**University of North Carolina Wilmington**

**MIS 323 – Business Telecommunications**

**Exercise 6 - LAN and WLAN Assignment**

**Provide answers to the following scenarios based on installing networks. You will need to provide explanations for your reasoning to receive full credit.**

###### Case 1: Pat's Petunias

You have been called in as a network consultant by your cousin Pat who operates a successful mail-order flower business. She is moving to a new office and wants to install a network for her telephone operators, who take phone calls and enter orders into the system. The number of operators working varies depending on the time of day and day of the week. On slow shifts, there are usually only 10 operators, whereas at peak times, there are 50. She has bids from different companies to install (1) a shared Ethernet 100Base-T network, or (2) a switched Ethernet 100Base-T network. She wants you to give her some sense of the relative performance of the alternatives so the can compare that with their different costs.

**What would you recommend and why?**

**Case 2: Eureka! Company**

Eureka has just leased a new office and are considering options for wiring it. Most users at the company bring their own laptops to do work. They have bids from different companies to install (a) a shared Ethernet 100Base-T network, (b) a switched Ethernet 100Base-T network, or (c) a 54 mbps wireless network.

**What would you recommend and why?**

**Case 3: South West State University**

South West State University installed a series of four Wi-Fi omnidirectional APs spread across the ceiling of the main floor of their library. The main floor has several large, open areas plus two dozen small offices spread around the outside walls. The WLAN worked well for one semester, but now more students have laptops, smart phones, etc. and performance has deteriorated significantly.

**What would you recommend they do? Additionally, there a recent concerns around security for the offices in the library. What would you suggest they do to handle these security issues?**