

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 $r_{a-t} = (1-t)i - \pi^e$.
- 2) (12 points) Answer EITHER part A OR Part B.
 - A) Explain Ricardian Equivalence using 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) In the Permanent Income Hypothesis, what is the MPC for the stimulus package? Explain your logic.
 - B) In both the Life-Cycle Model and the Permanent Income Hypothesis, we make an assumption about the banking system. What is that assumption? Why does it matter?
- 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 an economic boom. 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 the value of your assets. 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 an increase in the price of capital. 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 income tax rate. 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 a increase in government spending on both the S/I diagram for a closed economy and on the u_{c_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 depreciation rate on both the S/I diagram for a closed economy and on the u_{c_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?