
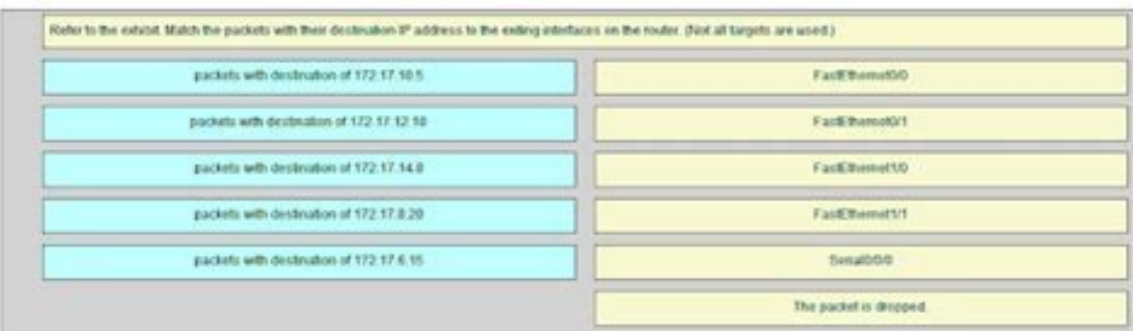


I'm not robot  reCAPTCHA

Open

```

>>>ipconfig
Gateway list result is 0.0.0.0 to network 0.0.0.0
C 10.0.0.0/24 is subnetted, 1 subnets
10.1.0.0 is directly connected, Serial0/0/0
D 172.17.0.0/24 is subnetted, 4 subnets
172.17.0.0 [110/2] via 192.168.3.4, 00:10:42:FA:CE:80:00
D 172.17.10.0 [110/2] via 192.168.5.2, 00:10:42:FA:CE:80:01
D 172.17.12.0 [110/2] via 192.168.4.2, 00:10:42:FA:CE:80:01
D 172.17.14.0 is directly connected, FastEthernet0/1
C 192.168.3.0/24 is directly connected, FastEthernet0/0
C 192.168.4.0/24 is directly connected, FastEthernet1/0
C 192.168.5.0/24 is directly connected, FastEthernet1/1
S* 0.0.0.0/0 is directly connected, Serial0/0/0
    
```



Find the equivalent of numbers given in a specified number system to the system mentioned against them.

(i) (11011101)₂ to decimal system
 (ii) (10001111000000100)₂ to hexadecimal system
 (iii) (C4F2)₁₆ to decimal system
 (iv) (418)₁₀ to binary system

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6(c) $L = \frac{1}{2}m(\dot{x}^2 + \dot{y}^2 + \dot{z}^2) - \frac{1}{2}k(x^2 + 2by + y^2)$,
 where $a, b, c, m > 0, k > 0$. Write down the Lagrangian equations of motion and identify the system.

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7(a) $(2D^2 - 5DD' + 2D'^2)y = \sin(2x + y) + 24(y - x) + e^{3x+y}$ solve the differential equation.

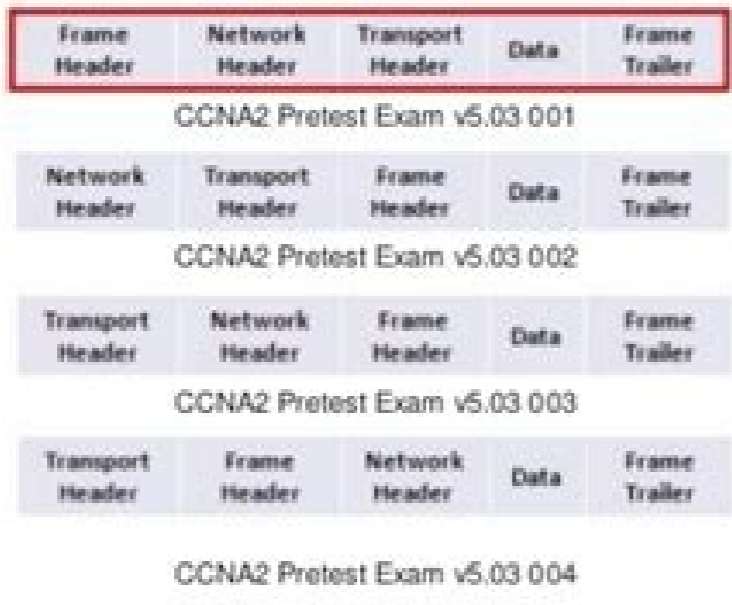
15

7(b) $\int \int (x^2 + y^2) dx dy$ over the region $x^2 + y^2 \leq 1$ in the first quadrant.

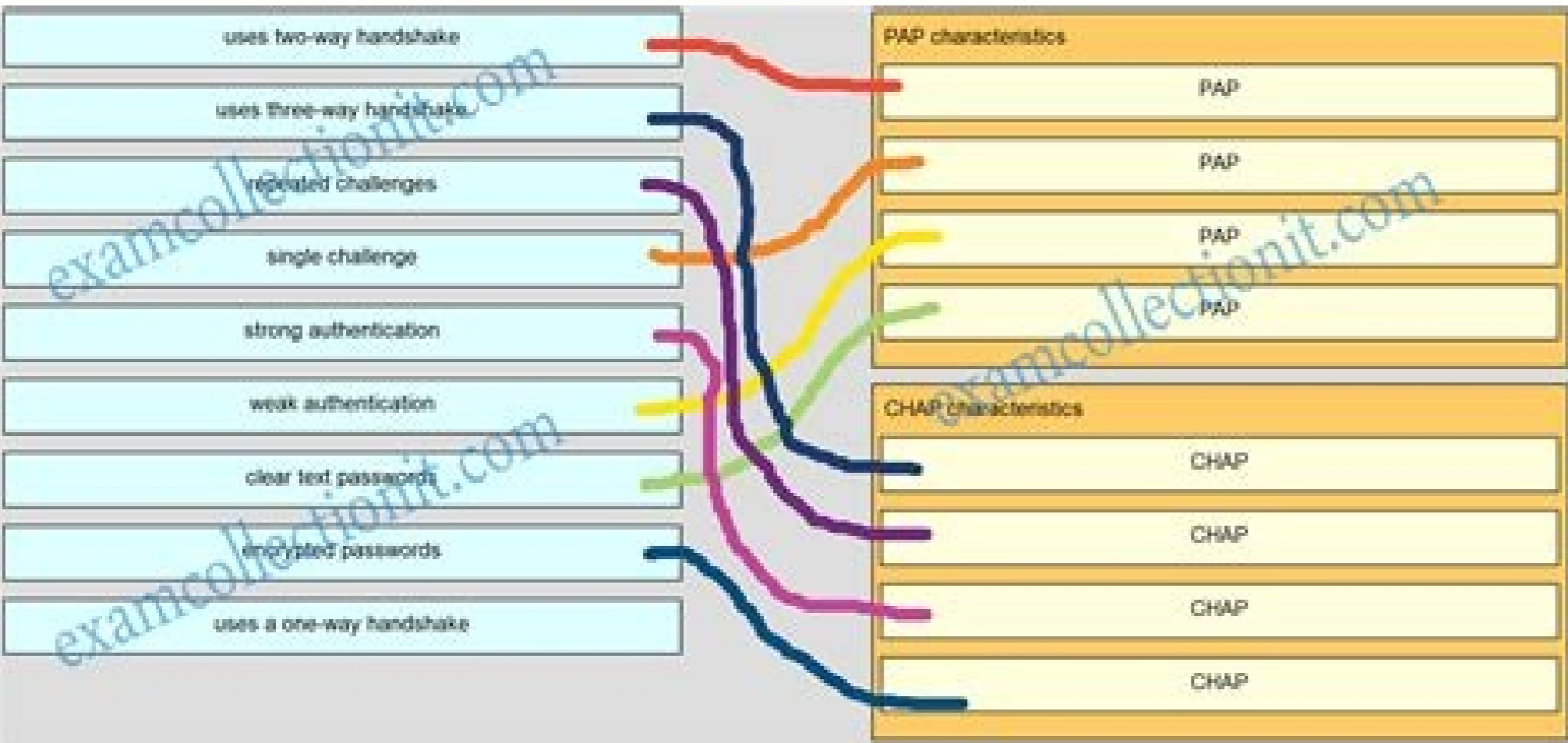
CCNA 2 Pretest Exam Answers (v5.03 + v5.1 + v6.0) – Full 100%

- Which two components are configured via software in order for a PC to participate in a network environment? (Choose two.)
 - MAC address
 - IP address*
 - kernel
 - shell
 - subnet mask*

2. What is the correct order for PDU encapsulation?



- To revert to a previous configuration, an administrator issues the command copy tftp startup-config on a router and enters the host address and file name when prompted. After the command is completed, why does the current configuration remain unchanged?
 - The command should have been copy startup-config tftp.
 - The configuration should have been copied to the running configuration instead.*
 - The configuration changes were copied into RAM and require a reboot to take effect.
 - A TFTP server can only be used to restore the Cisco IOS, not the router configuration.
- A small car dealership has a scanner that is attached to the PC of the sales manager. When salesmen need to scan a document, they place the document in the scanner and use their own PCs to control the scanner through software on the PC of the manager. After the document is scanned, they can attach it to an email or upload it into the sales software. What type of network model does this scenario describe?
 - client/server



- backbone cabling in an enterprise
- guest access in a coffee shop
- horizontal cabling structure
- waiting rooms in a hospital
- desktop PCs in an enterprise office
- long-haul networks

Copper Cables

- horizontal cabling structure
- desktop PCs in an enterprise office

Fiber Optic

- backbone cabling in an enterprise
- long-haul networks

Wireless

- guest access in a coffee shop
- waiting rooms in a hospital

Ccna 2 v6 final exam answers.

If the packet is to be routed out another interface, as is the case with R1, the router strips the current Layer 2 header and attaches a new Layer 2 header. It is identified by the prefix C in the routing table. CCNA 2 v6 RSE Final Exam Answers Form A 2018 2019 05 C 172.16.2.0/24 is directly connected, Serial0/0/0 S 192.168.2.0/24 [1/0] via 172.16.2.2 S 192.168.2.0/24 is directly connected, Serial 0/0/0 S 0.0.0.0 [1/0] via 172.16.2.2 Explanation: The C in a routing table indicates an interface that is up and has an IP address assigned. Received frames with a destination MAC address that is associated with the switch port on which it is received are not forwarded because the destination exists on the network segment connected to that port. Unicast frames are not always forwarded. Frame forwarding decisions are based on MAC address and port mappings in the CAM table. Explanation: Static routes are manually configured on a router. Acting as a backbone is a function of the core layer, standard static route floating static route default static route summary static route Explanation: There are four basic types of static routes. off restrict protect shutdown Explanation: On a Cisco switch, an interface can be configured for one of three violation modes, specifying the action to be taken if a violation occurs:Protect - Packets with unknown source addresses are dropped until a sufficient number of secure MAC addresses are removed, or the number of maximum allowable addresses is increased. Shutdown - The interface immediately becomes error-disabled and the port LED is turned off. In contrast, dynamic secure MAC addressing provides for dynamically learned MAC addresses that is stored only in the address table, the destination MAC address and the incoming port the destination MAC address and the outgoing port the source and destination MAC addresses and the outgoing port the source MAC address and the incoming port the source MAC address and the outgoing port Explanation: To maintain the MAC address table, the switch uses the source MAC address of the incoming packets and the port that the packets enter. auto secure MAC addresses dynamic secure MAC addresses static secure MAC addresses sticky secure MAC addresses Explanation: With sticky secure MAC addressing, the MAC addresses can be either dynamically learned or manually configured and then stored in the address table and added to the running configuration file. Unicast frames are always forwarded regardless of the destination MAC address. When R2 determines that the packet is to be sent out the LAN interface, R2 removes the Layer 2 header received from the serial link and attaches a new Ethernet header before transmitting the packet. Because the target network is 172.16.32.0/19, that static route must use the network 172.16.32.0 and a netmask of 255.255.224.0. CCNA 2 v6 RSE Final Exam Answers Form A 2018 2019 06 ip route 10.10.0.0 255.255.0.0 Serial 0/0/0 100 ip route 10.10.0.0 255.255.0.0 209.165.200.226 100 ip route 10.10.0.0 255.255.0.0 209.165.200.225 100 ip route 10.10.0.0 255.255.0.0 209.165.200.225 50 Explanation: A floating static route needs to have an administrative distance that is greater than the administrative distance of the active route in the routing table. default route supernet route ultimate route parent route level 2 child route Explanation: A level 2 child route is a subnet of a classful network and an ultimate route is any route that uses an exit interface or next hop address. They take less time to converge when the network topology changes. It is automatically updated and maintained by routing protocols. Thus static routing improves network security because it does not make route updates among neighboring routers. The router will be reset to the default factory information. The other entry (S 192.168.2.0/24) is directly connected, Serial 0/0/0) is a static route configured using the exit interface. In this mode, there is a notification that a security violation has occurred. Providing access to end users is a function of the access layer, which is the network edge. Last Updated on January 14, 2021 by Admin CCNA 2 v6 RSE Final Exam Answers Form A 2018 2019 04 1 2 3 4 5 6 Explanation: H1 creates the first Layer 2 header. The entry with the 0.0.0.0 route is a default static route which is used to send packets to any destination network that is not specifically listed in the routing table. There is no notification that a security violation has occurred. The S in a routing table signifies that a route was installed using the ip route command. To be a backup route the floating static route must have an administrative distance greater than 90 and have a next hop address corresponding to the serial interface IP address of Branch1. Two of the routing table entries shown are static routes to a specific destination (the 192.168.2.0 network). The other options are irrelevant. The entry that has the S denoting a static route and [1/0] was configured using the next-hop address. Static routes are not automatically updated and must be manually reconfigured if the network topology changes. Only frames with a broadcast destination address are forwarded out all active switch ports. The router will not forward routing information that is learned from other routers, when the Layer 2 switch needs to forward user traffic to another device when the Layer 2 switch is the default gateway of user traffic when the Layer 2 switch needs to be remotely managed when the Layer 2 switch is using a routed port Explanation: Layer 2 switches can be configured with an IP address so that they can be remotely managed by an administrator. In addition to broadcast frames, frames with a destination MAC address that is not in the CAM are also flooded out all active ports. 791 is the calculated OSPF metric. Router R1 is using an EIGRP route which has an administrative distance of 90 to reach the 10.10.0.0/16 network. 110 is the administrative distance used by default for the OSPF routing protocol. They improve the efficiency of discovering neighboring networks. The R1 router has to examine the destination IP address to determine how the packet is to be routed. Explanation: Cut-through frame forwarding reads up to only the first 22 bytes of a frame, which excludes the frame check sequence and thus invalid frames may be forwarded. A summary static route aggregates several routes into one, reducing the of the routing table. 172.16.64.0/18 is a subnet of the classful 172.16.0.0/16 network. scalability ISP selection speed of convergence the autonomous system that is used campus backbone architecture Explanation: There are several factors to consider when selecting a routing protocol to implement. Borderless switching is a network architecture, not a switching method. CCNA 2 v6 RSE Final Exam Answers Form A 2018 2019 07 1 0 90 20512256 Explanation: In the R2 routing table, the route to reach network 10.10.0.0 is labeled with an administrative distance of 1, which indicates that this is a static route. The destination address is used to select the outgoing port. Standard static routes are manually entered routes into the routing table. Ingress port buffering is used with store-and-forward switching to support different Ethernet speeds, but it is not a switching method. The router will only forward packets that originate on directly connected networks. 172.16.100.2 represents the next-hop IP address used to reach the 172.16.100.64 network, ip route 172.16.0.0 255.255.240.0 S0/0/0 200 ip route 172.16.32.0 255.255.224.0 S0/0/0 200 ip route 172.16.0.0 255.255.224.0 S0/0/0 100 ip route 172.16.32.0 255.255.0.0 S0/0/0 100 Explanation: OSPF has an administrative distance of 110, so the floating static route must have an administrative distance higher than 110. Floating static routes are backup routes that are placed into the routing table if a primary route is lost. A loopback address, default VLAN, and VTP domain configurations are not necessary for the purpose of remote switch management. They automatically switch the path to the destination network when the topology changes. borderless switching cut-through switching ingress port buffering store-and-forward switching Explanation: The FCS check is used with store-and-forward switching to drop any frame with a FCS that does not match the FCS calculation that is made by a switch. Static routes also improve resource efficiency by using less bandwidth, and no CPU cycles are used to calculate and communicate routes. Two of them are scalability and speed of convergence. In addition, vty lines must be configured to enable either Telnet or SSH connections. 0.0.0.0 is the default route used to send packets when a destination network is not listed in the routing table. It has an administrative distance of 1. They improve network security. Cut-through switching does not perform any error checking. IP address VTP domain vty lines default VLAN default gateway loopback address Explanation: To enable the remote management access, the Cisco switch must be configured with an IP address and a default gateway. The router will propagate a static default route in its RIP updates, if one is present. Layer 3 switches can use an IP address on routed ports. ::128 ::0 ::1/64 FFFF:128 Explanation: A default static route configured for IPv6, is a network prefix of all zeros and a prefix mask of 0 which is expressed as ::0. Layer 2 switches do not need a configured IP address to forward user traffic or act as a default gateway. Restrict - Packets with unknown source addresses are dropped until a sufficient number of secure MAC addresses are removed, or the number of maximum allowable addresses is increased. They use fewer router resources. Cut-through frame forwarding ensures that invalid frames are always dropped. Default static routes create a gateway of last resort. distribution data link physical access core acts as the backbone for the network, aggregating and distributing network traffic throughout the campus provides access to the rest of the network through switching, routing, and network access policies distributes access to end users represents the network edge Explanation: One of the functions of the distribution layer is aggregating large-scale wiring closet networks. It is unaffected by changes in the topology of the network. CCNA 2 v6 RSE Final Exam Answers Form A 2018 2019 08 0.0.0.0 172.16.100.64 172.16.100.2 110 791 Explanation: 172.16.100.64 is a destination network.

