**Task 1 ‘**

**PC1**

ping 172.31.0.0

ping 172.31.1.128

**PC2**

ping 172.31.1.128

ping 172.31.1.0

**PC3**

ping 172.31.0.0

ping 172.31.1.0

**R1**

en

conf t

ip route 172.31.0.0 255.255.255.0 172.31.1.193 (for R2 LAN)

ip route 172.31.1.196 255.255.255.252 172.31.1.193 (for R2 and R3 WAN)

ip route 172.31.1.128 255.255.255.192 172.31.1.193 (for R3 LAN)

**R2**

ip route 172.31.1.0 255.255.255.128 s0/0/0

ip route 172.31.1.128 255.255.255.192 s0/0/1

**R3**

ip route 172.31.1.0 255.255.255.128 172.31.1.197

ip route 172.31.0.0 255.255.255.0 172.31.1.197

ip route 172.31.1.192 255.255.255.252 172.31.1.197

**Task 2 ‘**

*For ipv4*

**Edge\_Router**

ip route 0.0.0.0 0.0.0.0 s0/0/0

exit

show ip route

conf t

ip route 0.0.0.0 0.0.0.0 s0/0/1 5

exit

show ip route

show run

conf t

int s0/0/0

shut

exit

int s0/0/0

no shut

**PC-A**

tracert 198.0.0.10

*For ipv6*

**Edge\_Router**

ipv6 route ::/0 2001:DB8:A:2::1 5

exit

show ipv6 route

show run

int s0/0/0

shut

exit

exit

show ipv6 route

conf t

int s0/0/0

no shut

**PC-A**

tracert 200:DB8:F:F::10

**Task 3 ‘**

**R1**

en

conf t

ip route 0.0.0.0 0.0.0.0 s0/0/1

router rip

version 2

no auto-summary

network 192.168.1.0

network 192.168.2.0

passive-interface g0/0

default-information originate

end

copy run start

**R2**

en

conf t

router rip

version 2

no auto-summary

network 192.168.2.0

network 192.168.3.0

network 192.168.4.0

passive-interface g0/0

default-information originate

end

copy run start

**R3**

en

conf t

router rip

version 2

no auto-summary

network 192.168.4.0

network 192.168.4.0

passive-interface g0/0

default-information originate

end

copy run start