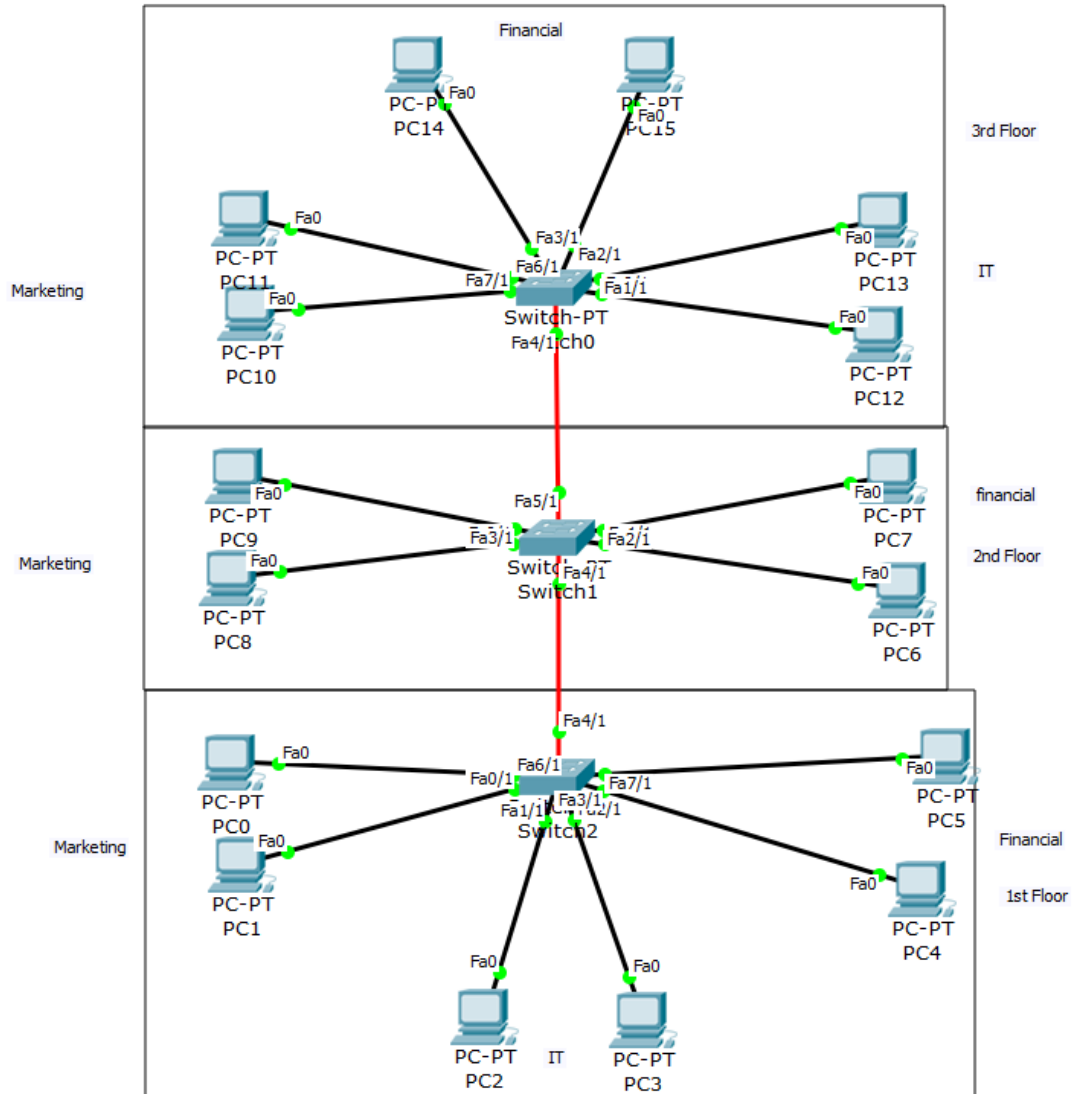# Exam Computer Network

Number 1 (15 point)


Make a VLAN using 3 switch and 16 computers with details like this:

a. Building have 3 floors and will be connected in 1 LAN.

b. Building have 3 division:

- **Financial Division** with range **192.168.10.0 – 192.168.10.255** (VLAN ID: **VLAN 10**)
- **Marketing Division** with range **192.168.20.0 – 192.168.20.255** (VLAN ID: **VLAN 20**)
- **IT Division** with range **192.168.30.0 – 192.168.30.255** (VLAN ID: **VLAN 30**)

Make a VLAN that so each computer can only connected into the same network as it division.
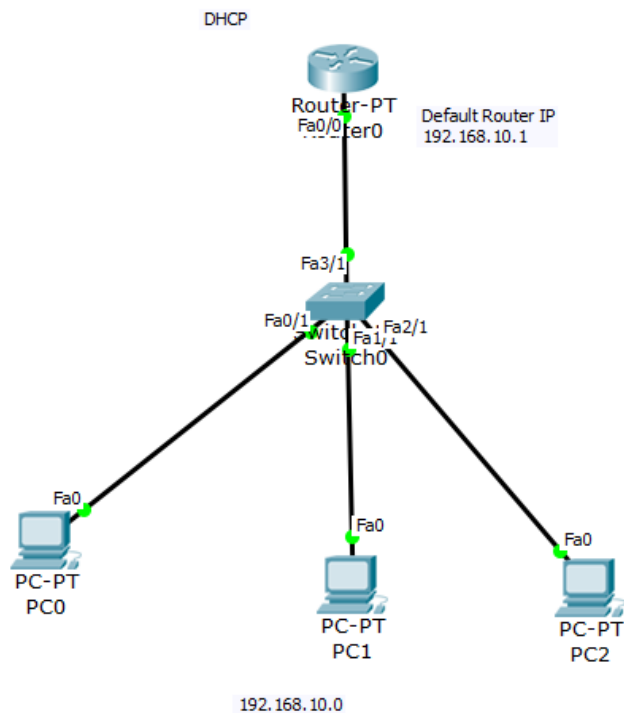
Number 2 (60 point) – Dynamic routing
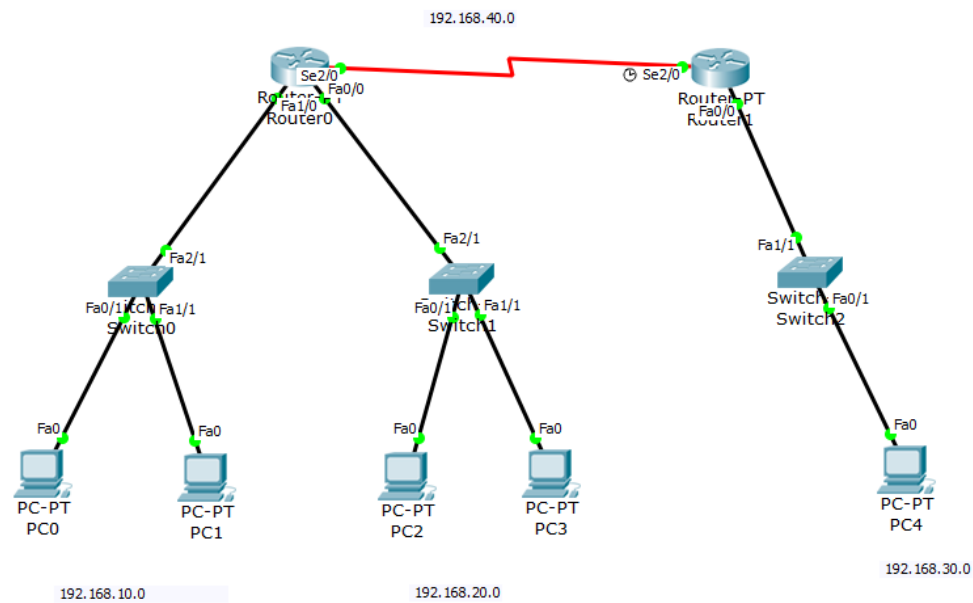
a. (20)Make dynamic routing configuration from picture above using **RIP** protocol
b. (20)Make dynamic routing configuration from picture above using **EIGRP** protocol
c. (20)Make dynamic routing configuration from picture above using **OSPF** protocol
*Notes: make into 3 different project (each number 1 packet tracer file)*

Number 3 (15 point) – DHCP

DHCP

Router-PT
Fa0/0 ter0   Default Router IP
                    192.168.10.1

Fa3/1

Fa0/1   Fa2/1
witc Fa1/1
Switch0

Fa0

Fa0   Fa0

PC-PT
PC0

PC-PT   PC-PT
PC1   PC2

192.168.10.0

Make a DHCP protocol to router give ip address automaticly for 100 devices. Use network **192.168.10.0** for this dhcp.

Set the default router ip address to **192.168.10.1**

Number 4 (10 point) – Wireless

WRT300N
Wireless Router0

TabletPC-PT
Tablet PC0

PC-PT
PC0

SMARTPHONE-PT
Smartphone0
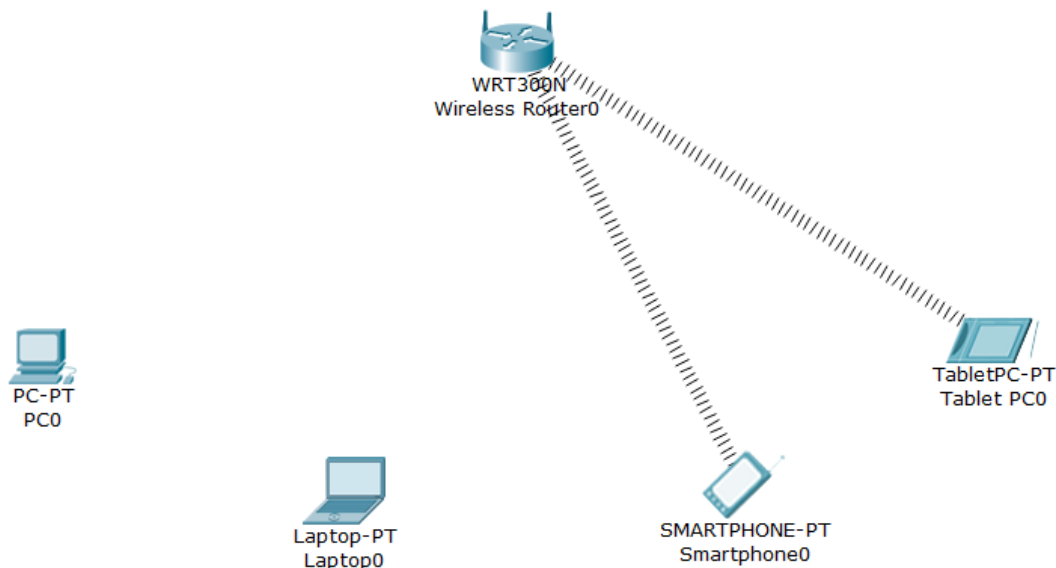
Laptop-PT
Laptop0

Make a topology like picture above using 1 pc, 1 laptop, 1 smartphone and 1 tablet.

Configure the router into dhcp ready and setting the starting ip for network **192.168.100.0.**

Set the starting ip into **192.168.100.100** for **100 devices**.

Set the network name for the wireless router into : "**course-net**"

Set the password using WPA2-Personal (using AES encryption) : "**empoweringitpeople**"

Course-Net Indonesia