

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 Wednesday, March 29<sup>th</sup>.

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 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** to **menu 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 and any others paying a fixed amount but helps those receiving the money. Know what an **expansion (a.k.a. boom)**, **contraction**, **recession**, **depression**, **trough**, and **peak** are. What is a **leading indicator**?

Chapter 8: 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**. *I took my list from an older version of the book. So my formulas are  $GDP - depreciation = NDP$ ,  $NDP + net\ factor\ payments + business\ subsidies - indirect\ business\ tax = NI$ .  $NI + transfer\ payments - direct\ business\ tax - retained\ earnings = PI$ .  $PI - personal\ taxes = DPI$ .* 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? Why should you start saving for retirement now? 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 215 will help you to understand parts of the chapter.

Chapter 12: Note we will not be making the Assumption #4 on Page 265. We will assume an open economy. What are C, I, G, and X? What determines them? What are the **MPC**, **MPS**, **APC**, and **APS**? *Note that even though our model assumes the MPC is the same for rich and poor, it also concludes that the rich will have a lower APC than the poor. It is easier to notice a person's APC than MPC.* You will not be drawing the graph for this chapter.

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Non-graded Homework Assignment #6A to be reviewed with Assignment #6.

- 1) (15 points) To retire and keep your standard of living, you need to save 20 times your annual income. Suppose your retirement fund earns 6% interest and if you earn \$50,000/year. If you save for 40 years, you need to save \$502.14/month. If you save for 30 years, you need to save \$1070.05/month. There are two reasons why the extra 10 years greatly reduces how much you have to save. What are the two reasons? Explain your logic. (Note that this means you should start saving for retirement today.)
- 2) (20 points) What is a patent? If the length of time that patents lasted was increased, then what would be the good effect and what would be the bad effect. Explain how both are caused.
- 3) (15 points) How does economic development cause urban congestion?
- 4) (15 points) The Trans-Pacific Partnership (TPP) was a free trade agreement which President Obama negotiated, but did not have time to get through Congress. President Trump has killed the agreement. WalletHub.com asked 18 experts what they thought about TPP. Given what your book says about keys to growth, how many of the experts do you think thought TPP was a good idea? Explain your logic. In case you are interested, you can see the results of the survey at the first link below, and my response at the second link. <https://wallethub.com/blog/was-the-trans-pacific-partnership-bad/33596/>  
<https://wallethub.com/blog/was-the-trans-pacific-partnership-bad/33596/#wilfrid-w-csaplar-jr->
- 5) (20 points) Suppose a person's consumption function was given by  $C = 1000 + .8(Y-T)$ . Their disposable income is \$10,000. Find their MPC, MPS, APC, and APS. Show all work. If there is no work, then explain how you found it.
- 6) (15 points) How does enforcing property rights yield more economic growth?