

Table 8.2: Routing Table for VLAN Configuration

PC	VLAN	IP Address	Subnet Mask	Default Gateway
PC0	10	192.168.10.2	255.255.255.0	192.168.10.1
PC1	10	192.168.10.3	255.255.255.0	192.168.10.1
PC8	20	192.168.20.2	255.255.255.0	192.168.20.1
PC3	20	192.168.20.3	255.255.255.0	192.168.20.1
PC4	10	192.168.10.4	255.255.255.0	192.168.10.1
PC5	10	192.168.10.5	255.255.255.0	192.168.10.1
PC6	20	192.168.20.4	255.255.255.0	192.168.20.1
PC7	20	192.168.20.5	255.255.255.0	192.168.20.1

Commands:

Left Switch:

```
Switch> enable  
Switch# configure terminal
```

```
Switch(config)# vlan 10  
Switch(config-vlan)# name CSE  
Switch(config-vlan)# exit
```

```
Switch(config)# vlan 20  
Switch(config-vlan)# name EEE  
Switch(config-vlan)# exit
```

```
Switch(config)# interface range fastethernet 0/1 - 10  
Switch(config-if-range)# switchport mode access  
Switch(config-if-range)# switchport access vlan 10  
Switch(config-if-range)# exit
```

```
Switch(config)# interface range fastethernet 0/11 - 20  
Switch(config-if-range)# switchport mode access  
Switch(config-if-range)# switchport access vlan 20  
Switch(config-if-range)# exit
```

```
Switch(config)# interface fastethernet 0/24
Switch(config-if)# switchport mode trunk
Switch(config-if)# exit
```

Right Switch:

```
Switch> enable
Switch# configure terminal

Switch(config)# vlan 10
Switch(config-vlan)# name CSE
Switch(config-vlan)# exit

Switch(config)# vlan 20
Switch(config-vlan)# name EEE
Switch(config-vlan)# exit

Switch(config)# interface range fastethernet 0/1 - 10
Switch(config-if-range)# switchport mode access
Switch(config-if-range)# switchport access vlan 10
Switch(config-if-range)# exit

Switch(config)# interface range fastethernet 0/11 - 20
Switch(config-if-range)# switchport mode access
Switch(config-if-range)# switchport access vlan 20
Switch(config-if-range)# exit

Switch(config)# interface fastethernet 0/23
Switch(config-if)# switchport mode trunk
Switch(config-if)# exit

Switch(config)# interface fastethernet 0/24
Switch(config-if)# switchport mode trunk
Switch(config-if)# exit
```

Router:

```
Router> enable
Router# configure terminal

Router(config)# interface fastethernet 0/0
```

```
Router(config-if)# no shutdown
Router(config-if)# exit

Router(config)# interface fastethernet 0/0.10
Router(config-subif)# encapsulation dot1Q 10
Router(config-subif)# ip address 192.168.10.1
255.255.255.0
Router(config-subif)# exit

Router(config)# interface fastethernet 0/0.20
Router(config-subif)# encapsulation dot1Q 20
Router(config-subif)# ip address 192.168.20.1
255.255.255.0
Router(config-subif)# exit
```