Wilfrid W. Csaplar Jr. Principles of Microeconomics Review Sheet for Exam 2

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, most likely Thursday, March 23rd.

Chapter 5: What are **negative externalities** and **positive externalities**? How are they seen on the graph? What is the best way to offset them? Show that on the supply and demand diagram. Know the economic reasons for **providing a legal system, promoting competition, providing public goods,** and **income redistribution**. Know what **government sponsored** and **government deterred goods** are. What is the difference between **voting** and **spending**?

Chapter 6: How do we calculate **marginal tax rate, average tax rate,** and **total taxes paid**? What is meant by **proportional, progressive,** and **regressive taxes**? What is the **tax base**? How can increasing a tax result in less revenue? What are **sales, excise, ad valorem,** and **specific (unit) taxes**? Who pays the tax? What is the **Laffer Curve**? The book actually draws it in Chapter 13. What are **Medicare** and **Social Security**? (Note that this is in the handouts I gave you which are also posted on my web page.) What are their effects on the economy? What is the problem with Social Security? What are some of the proposals for solving the problem? What are the pluses and minus of using each "solution"? I am most likely to give you a proposal for a solution and ask you how it would work, and whether or not you would implement my proposal.

Chapter 19: How do you calculate the **own-price elasticity of demand (E_P)**? Note that if you average the prices and quantities, then you are using "**arc elasticity**" otherwise you are using "**point elasticity**." What do the different elasticities of demand look like on a demand curve? I.e., which elasticities yield flat curves and which yield steep curves? Note that because the elasticity of demand is different at every point on a straight-line demand curve, you can only use the slope to compare two demand curves at the one point where they cross. How does the elasticity relate to **marginal revenue (MR)**? What determines if the price elasticity of demand is **elastic**, **inelastic**, or **unitary elastic**? The main determinant is the number, price, and quality of substitutes. However, the percentage of budget and the amount of time also make a difference. How do you calculate **cross-price elasticity (E_{XY})** using both the point and arc formulas? What does that number tell us about the goods? How do you calculate the **income elasticity of demand (E_I)** using both formulas? What does that number tell us about the good? How do you calculate the **price elasticity of supply** using both formulas? What does that tell us about the good? How will that change over time? What does the supply curve look like for the different elasticities? Hints on all elasticities, remember *ceteris paribus*. You must keep all other variables constant. All elasticities we discuss are %ΔQ/%Δsomething. This can be rewritten as (ΔQ/Δsomething)*(something/Q). The differences between point and arc are do you use your initial point (point elasticity) or an average of the two points (arc elasticity).

Chapter 20: What is meant by "**utility**" and "**utils**"? Be able to fill in a table like the one we did in class

for quantity, **total utility**, **average utility**, and **marginal utility**. Be able to plot them. What is meant by **diminishing marginal utility**? Understand the economic reason why $\mathbf{MU_X/P_X = MU_Y/P_Y}$ is utility maximizing. What are the **income** and **substitution effects**? How do they relate to the demand curve?

Chapter 21: What is meant by **economic rent**? How do we estimate it? Note that the graph on Page 483 is wrong unless you assume the opportunity costs of the land is zero if not used the way it is being used. What are the advantages and disadvantages of **proprietorships, partnerships, corporations,** and **LLCs**? What is the difference between **economic profits** and **accounting profits**? How do *length of loan* and *risk* affect the interest rate? How do we estimate the real interest rate from the inflation rate and the nominal interest rate? (Note that it is an estimate and if this was *Principles of Macroeconomics*, then I would teach you the correct way to calculate it.) Know how to use the equation $PV = \frac{FV_t}{(1+i)^t}$. What are the advantages and disadvantages of financing a project using **stocks, bonds**, and **reinvestment**? What is the **Theory of Efficient Markets**? Why do we care about **inside information**?

Non-graded Homework Assignment #5A to be reviewed with Assignment #5.

1) (15 points) Why do you think that most new companies are LLCs rather than partnerships? Explain your logic.

2) (5 points) In a few weeks, we will be concluding that perfectly competitive firms make no economic profits in the long-run. What does that mean about accounting profits? Explain your logic.

3) (20 points) I am having solar panels installed at my house. After tax credits, the cost is approximately $20,000. The estimated savings is $1500 per year on my electricity bill. The panels are guaranteed for 25 years. Set up the calculation which will determine the rate of return I expect to get. Do NOT solve it. Explain how you got the numbers. Assume the panels die after the guarantee runs out.

4) (20 points) Suppose a bond has a face value of $1000. It has a maturity date of 2027/3/24. The coupon rate is 5% with interest paid annually. Set up the calculation which will give you the current selling price if the going rate of interest is 4%. Without doing the calculation, is that number greater than $1000, equal $1000, or less than $1000. Explain your logic.

5) (10 points) I heard an expert on the radio state that nobody can tell you if the stock market is going to go up or down and if they claim to know, they are liars. Explain why he feels this.

6) (10 points) Economists use the term "economic rent" to explain why the best CEOs get such high pay. Explain their logic.