

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 October 7th or 8th.

Chapter 6 (Note that this is in the handouts I gave you which are also posted on my web page.): What are **Medicare** and **Social Security**? 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 7: What are, and how do we calculate, the **unemployment rate**, **labor force participation rate**, and **inflation rate**? What are **stocks** and **flows**? How do they relate to unemployment rates? Know how to classify people by the reason they are unemployed, i.e., laid off, job leaver, etc. Know how to tell who is in which category of unemployment, i.e., **frictional**, **structural**, **seasonal**, and **cyclical**. What is the **natural rate of unemployment**, a.k.a., **full employment unemployment rate**? How do **discouraged workers** and **underemployment** complicate the unemployment picture? What are the other costs of unemployment besides lowered production? How do we calculate **CPI**, **PPI**, **PCE Index** and **GDP deflator**. I won't ask you to do the calculation, but you may have to describe how it is done. Know how to calculate inflation from those numbers. Why does it matter if inflation is anticipated or unanticipated? What are the **costs of unanticipated and anticipated inflation**? (I added **shoe leather costs**.) Note that if inflation is expected to be 10% and it ends up being 7%, we had unexpected **deflation** of 3% and that hurts borrowers. Know what an **expansion** (a.k.a. **boom**), **contraction**, **recession**, **depression**, **trough**, and **peak** are. What is a **leading indicator**?

Chapter 8: What is the simple **circular flow**? What do we mean by product markets and factor markets? Know what is calculated in **GDP** and what is not. That method is the **expenditure method (C+I+G+X)**. Remember that “X” can be negative and that *you are likely to get the definition of “I” wrong. Stocks and bonds are not investments.* Ignore inventory investment. It is very small and confusing. Why should GDP calculated this way equal the **sum of the incomes and the sum of the value added**? What are some problems with trying to calculate GDP? What are some of the limitations in our understanding the meaning of different levels? Ignore GDI because they state it is the same as GDP, just calculated differently. Know how to get from **GDP** to **NDP**, **NI**, **PI**, and **DPI**. Note that if you know what those terms are trying to measure, you ought to be able to figure out what is added and what is subtracted. Capital consumption allowance is another way to calculate depreciation. What is the difference between **real** and **nominal GDP**? Ignore the chain-weighted measure for real GDP. How do we compare GDP across countries?

Chapter 9: What is **economic growth**? What are the negative effects of economic growth? What is the problem of using this as a measure of welfare? What causes GDP per capita to grow? Why do small

changes in the growth of GDP matter? What is **labor productivity** and what changes it? Why is **saving** so important to growth? What is **human capital**? What are the advantages and disadvantages of **patents**? Why do open economies grow faster? How does population growth affect development? Why are property rights important for growth? The **four keys to development** on Page 203 will help you to understand parts of the chapter.

Non-graded Homework Assignment #4A to be reviewed with Assignment #4.

- 1) (15 points) How does economic growth cause urban congestion?
- 2) (15 points) Most of the time since World War II, the full employment level of GDP has grown at 2.5% per year. However, from the late 1970s until the late 1990s, the growth rate reduced to 2.0%. I suspect that when economists look back at the time since 2008, the growth rate will have dropped back to 2.0% again. How long will it take GDP to double if the growth rate is 2.5%? How long will it take GDP to double if the growth rate is 2.0? Show all work for both calculations. Why do we care whether the growth rate is 2.0% or 2.5%?
- 3) (15 points) If you were to calculate how much money you need to save each year for retirement, the number is much greater if you wait a few years than if you start immediately upon graduation. For example, if you plan to work for 46 years after graduation and you earn an average real return of 5% (which is low for the stock market), then by waiting 12 years before you start to save, you must double your savings per year. (With a 9% return, waiting 8 years before you start saving will you to have to double your savings per year to save the same amount.) Give two reasons why waiting 12 years will double your required savings.
- 4) (20 points) How would lengthening the duration of patents help the economy to grow? What is the downside of increasing the duration of patents?
- 5) (15 points) How does limiting protectionism help an economy to develop?
- 6) (20 points) What are two problems with the definition of economic growth most commonly used? Explain how those problems could lead to misleading results.