MikroTik Certified Routing Engineer (MTCRE) DUMPS

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1. RouterOS main routing table contains static, RIP, and OSPF routes destined to the same network. Which of the following routes will be used if the administrative distance of each of the routing protocol entries is set to their default values?

A. The static route

B. All three will load balance

C. The OSPF route

D. The RIP route

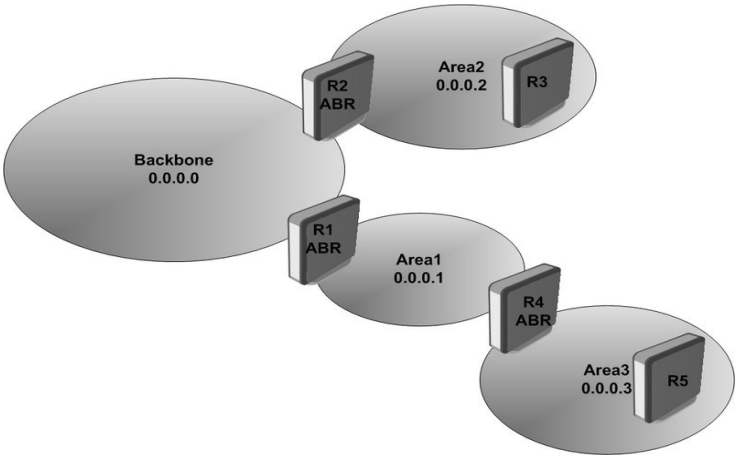
2. In this ospf network (see diagram), we want to re-distribute routes from R5 to the R3 router. Where do I have to create a virtual link?

A. Between R5 and R3

B. There is no need for a virtual-link

C. Between R1 and R4

D. Between R4 and R2



3. The OSPF network is configured as on the attached figure. Each of the links has cost sets as on the figure. If we configure redistribution of default route on router A with command:

/routing ospf instance set 0 distribute-default=always-as-type-2 metric-default=5

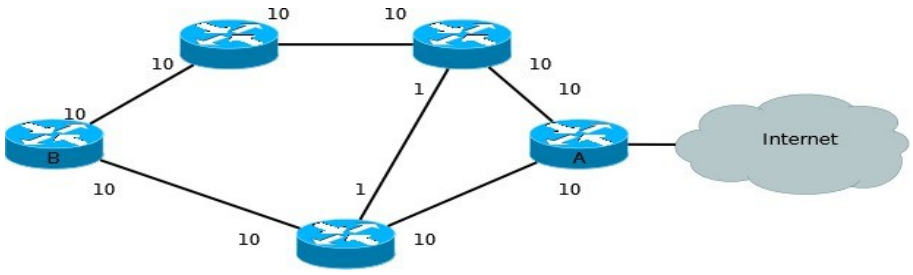
What will be the cost of the default route on router B?

A. 26

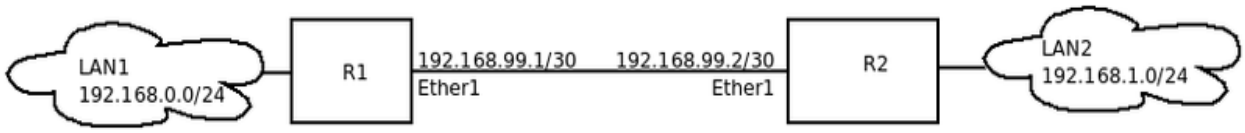
B. 25

C. 5

D. 35



4. Consider the following diagram. Assuming that all the necessary configuration has already been done on R2 (proxy-arp is disabled), to communicate from a device on LAN1 to a device on LAN2, which of the following configurations on R1 would enable this?



A. /ip route add dst-address=0.0.0.0/0 gateway=Ether1

B. /ip route add dst-address=192.168.0.0/24 gateway=192.168.0.1

C. /ip route add dst-address=192.168.1.0/24 gateway=192.168.99.2

D. /ip route add dst-address=0.0.0.0/0 gateway=192.168.99.2

E. /ip route add dst-address=192.168.1.0/24 src-address=192.168.0.0/24 gateway=192.168.99.2

5. When using the "check gateway" function in creating a route, the following protocols can be utilized to ensure the gateway address is reachable (choose all correct answers):

A. UDP

B. ARP

C. MNDP

D. ICMP

6. A network administrator has 2 vlans

/interface vlan

add name=vlan1 vlan-id=101 interface=ether1

add name=vlan2 vlan-id=102 interface=vlan1

any packet sent over "vlan2" interface

A. will not go through at all because vlan1 will drop it

B. will have one vlan tag added to ethernet header - "101"

C. will have one vlan tag added to ethernet header - "102"

D. will have two vlan tags added to ethernet header - "101" and "102"

E. Wrong configuration because it is not possible to have a vlan over another vlan

7. In an OSPF routed network, External routes are imported as-type-2. Remote routing decision to this network is made based on the sum of the external and internal metrics

false

8. When using routing option 'check-gateway=ping' what is the ICMP echo request interval (in seconds)?

A. 20s

B. 10s

C. 60s

D. 30s

9. If check-gateway=ping for a route is selected and the gateway for the route does not respond to pings, how many seconds does it take for the router to disable the route?

A. 5s

B. 20s

C. 10s

D. It depends on network type on affected interface

10. In OSPF network it is possible to use area-id=0.0.0.0 for non backbone area

false

11. To securely bridge (Layer 2) together two remote networks the following methods can be used:

A. EoIP over SSTP or over L2TP/IPsec

B. IPIP with IPsec secret specified

C. SSTP or L2TP/IPsec

D. SSTP with BCP or L2TP/IPsec with BCP

E. EoIP with IPsec secret specified

12. Which route will be used to reach host 192.168.1.55?

/ip route
add disabled=no distance=1 dst-address=192.168.1.0/24 gateway=1.1.1.1
add disabled=no distance=1 dst-address=192.168.1.0/25 gateway=2.2.2.2
add disabled=no distance=1 dst-address=192.168.0.0/16 gateway=3.3.3.3

A. Route via gateway 2.2.2.2

B. Route via gateway 3.3.3.3

C. Route via gateway 1.1.1.1

13. What is the minimum configuration necessary for establishing an IPIP tunnel?

A. Address of the remote router on both sides of the tunnel

B. Interface of the local and remote router on both sides of the tunnel

C. Tunnel ID of the local and remote router on both sides of the tunnel

D. Port configuration on both sides of the tunnel

14. In OSPF, when we set the nbma network type, we must also configure:

A. Neighbors

B. Area for each range

C. OSPF interface

D. Neighbors ID for each virtual link

15. Routing protocols used within the same AS are referred to as Exterior Gateway Protocols.

false

16. Mark all ECMP (Equal cost multi-path) routes that will split traffic to multiple paths:

A. /ip route add dst-addr=0.0.0.0/0 gateway=10.10.10.1

B. /ip route add dst-addr=0.0.0.0/0 gateway=10.10.10.1,10.10.10.1,10.20.20.1

C. /ip route add dst-addr=0.0.0.0/0 gateway=10.10.10.1,10.10.10.1

D. /ip route add dst-addr=0.0.0.0/0 gateway=10.10.10.1,10.20.20.1

17. /ip route configuration on router,

/ip route add gateway=192.168.0.1

/ip route add dst-address=192.168.1.0/24 gateway=192.168.0.2

/ip route add dst-address=192.168.2.0/24 gateway=192.168.0.3

/ip route add dst-address=192.168.3.0/26 gateway=192.168.0.4

Router needs to send packets to 192.168.3.240. Which gateway will be used?

A. 192.168.0.2

B. 192.168.0.3

C. 192.168.0.4

D. 192.168.0.1

18. Which VPN technologies can be used to bridge two remote networks?

A. L2TP/PPTP with BCP

B. IPIP

C. EoIP

D. IPsec

19. Mark the correct default route distances.

A. eBGP distance is 25

B. RIP distance is 130

C. OSPF distance is 110

D. iBGP distance is 200

20. When sending out an ARP request, an IP host is expecting what kind of address for an answer?

A. 802.11g

B. IP address

C. VLAN ID

D. MAC Address

21. There are two routes in the routing table:

0 dst-addr=10.1.1.0/24 gateway=5.5.5.5

1 dst-addr=10.1.1.4/30 gateway=5.6.6.6

Which gateway will be used to get to the IP address 10.1.1.6?

A. 5.5.5.5

B. the required route is not in the routing table

C. 5.6.6.6

D. both - half of the traffic will be routed through one gateway, half through the other

22. There are four routes in the routing table. Host 10.10.10.10 becomes unreachable.

1 dst-addr=0.0.0.0/0 gateway=11.11.11.11

1 dst-addr=20.20.20.0/24 gateway=10.10.10.10 check-gateway=ping

2 dst-addr=30.30.30.0/24 gateway=10.10.10.10

3 dst-addr=30.30.30.0/25 gateway=13.13.13.13 check-gateway=ping

Which gateway is used to get to the IP address 30.30.30.145?

A. None. Packets to that host will be dropped until host 10.10.10.10 becomes active again.

B. 10.10.10.10

C. 13.13.13.13

D. 11.11.11.11

23. It is possible to change the Time To Live in Firewall Mangle.

true

24. The 'check-gateway' option is enabled for one route. Select all statements that are true:

A. In case of failure of the gateway, routes pointing to that gateway will become inactive

B. Check gateway option can be configured for Ping, ARP and RARP (reverse ARP)

C. Gateway is checked every 10 seconds and after 2 failures, the gateway is considered unreacheable

D. Gateway is checked every 10 seconds and after a single failure, the gateway is considered unreachable

25. A routing table has following entries:

0 dst-address=10.0.0.0/24 gateway=10.1.5.126

1 dst-address=10.1.5.0/24 gateway=10.1.1.1

2 dst-address=10.1.0.0/24 gateway=25.1.1.1

3 dst-address=10.1.5.0/25 gateway=10.1.1.2

Which gateway will be used for a packet with destination address 10.1.5.126?

A. 10.1.5.126

B. 25.1.1.1

C. 10.1.1.1

D. 10.1.1.2

26. It is possible to create EoIP tunnels between two locations over the Internet

true

27. OSPF starts working on the router as soon as

A. the routing package is enabled on the router

B. at least one area is specified in the ospf area menu

C. at least one interface is defined in the ospf interface menu

D. at least one IP network is assigned in the ospf network menu

28. Router OS can set vlan-id value from - to :

A. 1-2049

B. 1-4095

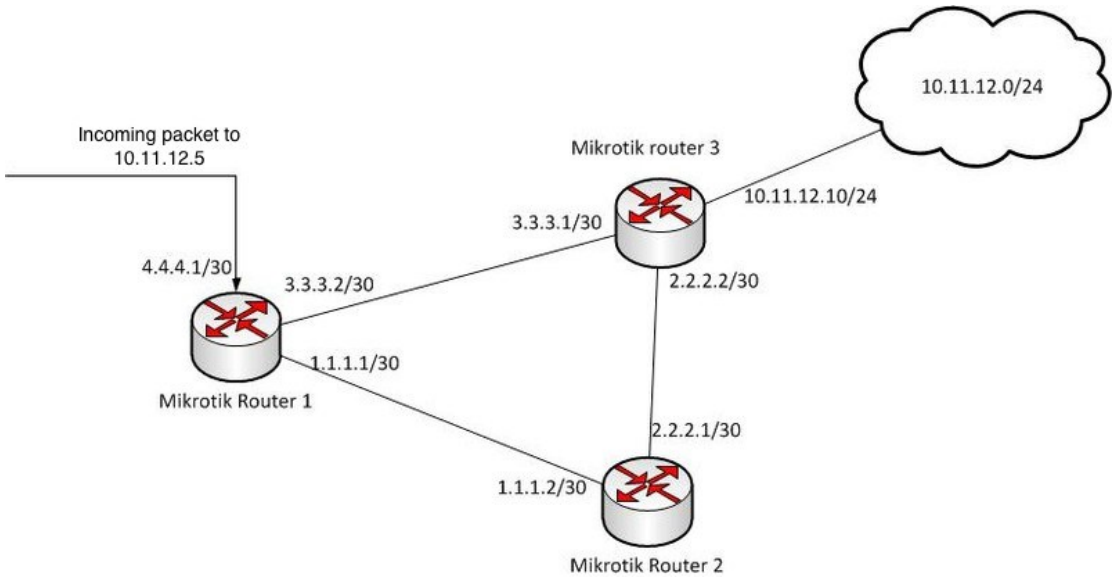
C. 1-4096

D. 1-2048

29.Route with lower distance will be preferred over the route with higher distance even if the gateway is unreachable

false

30. Please see the network diagram.



A packet with destination address 10.11.12.5 passes via MikroTik Router 1. In addition to the connected routes the router has following routes added to the routing table:

MikroTik Router1:

/ip route add dst-address=10.11.12.0/24 gateway=1.1.1.2

MikroTik Router 2:

/ip route add dst-address=10.11.12.0/24 gateway=2.2.2.2

MikroTik Router 3:

/ip route add dst-address=10.11.12.0/24 gateway=3.3.3.2

What will happen?

A. Packet will reach the destination

B. MikroTik Router 3 will discard the packet

C. There will be infinite loop until TTL of packet is equal to 1

D. There will be infinite loop until one of routers is disabled

31. When is Bridge Control Protocol (BCP) used?

A. To bridge wireless WDS interfaces

B. To pass Layer 2 ethernet frames to PPP type interfaces

C. When a loop-free bridged network (a substitution for Spanning Tree protocols) is needed

32. OSPF starts working on the router as soon as

A. at least one IP network is assigned in the ospf network menu

B. at least one area is specified in the ospf area menu

C. the routing package is enabled on the router

D. at least one interface is defined in the ospf interface menu

33. Router has two gateways to reach a certain network both with check gateway activated. Choose the option you can use to control active and backup gateway.

A. Interface

B. Routing mark

C. Scope

D. Distance

34. New area OSPF \"area1\" has been created. What could be used as a valid area id?

A. 0.0.0.0

B. 0.0.0.1

C. 1.2.3.4

35. Select true statements about PPPoE server

A. There can be more than one PPPoE server on one single interface

B. PPPoE users can be bound to one specific PPPoE server

C. For multiple PPPoE servers you need to use different physical interfaces (ethernet or wireless)

D. You can use different ports to use more than one PPPoE server

36. Network redundancy over several links (failover) can be achieved by

A. dynamic routing protocols

B. policy routing

C. route option "check-gateway"

D. web-proxy

37. To assign specific traffic to a route - traffic must be identified by a routing mark. Each packet can only have one routing mark.

false

38. The default value of \'target-scope\' for a static route is:

A. 1

B. 255

C. 30

D. 10

39. To create a route to a different network, e.g. 192.168.0.0/24, which of the following can be used as a gateway from your network?

A. 192.168.0.1

B. 192.168.100.1

C. ether1 with a larger than /32 address space

D. pppoe-out1

40. In broadcast networks OSPF depends on the following to function correctly.

A. ICMP

B. Broadcast

C. UDP

D. TCP

E. Multicast

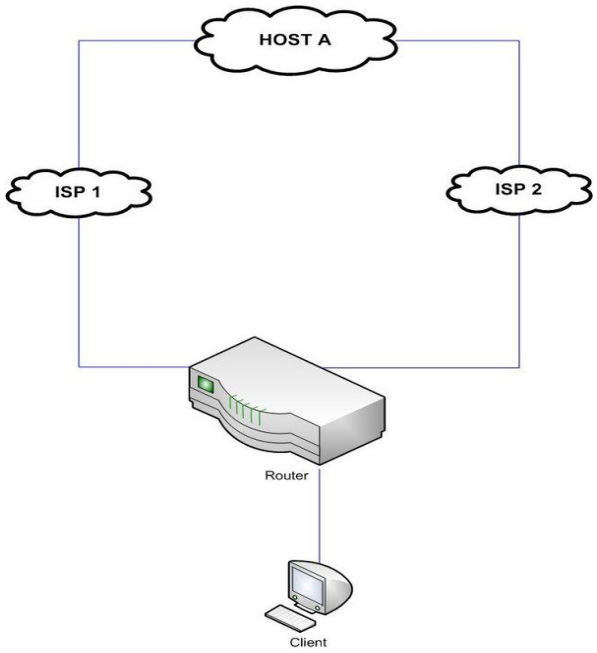
41. Routing table has several routes with the same gateway. If 'check-gateway' is enabled for one of the routes, and the gateway becomes unreachable, then

A. only this one route would become inactive

B. all routes with the same gateway would become inactive

C. the 'check-gateway' feature would not work at all, since the same gateway is used for more than one route

40. On the following network diagram,



when ROUTER wants to reach "HOST A" by itself, it should use ISP1 as gateway and when CLIENT wants to reach "HOST A", router should use ISP2 as a gateway. How would you configure routing marks to achieve this?

A. Chain Forward for a Routing Mark to route to ISP 2 & Chain Forward for a Routing Mark to route to ISP 1

B. Chain Prerouting for a Routing Mark to route to ISP 2 & Chain Output for a Routing Mark to route to ISP 1

C. Chain Input for a Routing Mark to route to ISP 2 & Chain Output for a Routing Mark to route to ISP 1

D. Chain Output for a Routing Mark to route to ISP 2 & Chain Forward for a Routing Mark to route to ISP 1

41. In OSPF settings, the NBMA Neighbor setting can be used to improve the stability of OSPF across wireless links.

true

42. For a user (one entry) in local PPP database (a PPP Secret and Profile tied to it), it is possible to:

A. Allow/deny use of more than one login by this user

B. Set max values for transferred data (Rx/Tx)

C. Allow login by PPPoE and PPTP, but deny login by L2TP

D. Allow only PPPoE login

E. Deny services (like telnet) only for this user or for one group of users

42. What conditions listed below are required to set up an EoIP tunnel between two RouterOS instances?

A. Both routers must have the same 'MAC address'

B. Both routers must have different 'MAC addresses'

C. Both routers must have the same 'Tunnel ID'

D. Both routers must have different 'Tunnel ID' values

43. Which ones of these are Point-to-Point addresses?

A. address=10.0.0.1/24 network=10.0.0.0

B. address=10.0.0.1/32 network=10.0.0.0

C. address=10.0.0.1/32 network=10.0.0.254

D. address=1.1.1.1/32 network=10.0.0.0

44. Consider two geographically separate sites. At each site, there is a RouterOS device. Ether1 is connected to the LAN and Ether2 is connected to the Internet. An EoIP tunnel is created between the two routers. And on both routers a Bridge interface with the EoIP tunnel and Ether1 as ports. 10 users are connected at site A and 30 users at site B. All users are configured to use a DHCP server to obtain IP address configuration. What is the minimum number of DHCP servers needed, (select correct configuration):

A. 1 DHCP Server: 1 server on site A's router, on Ether2.

B. 2 DHCP Servers: 1 server on each router, on the EoIP interface.

C. 2 DHCP Servers: 1 server on each router, on the LAN interface.

D. 1 DHCP Server: 1 server on site B's router, on the Bridge interface.

E. 2 DHCP Servers: 2 servers on site B's router, one on the LAN interface and one on the EoIP interface.

45. Equal cost in terms of routes in a routing table mean:

A. The administrative distance to the same destination network is the same via two or more gateways

B. The RSTP cost to the same destination network is the same via two or more gateways

C. Two OSPF routes from two areas

D. The same destination network is reachable via two or more gateways

46. What is the proper name in OSPF terminology for a router that redistributes routes from RIP to OSPF?

A. Designated router

B. Autonomous system boundary router

C. Area border router

D. External router

47. What is the protocol number used by the EoIP tunnel, to encapsulate Ethernet frames and send them to the remote side of the EoIP tunnel

A. 500

B. 47

C. 1194

D. 1723

48. A network administrator checks the IP routing table (/ip route print) and notices that there are two different routes (different /ip route entries) to the destination network 10.0.0.0/8. Each one has exactly one gateway (which is different to the other) and both are active (flag A). What could cause this behavior of 2 routing entries to the same network with both being active?

A. The administrator is using ECMP - (they have added 2 static routes to the network to load balance with ECMP)

B. The routes have different 'routing-mark' parameters and belong to two different routing tables

C. One of the routes is of type 'Connected' and the other one is of type 'Static'

D. One of the routes is of type 'Static' and one is from OSPF, but they have the same distance

49. What is the minimum configuration a network administrator needs to do on a MikroTik router to enable OSPF?

A. Both interface and network must be added to OSPF configuration

B. Nothing; OSPF instance can run with no configuration

C. Add a network to OSPF network configuration

D. Add an interface to OSPF interface configuration

50. If we change TTL to 2 in mangle chain prerouting

A. packet will be forwarded only to next L3 device

B. packet will not be forwarded

C. packet will always reach its destination

D. packet will be forwarded to the next 2 L3 devices

51. Which of the following are correct statements?

A. OSPF requires neighbor adjacencies before updates are sent

B. Every OSPF area must connect with area 1

C. OSPF allows unequal cost load balancing

D. OSPF is not a link state protocol

E. If OSPF router ID is not set manually, then the lowest IP address configured on an active interface is used

52. In OSPF to ensure that remote routing decision will be made based on both external and internal metrics, you should set redistribution as:

A. as-type-0

B. as-type-2

C. as-type-3

D. as-type-1

53. An OSPF area consists of 15 routers connected in 6 different broadcast networks. How many DR neighbours will there be in the area?

A. 0

B. 6

C. 15

D. 1

54. It is possible to create EoIP tunnels between two locations over the Internet

true

55. VLAN is an implementation of the 802.1Q VLAN protocol by the MikroTik RouterOS. It allows you to have multiple Virtual LANs on a single ethernet or wireless interface, giving the ability to segregate LANs efficiently. How many different vlans are possible on a single ethernet port?

A. only one

B. 4095

C. 4096

D. 63

56. What is the administrative distance of OSPF routes?

A. 20

B. 120

C. 10

D. 110

57. What is the maximum number of supported VLANs on a single ethernet interface in RouterOS:

A. 63

B. 255

C. unlimited

D. 511

E. 4095

58. What is the maximum number of hops, after which the network will be considered unreachable in OSPF?

A. 16

B. 99

C. Unlimited

D. 15

59. If one of two gateways is unreachable in an ECMP route with check gateway set, 50% of packets will be lost.

true

60. The correct order for PPPoE discovery stage is:

A. Request, Initialization, Session confirmation and Offer

B. Initialization, Session confirmation, Request and Offer

C. Request, Offer, Initialization and Session confirmation

D. Initialization, Offer, Request and Session confirmation

61. There is no way to establish OSPF adjacency when the link doesn't support multicast traffic.

false

62. Placing a single VLAN Tag onto an Ethernet frame adds extra information into the header. The increase in frame size is:

A. 8 bits

B. 16 bits

C. 4 bytes

D. 4 bits

63. ECMP provides:

A. per src/dst address pair load balancing to multiple gateways

B. per src address load balancing to multiple gateways

C. per packet load balancing to multiple gateways

D. per connection load balancing to multiple gateways

64. RouterOS device has acquired an IP address from an ISP using DHCP client. The same router is used for assigning IP addresses to local users using DHCP server, masquerade rule is configured properly. Packets that are coming from the ISP have TTL=1. Select correct statement:

A. Router does not have access to the Internet, but clients have

B. Router has access to the Internet, but clients do not

C. Neither router nor clients have access to the Internet

D. All clients and router have access to the Internet

65. There are two PPPoE stages, Discovery and Session.

true

66. Which description regarding OSPF Network LSAs is correct when using broadcast network type?

A. They are originated by the DR on every multi-access network. They include all attached routers including the DR itself

B. They are originated by Area Border Router and are sent into a single area to advertise an Autonomous System Border Router

C. They are originated by Area Border Routers and are sent into a single area to advertise destinations outside that area

D. They are originated by every router in OSPF network. They include all routers on the link, interfaces, the cost of the link, and any known neighbor on the link

67. Select true statements about PPTP/PPPoE server.

A. PPPoE server can be bound to one single interface

B. PPTP server can be bound to one single interface

C. PPTP server is reachable on all ip adresses

D. PPPoE server is reachable via all active interfaces

68. In OSPF protocol, which one of these router types are responsible for route distribution between different Autonomous systems?

A. IR

B. AS

C. ABR

D. ASBR

69. How many VLAN headers do IEEE 802.1Q permit?

A. 1

B. unlimited

C. more than 2

D. 2

70. Three routers are connected to each other

A has a 2 Mbit connection to B.

B has a 10 Mbit connection to C.

C has a 100 Mbit connection back to A.

What is the traffic direction flow from A to B with OSPF protocol (basic OSPF configuration)?

A. A - C - B

B. A - B

71. You can not use OSPF and RIP routing protocols simultaneously on the RouterOS

false

72. If 'check-gateway' is enabled for an ECMP route and one of the gateways is unreachable, then

A. the ECMP route becomes inactive

B. ECMP is going to send packets to all gateways even if one is unreachable

C. the unreachable gateway is not going be used in Round Robin algorithm

73. EOIP tunnels can not be bridged because they are not true layer 2 tunnels.

false

74. Settings in /ppp secret user database override corresponding /ppp profile settings

true

75. Concerning the OSPF protocol, mark the correct statements below:

A. On a OSPF point to point network, where Routers have the same priority, the router with the highest router ID will be elected as the DR (Designated Router)

B. If the router ID is not specified, OSPF will use the lowest IP address of the router as the router ID

C. Each router belonging to a OSPF network knows the best path to get to all other routers of the network, from its point of view

D. The OSPF Hello protocol can use multicast address 224.0.0.5

76. MikroTik router needs to forward IP-packet targeted to 11.12.4.5. Router routing table has 3 routes,

1. dst-address=11.12.4.0/24, distance=10, gateway=1.1.1.1

2. dst-address=11.12.4.0/28, distance=20, gateway=1.1.1.2

3. dst-address=0.0.0.0/0, distance=1, gateway=1.1.1.254.

Which of the gateways will router select?

A. 1

B. Nowhere. Host will get "destination host unreachable".

C. 3

D. 2

77. OSPF router has priority 0 configured on one of its interfaces. In which condition below will it become a designated router for the network configured on that interface? (select all that apply)

A. The router will become designated router if there is no other neighbor with priority 0, since 0 mean the highest priority

B. The router can become designated router if the network-type is point-to-point

C. The router can become designated router only if there there are only neigbors with the same priority.

D. The router cannot become designated router since priority 0 prevents it

78. What is policy routing for and what criteria can be used to decide appropriate route?

A. Policy routing can be used to force specific traffic to go different way through network, but only source and destination address can be used to distinguish traffic.

B. Policy routing can be used to bypass routing table and only active tunnel interfaces can be used to direct traffic alternatively.

C. Policy routing can be used to bypass routing table and is possible only if BGP is enabled.

D. Policy routing can be used to force specific traffic to go different way through network and beside source and destination address any traffic that can be marked in firewall can be used to distinguish traffic.

79. Open Shortest Path First is a

A. Distance vector routing protocol

B. Link state routing protocol

C. Hybrid routing protocol

80. Select valid routing protocols:

A. IGP

B. RIP

C. SPF

D. BGP

E. OSPF

81. You have the following configuration:

Router1 has:

1) Local network 10.8.80.254/24 on ether1

2) pptp-client with IP 10.10.10.10

Router2 has:

1) Local network 10.8.81.254/24 on ether1

2) pptp-server with IP 10.10.10.11

PPTP tunnel between these two routers is established correctly.

What is the right set of commands to ensure layer3 connectivity between hosts which are in networks on ether1 adapters on both routers.

A. Router1: ip route add dst-address=10.8.81.0/24 gateway=10.10.10.10 Router2: ip route add dst-address=10.8.80.0/24 gateway=10.10.10.11

B. Router1: ip route add dst-address=10.8.81.254/24 gateway=10.10.10.11 Router2: ip route add dst-address=10.8.80.0/24 gateway=10.10.10.10

C. Router1: interface ethernet set ether1 arp=proxy-arp Router2: interface ethernet set ether3 arp=proxy-arp

D. Router1: ip route add dst-address=10.8.81.0/24 gateway=10.10.10.11 Router2: ip route add dst-address=10.8.80.0/24 gateway=10.10.10.10

82. Select the correct statements about routing marks:

A. check-gateway option is not compatible with routing-mark

B. a packet with a routing mark is ignored by main routing table if there is at least one route for the routing mark

C. each packet can have more than one routing mark

D. can be assigned by IP firewall mangle chains input and output

83. Hotel internet firewall blocks IP/47 (GRE), UDP/500 (IKE) and IP/50 (ESP) protocol outbound/inbound connections. Select VPN tunnel protocols that will be able to establish a connection with such configuration:

A. SSTP (Secure Socket Tunneling Protocol)

B. IPsec

C. L2TP + IPsec (Layer-2 Tunneling Protocol over IPsec)

D. OpenVPN

E. PPTP (Point-to-point Tunneling Protocol)

F. L2TP (Layer-2 Tunneling Protocol)

84. Look at the picture. Which Gateway will be used to reach 192.168.88.10?

Pict2

#	DST-ADDRESS	GATEWAY	DISTANCE
0	192.168.88.0/24	192.168.55.1	1
1	192.168.88.0/25	192.168.55.2	2
2	192.168.88.0/26	192.168.55.3	3

A. 192.168.55.1

B. no one

C. 192.168.55.3

D. 192.168.55.2

85. The target scope can be used for:

A. To resolve nexthops that are not directly connected to the router

B. To configure several routes with different costs and distances

C. To build a FailOver System between two or more gateways

86. What addressing scheme is typically used on a PPP link?

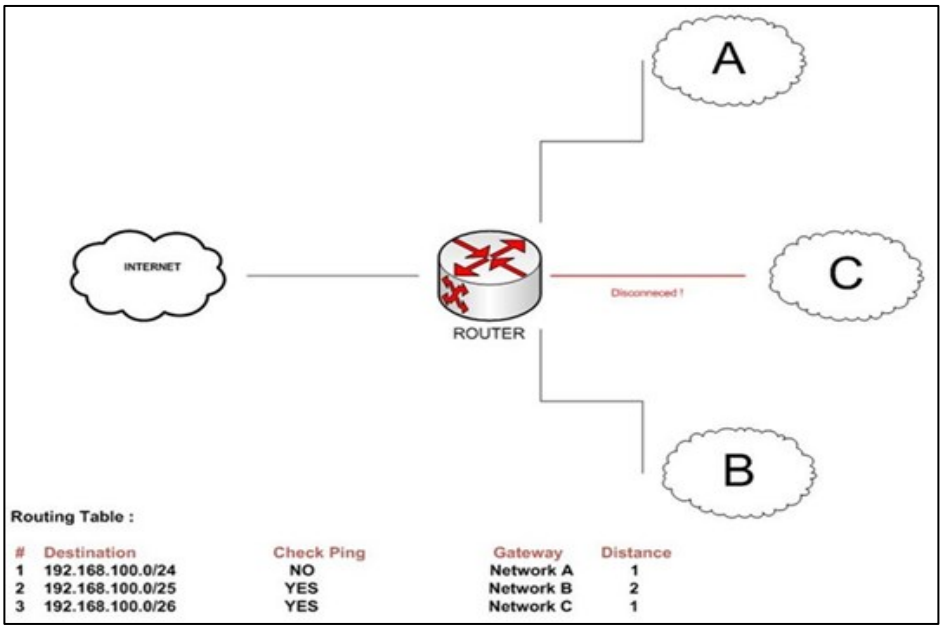
A. /24 private subnet

B. /30 subnet

C. /32 address on each side of the link

D. /31 subnet

87. Observe the diagram and the routing table beneath it. Select which route will match packets with the destination IP address 192.168.100.1



A. Route #1

B. None of the routes

C. Route #2

D. Route #3

88. How many routing marks can be added to a RouterOS device?

A. 100

B. 500

C. 251

D. Unlimited

89. Which routing table is used to apply recursive routing at MikroTik RouterOS?

A. It is only possible in the main routing table

B. It is possible in all the routing tables installed in a router

C. It is not possible

D. It is only possible on the x86 platform

90. It is possible to change the Time To Live in Firewall Mangle.

true

91. Define a routing loop (choose the most precise description)

A. situation where the packet is routed through the same sequence of routers until the TTL expires

B. situation where the TTL of the packet expires

C. Situation where the packet does not reach it\'s destination

D. situation where the packet is routed through the same router twice

92. To route two private networks together over a public routed network (there are multiple hops between the gateway routers of the private networks), you can use the following tunnel types (mark all that are correct):

A. IPIP

B. L2TP

C. PPPOE

D. PPTP

E. EOIP

93. In OSPF networks, stub areas are responsible for which of the following (check all that apply):

A. Increasing latency in the area

B. Reducing the memory requirements of routers in the area

C. Increasing the number of AS external routes

D. Reducing the database size inside the area

94. If route type is 'blackhole', then packets to the destination network are going to be

A. dropped on this router and ICMP message will be sent back to the source

B. sent back to the source

C. sent back to the previous router

D. dropped on this router

95. What are the advantages in creating multiple areas in OSPF ? Select all that apply.

A. Fewer hello packets.

B. Fewer adjacencies needed

C. Less frequent SPF calculations.

D. Smaller routing tables.

96. EoiP is:

A. Layer-2 tunnel, that can be bridged

B. MikroTik proprietary tunnel protocol

C. Layer-3 tunnel

97. Which static-route rule will have priority for destination 192.168.0.18?

A. dst-address=192.168.0.0/26 gateway=192.168.2.1 distance=2

B. dst-address=192.168.0.0/28 gateway=192.168.4.1 distance=5

C. dst-address=192.168.0.0/24 gateway=192.168.3.1 distance=1

D. dst-address=192.168.0.0/26 gateway=192.168.1.1 distance=3

E. dst-address=192.168.0.0/28 gateway=192.168.3.1 distance=1

98. In an OSPF based network, you wish to force one particular router to always be the Designated Router. You should set the priority value of that router to:

A. 0

B. 255

C. 1

99. Which of the following can connect a remote area in OSPF to the backbone area through a non-backbone area?

A. Backbone Area

B. Internal Router

C. Virtual Links

D. Area Border Router

100. Only OSPF routes distributed as "external" can be filtered with routing filters.

true

101. In an ECMP route, there are 3 gateways A, B and C. As gateways A and B have been added one time each and C two times.

How many percent of packets will route to gateway C?

A. 50%

B. 25%

C. Unknown, ECMP is not per packet balancer

D. 30%

102. There are two gateways to the Internet in a network on two separate routers. Both of them have OSPF routing enabled and are redistributing their default gateways to the network respectively. One does it as type 1, the other as type 2, cost configuration is the same on both routers. What will be preferred gateway in the network?

A. Traffic to Internet will be load-balanced between the two routes as routes from both routers will be installed in routing tables

B. MikroTik RouterOS does not distinguish types when redistributing default route. RouterOS relies only on cost, so route from the closest router in term of cost will be chosen

C. The route distributed as type 2 will be the preferred one

D. The route distributed as type 1 will be the preferred one

103. What is the type of a router that is always connected to more than one OSPF area?

A. Internal Router (IR)

B. Area Border Router (ABR)

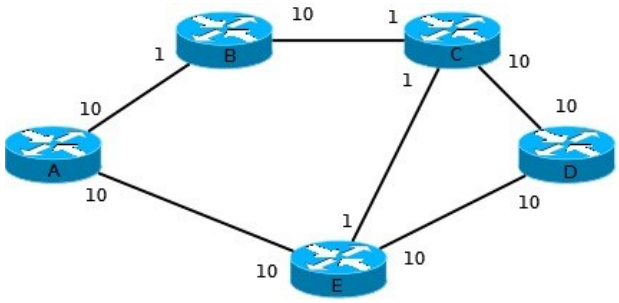
C. Stub Area router (SAR)

D. Autonomous System Border Router (ASBR)

104. There is no way to establish OSPF adjacency when the link doesn\'t support multicast traffic.

false

105. The OSPF network (see the attached image) is configured with costs of the links showed next to each router. Choose the routes which will be used to reach router D from router A and router A from router D.



A. A->B->C->E->D and D->C->B->A

B. A->B->C->D and D->C->B->A

C. A->E->D and D->C->B->A

D. A->E->D and D->E->A

106. Select correct statements about STUB area,

A. OSPF network type is NSSA.

B. Area is not 0 (backbone).

C. There is no ASBR in the area.

D. There is one ASBR in the area.

E. All routers in a STUB area must be configured as STUB