

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 I have a class after your class.

1) (12 points) Answer EITHER Part A OR Part B.

A) If a country's labor force grew at a rate of 2%, its capital stock grew at a rate of 3%, and its GDP grew at a rate of 2.9%, then what was the growth rate of total factor productivity? Show all work and briefly explain your answer.

B) Suppose a country has a life expectancy at birth of 55, an adult literacy rate of 78%, a gross enrollment rate of 69%, and a GDP per capita of \$40,000. What is there HDI? Show all work and briefly explain your answer.

2) (12 points) Answer EITHER Part A OR Part B.

A) Explain why Net Economic Welfare (NEW) is not often used as a measure of how well off a country is.

B) Explain the reason why the $\log(\text{GDP per capita})$ is closely correlated to the HDI, other than the fact that HDI includes it in the calculation.

3) (12 points) Answer EITHER Part A OR Part B.

A) Why do farms pay the average product of labor?

B) Explain why savings is needed for economic growth and why that makes development so hard for some countries.

4) (20 points) Answer EITHER Part A OR Part B.

A) Draw the two-sector demand for labor graph **without** a minimum wage. Illustrate the effects of an increase in the population. Explain why the line(s) moved as drawn. What happens to the wage in industry, wage in agriculture, quantity of labor in industry and the quantity of labor in agriculture? Briefly explain how you found each on your graph.

B) Draw the two-sector demand for labor graph **with** a minimum wage. Illustrate the effects of an improvement in the technology in the industry. Explain why the line(s) moved as drawn. What happens to the wage in industry, wage in agriculture, quantity of labor in industry and the quantity of labor in agriculture? Briefly explain how you found each on your graph.

5) (20 points) For EITHER the Millennium Development Goal (MDG) in Part A OR the MDG in Part B, explain what the world should do to reach this goal. Make sure you mention both an action taken by the developed countries **and** an action to be taken by the poor countries. Explain how these actions could help the world to reach the goal.

A) Halve, between 1990 and 2015, the proportion of the people whose income is less than \$1/day.

B) Have halted by 2015 and begun to reverse the spread of HIV/AIDS.

6) (24 points) For EITHER *invest in education and healthcare* OR *political and economic stability*, explain how that helps the economy develop. Explain how you would try to achieve that if you ruled a developing country. Explain how your actions would have the desired effects.