

Course name: Specialized Practical Applications Exam number: Midterm - Revision sheet
 Course Code: CNE414 Exam Date: Nov 2016
 Lecturer: Dr. Ahmed ElShafee Time Allowed: 60 minutes

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| <p>Q1) Which statement most accurately describes static and dynamic routes?</p> <p>A) Dynamic routes are manually configured by a network administrator, whereas static routes are automatically learned and adjusted by a routing protocol</p> <p>B) Static routes are manually configured by a network administrator, whereas dynamic routes are automatically learned and adjusted by a routing protocol</p> <p>C) Static routes tell the router how to forward packets to networks that are not directly connected, whereas dynamic routes tell the router how to forward packets to networks that are directly connected.</p> <p>D) Dynamic routes tell the router how to forward packets to networks that are not directly connected, whereas static routes tell the router how to forward packets to networks that are directly connected.</p> | <p>Q1) B</p> |
| <p>Q2) What does the command ip route 186.157.5.0 255.255.255.0 10.1.1.3 specify?</p> <p>A) Both 186.157.5.0 and 10.1.1.3 use a mask of 255.255.255.0.</p> <p>B) The router should use network 186.157.5.0 to get to address I 0.1.1.3.</p> <p>C) You want the router to trace a route to network 186.157.5.0 via I 0.1.1.3.</p> <p>D) The router should use address I 0.1.1.3 to get to devices on network 186.157 .5 .0.</p> | <p>Q2) D</p> |
| <p>Q3) Which command displays information about static route configuration on a Cisco router?</p> <p>A) show route ip</p> <p>B) show ip route</p> <p>C) show ip route static</p> <p>D) show route ip static</p> | <p>Q3) B</p> |



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| <p>Q4) Which of the following protocols is an example of an exterior gateway protocol?</p> <p>A) RIP B) BGP C) IGRP D) EIGRP</p> | Q4) B |
| <p>Q5) In which situation is an administrative distance required?</p> <p>A) whenever static routes are defined B) whenever dynamic routing is enabled C) when the same route is learned via multiple routing protocols D) when multiple paths are available to the same destination and they are all learned via the same routing protocol</p> | Q5) C |
| <p>Q6) When a router receives a packet with a destination address that is within an unknown subnetwork of a directly attached network, what is the default behavior if the ip classless command is not enabled?</p> <p>A) drop the packet B) forward the packet to the default route C) forward the packet to the next hop for the directly attached network D) broadcast the packet through all interfaces except the one on which it was received</p> | Q6) A |
| <p>Q7) Which command correctly assigns a subinterface to VLAN 50 using 802.1Q trunking?</p> <p>A) Router(config)#encapsulation 50 dot1 Q B) Router(config)#encapsulation 802.1 Q 50 C) Router(config-if)#encapsulation dot1Q 50 D) Router(config-if)#encapsulation 50 802.1 Q</p> | Q7) C |
| <p>Q8) How does a distance vector router learn about paths for networks that are not directly connected?</p> <p>A) from the source router B) from neighboring routers C) from the destination router D) distance vector router learns only about directly connected networks</p> | Q8) B |



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| <p>Q9) What does a distance vector router send to its neighboring routers as part of a periodic routing table update?</p> <p>A) the entire routing table B) information about new routes C) information about routes that have changed D) information about routes that no longer exist</p> | Q9) A |
| <p>Q10) With distance vector routing, the administrator can prevent count to infinity by setting a maximum for what value?</p> <p>A) metric B) update time C) holddown time D) administrative distance</p> | Q10) A |
| <p>Q11) What does split horizon specify?</p> <p>A) that information about a route should not be sent in any direction B) that information about a route should not be sent back in the direction that the original information came from C) that information about a route should always be sent back in the direction that the original information came from D) that information about a route should be sent back only in the direction that the original information came from</p> | Q11) B |
| <p>Q12) When a router sets the metric for a network that has gone down to the maximum value, what is it doing?</p> <p>A) triggering the route B) poisoning the route C) applying split horizon D) putting the route in holddown</p> | Q12) B |
| <p>Q13) If a route for a network is in holddown and an update arrives from a neighboring router with the same metric as was originally recorded for the network, what does the router do?</p> <p>A) ignores the update B) increments the holddown timer C) marks the network as "accessible" and removes the holddown timer D) marks the network as "accessible" but keeps the holddown timer on</p> | Q13) A |



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| <p>Q14) If a router has a network path in holddown and an update arrives from a neighboring router with a better metric than originally recorded for the network, what two things does it do? (Choose two.)</p> <p>A) removes the holddown B) continues the holddown C) marks the route as "accessible" D) marks the route as "inaccessible" E) marks the route as "possibly down"</p> | <p>Q14) A, C</p> |
| <p>Q15) How can link-state protocols limit the scope of route changes?</p> <p>A) by supporting classless addressing B) by sending the mask along with the address C) by sending only updates of a topology change D) by segmenting the network into area hierarchies</p> | <p>Q15) D</p> |
| <p>Q 16) What is the purpose of link-state advertisements</p> <p>A) to construct a topological database B) to specify the cost to reach a destination C) to determine the best path to a destination D) to verify that a neighbor is still functioning</p> | <p>Q16) A</p> |
| <p>Q 17) By default, how often does RIP broadcast routing updates</p> <p>A) every 6 seconds B) every 15 seconds C) every 30 seconds D) every 60 seconds</p> | <p>Q17) C</p> |
| <p>Q18) What is the maximum allowable hop count for RIP</p> <p>A) 6 B) 15 C) 30 D) 60</p> | <p>Q18) B</p> |



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| <p>Q 19) With RIP, load balancing is performed over multiple paths that have which characteristic?</p> <p>A) equal cost B) equal weight C) equal distance D) equal bandwidth</p> | Q(9) A |
| <p>Q20) Which command correctly specifies RIP as the routing protocol?</p> <p>A) Router(config)#rip B) Router(config)#router rip C) Router(config-router)#rip { AS no.} D) Router(config-router)#router rip { AS no.}</p> | Q20) B |
| <p>Q21) What is the default value of the RIP holddown timer?</p> <p>A) 30 seconds B) 60 seconds C) 90 seconds D) 180 seconds</p> | Q21) D |
| <p>Q22) In this line from the output of the debug ip rip command, what do the numbers within the parentheses signify? RIP: sending v1 update to 255.255.255.255 via Ethernet1 (10 . 1 . 1 . 2)</p> <p>A) the source address B) the next-hop address C) the destination address D) the address of the routing table entry</p> | Q22) A |
| <p>Q23) What could cause the message "RIP: bad version 128 from 160.89 .80.43" to be displayed in the output of the debug ip rip command?</p> <p>A) receiving a malformed packet B) sending a routing table update C) receiving a routing table update</p> | Q23) A |



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| <p>Q24) Which two factors can be included in an IGRP composite routing metric? (Choose two.)</p> <p>A) load B) distance C) reliability D) hop count E) CPU speed</p> | <p>Q24) A, C</p> |
| <p>Q25) Which advantage does the IGRP composite metric have over the RIP hop count metric?</p> <p>A) faster speed B) greater accuracy C) greater simplicity D) faster convergence</p> | <p>Q25) B</p> |
| <p>Q26) With the IGRP unequal-cost path load balancing, why must the next-hop router of each alternate path be closer to the destination than is the local router by its best path?</p> <p>A) to ensure scalability B) to ensure packet arrival C) to prevent routing loops D) to prevent multiple packet distribution</p> | <p>Q26) C</p> |
| <p>Q27) Which command will distribute traffic across IGRP multiple paths only to the paths with the lowest metric (equal-cost path load balancing)?</p> <p>A) variance 2 B) traffic-share min C) traffic-share balanced D) traffic-share variance 1</p> | <p>Q27) B</p> |
| <p>Q28) With IGRP load balancing, which command specifies that the metric of a feasible alternate path to a destination can be no more than three times the metric of the best path metric to that destination?</p> <p>A) variance 3 B) variance 0.3 C) traffic-share min D) traffic-share balanced</p> | <p>Q28) A</p> |



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| <p>Q29) The flush value, as displayed in the output of the show ip protocols command, should be greater than the sum of which two other values?</p> <p>A) update and invalid B) update and holddown C) invalid and holddown D) invalid and twice holddown</p> | Q29) C |
| <p>Q30) If router A sends router B an IGRP update indicating that a route that was inaccessible is now reachable, when will router B update its routing table?</p> <p>A) immediately B) after 10 seconds C) when it receives a second notice D) when the holddown timer expires</p> | Q30) D |
| <p>Q31) Which command displays metric information that is contained in an IGRP update?</p> <p>A) debug ip igmp events B) debug ip igmp transactions C) debug ip igmp events summary D) debug ip igmp transactions summary</p> | Q31) B |
| <p>Q32) How is the bandwidth requirement for EIGRP packets minimized?</p> <p>A) by propagating only data packets B) by propagating only hello packets C) by propagating only routing table changes and hello packets D) by propagating the entire routing table only to those routers affected by a topology change</p> | Q32) C |
| <p>Q33) Which command correctly specifies that network 10.0.0.0 is directly connected to a router that is running EIGRP?</p> <p>A) Router(config)#network 10.0.0.0 B) Router(config)#router eigrp 10.0.0.0 C) Router(config-router)#network 10.0.0.0 D) Router(config-router)#router eigrp 10.0.0.0</p> | Q33) C |



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| <p>Q34) Which command displays the amount of time since the router heard from an EIGRP neighbor?</p> <p>A) show ip eigrp traffic B) show ip eigrp topology C) show ip eigrp interfaces D) show ip eigrp neighbors</p> | Q34) D |
| <p>Q35) What are two characteristics of OSPF? (Choose two.)</p> <p>A) hierarchical B) proprietary C) open standard D) similar to RIP E) distance vector protocol</p> | Q35) A, C |
| <p>Q36) OSPF routes packets within a single ____.</p> <p>A) area B) network C) segment D) autonomous system</p> | Q36) D |
| <p>Q37) With OSPF, each router builds its SPF tree using the same link-state information, but each will have a separate ____ of the topology.</p> <p>A) state B) view C) version D) configuration</p> | Q37) B |
| <p>Q38) Which component of the SPF algorithm is inversely proportional to bandwidth?</p> <p>A) link cost B) root cost C) link state D) hop count</p> | Q38) A |



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| <p>Q39) Which command correctly starts an OSPF routing process using process ID 191?</p> <p>A) Router(config)#router ospf 191 B) Router(config)#network ospf 191 C) Router(config-router)#network ospf 191 D) Router(config-router)#router ospf process-id 191</p> | <p>Q39) A</p> |
| <p>Q40) What is the purpose of the show ip ospf interface command?</p> <p>A) to display OSPF-related interface information B) to display general information about OSPF routing processes C) to display OSPF neighbor information on a per-interface basis D) to display OSPF neighbor information on a per-interface type basis</p> | <p>Q40) A</p> |
| <p>Q41) The output from which command includes information about the length of the OSPF packet?</p> <p>A) debug ip ospf events B) debug ip ospf packet C) debug ip ospf packet size D) debug ip ospf mpls traffic-eng advertisements</p> | <p>Q41) B</p> |