router

D. Hop count

Correct Answer: ACD

QUESTION 156

(Single Choice) What does the distance vector routing protocol focus on according to the discovered routes and calculated routes?

A. The number of hops on between the router and the destination

B. The address of the next hop specified manually

C. Whether the egress port on the route belongs to a port aggregation group

D. Link bandwidth resource information

Correct Answer: A

QUESTION 157

(Single Choice) Equal-cost routes are the routes that have the same ().

A. Cost

B. Priority

C. Egress port

D. Next hop

Correct Answer: A

QUESTION 158

(Single Choice) Each router only knows how to forward the packet to the next hop IP address. It doesn't know the end-to-end forwarding path. This type of forwarding is called ().

A. Hop by hop forwarding

B. Host by host forwarding

C. Router by router forwarding

D. Network by network forwarding

Correct Answer: A

QUESTION 159

(Single Choice) Which of the following is used by routers to forward the packets on the network?

- A.DNS lookups
- B.ARP tables
- C.Routing tables
- D.MAC address tables

Correct Answer: C

QUESTION 160

(Single Choice) Which of the following statements regarding routing convergence is correct?

- A.Convergence is a process that occurs due to network topology changes.
- B.Convergence is a process of establishing neighbor relationships between any two routers by sending hello packets.
- C.Convergence is a process of combining the routing tables of two routers.
- D.Convergence is a process of synchronizing all routing tables for all the routers in the network. It is the process for a router to reach the stable and consistence state after the network changes.

Correct Answer: D

QUESTION 161

(Single Choice) If the optimal path to the destination IP address is unavailable after a change occurs in a network topology, the dynamic routing protocol can make adaptation to this change and determine another optimal path to the destination IP address.

- T.True
- F.False

Correct Answer: T

QUESTION 162

(Single Choice) The data link layer in a router receives a packet from upper layer and the length of the packet is greater than the MTU of the interface that will transmit this packet. What will the router do?

- A.Discard the packet
- B.Fragment the packet
- C.requests the source router to reduce the length of the packet
- D.Forward the packet directly

Correct Answer: B

QUESTION 163

(Single Choice) Characterized by simple configuration and poor scalability, which of the following protocols is based on the Bellman-Ford algorithm and sends a complete routing table to an adjacent router at a certain interval?

- A.Distance vector routing protocol
- B.Link-state routing protocol
- C.Interior gateway protocol
- D.Exterior gateway protocol

Correct Answer: A

QUESTION 164

(Multiple Choice) Which of the following statements regarding routing loops are correct?

- A.Routing loops cause the packets not able to reach the destination and this will result in network congestion.
- B.Route loops are generated by dynamic routing protocols only.
- C.Packets are routed circularly between two or more routers and will be discarded when the TTL becomes 0.
- D.Link state routing protocols will not cause the routing loops.

Correct Answer: AC

QUESTION 165

(Multiple Choice) Which of the following indicators are used to measure the performance of a dynamic routing protocol?

- A.Zero routing loop
- B.Low protocol cost
- C.Number of subnets

D.Route priority

Correct Answer: AB

QUESTION 166

(Multiple Choice) Which of the following statements regarding default route are correct?

A.Default route is more preferred over the specific route

B.Default route is used only when the destination route is not in the routing table

C.Default route can be configured manually.

D.Default route is a special type of dynamic route.

Correct Answer: BC

QUESTION 167

(Single Choice) Assume an internal network has only one route to the external networks, which of the following configurations is better?

A.Default route

B.Host route

C.Dynamic route

D.Direct route

Correct Answer: A

QUESTION 168

(Single Choice) Suppose a gateway is configured in a host running Windows system, which of the following is similar to the configuration on a router?

A.Direct route

B.Default route

C.Dynamic route

D.Host route

Correct Answer: B

QUESTION 169

(Single Choice) After a fault occurs in a network, a static route can be rectified automatically and the network administrator does not need to reconfigure it.

T.True

F.False

Correct Answer: F

QUESTION 170

(Single Choice) Which of the following values is the default preference value for static route on the VRP platform?

A.0

B.20

C.60

D.100

Correct Answer: C

QUESTION 171

(Single Choice) A static route can be either configured manually by a network administrator or generated automatically.

T.True

F.False

Correct Answer: F

QUESTION 172

(Multiple Choice) A command for configuring a static route contains the destination IP address and mask. In which notations can the mask be expressed?

A.Dotted decimal notation

B.Mask size (namely, the number of binary 1s in the mask)

C.Dotted binary notation

D.Dotted hexadecimal notation

Correct Answer: AB

QUESTION 173

(Multiple Choice) Compared to static routing protocol, which of the following are the advantages of dynamic routing protocol?

- A.Low bandwidth consumption
- B.Simple
- C.The router running dynamic routing protocol can detect the changes of the network topology automatically.
- D.The router running dynamic routing protocol can calculate the routes automatically.

Correct Answer: CD

QUESTION 174

(Multiple Choice) Which of the following are the advantages of static routing protocol?

- A.Simple configuration
- BAutomatic routing updates
- C.Enhanced network security
- D.Save the bandwidth

Correct Answer: AD

QUESTION 175

(Multiple Choice) Which of the following are the disadvantages of using static routing protocol in the network?

- A.The configurations are complicated in a large network.
- B.Re-configurations are required after the topology changes
- C.External routers can not learn the static route configuration which will result in network unreachability.
- D.On the VRP platform, load balancing can not be implemented using static route

Correct Answer: AB

QUESTION 176

(Multiple Choice) Two static routes to the 10.1.1.1/32 network are configured on a router. One of the static routes is not assigned with a value for the preference_value parameter; the other static route is assigned with 100 for the preference_value parameter. In this case, which of the following statements are true?

- A.The route not signed with a value for the preference_value parameter functions as the working route.
- B.The route signed with 100 for the preference_value parameter functions as the working route.
- C.A static route supports route backup.
- D.The two static routes work in load sharing mode.

Correct Answer: AC

QUESTION 177

(Single Choice) The information about static routes can be viewed through a router. A backup route is identified as ().

- A.Bypass
- B.Inactive
- C.Backup
- D.Slave

Correct Answer: B

QUESTION 178

(Multiple Choice) Which of the following statements regarding static route are correct?

- A.Default route is a special type of dynamic route
- B.Some of the dynamic routing protocol such as OSPF can generate default routes.
- C.Default route is used when the destination network is not in the routing table.
- D.The network IP and mask of the default route is 0.0.0.0 and 0.0.0.0 respectively.

Correct Answer: BCD

QUESTION 179

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

- A.A route that can be configured manually.
- B.A default route can be only configured manually by a network administrator.

C.A default route is a kind of special static route.

D.A default route can be generated by using a dynamic routing protocol.

Correct Answer: AD

QUESTION 180

(Single Choice) What does a router do after it receives a datagram containing a destination address that is not listed in the routing table?

A.The router matches an OSPF route with the destination address.

B.The router matches an RIP route with the destination address.

C.The router matches a BGP route with the destination address.

D.The router uses the default route.

Correct Answer: D

QUESTION 181

(Single Choice) How is routing information about a default route expressed?

A.The destination IP address is expressed in all 0s and the mask is expressed in all 1s.

B.The destination IP address is expressed in all 1s and the mask is expressed in all 0s.

C.Both the destination IP address and mask are expressed in all 0s.

D.Both the destination IP address and mask are expressed in all 1s.

Correct Answer: C

QUESTION 182

(Single Choice) How many routes at most does a default route on Huawei router support load sharing?

A.0

B.2

C.16

D.32

Correct Answer: D

QUESTION 183

(Single Choice) After a change occurs in a network topology, which of the following routes does not change automatically but changes only after the network administrator updates the change?

A.RIP route

B.OSPF route

C.BGP route

D.Static route

Correct Answer: D

QUESTION 184

(Single Choice) Which of the following routing protocols are the link state routing protocols?

A.RIP

B.BGP

C.IP

D.OSPF

Correct Answer: D

QUESTION 185

(Multiple Choice) Which of the following statements regarding the comparison between OSPF and RIP are correct?

A.OSPF is more appropriate for large networks than RIP.

B.RIP is more appropriate for small networks than OSPF.

C.RIP is more appropriate for flat network design while OSPF is more appropriate for hierarchical network design.

D.In the same network, RIP will consume more bandwidth than OSPF.

Correct Answer: ACD

QUESTION 186

(Multiple Choice) Which of the following statements regarding OSPF are correct?

A.Support CIDR (Classless Inter-Domain Routing)

B.Use the distance vector algorithm

C. Use the triggered updates to immediately notify the neighbors about the topology changes so that the changes are synchronized in the AS.

D. Use the reserved multicast addresses to transmit protocol packets.

Correct Answer: ACD

QUESTION 187

(Multiple Choice) Which of the following statements regarding OSPF are correct?

A. OSPF is an EGP.

B. OSPF calculates the shortest path tree based on the link state information and OSPF itself will not generate the routing loop

C. Supporting authentication of the messages and this enhanced the security

D. Supporting ECMP (Equal Cost Multi-Path)

Correct Answer: BCD

QUESTION 188

(Multiple Choice) Which of the following statements regarding the OSPF router types are incorrect?

A. ABR can be ASBR at the same time.

B. ABR is the router connecting any two OSPF areas and it can be used to transmit the routing information between them.

C. The router inside an OSPF area can not be ASBR.

D. An OSPF router can belong to two or more areas but can be the ABR for a "single" area only.

Correct Answer: BCD

QUESTION 189

(Single Choice) In OSPF protocol, most of the packets are sent by using reserved multicast address and this can reduce the impact on non-OSPF speaking devices.

T. True

F. False

Correct Answer: T

QUESTION 190

(Single Choice) On VRP platform, which of the following is the default route preference value for OSPF routing protocol?

A. 10

B. 1

C. 100

D. 120

Correct Answer: A

QUESTION 191

(Multiple Choice) Which of the following network types are supported by OSPF?

A. Point-to-Point

B. Point-to-Multipoint

C. Bus Topology

D. Broadcast

Correct Answer: ABD

QUESTION 192

(Multiple Choice) In OSPF protocol, an ABR can also function as ()

A. IR (Internal Router)

B. BR (Backbone Router)

C. ASBR

D. Stub Router

Correct Answer: BC

QUESTION 193

(Single Choice) In an OSPF area, routers exchange information about (). This type of information forms an information library.

- A.Link status
- B.Distance vector
- C.Route cost
- D.Route priority

Correct Answer: A

QUESTION 194

(Single Choice) A router with OSPF enabled calculates the shortest route to the destination by using () algorithm.

- A.OSPF
- B.SPF
- C.SRC
- D.OPF

Correct Answer: B

QUESTION 195

(Single Choice) OSPF can generate a loop-free shortest route tree by using a routing protocol algorithm. Thus, the OSPF routing protocol has no loop problem.

- T.True
- F.False

Correct Answer: T

QUESTION 196

(Single Choice) OSPF runs over the IP protocol and the IP protocol No. used by OSPF is ().

- A.89
- B.80
- C.512
- D.2328

Correct Answer: A

QUESTION 197

(Single Choice) OSPF has experienced several versions. Which of the following versions is experimental and has never been deployed?

- A.OSPFv1
- B.OSPFv2
- C.OSPFv3
- D.OSPFv4

Correct Answer: A

QUESTION 198

(Single Choice) Which of the following OSPF versions is specific to the IPv6 technology?

- A.OSPFv1
- B.OSPFv2
- C.OSPFv3
- D.OSPFv4

Correct Answer: C

QUESTION 199

(Multiple Choice) Which of the following statements about the features of the OSPF protocol are true?

- A.The OSPF protocol supports area division.
- B.The OSPF protocol is quick in route convergence when routes change.
- C.The OSPF protocol supports “multiple” equal-cost routes.
- D.The OSPF protocol supports encrypt protocol packets.

Correct Answer: ABC

QUESTION 200

(Multiple Choice) The link state database (LSDB) on an OSPF router is formed based on ().

- A.local LSA
- B.LSA advertised by a neighboring router

- C.RSVP packet advertised to a neighboring router
- D.RSVP packet advertised by a neighboring router

Correct Answer: AB

QUESTION 201

(Single Choice) Each router calculates the shortest path tree based on the LSDB with itself as a () node.

- A.Root
- B.leaf
- C.Specified root
- D.Backup

Correct Answer: A

QUESTION 202

(Multiple Choice) The shortest path tree calculated by a router in an OSPF area provides () on the path from this router to other nodes in the network.

- A.All link states
- B.Routing table
- C.MAC address table
- D.ARP table

Correct Answer: B

QUESTION 203

(Multiple Choice) Which of the following statements about an OSPF neighboring router are true?

- A.An OSPF interface broadcasts Hello packets to discover a neighbor.
- B.After a router receives a Hello packet from the peer router, it becomes the neighbor of the peer router.
- C.After an OSPF router receives a Hello packet from the peer OSPF router, it checks the parameters in the packet. If the parameters in the packet from the peer OSPF router are consistent with the parameters of this OSPF router, the two OSPF routers become neighbors of each other.
- D.Neighbor discovery is equivalent to adjacency establishment.

Correct Answer: AC

QUESTION 204

(Single Choice) Two OSPF routers become neighbors only after they successfully exchange () packets and LSAs.

- A.Hello
- B.DD
- C.LSR
- D.LSU

Correct Answer: B

QUESTION 205

(Single Choice) When two routers synchronize their LSDBs, they use () packets to describe their own LSDBs.

- A.Hello
- B.DD
- C.LSR
- D.LSU

Correct Answer: B

QUESTION 206

(Multiple Choice) In a () network, DRs and BDRs are used to prevent the problem with route convergence at a low speed.

- A.Point-to-point
- B.Broadcast
- C.NBMA
- D.Point-to-multipoint

Correct Answer: BC

QUESTION 207

(Multiple Choice) Which of the following statements regarding Autonomous System Boundary Router are correct?

- A.ASBR is the router that imports the routes calculated by other protocols into OSPF.
- B.ASBR is not always on the border of AS but it can be set anywhere in the AS except Stub area.
- C.ABR can not be ASBR at the same time.
- D.ASBR must belong to two OSPF areas.

Correct Answer: AB

QUESTION 208

(Single Choice) Which of the following statements regarding the routing loop in OSPF is correct?

- A.Routing loop is eliminated within an OSPF area.
- B.Routing loop is not eliminated between two OSPF areas.
- C.Routing loop is not eliminated within an OSPF Autonomous Systems.
- D.No routing loop exists outside the OSPF autonomous system.

Correct Answer: A

QUESTION 209

(Multiple Choice) Which of the following statements regarding OSPF area are incorrect?

- A.Without manual configuration, an OSPF area is a backbone area with area ID 0 by default.
- B.OSPF supports area division.
- C.Every OSPF area is identified by a 32-bit Area ID number.
- D.Area ID must be assigned by IANA and we can not simply assign it.

Correct Answer: AD

QUESTION 210

(Multiple Choice) Which of the following statements regarding adjacencies of OSPF routers are correct?

- A.After two routers have been received the Hello packets from each other, they will form the adjacency automatically.
- B.If two routers are fully adjacent, the network type between them may be Point-to-Point network.
- C.If two routers are fully adjacent, the network type between them may be Point-to-Multipoint network.
- D.If two routers are fully adjacent and the network type between them is broadcast network, then one of routers must be either DR or BDR.
- E.Only two adjacent routers can exchange LSAs.

Correct Answer: BCDE

QUESTION 211

(Single Choice) In broadcast network of OSPF protocol, any two DR Others will neither exchange routing information nor send Hello packet to each other due to the existence of DR.

- T.True
- F.False

Correct Answer: F

QUESTION 212

(Single Choice) OSPF is an application layer protocol and it runs on ()

- A.UDP, port number 520
- B.TCP, port number 179
- C.IP, Protocol Number 89
- D.Data Link layer

Correct Answer: C

QUESTION 213

(Single Choice) OSPF takes the precedence to select () as a router ID unless you specify a router ID manually.

- A.the biggest IP address of all the loopback port addresses
- B.the biggest IP address of the physical port IP addresses
- C.127.0.0.1
- D.the IP address of a port connected to an OSPF neighbor

Correct Answer: A

QUESTION 214

(Single Choice) After OSPF divides an AS into different areas, what is communicated between these areas?

- A.Abstract route information for each area

- B.Link state information for each area
- C.Topology information for each area
- D.Link bandwidth information for each area

Correct Answer: A

QUESTION 215

(Single Choice) A backbone OSPF area is responsible for releasing the information collected by each border router to non-backbone OSPF areas. Which of the following represents the ID of a backbone OSPF area?

- A.area 0
- B.area 1
- C.area 0.0.0.1
- D.area 0.0.0.2

Correct Answer: A

QUESTION 216

(Multiple Choice) Which of the following statements regarding the backbone area in OSPF protocol are correct?

- A.The area ID of the backbone area is 0.0.0.1.
- B.Each area must be connected to the backbone area.
- C.Backbone area is responsible for advertising the aggregated routing information generated by ABR between non-backbone areas.
- D.ABR connects to different areas and at least one of the connected area is backbone area.

Correct Answer: BCD

QUESTION 217

(Single Choice) Assume that a non-backbone area and backbone area can not be directly connected. Which of the following ways can be used to solve this problem?

- A.Configuring ABR
- B.Configuring ASBR
- C.Configuring Virtual-link
- D.Configuring Stub area

Correct Answer: C

QUESTION 218

(Single Choice) presentation [A router runs OSPF and its interface Serial 0 with IP address 10.0.0.1/30 belongs to the backbone area, which of the following commands is used to enable OSPF at this interface?

- A.[Quidway-ospf -1-area-0.0.0.0]network 10.0.0.0
- B.[Quidway-ospf -1-area-0.0.0.0]network 10.0.0.0 0.0.0.3
- C.[Quidway-serial0]ospf area 0 enable
- D.[Quidway-ospf -1]network 10.0.0.0 255.255.255.252

Correct Answer: B

QUESTION 219

(Multiple Choice) In an OSPF network, an ASBR router advertises the information about the routes outside an AS to the AS. Which of the following routers can function as an ASBR?

- A.IR
- B.ABR
- C.A router that belongs to the backbone OSPF area
- D.A router that does not belong to the backbone OSPF area

Correct Answer: BCD

QUESTION 220

(Multiple Choice) Which of the following statements about the configuration of OSPF areas are true?

- A.All non-backbone OSPF areas must be connected to a backbone OSPF area, either physically or logically.
- B.An ABR generates LSDBs separately for backbone OSPF areas and non-backbone OSPF areas.
- C.The same network segment on an ABR must be enabled in both backbone OSPF areas and non-backbone OSPF areas.
- D.An ABR generates a uniform LSDB for all OSPF areas.

Correct Answer: AB

QUESTION 221

(Multiple Choice) What advantages does hierarchical routing defined by OSPF have?

- A.Extend the interval of SPF calculation.
- B.Decrease the size of a routing table.
- C.Reduce the number of link state update packets.
- D.Reduce the number of network layers.

Correct Answer: ABC

QUESTION 222

(Multiple Choice) OSPF routers are classified into four types. Which of the following statements about interior routers (IRs) are true?

- A.The ports on an IR belong to a same area.
- B.An IR is located in the center of a physical area.
- C.Only one port on an IR connects to a backbone area.
- D.If all the ports on an IR belong to area 0, this IR functions as a backbone router.

Correct Answer: AD

QUESTION 223

(Multiple Choice) Which of the following areas fall into the OSPF area group?

- A.Standard area
- B.Stub area
- C.Totally stubby area
- D.Boundary area

Correct Answer: ABC

QUESTION 224

(Multiple Choice) Which of the following statements about the functions of an ABR are true?

- A.An ABR is a gateway in the case of communication between different areas.
- B.An ABR collects the topology information about an area that is connected to the ABR and sends the information to the backbone area.
- C.An ABR maintains one LSDB for every area connected to the ABR.
- D.An ABR provides at least two port for connecting to a backbone area.

Correct Answer: ABC

QUESTION 225

(Single Choice) Which of the following is the metric of OSPF?

- A.Number of hops
- B.COST
- C.Priority
- D.LSA

Correct Answer: B

QUESTION 226

(Multiple Choice) Each OSPF router floods LSAs to advertise link status information, including ().

- A.Ports
- B.Available neighbors
- C.Information about adjacent network segments
- D.Local link status information

Correct Answer: BCD

QUESTION 227

(Single Choice) According to the OSPF protocol, a router floods LSAs. In this context, what does "flood" mean?

- A.An action sending a link state database
- B.An action synchronizing a link state database
- C.An action sending and synchronizing a link state database
- D.An action deleting a link state database from a port

Correct Answer: C

QUESTION 228

(Multiple Choice) Which of the following statements about the information contained in a DD packet are true?

- A.A DD packet contains all information about each LSA.
- B.A DD packet contains only the header of an LSA.
- C.The header of an LSA is the unique identifier of the LSA.
- D.The header of an LSA is only a small portion of all the data of the LSA.

Correct Answer: BCD

QUESTION 229

(Single Choice) Which of the following is the abbreviation for DHCP?

- A.Dynamic Host Configuration Protocol
- B.Dynamic Host Connection Protocol
- C.Dynamic Hot Connection Protocol
- D.Denial Host Configuration Protocol

Correct Answer: A

QUESTION 230

(Single Choice) Which layer of OSI reference model does DHCP belong to?

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

Correct Answer: D

QUESTION 231

(Single Choice) What is the main function of DNS?

- A.Sender
- B.Receiver
- C.Harddisk
- D.Message
- E.Protocol

Correct Answer: A

QUESTION 232

(Single Choice) What is the underlying protocol used by DHCP to send messages?

- A.TCP
- B.UDP
- C.RTP
- D.SIP

Correct Answer: B

QUESTION 233

(Single Choice) In Window XP system, which of the following commands is used to release the IP address assigned by the DHCP Server?

- A.ipconfig /all
- B.ipconfig /renew
- C.ipconfig /release
- D.ipconfig

Correct Answer: C

QUESTION 234

(Multiple Choice) Which of the following protocols can be used for file transfer?

- A.FTP
- B.TFTP
- C.Telnet
- D.lcmp

Correct Answer: AB

QUESTION 235

(Single Choice) Which of the following protocols is transport layer protocol of TFTP?

- A.SIP
- B.UDP
- C.TCP
- D.RTP

Correct Answer: B

QUESTION 236

(Single Choice) Which of the following is an attribute of file transferred by using FTP?

- A.Low speed
- B.High throughput
- C.Simple
- D.Read-only memory

Correct Answer: B

QUESTION 237

(Multiple Choice) TFTP can control a TFTP user according to the user name and password.

- T.True
- F.False

Correct Answer: T

QUESTION 238

(Single Choice) By default, which port is used by the FTP server to establish the data connection?

- A.20
- B.21
- C.23
- D.25

Correct Answer: A

QUESTION 239

(Single Choice) FTP session consists of two types of connections, they are()

- A.Output connection
- B.Input connection
- C.Control connection
- D.Data connection

Correct Answer: CD

QUESTION 240

(Multiple Choice) Which of the following applications are based on the TCP protocol?

- A.PING
- B.FTP
- C.TELNET
- D.OSPF

Correct Answer: BC

QUESTION 241

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

- A.FTP is based on the UDP protocol.
- B.FTP is used to provide low-speed file transfer.
- C.TFTP can control an FTP user according to the login name and password.
- D.A router can work as either an FTP Client or an FTP Server.

Correct Answer: CD

QUESTION 242

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

- A.TFTP is based on the UDP protocol.

- B.TFTP is a simple file transfer protocol and applicable to read-only memory.
- C.TFTP can control a TFTP user according to the login name and password.
- D.TFTP supports only the Client mode.

Correct Answer: ABD

QUESTION 243

(Multiple Choice) Which of the following protocols or applications are based on UDP?

- A.FTP
- B.TFTP
- C.SNMP
- D.Telnet

Correct Answer: BC

QUESTION 244

(Single Choice) Which port number does Telnet uses for protocol transmission?

- A.23
- B.24
- C.8080
- D.48

Correct Answer: A

QUESTION 245

(Single Choice) Which transport-level protocol does Telnet use?

- A.TCP
- B.UDP
- C.ECMP
- D.UCMP

Correct Answer: A

QUESTION 246

(Single Choice) Which of the following port numbers is used by Telnet?

- A.23
- B.25
- C.27
- D.29

Correct Answer: A

QUESTION 247

(Single Choice) What is the underlying protocol used by Telnet to transmit data?

- A.RTP
- B.SIP
- C.UDP
- D.TCP

Correct Answer: D

QUESTION 248

(Multiple Choice) Compared with telnet, which of the following advantages does SSH support?

- A.Encrypt the transmitted data to guarantee its security and reliability
- B.Prevent DNS and IP spoofing
- C.Accelerate the data transmission speed by compressing the data
- D.Scalable application based on UDP connection

Correct Answer: ABC

QUESTION 249

(Multiple Choice) Which of the following protocols or applications are based on TCP?

- A.FTP
- B.DNS
- C.SNMP

D.Telnet

Correct Answer: ABD

QUESTION 250

(Single Choice) Which of the following commands is used to check whether an application-level protocol works normally?

A.PING

B.TRACE

C.Extended ping

D.TELNET

Correct Answer: D

QUESTION 251

(Single Choice) On a non-broadcast network, OSPF has two operating modes: NBMA and P2MP.

A. True

B. False

Correct Answer: A

QUESTION 252

(Single Choice) Which statement about ARP proxy is false?

A. The ARP proxy, namely, the gateway, sends ARP request for the host. The MAC address in the ARP request packet is the MAC address of the host.

B. The ARP proxy, namely, the gateway, sends ARP request for the host. The MAC address in the ARP request packet is the MAC address of its own interface.

C. ARP proxy is also called promiscuous ARP or ARP hack.

D. The ARP proxy allows the hosts on the networks with the same network ID to communicate with each other.

Correct Answer: A

QUESTION 253

(Single Choice) If the Router Priority of a router is set to 0, this router cannot be elected as a DR or a BDR.

A. True

B. False

Correct Answer: A

QUESTION 254

(Single Choice) Which statement about OSPF is false?

A. The router with a higher Router Priority also has a higher DR election priority.

B. When two routers have the same Router Priorities, the router with a larger Router ID has a higher DR election priority.

C. If a DR fails, the BDR automatically takes over as the DR and a new BDR is elected.

D. If a BDR fails, the DR will not take over as the BDR and awaits the fault recovery of the BDR. No new BDR will be elected.

Correct Answer: D

QUESTION 255

(Multiple Choice) What are the OSPF message types?

A. Hello

B. Database Description

C. Link State Request

D. Link State Update

E. Link State Advertisement

Correct Answer: ABCD

QUESTION 256

(Multiple Choice) Which of the following statements regarding the route preference are correct?

A.It is used by RIP and OSPF only

B.It is used by all routing protocols

C.It is an important factor for route selection

D.The default preference value of direct route is 0

Correct Answer: BCD

QUESTION 257

(Multiple Choice) Which of the following statements regarding default route are correct?

- A.Default route is more preferred over the specific route
- B.Default route is used only when the destination route is not in the routing table
- C.Default route can be configured manually.
- D.Default route is a special type of dynamic route.

Correct Answer: BC

QUESTION 258

(Multiple Choice) Which of the following indicators are used to measure the performance of a dynamic routing protocol?

- A.Zero routing loop
- B.Low protocol cost
- C.Number of subnets
- D.Route priority

Correct Answer: AB

QUESTION 259

(Multiple Choice) Two static routes to the 10.1.1.1/32 network are configured on a router. One of the static routes is not assigned with a value for the preference_value parameter; the other static route is assigned with 100 for the preference_value parameter. In this case, which of the following statements are true?

- A.The route not signed with a value for the preference_value parameter functions as the working route.
- B.The route signed with 100 for the preference_value parameter functions as the working route.
- C.A static route supports route backup.
- D.The two static routes work in load sharing mode.

Correct Answer: AC

QUESTION 260

(Multiple Choice) Two static routes to the 10.1.1.1/32 network are configured on a router. One of the static routes is not assigned with a value for the preference_value parameter; the other static route is assigned with 100 for the preference_value parameter. In this case, which of the following statements are true?

- A.The route not signed with a value for the preference_value parameter functions as the working route.
- B.The route signed with 100 for the preference_value parameter functions as the working route.
- C.A static route supports route backup.
- D.The two static routes work in load sharing mode.

Correct Answer: AC

QUESTION 261

(Multiple Choice) Which of the following statements regarding static route are correct?

- A.Default route is a special type of dynamic route
- B.Some of the dynamic routing protocol such as OSPF can generate default routes.
- C.Default route is used when the destination network is not in the routing table.
- D.The network IP and mask of the default route is 0.0.0.0 and 0.0.0.0 respectively.

Correct Answer: BCD

QUESTION 262

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

- A.A route that can be configured manually.
- B.A default route can be only configured manually by a network administrator.
- C.A default route is a kind of special static route.
- D.A default route can be generated by using a dynamic routing protocol.

Correct Answer: AD