

1. Various profiles are designed to facilitate the configuration and maintenance of WLAN functions and features. Which of the following statements about these profiles is false?



- A. VAP profiles provide differentiated WLAN services for users.
- B. Regulatory domain profiles provide configurations of the country code, calibration channel set, and calibration bandwidth for APs.
- C. Only security profiles and SSID profiles can be bound to VAP profiles.
- D. Radio profiles are used to optimize radio parameters and control the in-service channel switching function.



3. The following shows the routing table of a specific router:

Destination/Mask	Proto	Pre	Cost	Flags	NextHop	Interface
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172.16.1.0/24	OSPF	10	200	D	192.168.1.2	GigabitEthernet0/0/0
---------------	------	----	-----	---	-------------	----------------------

172.16.0.0/16	Static	5	0	RD	192.168.1.2	GigabitEthernet0/0/0
---------------	--------	---	---	----	-------------	----------------------

172.16.1.0/22	Static	80	0	RD	192.168.1.2	GigabitEthernet0/0/0
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When data needs to be sent to the destination 172.16.1.1 through this router, which of the following routes is used?

A. Static route 172.16.0.0/16 with a preference of 5 and cost of 0

B. OSPF route 172.16.1.0/24 with a preference of 10 and cost of 200

C. Static route 172.16.1.0/22 with a preference of 80 and cost of 0

D. Both static routes because their cost values are the same

5. What is the length range of an Ethernet frame?

- A. 64 to 1500 bytes
- B. 46 to 1500 bytes
- C. 64 to 1518 bytes
- D. 46 to 1518 bytes



6. In STP, which of the following values cannot be set as the bridge priority?



- A. 8192
- B. 0
- C. 22528
- D. 16384



7. Which of the following commands can be used to check OSPF LSDB information on a Huawei device?



- A. display ospf brief
- B. display ospf lsdb
- C. display ospf routing
- D. display ospf peer

8. The establishment of an OSPF adjacency between devices involves four steps. Which of the following statements about these steps is true?



-  A. The devices negotiate the master/slave relationship, exchange LSAs, establish bidirectional neighbor relationships, update LSAs, and synchronize their LSDBs.
- B. The devices negotiate the master/slave relationship, establish bidirectional neighbor relationships, exchange LSAs, update LSAs, and synchronize their LSDBs.
-  C. The devices establish bidirectional neighbor relationships, negotiate the master/slave relationship, exchange LSAs, update LSAs, and synchronize their LSDBs.
- D. The devices exchange LSAs, negotiate the master/slave relationship, establish bidirectional neighbor relationships, update LSAs, and synchronize their LSDBs.



11. Which of the following is not a valid port role in RSTP?



- A. Designated port
- B. Root port
- C. Backup port
- D. Forwarding port

12. The Point-to-Point Protocol (PPP) is a common data link layer protocol for wide area networks (WANs). Which of the following statements about PPP is false?

A. PPP supports the Password Authentication Protocol (PAP) and Challenge-Handshake Authentication Protocol (CHAP).

B. If PPP uses password authentication mode, negotiation packets are transmitted in plain text, which is insecure.

C. PPP uses the Link Control Protocol (LCP) to negotiate link control layer parameters.

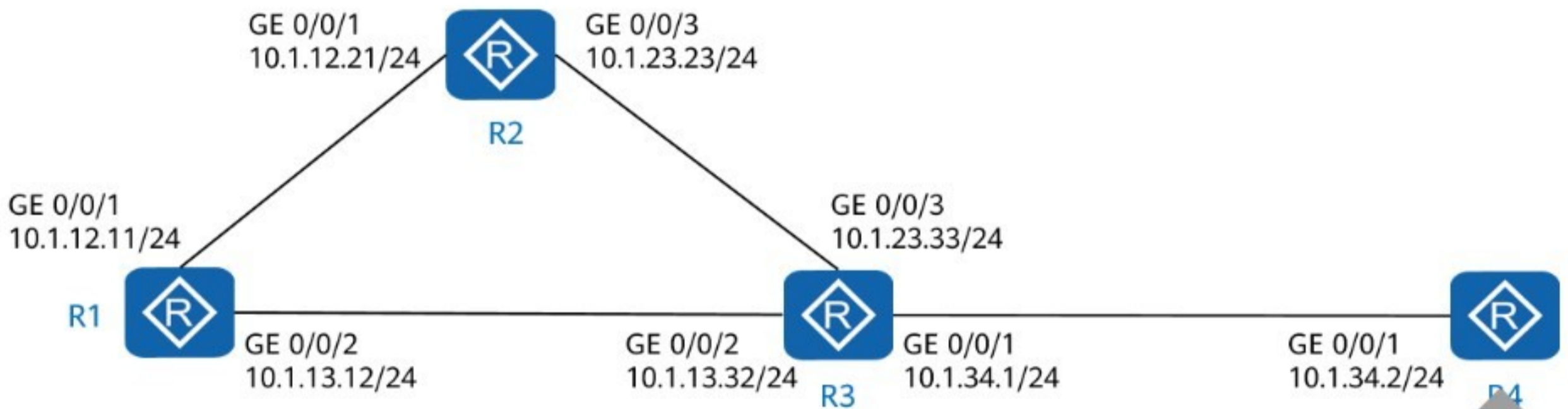
D. The establishment of a PPP link goes through three phases: link layer negotiation, network layer negotiation, and authentication.

13. In which of the following modes are DHCP Discover messages sent?



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

16. As shown in the following networking, the interfaces connecting R1, R2, R3, and R4 are running OSPF, and are all in area 0. On R1, a static route to the network segment 10.1.34.0/24 is configured using the ip route-static 10.1.34.0 24 10.1.13.32 command. Which of the following statements is true?



A. The routing table of R1 contains only the OSPF route to the network segment 10.1.34.0/24, and the next hop of the route is 10.1.13.32.



B. The routing table of R1 contains both the static route and OSPF route to the network segment 10.1.34.0/24.

- C. The routing table of R1 contains the OSPF route to the network segment 10.1.34.0/24, and the next hop of the route is 10.1.12.21.
- D. The routing table of R1 contains only the static route to the network segment 10.1.34.0/24.



18. What is the valid VLAN ID range?

- A. 1 to 4095
- B. 0 to 4094
- C. 1 to 4094
- D. 0 to 4095



19. Which of the following lists the correct protocol layers of the TCP/IP reference model from bottom to top?



- A. Physical layer, data link layer, network layer, transport layer, and application layer
- B. Application layer, transport layer, network layer, data link layer, and physical layer
- C. Application layer, presentation layer, session layer, transport layer, network layer, data link layer, and physical layer
- D. Physical layer, data link layer, network layer, transport layer, session layer, presentation layer, and application layer



25. The Versatile Routing Platform (VRP) uses the file system to manage files and directories on a device. Which of the following commands can be used to check the current directory of a device?



- A. pwd
- B. dir
- C. display dir
- D. ls

26. OSPF is configured on RTA, RTB, and RTC. Gigabit Ethernet 0/0/0 interfaces of these routers belong to area 0 and the network types of these interfaces are broadcast. The router ID of RTA is 1.1.1.1, and the DR priority of GigabitEthernet 0/0/0 on RTA is set to 0. The router ID of RTB is 2.2.2.2, and the DR priority of GigabitEthernet 0/0/0 on RTB is set to 255. The router ID of RTC is 3.3.3.3, and the DR priority of GigabitEthernet 0/0/0 on RTC is the default value.

Which of the following statements is true about the DR and BDR on the network?

A. RTB functions as the DR, and RTA as the BDR.

B. RTB functions as the DR, and RTC as the BDR.

C. RTA functions as the DR, and RTB as the BDR.

D. RTC functions as the DR, and RTB as the BDR.

28. A router has the following four specific routes:

```
ip route-static 10.1.20.0 24 12.1.1.2
```

```
ip route-static 10.1.21.0 24 12.1.1.2
```

```
ip route-static 10.1.22.0 24 12.1.1.2
```

```
ip route-static 10.1.23.0 24 12.1.1.2
```

To summarize these specific routes, which of the following commands should be run?

A. ip route-static 10.1.20.0 23 12.1.1.2

B. ip route-static 10.1.20.0 22 12.1.1.2

C. ip route-static 10.1.0.0 16 12.1.1.2

D. ip route-static 10.1.16.0 21 12.1.1.2



29. A WLAN is constructed using wireless technologies. Which of the following statements about the WLAN networking is false?



- A. A virtual access point (VAP) is a service entity virtualized on an AP. All VAPs virtualized on the same AP has the same BSSID.
- B. The basic service set identifier (BSSID) identifies a wireless network and is represented using the MAC address of an AP.
- C. A basic service set (BSS) indicates an area covered by an AP.
- D. The service set identifier (SSID) identifies a wireless network and is represented using a character string.



1. Which of the following statements is true about APs in WLAN networking?

- A. Fat APs need to work with an AC and are managed and configured by the AC in a unified manner.
- B. Fit APs can independently implement functions such as wireless user access, service data encryption, and service data packet forwarding.
- C. An AC must be deployed in WLAN networks.
- D. Typically, APs use PoE power to facilitate deployment.

2. The following shows partial OSPF neighbor information for a specific router:

OSPF Process 1 with Router ID 10.1.1.3

Neighbors

Area 0.0.0.0 interface 10.1.1.3(GigabitEthernet0/0/0)'s neighbors

Router ID: 10.1.1.1 Address: 10.1.1.1

State: Full Mode:Nbr is Slave Priority: 1

DR: 10.1.1.5 BDR: 10.1.1.1 MTU: 0

Dead timer due in 35 sec

Retrans timer interval: 5

Neighbor is up for 00:02:01

Authentication Sequence: [0]

Which of the following statements is false?

A. The preceding information is about the neighbor relationship of the router and BDR router.

B. The router ID of the OSPF process on the router is 10.1.1.3.

C. The router is a DR-other router.

D. The router is the slave router in the master-

3. The MAC address table of a switch is as follows:

00-01-02-03-04-AA G0/0/1

00-01-02-03-04-CC G0/0/3

A data frame with the destination MAC address 00-01-02-03-04-BB is received on G0/0/1, and another data frame with the destination MAC address 00-01-02-03-04-CC is received on G0/0/3. How does the switch process the two data frames?

- A. Forwards the first frame and discards the second frame.
- B. Floods the first frame and forwards the second frame.
- C. Floods the first frame and discards the second frame.
- D. Forwards the first frame and floods the second frame.

4. Refer to the following configuration on a Huawei router.

```
<huawei>system-view
```

```
[huawei]user-interface maximum-vty 7
```

Which of the following statements is true?

- A. If a user forgets the system login password, the user will be locked out after seven consecutive failed login attempts.
- B. The router allows a maximum of seven users to log in concurrently through the asynchronous serial port.
- C. The router allows a maximum of seven users to log in concurrently through the console port.
- D. The router allows a maximum of seven users to log in concurrently through Telnet.

5. Which of the following states indicates that the neighbor relationship is stable between OSPF-enabled DR-other routers on a broadcast network?

A. Two-way

B. Down

C. Loading

D. Full

6. An IPv6 address is 128 bits long. Typically, an IPv6 address is represented by eight groups of 16-bit hexadecimal values separated by colons (:). Which of the following statements about IPv6 addresses is false?

- A. The IPv6 address with the prefix FE80::/10 is a link-local address (LLA).
- B. There may be ULA conflicts in a global scope.
- C. Each IPv6 interface must have a unique local address (ULA).
- D. A global unicast address (GUA) is globally unique.

7. NTP is a network protocol used to synchronize computer clocks with an NTP server. Which of the following statements about NTP is false?

- A. The master time server directly synchronizes with the standard reference clock through cables or radio signals.
- B. NTP is a network layer protocol in the TCP/IP protocol suite.
- C. The stratum indicates the hierarchy for clock synchronization. The value 1 indicates the highest clock precision.
- D. NTP packets are transmitted through UDP.

8. Refer to the following ACL configuration on a device. Which of the following statements is true?

```
#
```

```
time-range satime 08:00 to 17:30 working-day
```

```
#
```

```
acl number 3002
```

```
rule 5 permit ip source 10.164.2.0 0.0.0.255 destination 10.164.9.9 0.0.0.255 time-range satime
```

- A. The ACL rule takes effect only on working days.
- B. This ACL is a basic ACL according to the ACL classification rules.
- C. All packets with the source IP addresses on the network segment 10.164.2.0/24 will be permitted by the device.
- D. This ACL is a user ACL according to the ACL classification rules.

9. In the same Ethernet network segment, five routers are running OSPF for interconnection. When the protocol status of all routers is stable, which of the following statements is true?

- A. The neighbor status of all routers is Full.
- B. The neighbor status of a router on the network can only be Full or 2-way.
- C. The neighbor relationship between a DR router and another router can be Full or 2-way.
- D. There are routers of which all neighbor relationships are in 2-way state on the network.

10. Which of the following statements is false about Control and Provisioning of Wireless Access Points (CAPWAP)?

- A. CAPWAP transmits two types of messages at the transport layer: service data traffic and management traffic.
- B. When tunnel forwarding is used, an AP exchanges data with an AC through a CAPWAP tunnel.
- C. CAPWAP is an application layer protocol based on TCP.
- D. CAPWAP is used to maintain the connectivity between APs and an AC.

11. Dynamic routing protocols can be classified into Interior Gateway Protocol (IGP) and Exterior Gateway Protocol (EGP) according to their working area. Which of the following protocols is an EGP?

- A. RIP
- B. BGP
- C. OSPF
- D. IS-IS

12. SNMP is used to manage network devices. Refer to the following SNMP configuration on a Huawei device. Which of the following statements is false?

```
[~HUAWEI] display current-configuration | include snmp
```

```
snmp-agent
```

```
snmp-agent local-engineid 800007DB03001974593301
```

```
snmp-agent sys-info version v3
```

```
snmp-agent mib-view included iso-view iso
```

```
snmp-agent group v3 v3group privacy read-view iso-view write-view iso-view notify-view iso-view
```

```
snmp-agent usm-user v3 v3user
```

```
snmp-agent usm-user v3 v3user group v3group
```

```
snmp-agent usm-user v3 v3user authentication-mode sha cipher %^%#&Ygn:NzQw;d>f=2+aJ;;=B\IM^"P1Hf/{L$F9UW@%^%#
```

```
snmp-agent usm-user v3 v3user privacy-mode aes256 cipher %^%#Gc!*FAB;vL5_[a#9q9i7:*lj;q#<P8MOf8@PJMJO%^%#
```

- A. SNMPv3 is configured.
- B. The v3user user can access nodes in the subtree with iso as the root node.
- C. The encryption mode of the v3user user is SHA.
- D. SNMP packets will be encrypted using AES256.

13. OSPF authentication enables a device to encrypt OSPF packets by adding an authentication field to the packets, ensuring network security. Which of the following statements about OSPF authentication is false?

- A. Interface authentication is configured in the interface view and applies to all the packets received on the interface.
- B. Area authentication applies to the packets received on all the interfaces in a specific area.
- C. OSPF authentication is classified into area authentication and interface authentication.
- D. The authentication modes of two OSPF neighbors must be the same, that is, both of them either use interface authentication or use area authentication.

14. Which of the following statements about STP and RSTP is false?

- A. RSTP converges faster than STP.
- B. There are five STP port states: Forwarding, Learning, Listening, Blocking, and Disabled.
- C. RSTP is backward compatible with STP.
- D. There are three RSTP port states: Forwarding, Learning, and Blocking.

15. Mastering the basic operations of the file system is crucial for network engineers to efficiently manage the configuration files and VRP system files of devices. Which of the following statements is true about these files?

- A. System software is mandatory for device startup and running. The common file name extension is .cfg.
- B. A patch file is a type of software compatible with the system software. The common file name extension is .zip.
- C. A PAF file effectively controls product features and resources. The common file name extension is .bin.
- D. A configuration file stores configuration commands. The common file name extension is .cc.

17. Which of the following statements about Fit AP+ AC networking is true?

- A. The tunnel forwarding mode can reduce the forwarding pressure on the AC.
- B. A data tunnel and a control tunnel will be established between the AC and Fit AP.
- C. The AP version can be upgraded through HTTP.
- D. After a CAPWAP tunnel is established between the AC and Fit AP, keepalive packets are used to detect the status of the CAPWAP tunnel.

18. When a ping command is run on a network device to check the network connectivity, which type of packet will be sent by the network device?

A. IGMP

B. UDP

C. ICMP

D. TCP

16. Network Address Translation (NAT) translates the IP address in an IP packet header into another IP address. Which of the following is not an advantage of NAT?

- A. Effectively preventing attacks from external networks and greatly improving network security
- B. Alleviating the exhaustion of IP addresses
- C. Implementing accurate identification and control of packet flows on networks to control network access behavior, prevent network attacks, and improve network bandwidth efficiency
- D. Allowing the access of intranet hosts to external networks and the access of external hosts to intranets, and enabling communication between intranets and external networks

19. How many bytes does an MPLS label contain?

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

20. Refer to the following AAA configuration on a device. Which of the following statements is true?

```
[R1-aaa]display this
```

```
[V200R003C00]
```

```
#
```

```
aaa
```

```
authentication-scheme default
```

```
authorization-scheme default
```

```
accounting-scheme default
```

```
domain default
```

```
domain default_admin
```

```
local-user huawei password cipher %$%$m]GrHm
```

```
J1mL[7&zCh^XQBUII]%$%$
```

```
local-user huawei privilege level 0
```

```
local-user huawei service-type telnet
```

```
#
```

- A. The authorization scheme is default and the authorization mode is non-authorization.
- B. The authentication mode is local authentication.
- C. The huawei user can log in to the device through SSH.
- D. The huawei user can run the display current-configuration command.

21. The ping and traceroute commands are used to check the network status. Which of the following statements about the ping and traceroute commands is false?

- A. The ping command can be used to check connectivity to a destination address.
- B. The source IP address of packets to be sent can be specified in the traceroute command.
- C. The traceroute command can be used to check the gateways that packets pass through before reaching the destination.
- D. The ping -s source-ip-address destination-ip-address command is used to specify the source and destination IP addresses of ICMP Echo Request packets.

22. An AC manages and controls APs in a centralized manner through CAPWAP tunnels. An AP sends a Discovery Request packet to find an available AC. Which of the following methods cannot be used by an AP to discover an AC?

A. Multicast

B. DNS

C. Static configuration (manually specifying an AC)

D. DHCP

23. Which is the most widely used VLAN assignment method?

- A. MAC address-based VLAN assignment
- B. Protocol-based VLAN assignment
- C. IP subnet-based VLAN assignment
- D. Interface-based VLAN assignment

24. The process for an AP to go online is as follows: The AP sends a Join Request packet to an AC, which then authenticates the AP after receiving the packet. The AP gets managed after being successfully authenticated. Which of the following AP authentication methods is not supported by an AC?

- A. Serial number authentication
- B. Password authentication
- C. Non-authentication
- D. MAC address authentication

25. IPv6 addresses can be classified into three types based on IPv6 address prefixes. Which of the following is not an IPv6 address type?

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

26. OSPF has multiple types of protocol packets. These packets play different roles in the interaction between OSPF routers. Which of the following packets describes summary information about the local LSDB and is used to synchronize the LSDBs of two routers?

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

27. The Domain Name System (DNS) protocol is used to resolve domain names to IP addresses. Which of the following statements about DNS is false?

- A. DNS supports traversal query.
- B. A domain name can be used to identify a host.
- C. A DNS server maintains the database that stores the mappings between domain names and IP addresses and responds to the requests from the resolver.
- D. DNS supports recursive query.

28. Which of the following is not a method for an AP to discover an AC address?

- A. Static configuration
- B. DHCP
- C. OSPF
- D. Broadcast
- E. DNS

29. What is the network ID for the IP address 192.168.1.1/29?

A. 192.168.1.7

B. 192.168.1.4

C. 192.168.1.255

D. 192.168.1.0

30. Which of the following statements about BPDUs in STP is false?

- A. TCN BPDUs are triggered only when the network topology changes.
- B. A configuration BPDU contains parameters such as the bridge ID, path cost, and port ID.
- C. When the network topology becomes stable, all switches proactively send configuration BPDUs.
- D. BPDUs are classified into configuration BPDUs and TCN BPDUs.

32. Which of the following are possible causes for an AP's failure to go online?



- A. PoE parameters are incorrectly configured on the PoE switch to which the AP is connected.
- B. Network cables are not properly connected.
- C. The link between the AC and AP is not established.
- D. The AC version does not match the AP version.



33. The route preference is an indicator used by a router to compare routes of different routing protocols. Which of the following statements are true about the default preference of common routes?

- A. The default preference of a static route is 60.
- B. The default preference of an OSPF external route is 255.
- C. The default preference of a direct route is 0.
- D. The default preference of an OSPF internal route is 10.

37. In contrast with SNMPv1, which of the following operations are newly added to SNMPv2c?



- ~~A. SetRequest~~
- B. GetBulkRequest
- ~~C. GetNextRequest~~
- D. InformRequest

39. A host at 192.168.1.1/24 on an intranet wants to access a server at 160.131.20.1 on a public network. Refer to the following configuration on a gateway router:

```
[RTA]interface GigabitEthernet 0/0/0
```

```
[RTA-GigabitEthernet0/0/0]nat outbound 2000
```

Which of the following statements are true?

A. The administrator configures Easy IP.

B. The administrator configures the NAT Server.

C. The address 192.168.1.1 will be translated into the public network address of the interface GigabitEthernet 0/0/0 on the gateway router.

D. The address 192.168.1.1 will be translated into a public IP address in a public address pool.

43. PPP over Ethernet (PPPoE) is a link layer protocol that encapsulates PPP frames into Ethernet frames. Which of the following statements about PPPoE are true?



- A. A PPPoE client broadcasts a request for the required service information.
- B. A PPPoE client can terminate a PPPoE session in unicast mode.
- C. PPPoE session establishment involves three stages: PPPoE discovery, session, and termination.
- D. PPPoE is often used by home users and enterprise users to dial up for Internet access.



44. Which of the following statements about IP addresses and MAC addresses are true?



- A. IP addresses are assigned based on the network topology.
- B. MAC addresses are unchangeable.
- C. IP addresses are unchangeable.
- D. MAC addresses are assigned based on vendors.

45. For the IPv6 address 2000:002A:0000:0000:0000:000A:020C:023D, which of the following comply with the IPv6 address abbreviation rules?



A. 2000:2A::A:2C:23D

B. 2000:2A:0:0:0:A:2C:23D

C. 2000:2A::A:20C:23D

D. 2000:2A:0:0:0:A:20C:23D

47. Which of the following statements about Layer 2 hybrid ports are true?



A. When a tagged frame needs to be sent from a Layer 2 hybrid port of a switch and the VID in the tag of the frame is in the untagged VLAN ID list, the port removes the tag from the frame and then sends the untagged frame out on the link.



B. When receiving an untagged frame on a link, a Layer 2 hybrid port adds a tag with the VID as its PVID to the frame and then forwards the frame.



C. When a tagged frame needs to be sent from a Layer 2 hybrid port of a switch and the VID in the tag of the frame is in the tagged VLAN ID list, the port sends the frame out on the link without removing the tag from the frame.



D. After receiving a tagged frame on a link, a Layer 2 hybrid port checks whether the VID in the tag of the frame is in the tagged or untagged VLAN ID list. If not, the port discards the frame.

48. A router can advertise default routes in an OSPF area. Which of the following statements about OSPF default route advertisement are false?



A. After learning the default route advertised by the router, other routers in the same OSPF area as the router will add this route to their routing tables.

B. If there is no default route on the local device, the default-route-advertise always command can be run to advertise a default route in an OSPF area.

C. The default-route-advertise command can be used to advertise a default route in an OSPF area only when the default route exists on the local device.

D. The preference of the advertised default route in the routing table is 10.

31. Which of the following statements about static and dynamic routes are true?

- A. Dynamic routing protocols can be classified into distance-vector routing protocols and link-state routing protocols based on their working mechanism and routing algorithms.
- B. Dynamic routing protocols can automatically discover and generate routes and are more suitable for large-scale networks.
- C. Static routes have low requirements on the system and are applicable to simple, stable, and small-sized networks.
- D. When creating a static route, you must specify both the outbound interface and next hop.

32. Which of the following are valid MAC address types?

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

33. A WLAN is a network that uses wireless signals such as radio waves, lasers, and infrared rays to replace the traditional media used for transmission on a wired LAN. Which of the following devices are commonly used on a WLAN?

- A. Wireless access controller (AC)
- B. Cloud AP
- C. Fat AP
- D. Fit AP

34. When troubleshooting a spanning tree network fault, an administrator obtains the spanning tree status information of interface GE0/0/1 on a switch, shown as follows:

```
---[Port1 (GigabitEthernet0/0/1)][FORWARDING]---
```

```
-
```

Port Protocol :Enabled

Port Role :Designated Port

Port Priority :128

Port Cost(Dot1T) :Config=100 / Active=100

Designated Bridge/Port :32768.4c1f-cc4f-26df / 128.1

Port Edged :Config=default / Active=disabled

Point-to-point :Config=auto / Active=true

Transit Limit :147 packets/hello-time

Protection Type :None

Port STP Mode :STP

Which of the following statements are true?

- A. The standard for calculating the path cost of the port is legacy standard.
- B. The administrator has changed the path cost of the port by running the `stp path cost` command.
- C. The default priority of the switch running the spanning tree protocol is 32767.
- D. The switch uses the default priority.

35. A WLAN is constructed using wireless technologies. Which of the following are wireless network types based on the application scope?

- A. WPAN
- B. WWAN
- C. WLAN
- D. WMAN

36. The concept of Network Functions Virtualization (NFV) was proposed by a group of network service providers to solve problems such as too much telecom network hardware, complex deployment and O&M, and difficult service innovation. Which of the following components are included in the standard NFV architecture?

- A. NFVI
- B. VNF
- C. OS
- D. MANO

37. Refer to the following configuration on the VTY user interface 0. When a user logs in to the system through VTY 0, which of the following statements are true?

```
<HUAWEI> system-view
```

```
[~HUAWEI] user-interface vty 0
```





```
[~HUAWEI-ui-vty0] user privilege level 2
```

- A. The user can use the ping and tracert commands.
- B. The user can use service configuration commands, including routing configuration commands.
- C. The user can use some display commands.
- D. The user can use the debugging command to diagnose service faults.

38. Which of the following IP addresses are private IP addresses?

- A. 10.0.1.1/30
- B. 172.16.1.1/30
- C. 172.33.1.1/30
- D. 192.168.1.1/30

39. Which of the following statements about Layer 2 and Layer 3 loops are true?

-  A. A Layer 2 loop may occur if cables are incorrectly connected.
-  B. The TTL field in the IP packet header can prevent Layer 2 loops.
-  C. The Layer 2 frame header does not contain any information that can prevent data frames from being forwarded endlessly.
-  D. If redundant links are deployed on the network, Layer 2 loops may occur.

40. An administrator wants to allocate IP addresses in the network segment 172.16.4.32/29 to hosts. Which of the following IP addresses can be allocated to hosts?

- A. 172.16.4.33 255.255.255.248
- B. 172.16.4.34 255.255.255.240
- C. 172.16.4.32 255.255.255.240
- D. 172.16.4.35 255.255.255.248

41. ACLs are used to match and distinguish packets. Which of the following information can be used to define ACL rules?

- A. VLAN ID
- B. Source and destination IP addresses of IPv4 packets
- C. Protocol type of Ethernet frames
- D. Source and destination MAC addresses

42. Refer to the following ACL configuration on a device. Which of the following statements are true?

```
acl number 2000
```

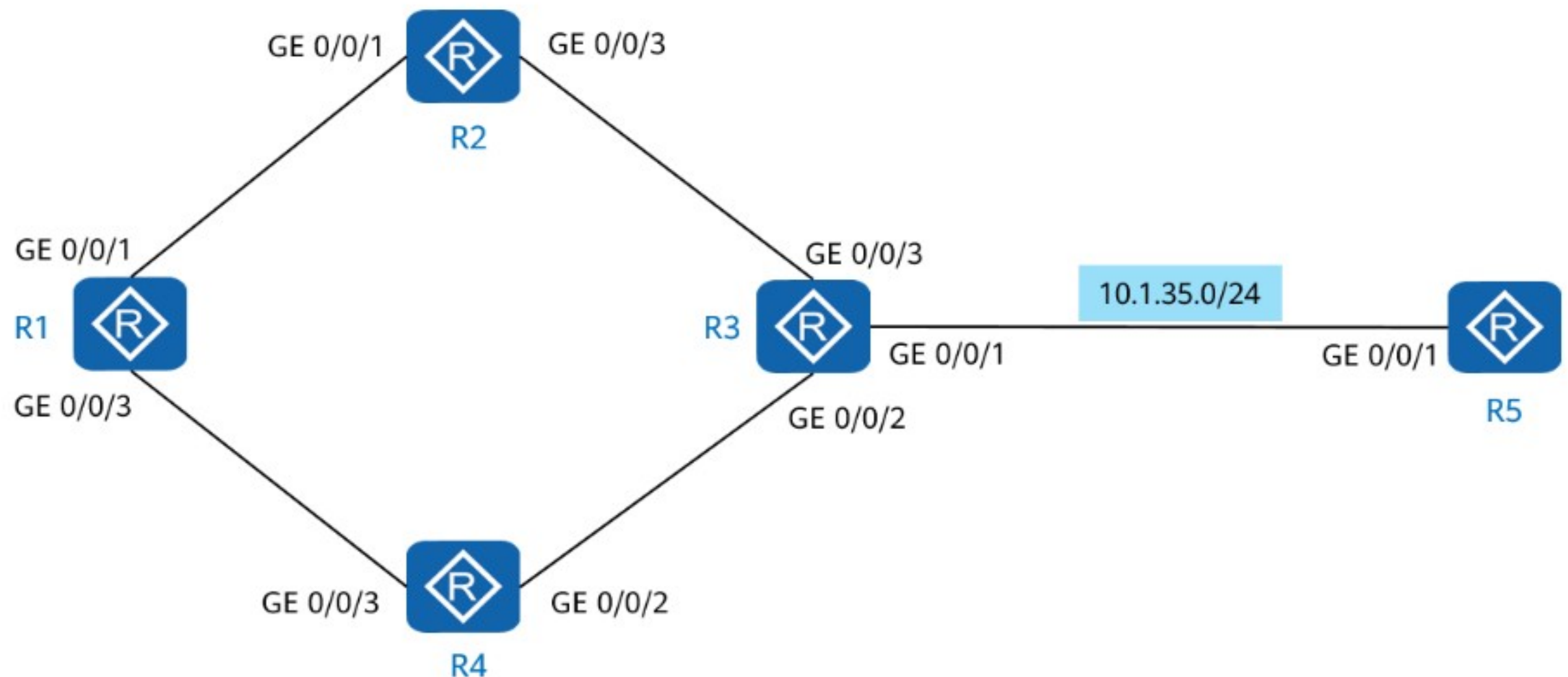
```
rule 5 deny source 10.1.1.1 0
```

```
rule 10 deny source 10.1.1.2 0
```

```
rule 15 permit source 10.1.1.0 0.0.0.255
```

- A. Packets with the destination IP address 10.1.1.1 will be filtered out by the device.
- B. Packets with the source IP address 10.1.1.2 will be filtered out by the device.
- C. All packets with the source IP address on the network segment 10.1.1.0/24 will be permitted by the device.
- D. Packets with the source IP address 10.1.1.3 will be permitted by the device.


43. As shown in the following networking, the interfaces connecting R1, R2, R3, R4, and R5 are running OSPF, and are all in area 0. The routing table of R1 has two equal-cost routes to the destination 10.1.35.0/24. In order for the forwarding path R1 -> R4 -> R3 to be preferentially selected, which of the following configuration should be performed?





- A. Run the ospf cost 10 command on GE0/0/1 of R2.
- B. Run the ospf cost 10 command on GE0/0/3 of R3.
- C. Run the ospf cost 10 command on GE0/0/1 of R1.
- D. Run the ospf cost 10 command on GE0/0/3 of R2.

44. IPv6 have many advantages over IPv4. Which of the following statements about these advantages are true?

 A. Uses gratuitous ARP to detect duplicate addresses.

 B. Provides a larger address space due to being 128 bits in length.

 C. Simplifies the packet header and supports new applications using extension headers.

 D. Supports the configuration of stateless address autoconfiguration (SLAAC) addresses.

45. Which of the following statements about collision domains and broadcast domains are true?

- A. Each port of a switch connects to a collision domain.
- B. Each port of a router connects to a broadcast domain.
- C. All devices connected to the same hub belong to the same collision domain.
- D. The Ethernet uses CSMA/CD to avoid collisions in collision domains.

46. Network Address Translation (NAT) translates the IP address in an IP packet header into another IP address. Which of the following methods can implement NAT?

- A. NAT Server
- B. Easy IP
- C. Dynamic NAT
- D. Static NAT/NAPT

47. Which of the following are the advantages of a VLAN?

- A. Limits broadcast domains.
- B. Improves network robustness.
- C. Flexibly constructs virtual workgroups.
- D. Enhances LAN security.

48. Which of the following are IPv6 address types?

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

49. In OSPF, which of the following network types require the election of a DR and BDR?

A. NBMA

B. BMA

C. P2MP

D. P2P

50. Which of the following statements are false about the forwarding behavior of access ports on a switch?



A. When an access port of the switch receives a data frame carrying the same tag as the default VLAN ID of the port, the port discards the frame.



B. When an access port of the switch receives a data frame carrying the same tag as the default VLAN ID of the port, the port accepts the frame.



C. When an access port of the switch sends an untagged data frame, the port adds its default VLAN ID to the frame.



D. When an access port of the switch receives an untagged data frame, the port adds its default VLAN ID to the frame.

51. Static routes and OSPF routes can form equal-cost routes.

True

False



52. Specific routes can be summarized into a summary route only when they have the same next-hop address.



- True
- False

54. Before sending an IPv6 packet, an interface performs the following operations in this order: address configuration, address resolution, and duplicate address detection (DAD).



- True
- False

55. After receiving a tagged frame from the peer device, an access port of a switch checks the VLAN ID of the frame. If the VLAN ID is the same as PVID of this port, the port accepts the frame and removes the tag from the frame.



True

False

56. A blackhole route (or null route) can prevent routing loops.



- True
- False

59. Segment routing (SR) can be deployed with or without controllers.

True

False



51. FTP is a file transfer protocol and works in active or passive mode.

- True
- False

52. Network design and planning is the first phase of campus network construction.

- True
- False

53. In an OSPF AS, a router can function as both an ABR and an ASBR.

- True
- False

54. When a static route is configured on a router, the specified next-hop address must be an address on the directly connected network.

- True
- False

55. In the WLAN network architecture, ACs can be connected in in-path or off-path mode.

- True
- False

56. Segment routing (SR) provides an innovative traffic steering method. It divides a network path into segments and allocates segment IDs (SIDs) to these segments. The segments and nodes are sequentially arranged into a segment list to form a forwarding path.

- True
- False

57. A hybrid port on a switch can connect to either a user host or a port on another switch.

- True
- False

58. In STP, a non-root-bridge switch can have two root ports.

True

False

59. A CAPWAP tunnel is established between the Fit AP and AC to transmit management traffic and service data traffic.

True

False

60. To prevent out-of-order packets, it is recommended that Eth-Trunk use flow-based load balancing.

- True
- False