

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) For EITHER the event in Part A OR the event in Part B, determine what happens to the current account and the capital-financial account for the USA. Explain your logic.

- A) The Bethany German Club students spend spring break in Europe. (Assume they are American.)
- B) An American buys a German government bond.

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

- A) Explain $uc_K = (r+d)p_K$
- B) Explain $MPK^f = uc_K / (1-\tau)$.

3) (14 points) Answer EITHER Part A OR Part B.

- A) Suppose that GDP grew 8%, the labor force grew 5%, and we added 9% more capital. How much did technology improve? Show all work.
- B) What is meant by *total factor productivity*? What changes it? State why that will change it.

4) (18 points) Answer EITHER Part A OR Part B.

- A) Draw the S/I diagram for a small open economy with a capital-financial account deficit. Explain how you know it is a capital-financial account deficit. Illustrate the effects of an increase in the world interest rate. Explain why the curve(s) moved as drawn. What happens to the level of savings, level of investment, and the capital-financial account deficit.
- B) Draw the S/I diagram for a small open economy with balanced trade. Use it to explain the origin of the term "twin deficits."

5) (18 points) Draw the MPK^f/uc_K diagram. Illustrate the effects of EITHER the event in Part A OR the event in Part B. Explain why the curve(s) moved as drawn. What happens to the user cost of capital and the desired amount of capital?

- A) A new technology is developed which makes capital more productive.
- B) The corporate tax rate goes up.

6) (26 points) Draw the S/I diagram for a large open economy with a current account deficit. Explain how you know it is a current account deficit. Illustrate the effects of EITHER the event in Part A OR the event in Part B. What happens to the interest rate, level of savings in both countries, level of investment in both countries, and the current account deficit.

- A) The foreign price of capital increases.
- B) The foreign country experiences a negative supply shock.