Wilfrid W. Csaplar Jr. Intermediate Price Theory Review Sheet for Exam 4 and Final

This review sheet is intended to cover everything that could be on the exam; however, it is possible that I will have accidentally left something off. 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 in the homework assignments, and possibly a few definition questions, but I am more likely to ask questions that make you use the definitions rather than recite them. I will probably ask one of the questions from the book at the end of the chapters.

The review session will be at a time to be determined in class, probably Sunday 11/30.

Chapter 7 starting at Page 247: Understand the **expansion path**. Know how to use the expansion path to find the **LRTC curve**. Understand the **short-run expansion path** which I drew, which is slightly different than what they drew. Know how to find **economies of scale (IRTS) or diseconomies of scale (DRTS)** from looking at the LRATC curve and/or the **isoquant/isocost diagram**. Know how to calculate **cost-output elasticity E_C** and understand what that means. *It is just like most elasticities. However, it is how costs varies with output. Therefore, $E_C = \%\Delta C/\%\Delta Q$. That can be shown to = MC/ATC.* Be able to plot the **LRATC/SRATC/LRMC/SRMC** diagram with several short-run cost curves. Do not worry about the dark blue line on the graph on Page 257. *The SRATC curves are tangent to the LRATC, so they cannot touch at the minimum of the SRATC except for the one at the bottom of the LRATC. Also, the SRMC curves much cross the LRMC curves at the same quantity as the tangency of the LRATC and SRATC.* What do **economies** and **diseconomies of scope** mean? How do we calculate them? Do not worry about the graph on Page 259. Be able to plot the learning curve, explain why it takes that shape, and how that differs from economies of scale. Ignore Section 7.7.

Chapter 8: What do the terms **perfect competition, price taker, homogeneous products, free entry,** and **free exit** mean? Be able to plot the **total costs, total revenue, and total profit lines**. *Note that the total profit line may start going down or going up depending upon whether MC>MR.* Note that the graph on Page 285 is for a firm which is not perfectly competitive because it requires a downward sloping demand. Why does profit maximizing mean **MR = MC**? Why is the firm's demand horizontal? Why does a perfectly competitive firm (and only them) have MR = P? Be able to draw the **ATC/AVC/MC/D/MR graph for a firm**. Use that graph to find **profits or losses and the firm's supply curve**. What is the **shut-down point**? Why is it there? How do we get the **industry supply** from the firms' supply curves. Note that I simplified the diagram by assuming all the firms are identical, so my graph does not quite match Figure 8.9. How do we calculate the **market elasticity of supply (E_S)**? How do we interpret that? Be able to find **producer surplus** on the MC/ATC/AVC/D/MR diagram for a perfectly competitive firm and on the S/D diagram for the industry. How do we get the **long-run industry supply curve**? Why do firms make **zero profit**? How does the S_{LR} for the industry differ if the industry is an **increasing cost or decreasing cost industry**? What is **economic rent**? How do taxes affect the long-run supply for the firm and industry?

Chapter 9 up to Page 328: Be able to find **consumer surplus, producer surplus**, and **deadweight loss** for a perfectly competitive industry. Understand how **price ceilings**, affect the diagram. Know what **market failures** are, but we will solve them next semester.

Non-graded Assignment #9 to be reviewed with Assignment #9.

1) (50 points) Draw the ATC/AVC/MC/D diagram for a perfectly competitive firm which is making positive profits. Beside it, draw the S/D diagram for the industry. Explain how you know the firm is making positive profits. Illustrate what happens over time. Assume the industry is a constant cost industry. Explain why the curve(s) moved as drawn.

2) (20 points) Draw the short-run and long-run supply curves for a perfectly competitive industry which is in a decreasing cost industry. Explain why they take their shapes.

3) (10 points) Explain how the long-run supply curve for an industry could be downward sloping.

4) (20 points) Draw a supply and demand diagram for an industry. Place a price ceiling on the diagram. Find the quantity produced, price charged, consumer surplus, producer surplus, and dead-weight loss. Explain how you found them. Why did I argue the graph in the book is wrong?

Review Sheet for the Final:

The review session will be at a time to be determined. The final will be Friday, 12/12 at 1:00.

Chapter 9 after Page 328: How do **price floors (minimum), price supports, production quotas, import tariffs, import quotas, taxes, and subsidies** affect the industry supply and demand diagram for a perfectly competitive industry. How do we find the **tax incidence**?

When I write the final, I look for the material not tested yet (as in Chapter 9 after Page 328) and the most important topics and I ask questions about them. Then I look for questions which I wanted to ask about, but was unable to ask about. Those are put on the final too.

This non-graded assignment is from the material after Exam #4.

1) (25 points) Draw the supply and demand diagram for a perfectly competitive industry. Place a price floor on the good. Assume the government buys the excess products. Find the producer surplus, consumer surplus, and the cost to the government. Prove society is worse off than without the floor.

2) (25 points) Draw the supply and demand diagram for a perfectly competitive industry where the supply is flat the demand is steep. Place a specific tax on the good. Find who pays most of the tax. Explain why they pay most of the tax.

3) (25 points) Draw the supply and demand diagram for a perfectly competitive industry which competes against imports. Show the effects of a small tariff on imports on consumer surplus, producer surplus, and government tax revenue. Prove that society as a whole is hurt.

4) (25 points) Draw the supply and demand diagram for a perfectly competitive industry. Show the effects of a subsidy using consumer surplus, producer surplus, and government expenditure. Prove the country as a whole is hurt by it.