ISM/UNEX 270, Service Engineering

Homework 5: Service Capacity Management, Inventory Management, and Reviewing Concepts Learned

Unit Goals

(i.) Prepare for the Littlefield Challenge by reviewing capacity and inventory management concepts.
(ii.) Look back at the material we have covered so far and present a synthesis of its aspects that seem most important or noteworthy to you.

Due: beginning of class, Thursday, March 6 (one week)

Assessment: 10% of course grade. P1 - 2%, P2 - 1%, P3 - 2%, P4 - 5%.

Problems

P1.
Textbook Version 5: Problem 14.7, all parts, page 471. Refer to Chapters 13 and 14, and Appendices C and D for the necessary concepts from queueing theory.

Textbook Version 6: Problem 16.7, all parts, page 425. Refer to Chapter 16, and Appendices C and D.

P2.
Version 5: Problem 14.8, part a only, page 471.

Version 6: Problem 16.8, part a only, page 425.

P3.
Version 5: Problem 16.1, page 543, all parts. Refer to Chapter 16 for details on the EOQ and inventory management principles.

Version 6: Problem 18.1, page 500, all parts. Refer to Chapter 18.

P4. Essay question:

Write a one to two page essay of your view of the service industry today – including both opportunities and challenges that you see. Incorporate reflections on the lectures, guest speakers, and readings from ISM270 up to now.