

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 200 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 can give extra time but not much.

1) (14 points) Answer EITHER Part A OR Part B.

A) Is the private return on education highest for primary, secondary, or tertiary education? Explain your logic.

B) Why is the private return for tertiary education high in developing countries but low in developed countries? Explain your logic.

2) (14 points) Answer EITHER Part A OR Part B.

A) Suppose a building project has a cost of \$10,000 per year for two years. The resulting building will make a profit of \$3,000 per year for 20 years. At that point, the building will be worth \$2,000. Set up the equation which will be able to calculate the internal rate of return. Explain why you put the numbers where you did. Without doing the calculation, explain how you would determine if the building would be worth it.

B) Pretend you are about the graduate. If you get a job now, it will pay you \$50,000 per year and you will earn that for 48 years. If you go to graduate school, it will cost you \$25,000 per year for two years. After graduation from graduate school, you will be earning \$55,000 for 46 years. Set up the equation which will determine the private rate of return on your education. Briefly explain how you chose to put each number where you did. Without doing the calculation, explain how you use the result to figure out if graduate school is worth it.

3) (14 points) Answer EITHER Part A OR Part B.

A) In Question #2A, we assumed the shadow price of labor and foreign exchange was exactly the price paid. Suppose that the labor used in the first two years was \$5000 and in the last 20 years was \$1000. If the shadow price of labor is 20% lower than the wage rate, how much should the \$10,000 and \$3,000 really be? Show all work and briefly explain how you got the numbers.

B) In Question #2B, we calculated the private return to the education. However, there is also the social return to the education. What would increase the social return to the education? What would decrease the social return to the education? Explain both why the social return might be higher or lower than the private return.

4) (16 points) Answer EITHER Part A OR Part B.

A) The population pyramid on the back of this page is for Australia. What information can you conclude about indigenous **and** non-indigenous populations in Australia in 2011? Explain your logic. Source: <http://www.healthinfonet.ecu.edu.au/health-facts/summary>

B) It is often said that to improve health you need more income and to get more income you need better health. Explain why both of these statements are true.

5) (20 points) Answer EITHER Part A OR Part B.

A) *Joint venture requirements* have both good and bad aspects. What are they? What is the greatest advantage of them? Explain why they have that effect. What is their biggest disadvantage? Explain why they have that problem.

B) *Tax holidays* have both good and bad aspects. What are they? What is the greatest advantage of them? Explain why they have that effect. What is their biggest disadvantage? Explain why they have that problem.

6) (22 points) Answer EITHER Part A OR Part B.

A) What do you think is the biggest problem with the education systems in poor countries? Why do you feel that is a big problem? What can their governments do about it? Explain how that would reduce the problem.

B) What do you think is the biggest problem with the health systems in poor countries? Why do you feel that is a big problem? What can their governments do about it? Explain how that would reduce the problem.

7) (0 points) The following is a complete list of everything I know that has this unusual description. What is that description? Sheer Heart Attack by Queen; The Kids Are Alright by The Who; Brain Salad Surgery by Emerson, Lake, and Palmer; Out of the Silent Planet by Kings X, and Losing Streak by Less Than Jake (in the USA but not in Japan). In all cases I am referring to the original recording. Why are you answering a 0 point question on April Fools' Day?

