CSE 324 Lab Final Practice Exam Solution

Step 1: Configure DHCP in Guest Network

R3(config)#ip dhcp pool R3G0/0

R3(dhcp-config)#net 192.168.4.0 255.255.255.0

R3(dhcp-config)#default-router 192.168.4.1

R3(dhcp-config)#dns-server 192.168.1.12

R3(dhcp-config)#exit

R3(config)#ip dhcp excluded-address 192.168.4.1 192.168.4.252

Step 2: Configure Routing Protocols (Static, Default, and RIP)

R1(config)#ip route 0.0.0.0 0.0.0.0 11.10.100.1

ISP(config)#ip route 209.165.200.240 255.255.255.248 11.10.100.2

R1(config)#router rip

R1(config-router)#net 192.168.100.0

R1(config-router)#net 192.168.101.0

R1(config-router)#default-information originate

R1(config-router)#exit

R2(config)#router rip

R2(config-router)#net 192.168.1.0

R2(config-router)#net 192.168.101.0

R2(config-router)#net 192.168.103.0

R2(config-router)#exit

R3(config)#router rip

R3(config-router)#network 192.168.4.0

R3(config-router)#network 192.168.100.0

R3(config-router)#network 192.168.102.0

R4(config)#router rip

R4(config-router)#network 192.168.2.0

R4(config-router)#network 192.168.3.0

R4(config-router)#network 192.168.102.0

R4(config-router)#network 192.168.103.0

Step 3: Configure NAT

R1(config)#ip nat inside source static 192.168.1.10 209.165.200.241

R1(config)#ip nat pool NAT-POOL 209.165.200.242 209.165.200.244 netmask 255.255.255.248

R1(config)#access-list 10 permit 192.168.1.0 0.0.0.255

R1(config)#access-list 10 permit 192.168.2.0 0.0.0.255

R1(config)#access-list 10 permit 192.168.3.0 0.0.0.255

R1(config)#access-list 10 permit 192.168.4.0 0.0.0.255

R1(config)#ip nat inside source list 10 pool NAT-POOL

R1(config)#interface serial 0/0/0

R1(config-if)#ip nat outside

R1(config-if)#exit

R1(config)#interface serial 0/0/1

R1(config-if)#ip nat in

R1(config-if)#exit

R1(config)#interface serial 0/1/1

R1(config-if)#ip nat in

R1(config-if)#exit

Step 5: Design and Implement ACL on Specific Router

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R2(config)#access-list 1 deny host 192.168.3.11

R2(config)#access-list 1 permit any

R2(config)#int gigabitEthernet 0/0

R2(config-if)#ip access-group 1 out

R2(config-if)#exit

Q3

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ISP(config)#access-list 1 deny 10.0.0.0 0.255.255.255

ISP(config)#access-list 1 deny 172.16.0.0 0.15.255.255

ISP(config)#access-list 1 deny 192.168.0.0 0.0.255.255

ISP(config)#access-list 1 permit any

ISP(config)#interface serial 0/0/0

ISP(config-if)#ip access-group 1 in

ISP(config-if)#iexit