Wilfrid W. Csaplar Jr., Ph.D. Economics 302 Exam #2 2009/3/11

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) (10 points) Answer EITHER Part A OR Part B.
A) How do we measure the growth of factor productivity? What is the problem with doing that?
B) What is the relationship between CA and KFA? Why do they have that relationship?

2) (12 points) Explain EITHER the equation in Part A OR the equation in Part B.
A) $r_{a-t} = (1-t)i - \pi^e$
B) $\Delta Y/Y = \Delta A/A + a_K \Delta K/K + a_N \Delta N/N$. You can treat Δsomething/something as one variable. Do not worry about explaining a_K and a_N.

3) (18 points) Answer EITHER Part A OR Part B.
A) Suppose we imported $100 worth of goods, $50 worth of services, and $30 worth of bonds. We exported $75 worth of goods, $35 worth of goods, and $40 worth of bonds. We earned $10 from abroad and paid $8 in income abroad. We made $12 worth of unilateral transfers. Assume all transactions are balanced by money in bank accounts in the appropriate countries. Use this information to calculate NX, NFP, CA, and KFA. Show all work and briefly explain what you are doing. If you need some data you do not have, assume it is zero.
B) Use the S/I diagram for a small open economy to explain how we get the term "twin deficits."

4) (24 points) Answer EITHER Part A OR Part B.
A) Draw the S/I diagrams for a large open economy with a current account surplus. Explain how you know it has a current account surplus. Draw an increase in the foreign corporate tax rate. Explain why the curve(s) moved as drawn. What happens to the quantity of savings in the two countries, the quantity of investment in the two countries, the interest rate, the current accounts in the two countries, and the capital-financial accounts in the two countries?
B) Draw the S/I diagrams for a large open economy with a current account deficit. Explain how you know it has a current account deficit. Draw an increase in the foreign country's future marginal productivity of capital. Explain why the curve(s) moved as drawn. What happens to the quantity of savings in the two countries, the quantity of investment in the two countries, the interest rate, the current accounts in the two countries, and the capital-financial accounts in the two countries?

5) (36 points) Answer EITHER Part A OR Part B.
A) Draw the MPK^f/uc_K diagram and the S/I diagram for a small open economy with a capital-financial account surplus. Explain how you know the capital-financial account is in surplus. Draw the effects of an increase in the price of capital on the two diagrams. Explain why the curve(s) moved as drawn. What happens to the desired amount of capital, user cost of capital, quantity of investment, quantity of savings, and the interest rate?
B) Draw the MPK^f/uc_K diagram and the S/I diagram for a small open economy with a capital-financial account surplus. Explain how you know the capital-financial account is in surplus. Draw the effects of an increase in the world interest rate on the two diagrams. Explain why the curve(s) moved as drawn. What happens to the desired amount of capital, user cost of capital, quantity of investment, quantity of savings, and the interest rate?