

Ahmed Jalil, 200932

Computer Networks Lab

Final Exam

Q1)

1. 193.34.23.1 – C – N.N.N.H – 255.255.255.0
2. 199.80.60.110 – C – N.N.N.H – 255.255.255.0
3. 224.254.254.254 – D – This class exists only for multicast purposes, therefore, no subnet mask.
4. 108.80.10.1 – A - N.H.H.H – 255.0.0.0
5. 120.1.1.1 – A – N.H.H.H – 255.0.0.0
6. 12.11.12.22 – A – N.H.H.H – 255.0.0.0
7. 66.77.88.80 – A – N.H.H.H – 255.0.0.0
8. 134.200.234.12 – B – N.N.H.H – 255.255.0.0
9. 223.254.254.254 – C – N.N.N.H – 255.255.255.0
10. 100.100.100.100 – A – N.H.H.H – 255.0.0.0

Q2) Connecting two personal computers with a router ...

Router2

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 200.200.200.200

Subnet Mask 255.255.255.0

Default Gateway 200.200.200.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address

Link Local Address FE80::201:C7FF:FEC9:5D7B

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0

GigabitEthernet0/1

GigabitEthernet0/2

GigabitEthernet0/2

Port Status ☒ On

Bandwidth ☒ 1000 Mbps ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0000.0C28.1E03

IP Configuration

IPv4 Address 200.200.200.1

Subnet Mask 255.255.255.0

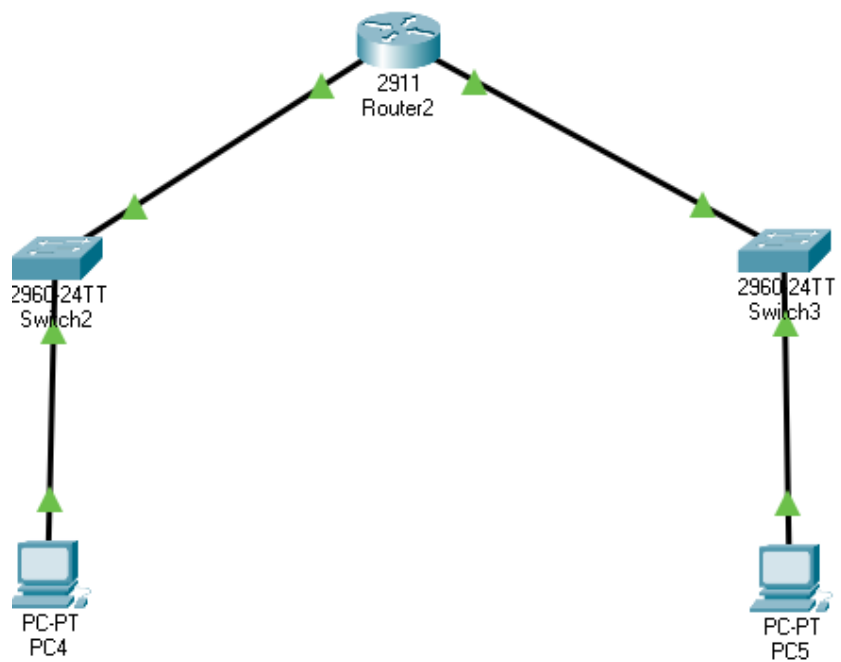
Tx Ring Limit 10

Equivalent IOS Commands

```

Router(config-if)#ip address 200.200.200.1 255.255.255.0
Router(config-if)#ip address 200.200.200.1 255.255.255.0
Router(config-if)#ip address 200.200.200.1 255.255.255.0
Router(config-if)#ip address 200.200.200.1 255.255.255.0
Router(config-if)#ip address 200.200.200.1 255.255.255.0

```



```
Physical  Config  Desktop  Programming  Attributes
Command Prompt

Packet Tracer PC Command Line 1.0
C:\>ping 32.32.32.32

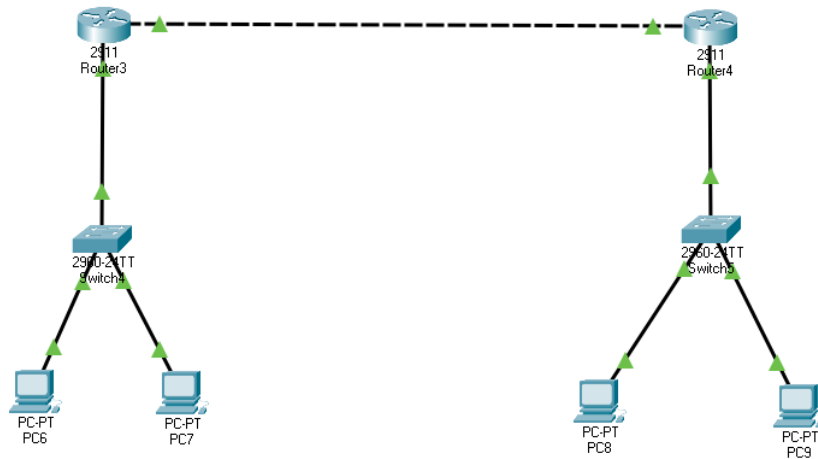
Pinging 32.32.32.32 with 32 bytes of data:

Reply from 32.32.32.32: bytes=32 time=7ms TTL=127
Reply from 32.32.32.32: bytes=32 time<1ms TTL=127
Reply from 32.32.32.32: bytes=32 time<1ms TTL=127
Reply from 32.32.32.32: bytes=32 time<1ms TTL=127

Ping statistics for 32.32.32.32:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 7ms, Average = 1ms

C:\>|
```

Q3) Connecting two different networks via two routers using static routing ...



Physical Config Desktop Programming Attributes

IP Configuration

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address: 32.32.32.32

Subnet Mask: 255.0.0.0

Default Gateway: 32.32.32.1

DNS Server: 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address: /

Link Local Address: FE80::260:47FF:FE0D:3689

Default Gateway:

DNS Server:

802.1X

☐ Use 802.1X Security

Authentication: MD5

Username:

Password:

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 32.32.32.33

Subnet Mask 255.0.0.0

Default Gateway 32.32.32.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address

Link Local Address FE80::2D0:97FF:FE35:EB47

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0

GigabitEthernet0/1

GigabitEthernet0/2

GigabitEthernet0/1

Port Status ☒ On

Bandwidth ☒ 1000 Mbps ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0002.4A03.E002

IP Configuration

IPv4 Address 32.32.32.1

Subnet Mask 255.0.0.0

Tx Ring Limit 10

Equivalent IOS Commands

Physical	Config	CLI	Attributes
<div> <div> <div>GLOBAL</div> <div>Settings</div> <div>Algorithm Settings</div> <div>ROUTING</div> <div>Static</div> <div>RIP</div> <div>SWITCHING</div> <div>VLAN Database</div> <div>INTERFACE</div> <div>GigabitEthernet0/0</div> <div>GigabitEthernet0/1</div> <div>GigabitEthernet0/2</div> </div> <div> <div>GigabitEthernet0/1</div> <div>Port Status <input checked="" type="checkbox"/> On</div> <div>Bandwidth <input checked="" type="radio"/> 1000 Mbps <input type="radio"/> 100 Mbps <input type="radio"/> 10 Mbps <input checked="" type="checkbox"/> Auto</div> <div>Duplex <input type="radio"/> Half Duplex <input checked="" type="radio"/> Full Duplex <input checked="" type="checkbox"/> Auto</div> <div>MAC Address 0002.4A03.E002</div> <div> <div>IP Configuration</div> <div>IPv4 Address 32.32.32.1</div> <div>Subnet Mask 255.0.0.0</div> </div> <div>Tx Ring Limit 10</div> </div> </div>			

Equivalent IOS Commands

Physical	Config	CLI	Attributes
<div> <div> <div>GLOBAL</div> <div>Settings</div> <div>Algorithm Settings</div> <div>ROUTING</div> <div>Static</div> <div>RIP</div> <div>SWITCHING</div> <div>VLAN Database</div> <div>INTERFACE</div> <div>GigabitEthernet0/0</div> <div>GigabitEthernet0/1</div> <div>GigabitEthernet0/2</div> </div> <div> <div>GigabitEthernet0/2</div> <div>Port Status <input checked="" type="checkbox"/> On</div> <div>Bandwidth <input checked="" type="radio"/> 1000 Mbps <input type="radio"/> 100 Mbps <input type="radio"/> 10 Mbps <input checked="" type="checkbox"/> Auto</div> <div>Duplex <input type="radio"/> Half Duplex <input checked="" type="radio"/> Full Duplex <input checked="" type="checkbox"/> Auto</div> <div>MAC Address 0002.4A03.E003</div> <div> <div>IP Configuration</div> <div>IPv4 Address 2.2.2.2</div> <div>Subnet Mask 255.0.0.0</div> </div> <div>Tx Ring Limit 10</div> </div> </div>			

Equivalent IOS Commands

```
Router(config)#ip route 192.192.192.0 255.255.255.0 2.2.2.1
```

Physical Config CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0

GigabitEthernet0/1

GigabitEthernet0/2

Static Routes

Network

Mask

Next Hop

Network Address

192.192.192.0/24 via 2.2.2.1

Physical Config Desktop Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address

Subnet Mask

Default Gateway

DNS Server

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication

Username

Password

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address: 192.192.192.193

Subnet Mask: 255.255.255.0

Default Gateway: 192.192.192.1

DNS Server: 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address: /

Link Local Address: FE80::20B:BEFF:FE6A:76B5

Default Gateway:

DNS Server:

802.1X

☐ Use 802.1X Security

Authentication: MD5

Username:

Password:

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0

GigabitEthernet0/1

GigabitEthernet0/2

GigabitEthernet0/1

Port Status: ☒ On

Bandwidth: ☒ 1000 Mbps ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex: ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address: 0090.2171.2102

IP Configuration

IPv4 Address: 192.192.192.1

Subnet Mask: 255.255.255.0

Tx Ring Limit: 10

Equivalent IOS Commands

Router4

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0

GigabitEthernet0/1

GigabitEthernet0/2

GigabitEthernet0/2

GigabitEthernet0/2

Port Status ☒ On

Bandwidth ☒ 1000 Mbps ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0090.2171.2103

IP Configuration

IPv4 Address 2.2.2.1

Subnet Mask 255.0.0.0

Tx Ring Limit 10

Physical Config **Desktop** Programming Attributes

Command Prompt

```

Packet Tracer PC Command Line 1.0
C:\>ping 32.32.32.32

Pinging 32.32.32.32 with 32 bytes of data:

Request timed out.
Request timed out.
Reply from 32.32.32.32: bytes=32 time<1ms TTL=126
Reply from 32.32.32.32: bytes=32 time<1ms TTL=126

Ping statistics for 32.32.32.32:
    Packets: Sent = 4, Received = 2, Lost = 2 (50% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 32.32.32.32

Pinging 32.32.32.32 with 32 bytes of data:

Reply from 32.32.32.32: bytes=32 time=6ms TTL=126
Reply from 32.32.32.32: bytes=32 time<1ms TTL=126
Reply from 32.32.32.32: bytes=32 time<1ms TTL=126
Reply from 32.32.32.32: bytes=32 time<1ms TTL=126

Ping statistics for 32.32.32.32:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 6ms, Average = 1ms

C:\>

```

```

C:\>

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 6ms, Average = 1ms

```