Wilfrid W. Csaplar Jr., Ph.D. Economics 302 Exam #2 2007/02/26

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 10-point question should take 5 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) Why does an increase in the depreciation rate have an ambiguous effect upon the level of investment?
B) Why does the S curve in the S/I diagram slope up?

2) (10 points) Answer EITHER Part A OR Part B.
A) Why do we have the "f" on the MPK in the diagram which determines K^*?
B) We assumed that the whole difference between K^* and K_t will be invested. Why might we invest less than that? Ignore depreciation for this question.

3) (12 points) Explain either $uc = (r + d)p_k$ or the approximation in the book given as $r_{a-t} = (1-t)i - \pi^e$.

4) (12 points) Answer EITHER Part A OR Part B.
A) Suppose a country exports 200 worth of goods and 100 worth of services, imports 250 worth of goods and 75 worth of services, has net factor payments of -20, net unilateral transfers of -10, no net capital account transactions and statistical discrepancy, and an increase in foreign-owned assets in the country. (All numbers are billions of their currency.) How much is the increase in assets they own abroad, NX, CA, and KFA? Show all work. If it is not obvious what you are doing from the statistics, briefly explain how you are doing the calculation.
B) The book gives five statements which it says mean the same thing. One is, "Net foreign lending of $10 billion." Another one is, "Net exports of $10 billion (if net factor payments, NFP, and net unilateral transfers equal zero.)" Explain why these to statements are the same and why the parenthetical part is important.

5) (28 points) Answer EITHER Part A OR Part B.
A) Illustrate on both the uc/MPK^f diagram and the S/I diagram for a closed economy, an increase in government spending, assuming no Ricardian Equivalence. Explain why the curve(s) moved as drawn. What happens to the desired amount of capital, the level of investment, the level of savings, and the interest rate?
B) Illustrate on both the uc/MPK^f diagram and the S/I diagram for a small open economy with a KFA surplus, an improvement in technology. Explain why the curve(s) moved as drawn. What happens to the desired amount of capital, the level of investment, the level of savings, and the KFA surplus?

6) (28 points) Answer EITHER Part A OR Part B, making sure to label which graph is which country.
A) Suppose the only countries in the world are the USA and **China** and both are large. Draw the S/I diagrams for both countries illustrating that the USA has a **current account deficit**. State how you know we have a deficit. Suppose the Chinese savings rate decreases. Illustrate that on the diagrams. Explain why the curve(s) moved as drawn. What happens to the levels of savings and investment in the two countries? What happens to the world interest rate? What happens to the USA's current account?
B) Suppose the only countries in the world are the USA and India and both are large. Draw the S/I diagrams for both countries illustrating that the USA has a **current account surplus**. State how you know we have a surplus. Suppose the **Brazilian** wealth increases. Illustrate that on the diagrams. Explain why the curve(s) moved as drawn. What happens to the levels of savings and investment in the two countries? What happens to the world interest rate? What happens to the USA's current account?