

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 TBD, probably on Monday 3/11.

Chapter 6 starting at Page 181: What is meant by *absolute poverty*? What are the two most common values chosen for that? Why do some people disagree about them? Be able to calculate the *poverty gap*. Know what that means. Is growth good for the poor? What can be done to help the poor more with growth? What are *safety nets*?

Chapter 7: What are *crude birth rate* and *crude death rate*, and how do they relate to the *rate of natural increase*? Why does the *demographic transition curve* often look like the one they drew for Finland? What is the *total fertility rates*? What causes it to change? Why is a 2% growth rate a big problem? What is *population momentum* and how does it cause populations to continue to grow after the fertility rate equals the replacement rate? What did **Malthus** say? What were the strengths and weaknesses of his theory? Understand how the five items on Page 234 affect the fertility rate. How does faster population growth hurt development? What is the *dependency ratio* and why does it matter? What are the arguments of the *population "optimists."* What are the strengths and weaknesses of their theory? What can be done to reduce the population growth? What are the strengths and weaknesses of the various approaches?

Chapter 8: What is *human capital* and why does it matter? What are *stocks* and *flows*? How do they relate to **education**? What are *gross and net enrollment rates* and how can the former be greater than 100%? If it is greater than 100%, then is that good or bad? How does education differ between boys and girls? What is the difference between **schooling and education**? How do earnings depend upon education? Be able to calculate the **private return** using the **present value calculations**. How do you calculate the **social return**? How do the **social costs and benefits** differ from the **private costs and benefits**? Be able to set up the formula to calculate the **internal rate of return**. Understand why the numbers in Table 8-3 take the patterns they do. Why might those numbers be inaccurate? How can we make schooling more productive? This includes changing underinvestment and misallocation of resources, as well as improving schools and lowering the costs of going to school.

Chapter 9: What determines the shape of **mortality pyramids** like those on Page 300? What are the *under-five mortality rate*, the *morbidity rate*, and *mortality rate*? What causes *stunting*? How do *life expectancy* and *HALE life expectancy* differ? (Shouldn't the latter be just called HALE?) Why is that difference important? What is meant by *epidemiological transition*? What are the three stages and why do they occur? How are **health** and income related? How do they relate to growth? For the three diseases, **HIV/AIDS, malaria, and tuberculosis**, what causes those diseases? Where are they problems? What are the effects of them on society and the individual? How have they been effectively reduced? What is the **DOTS** method? How was polio eradicated in Latin America? How were diarrheal deaths reduced?

Chapter 10: How do you do a **project appraisal** using the **cost-benefit analysis** and a **NPV** calculation. This is just like in Chapter 8 except we also have the value of the equipment at the end of the time. What are **opportunity costs** and how do they relate to the **shadow prices**? How do **commercial project appraisal** differ from **economic project appraisal** and **social project appraisal**? Be able to do a calculation like that in the table on Page 357. Why does using the shadow price of labor instead of the wage rate always increase the NPV while using the shadow price of foreign exchange has an ambiguous effect on the NPV? What is **rent seeking**? Why is it bad? (I am not referring to what the Dead Kennedys sing about.) How do the following hurt a country's ability to have entrepreneurs start new companies: **corruption, licenses & permits, laws restricting firing employees, poor courts for enforcing contracts, lack of domestic saving, and taxes on firms**?

This is the non-graded Assignment #6A that will be reviewed with Assignment #6.

1) (20 points) Two of the rows from the calculation of the life expectancy of Malaysia in 1995 is recreated below. Fill in the blanks. Show all work. For the entry in Column 4, you cannot directly calculate it, but you can give an estimate. State how you got the estimate.

Age	1 Proportion dying in interval	2 Number living at the beginning of interval	3 Number dying during the age interval	4 Person-years lived in age interval	5 Person-years live here and in future years	6 Years of life remaining
65-70	0.16050	70,833				
70-75	0.26762		15,319	259,024	602,260	10.13

2) (10 points) What is meant by DOTS? Why is that more important than the normal way of doing vaccines?

3) (15 points) Explain the difference between HALE and the traditional life expectancy using an example. Which do you think is better? Explain your logic.

4) (15 points) Draw a mortality pyramid for developed country. Explain why it takes its shape.

5) (25 points) Suppose a factory will take two years to build at a cost of \$500 per year. That costs includes \$100 of foreign exchange and \$300 of labor. Over the next five years, it will bring in \$400 of profits per year. Those profits include \$200 per year of foreign exchange coming into the country and paying workers \$250 per year. After five years, they can sell the factory for \$200. Set up the calculation for the net present value for the company if the interest rate is 10%. Briefly explain how you got the numbers. Do NOT do the calculation. Suppose the shadow price of labor is 80% of the market wage and the shadow price of the foreign exchange is 30% higher than the official exchange rate. Set up the calculation for the social NPV if the interest rate is 10%. Briefly explain how you got the numbers. Do NOT do the calculation.

6) (10 points) Is the shadow price of labor normally higher or lower than the market wage rate? Explain your logic.

7) (5 points) Explain how laws restricting the firing of workers can discourage entrepreneurs.