

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 170 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.

I will be handing out an assignment on Friday, which will be due the day after break. If you miss that class, download the assignment from the web page.

- 1) (10 points) Explain EITHER the equation $KFA = -CA$ OR the equation $uc_k = (r+d)p_k$
- 2) (12 points) Answer EITHER part A OR Part B.
 - A) Explain why durable goods can cause problems for testing the Permanent Income Hypothesis.
 - B) In the Life-Cycle Model, we assume you know when you will die. Without drawing the graph, explain how the fact that we do not know when we will die would affect the diagram.
- 3) (12 points) Answer EITHER Part A OR Part B.
 - A) Explain why the depreciation rate has an ambiguous effect upon the amount of investment.
 - B) Explain, without using a graph, why an increase in government spending can hurt the economy's long-term growth.
- 4) (18 points) Answer EITHER part A OR Part B.
 - A) Draw the diagram for income and consumption over your lifetime (Life-Cycle Model). Illustrate the effects of a promotion with a pay raise. Explain why the line(s) moved as drawn. What happens to your savings? Explain your logic.
 - B) Draw the inter-temporal budget constraint. Illustrate the effects of an increase in your current income. Explain why the curve moved as drawn.
- 5) (18 points) Answer EITHER Part A OR Part B.
 - A) Draw the S/I diagram for a small country with a current account deficit. Explain how you know your graph shows a current account deficit. Illustrate the effects of a temporary recession. Explain why the line(s) moved as drawn. What happens to the level of savings, level of investment, interest rate, and the current account deficit?
 - B) Draw the S/I diagram for a small country with a capital financial account deficit. Explain how you know your graph shows a capital financial account deficit. Illustrate the effects of an increase in the value of assets. Ignore Ricardian Equivalence. Explain why the line(s) moved as drawn. What happens to the level of savings, level of investment, interest rate, and the current account deficit?
- 6) (30 points) Answer EITHER part A OR Part B.
 - A) Illustrate an increase in wealth on both the S/I diagram for a closed economy and on the uc_k/MPK^f diagram. Explain why the curve(s) moved as drawn. What happens to the cost of capital, the interest rate, the desired amount of capital, the quantity of savings, and the quantity of investment?
 - B) Illustrate an increase in price of capital on both the S/I diagram for a closed economy and on the uc_k/MPK^f diagram. Explain why the curve(s) moved as drawn. What happens to the cost of capital, the interest rate, the desired amount of capital, the quantity of savings, and the quantity of investment?