Wilfrid W. Csaplar Jr. Managerial Economics Review Sheet for Exam 3

This review sheet is intended to cover everything that could be on the exam. However, it is possible that I may have inadvertently overlooked something. You are still responsible for everything in the chapters covered except anything that I explicitly say you are not responsible for. Therefore, if I left something off of this sheet, it can still be on the exam. There will be no multiple-choice questions. Most of the questions will be like the ones on the homework assignments, and possibly a few definition questions. I am more likely to ask questions that make you use definitions rather than have you recite them. I will probably ask one of the questions from the book at the end of the chapters.

The review session for this test will be Thursday, 3/31, at 7:30 in the normal room (I hope).
I slightly changed the syllabus so that for this test, we are doing sections 6.1 - 6.3.

Chapter 6.1 - 6.3: What are the production function, fixed inputs, variable inputs, short-run, long-run, TP_L, MP_L, and AP_L are. Why do the three graphs look as drawn? What are the MRP_L and the MRC_L and why should they be equal?

Chapter 7: What are implicit and explicit costs? How do economic costs differ from accounting costs? What is the difference between short-run and long-run? Be able to plot the SRTC, SRTVC, SRATC, SRAVC, and SRMC curves. Derive them from the isoquant/isocost diagram by holding K constant and drawing a horizontal line at that level. Hints on drawing them: Note that SRMC. must go through the minimum of both the SRATC and the SRAVC curves. The distance between SRATC and SRAVC is SRATC, so those two curves must be getting closer together. Therefore, draw the SRAVC curve first, then the SRATC curve and finally the SRMC curve. Remember to start the SRMC curve at the same point as the SRAVC curve. Also, be able to derive the LRATC, LRTC, and LRMC curves from the isoquant/isocost diagram using the expansion path. Understand why the LRATC curve is the envelope of the SRATC curves. Be able to draw them. Understand why the LRTC curve is the envelope of the SRTC curves. Be able to draw them. Understand why the LRATC may take each of the three different LRATC curves on page 287. What is the learning curve? Why does it take that shape? How can we keep costs down by outsourcing and having immigration of labor? Skip section 7-7. Understand breakeven analysis including the graph of straight-line TC and straight-line TR. How does the operating leverage affect the diagram? What is DOL? How do we calculate it? What does high DOL imply about the firm's profitability? Why is it acceptable to use the SRTC curve that is straight? Ignore pages 306 - 310.

Chapter 8.1 - 8.3: What are the characteristics of perfect competition, monopoly, monopolistic competition, and oligopoly? **Why do <u>all</u> of these firms set MR = MC**? What is meant by imperfect competition? Be able to relate the industry supply and demand for a perfectly competitive industry to the demand for the firm. Why does D = MR for that firm? Be able to find the output, price, total costs, total revenue, total profits or losses, and total variable costs from the ATC/AVC/MC/D/MR diagram. Hint: Find the ATC at the quantity produced **not** at the minimum of ATC. Be able show on both the firm and industry diagrams what happens if the profits are not zero. (Even though we imply the industry supply curve is horizontal in the long-run, it can be upward sloping; however, it takes time to prove that.) Be able to find exports or imports on the industry supply and demand diagram. Ignore the diagram for the exchange rate; however, know how to determine if the currency is getter stronger (appreciation) or weaker (depreciation) and how that affects the industry supply and demand diagram.

This is the non-graded assignment #6A that will be covered with assignment #6.

1) (20 points) Illustrate on the diagram for break-even analysis, an increase in the price of the good. Explain why the curve(s) moved as drawn. What happened to the break-even point? Why did that happen?

2) (10 points) Suppose the firm is producing 1000 items and sells them for $5/unit. If the AVC is $3/unit, and the TFC is $1500, what are the break-even output and the DOL? Show all work.

3) (15 points) Why is a high DOL a bad sign? What does DOL mean?

4) (40 points) Draw on side-by-side diagrams, the ATC/AVC/MC/D/MR diagram for a competitive firm making money and the S/D diagram for the industry. Explain how the two curves inter-relate. Explain how you know the firm is making money. Illustrate the movements of the curves on both diagrams over time. Explain why the curves moved as drawn.

5) (15 points) Draw the learning curve. Explain why it takes its shape.