BIRZEIT UNIVERSITY

ENCS 413: COMPUTER NETWORKS LABORATORY

Practical Final Exam (60 minutes)

Date: 07/08/2016
Time: 15:30 – 16:30
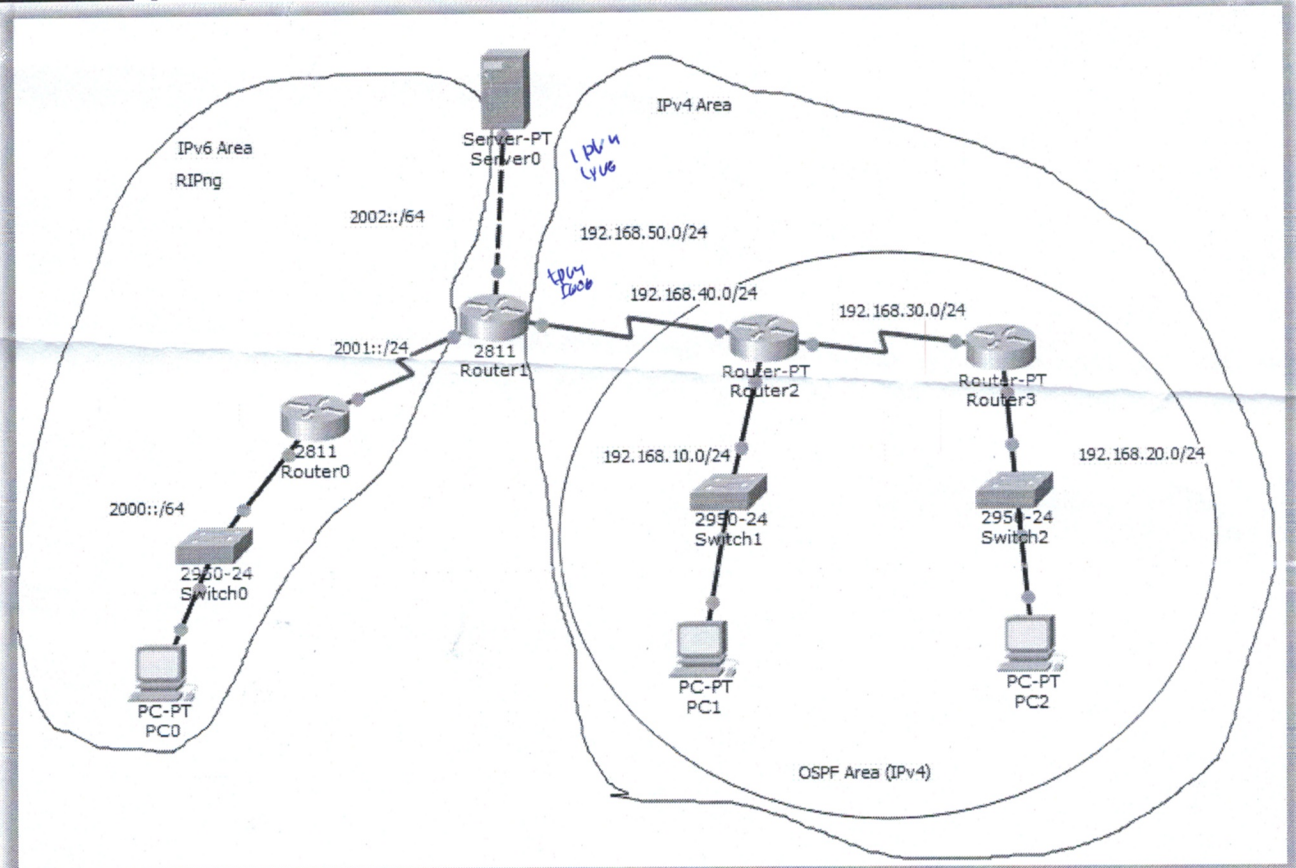
Name:_____   **ID:**_____

Notes:
- You are, only, allowed to use Command Line Interface (CLI).
- Shutdown your phones
- Hand-in this paper when you finish the exam

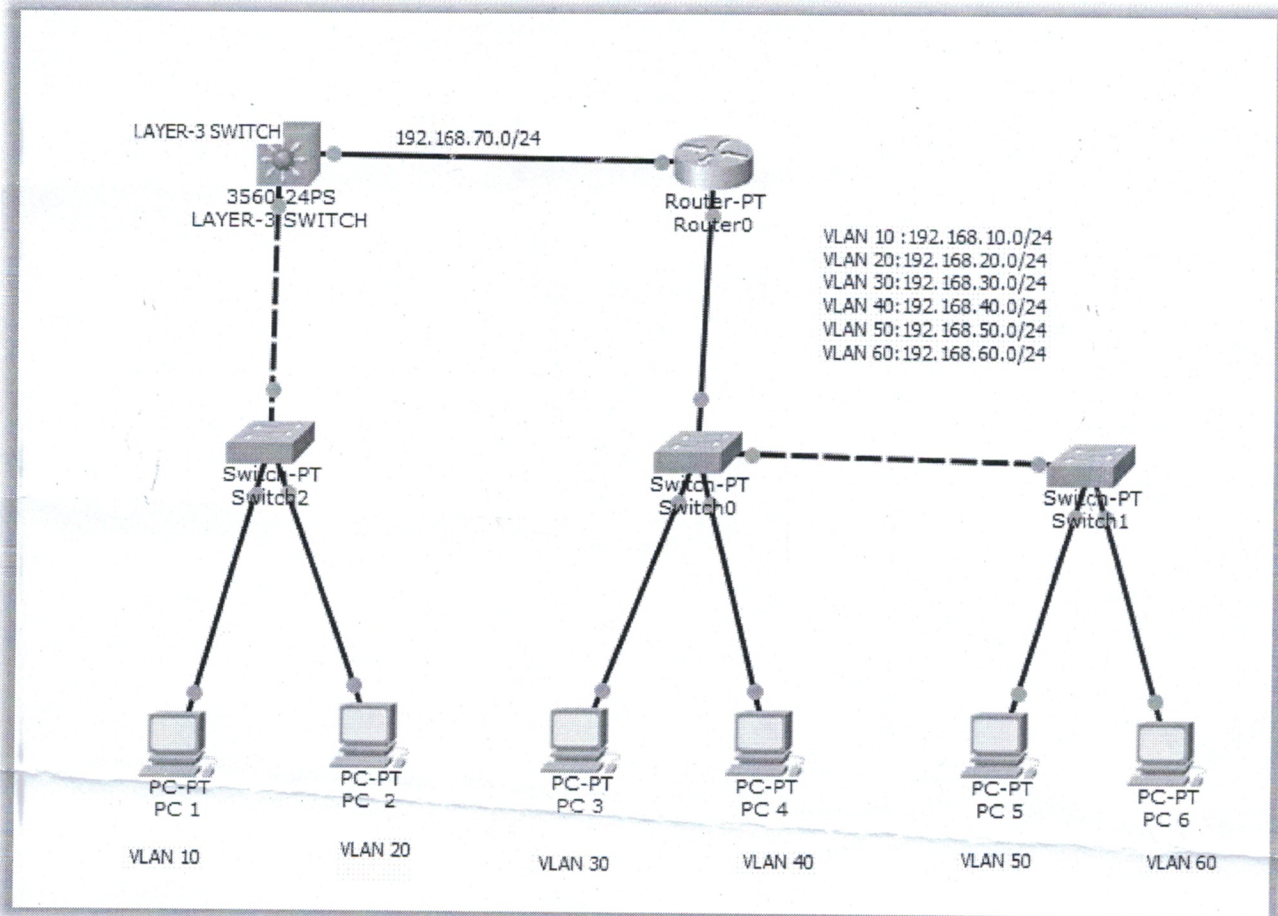**Question 1:** [Routing (IPv4 and IPv6)] **(12 points)**

Connect the topology above, take into consideration:
1. The Communication inside the area labeled OSPF should be using OSPF routing protocol
2. The PCs inside the IPv4 area should be able to access the server using static routing
3. The Communication inside the IPv6 Area should be using RIPng and the PCs should be able to access the server
4. Use Router 2811 in the IPv6 area
5. An interface might have two IPs, one is IPv4 and the other is IPv6.

Here is the Criteria

IP assignment	**3 pts**
OSPF	**3 pts**
RIPng	**3 pts**
Static Routing	**3 pts**

1

LAYER-3 SWITCH
192.168.70.0/24

3560-24PS
LAYER-3 SWITCH

Router-PT
Router0

VLAN 10 : 192.168.10.0/24
VLAN 20: 192.168.20.0/24
VLAN 30: 192.168.30.0/24
VLAN 40: 192.168.40.0/24
VLAN 50: 192.168.50.0/24
VLAN 60: 192.168.60.0/24

Switch-PT
Switch2

Switch-PT
Switch0

Switch-PT
Switch1

PC-PT
PC 1

PC-PT
PC 2

PC-PT
PC 3

PC-PT
PC 4

PC-PT
PC 5

PC-PT
PC 6

VLAN 10

VLAN 20

VLAN 30

VLAN 40

VLAN 50

VLAN 60

1. Connect the above topology and assign the IPs and the VLANSs in a proper way. [**5 pts**]
2. Use the RIP as the routing protocol. [**3 pts**]
3. Enable the telnet on the router. [**1 pt**]
4. Use standard ACL to deny VLAN 30 from Accessing VLAN 10. [**2 pts**]
5. Deny PC-3 from accessing the telnet on the router [**2 pts**]