

Write your name on the cover of the test booklet and nowhere else. Enclose this sheet with the booklet. Failure to follow these directions will cost you 1 point. The test has 100 points (to be scaled up to 160 points) and is scheduled to take 50 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 12-point question should take 6 minutes. I cannot give extra time because some students have a class after your class.

1) (16 points) Answer EITHER Part A OR Part B.

A) China requires that any MNC which starts a plant in China must do a joint venture with a Chinese company and the Chinese company must have at least a 51% share of the joint venture. What is one advantage and one disadvantage of this policy? Explain your logic.

B) A common practice for developing countries is to have tax holidays for a new factory. What an advantage and a disadvantage of this policy? Explain your logic.

2) (20 points) The poorest countries in the world have many problems when it comes to education. What problem do you feel is the biggest? Why did you choose that problem? What would you do to reduce the problem? Explain the logic as to how your proposal would reduce the problem.

3) (20 points) Answer EITHER Part A OR Part B.

A) Lesotho’s average life expectancy at birth is 48.7. Lesotho is a tiny country almost surrounded by South Africa. I suspect there are two reasons for short life expectancy. What do you think are the causes of this number being so low? State ONE of the reasons and explain why you chose that cause. Since I am 52, if I had lived my whole life in Lesotho, would this mean my average life expectancy would be in the single digits? Explain your logic.

B) Fill in the rest of the table. Show all calculations. If a calculation is not immediately obvious, then **briefly** explain what you did.

| Age | Proportion dying in interval | # living at the beginning | # dying during interval | Person years lived | | Years of life remaining |
|---------|------------------------------|---------------------------|-------------------------|--------------------|------------------------|-------------------------|
| | | | | in age interval | in this and subsequent | |
| 65 - 70 | .16050 | 70,833 | 11,368 | 325,743 | 928,004 | 13.10 |
| 70-75 | .25762 | | | | | |

4) (20 points) For EITHER an *excise tax* OR an *import tariff on all imports*, determine if it is a good tax for a developing country to impose. Make sure you mention TWO of the criteria we used to determine whether or not a tax is a good one.

5) (24 points) Answer EITHER Part A OR Part B.

A) Suppose that four years of college cost \$15,000/year (at the state school). The state pays \$25,000/year for your education. If you got a job straight out of high school, you could earn \$20,000/year for the rest of your life. After graduating, you could earn \$30,000/year for life. Suppose that if you went to work straight out of high school, you would work for 50 years but if you wait until you graduate from college, you would work for 46 years. Set up, **but do not calculate**, the equation which you would use to determine the rate of return you are earning on your education **and** the rate of return society is getting on the education. Explain how you determined what numbers to put into each location, how you would determine if the education is worth it, **and** whether the return to society is bigger or smaller than the return to you.

B) Suppose your company is considering building a factory. The factory will cost it \$2000 to build. Of that money, \$400 is labor and \$300 is foreign exchange. The building will result in a profit of \$500 a year for 5 years. That profit includes \$550 worth of foreign exchange and \$50 worth of labor. Your company wants a 5% return. The shadow price of labor is 20% lower than the wage rate and the shadow price of foreign exchange is 10% higher than the official rate. Set up **but do not calculate** the equation which would tell you whether or not the factory is worth building **and** whether or not the country will feel it is worth building. Explain how you determined where to put the numbers in the equations.