

Name: _____

SID : _____

Discussion Section: _____

**Economic 100B
Macroeconomic Analysis
Professor Steven Wood**

Spring 2007

Exam #3

Please sign the following oath:

The answers on this test are entirely my own work. I neither gave nor received any aid while taking this test. I will not discuss the questions on this test until after 3:30 p.m. on May 11, 2007.

Signature

Any test turned in without a signature indicating that you have taken this oath will be assigned a grade of zero.

Graph Instructions

When drawing diagrams, the following rules apply:

- Completely, clearly and accurately label all axis, lines, curves, and equilibrium points.
- The original diagram and equilibrium points MUST be drawn in black or pencil.
- The first shift of any curve(s) or line(s) and the new equilibrium points MUST be drawn in red.
- The second shift of any curve(s) or line(s) and new equilibrium points MUST be drawn in blue.
- The third shift of any curve(s) or line(s) and new equilibrium points MUST be drawn in green.

Do NOT open this test until instructed to do so.

Good Luck!

This page intentionally left blank.

A. Multiple Choice Questions. Mark the letter corresponding to the best answer in the assigned space at the bottom of the page. (3 points each; total of 30 points.)

1. Since 1980, globalization has increased enormously. This would suggest all of the following are more valid today than in 1980 EXCEPT:
 - a. Relative capital mobility is a better description of the world than relative capital immobility.
 - b. Differences in real interest rates across countries are lower.
 - c. Some countries have large amounts of foreign reserves.
 - d. When governments run budget deficits, interest rates now rise more.
 - e. Capital account deficits and surpluses are larger in magnitude.

2. In the Mundell-Fleming model with *flexible* exchange rates, all of the following are true EXCEPT:
 - a. A fiscal expansion leads to an exchange rate appreciation.
 - b. Monetary policy has no effect on output.
 - c. A fiscal expansion has no effect on output.
 - d. Prices are fixed.
 - e. Ultimately, fiscal policy has no effect on interest rates.

3. Suppose we have *flexible* exchange rates and the current account is +50. Then the capital account:
 - a. Is -50.
 - b. Is indeterminate.
 - c. Depends on the level of sterilization.
 - d. Depends on the balance of payments.
 - e. Depends on the amount of foreign exchange reserve accumulation.

4. A number of countries in Europe have adopted a single currency, the Euro. One potential drawback of a single currency for these countries is:
 - a. Fiscal expansions are no longer effective.
 - b. They no longer have control over interest rates.
 - c. Their exchange rates will now be more volatile, therefore reducing trade.
 - d. Capital account deficits will increase.
 - e. None of the above.

5. Consider a new theory: high interest rates increase the debt burden of firms, thus lowering investment. In the DAD – SAS model, this new effect would:
 - a. Steepen the DAD curve
 - b. Flatten the DAD curve
 - c. Rotate the SAS curve upwards
 - d. Rotate the SAS curve downwards
 - e. None of the above.

1

2

3

4

5

6. Research indicates that aggregate social welfare depends inversely on (i.e., is negatively related to) the levels both of unemployment and inflation; both are equally disliked. If output is at potential, then a central banker maximizing *long-run* welfare would:
- Lower interest rates to increase output.
 - Do nothing.
 - Permanently increase the rate of money growth to attain higher output growth.
 - Raise interest rates to lower output.
 - Increase the money supply.
7. According to the “learning by doing” model, increases in economic activity permanently increase productivity. If unemployment is at the NAIRU and the government increases expenditure, then—compared to the usual model—in the long run:
- Output will be lower than before.
 - Output will be higher than before.
 - Inflation will be lower than before.
 - a. and c.
 - b. and c.
8. Wages in an economy increase with the capital stock. Now suppose that high inflation reduces the savings rate. If unemployment is at the NAIRU, an increase in the money supply would:
- Increase inflation in the long run according to the DAD – SAS model.
 - Lower wages in the long run according to the Solow model.
 - Raise wages in the long run according to the Solow model.
 - a. and b.
 - a. and c.
9. Suppose that country A and country B both have positive output ratios, that their aggregate demand curves are similarly responsive to inflation, and that their aggregate supply curves are similarly responsive to output gaps. Now, if country A has a higher output ratio than country B, then:
- Inflation is higher in country A.
 - Inflation is increasing more quickly in country A.
 - Inflation is falling faster in country A.
 - Inflation is lower in country A.
 - None of the above.
10. According to the *permanent income hypothesis*, consumption today depends on future income. If output is at potential and a new forecast predicts higher income growth in five years then, an inflation stabilizing central bank would:
- Raise interest rates today.
 - Lower interest rates today.
 - Raise interest rates in five years time.
 - Lower interest rates in five years time.
 - None of the above.

B. IS – LM - BP Model and DAD – SAS Model Problems. Answer BOTH of the following questions based on the standard models developed in class. (35 points each; total of 70 points.)

1. China's economy has been experiencing an investment and export boom that has pulled the unemployment rate well below the NAIRU. The country also has a substantial current account surplus, a significant capital account surplus, a fixed exchange rate, and relative capital immobility. The Peoples Bank of China (PBOC), China's central bank, always sterilizes any foreign exchange market intervention that it undertakes. The Chinese government is worried about over-investment in many industries and rising inflation.
 - a. One alternative (Scenario #1) for dealing with these concerns is to have the PBOC use monetary policy to stabilize the economy at potential output. Based only on this information, use a standard IS – LM – BP model diagram to accurately and clearly show:
 - i. China's initial economic situation, and
 - ii. What happens to equilibrium income, interest rates, and the balance of payments if the PBOC uses monetary policy to stabilize the economy at potential output.

- b. Provide an economic explanation for what happens to China's equilibrium income, interest rates, investment, net exports, and the balance of payments as a result of this decision.

- c. Re-draw your initial diagram. A second alternative (Scenario #2) for dealing with over-investment and rising inflation is for the government to let the exchange rate freely float, assuming that this would return the economy to potential output. Based only on this information, use a second standard IS – LM – BP model diagram to accurately and clearly show:
- i. China's initial economic situation, and
 - ii. What happens to equilibrium, interest rates, and the balance of payments if the Chinese government allows that exchange rate to become freely flexible.

- d. Provide an economic explanation for what happens to China's equilibrium income, interest rates, investment, net exports, and the balance of payments as a result of this decision.

2. Suppose there are 2 countries—Country A and Country B—that are alike in every respect except that in Country B interest rates are more sensitive to inflation. Both countries are initially at potential output with stable inflation rates. In both countries, rising inflation causes a permanent increase in the saving rate because people face more uncertainty.
 - a. Based only on this information, use a DAD – SAS model diagram to accurately and clearly show:
 - i. Country A’s initial economic situation,
 - ii. How a sudden rise in oil prices would affect equilibrium income and inflation during the first 2 years of the adjustment process (i.e., years 1, 2, and 3), and
 - iii. The economy’s final economic situation when the adjustment process is complete.

- b. Based only on the information above, use a separate DAD – SAS model diagram to accurately and clearly show:
- i. Country B's initial economic situation,
 - ii. How a sudden rise in oil prices would affect equilibrium income and inflation during the first 2 years of the adjustment process (i.e., years 1, 2, and 3), and
 - iii. The economy's final economic situation when the adjustment process is complete.

- c. Compare and contrast the changes in economic output and inflation between Country A and Country B in both the short-run and once the adjustment process is complete.