

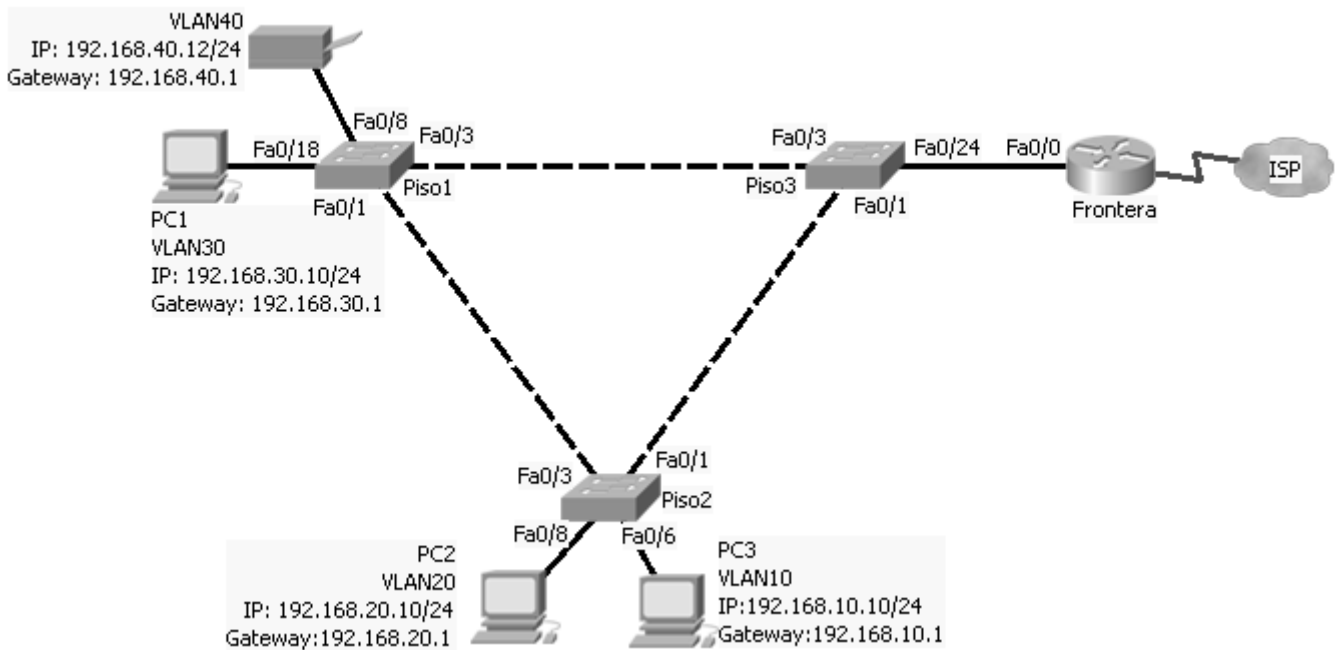
Conmutación y Enrutamiento II Examen de Mejoramiento

Nombre: _____

Calificación

Paralelo: _____

1. En base al diagrama mostrado y las salidas de los comandos “show interface trunk” y “show running-configuration” y “show vlan summary” determine:
- Porque PC2 no puede imprimir (20 puntos)
 - Porque PC1 no tiene salida a Internet (20 puntos)
 - Porque Piso1 no recibe respuesta al comando ping 192.168.99.1 (20 puntos)



```

Frontera#show running-config
~~~~~
interface FastEthernet0/0
no ip address
duplex auto
speed auto
!
interface FastEthernet0/0.10
encapsulation dot1Q 10
ip address 192.168.10.1 255.255.255.0
!
interface FastEthernet0/0.20
encapsulation dot1Q 20
ip address 192.168.20.11 255.255.255.0
!
interface FastEthernet0/0.30
encapsulation dot1Q 3
ip address 192.168.30.1 255.255.255.0
!
interface FastEthernet0/0.40
encapsulation dot1Q 40
ip address 192.168.40.1 255.255.255.0
!
interface FastEthernet0/0.99
encapsulation dot1Q 99 native
ip address 192.168.98.1 255.255.255.0
~~~~~
end
    
```

```
Piso1#show interface trunk
Port      Mode      Encapsulation  Status      Native vlan
Fa0/1     on        802.1q         trunking    69
Fa0/3     on        802.1q         trunking    69

Port      Vlans allowed on trunk
Fa0/1     1-1005
Fa0/3     1-1005

Port      Vlans allowed and active in management domain
Fa0/1     1,10,20,30,40,99
Fa0/3     1,10,20,30,40,99

Port      Vlans in spanning tree forwarding state and not pruned
Fa0/1     1,10,20,30,40,99
Fa0/3     1,10,20,30,40,99
```

```
Piso1#show vlan brief
```

VLAN Name	Status	Ports
1 default	active	Fa0/2, Fa0/4, Fa0/5, Fa0/6 Fa0/7, Fa0/8, Fa0/10, Fa0/11 Fa0/12, Fa0/13, Fa0/14, Fa0/15 Fa0/16, Fa0/17, Fa0/19, Fa0/20 Fa0/21, Fa0/22, Fa0/23, Fa0/24
10 Ventas	active	
20 Tecnico	active	
30 Secretarias	active	Fa0/18
40 Servicios	active	Fa0/9
99 Administracion	active	

```
Piso1#show running-config
```

```
~~~~~
interface Vlan69
 ip address 192.168.69.10 255.255.255.0
!
ip default-gateway 192.168.69.1
~~~~~
end
```

```
Piso2#show interface trunk
Port      Mode      Encapsulation  Status      Native vlan
Fa0/1     on        802.1q         trunking    99
Fa0/3     on        802.1q         trunking    99

Port      Vlans allowed on trunk
Fa0/1     1,10,20,30,99
Fa0/3     1,10,20,30,99

Port      Vlans allowed and active in management domain
Fa0/1     1,10,20,30,99
Fa0/3     1,10,20,30,99

Port      Vlans in spanning tree forwarding state and not pruned
Fa0/1     1,10,20,30,99
Fa0/3     1,10,20,30,99
```

```
Piso2#show vlan brief
```

VLAN Name	Status	Ports
1 default	active	Fa0/2, Fa0/4, Fa0/5, Fa0/7 Fa0/9, Fa0/10, Fa0/11, Fa0/12 Fa0/13, Fa0/14, Fa0/15, Fa0/16 Fa0/17, Fa0/18, Fa0/19, Fa0/20 Fa0/21, Fa0/22, Fa0/23, Fa0/24
10 Ventas	active	Fa0/6
20 Tecnico	active	
30 Secretarias	active	Fa0/8
40 Servicios	active	
99 Administracion	active	

```
Piso2#show running-config
```

```
~~~~~
interface Vlan99
 ip address 192.168.99.20 255.255.255.0
```

```
!
ip default-gateway 192.168.99.1
~~~~
end
```

```
Piso3#show interface trunk
Port      Mode      Encapsulation  Status      Native vlan
Fa0/1     on        802.1q         trunking    99
Fa0/3     on        802.1q         trunking    99

Port      Vlans allowed on trunk
Fa0/1     1,10,20,30,40,99
Fa0/3     1,10,20,30,40,99

Port      Vlans allowed and active in management domain
Fa0/1     1,10,20,30,40,99
Fa0/3     1,10,20,30,40,99

Port      Vlans in spanning tree forwarding state and not pruned
Fa0/1     1,10,20,30,40,99
Fa0/3     1,10,20,30,40,99
```

```
Piso3#show vlan brief
-----
VLAN Name                Status      Ports
-----
1    default                active      Fa0/2, Fa0/4, Fa0/5, Fa0/6
                                           Fa0/7, Fa0/9, Fa0/10, Fa0/11
                                           Fa0/12, Fa0/13, Fa0/14, Fa0/15
                                           Fa0/16, Fa0/17, Fa0/19, Fa0/20
                                           Fa0/21, Fa0/22, Fa0/23
10   Ventas                   active
20   Tecnico                  active
30   Secretarias              active      Fa0/18
40   Servicios                 active      Fa0/8 Fa0/24
99   Administracion           active
```

```
Piso3#show running-config
~~~~
interface Vlan99
 ip address 192.168.99.30 255.255.255.0
!
ip default-gateway 192.168.99.1
~~~~
end
```

2. Defina brevemente los siguientes términos (20 puntos)

a) STP

b) VLAN

c) VTP

d) Puerto Raíz

e) WEP

f) IEEE802.11g

g) Prioridad

h) Encapsulamiento

i) Conmutador de Capa 3

j) SSID

3. Describa detalladamente los tres pasos básicos recomendados para asegurar una red inalámbrica (20 puntos)