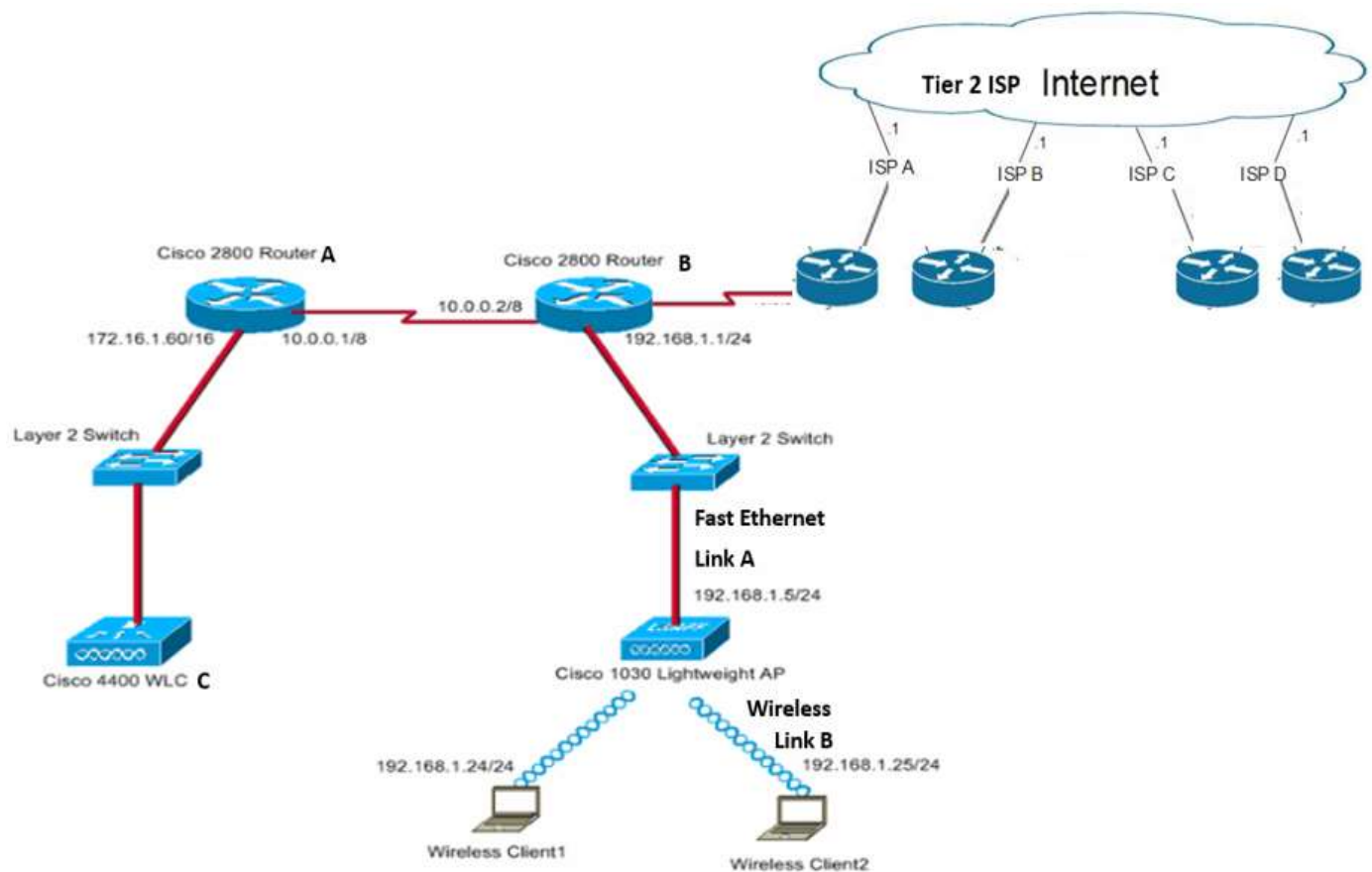


Student Name: _____

ID: _____

Section: _____

Semester	Fall-2021
Course	Data Communication and Networks
Quiz #	3
Topics Covered:	Network Layer
CLO Covered:	CLO-3
Date:	13-1-2022
Maximum Marks:	10
Weighted Marks:	
Instructor:	Nauman H. Ansari



Question 1 [C2-CLO3-PLO2]: The network engineer of the Customer-A of ISP-D wants to assign IP addresses from the range 190.200.160.0/24 to Office1, Office2 and Office3. The subnets are required to support 16, 32, and 8 IPs respectively. **Estimate** the subnet address blocks for each Office and show with prefix length. **[Marks: 5]**

Solution:

Office	Address Block	Prefix Length
Office1	190.200.160.0-190.200.160.15	/28
Office2	190.200.160.32-190.200.160.63	/27
Office3	190.200.160.64-190.200.160.71	/29

Question 2 [C2-CLO3-PLO2]: Interpret the given network diagram and provide information for the following network links: **[Marks=5]**

- (i) What Multiple Access Protocol is used on Link B?
- (ii) Which link uses 802.11 IEEE standard?
- (iii) What is the Speed of Link A?
- (iv) What Multiple Access Protocol is used on Link A?
- (v) What is the network and broadcast address of the wireless client connected with Link B?

Solution:

- (i) CSMA/CA
- (ii) Link B
- (iii) 100 Mbps
- (iv) CAMA/CD
- (v) Network Address: 192.168.168.168; Broadcast Address: 192.168.168.175

