Name: ____________________
(Last name, first name)

SID: ____________________

Lecture (1 or 2): ____________________

UGBA 101B
Macroeconomic Analysis for Business Decisions
Dr. Steven Wood

Spring 2006

Exam #2

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 5:00 p.m. on March 23, 2006.

______________________
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:

a. Completely, clearly and accurately label all axis, lines, curves, and equilibrium points.

b. The original diagram and equilibrium points MUST be drawn in black.

c. The first shift of any line(s) and the new equilibrium points MUST be drawn in red.

d. Any subsequent shifts in curves and new equilibrium points MUST be drawn in another color, preferably blue and then green.

Do NOT open this test until instructed to do so.
A. **Multiple Choice Questions.** Circle the letter corresponding to the **best** answer. (3 points each; total of 30 points.)

1. Suppose that a fall in tax rates always raises potential output. If unemployment starts at the NAIRU and tax rates are reduced, then a central bank stabilizing the economy at potential output will:
   
   a. Raise interest rates.
   b. Reduce interest rates.
   c. Leave interest rates unchanged.
   d. Leave the money supply unchanged.
   e. Cannot be determined.

2. Suppose that unemployment is below the NAIRU. Then we know that:
   
   a. The actual budget balance is below the structural budget balance.
   b. The actual budget balance is above the structural budget balance.
   c. Output growth is greater than potential output growth.
   d. Output growth is less than potential output growth.
   e. The output ratio is negative.

3. In the IS-LM Model, a rise in savings causes:
   
   a. An equal increase in investment and the IS curve does not shift.
   b. An outward shift of the IS curve.
   c. An inward shift of the IS curve.
   d. An indeterminate shift of the IS curve.
   e. A fall in the money multiplier and an inward shift in the LM curve.

4. Suppose the government increases expenditures by $100 billion and output increases by $80 billion. This could be due to:
   
   a. A rise in the marginal propensity to consume.
   b. A decline in interest rates.
   c. A fall in consumption as a result of crowding out.
   d. Inside lags in fiscal policy.
   e. An outward shift of the IS curve.
5. Suppose that investment is now given by \( I = I_0 - I(r) + I(Y) \). That is, investment now depends positively on income as well as negatively on interest rates. In this case, the multiplier is:

   a. Larger, the IS curve is flatter and monetary policy is more powerful.
   b. Larger, the IS curve is flatter and monetary policy is less powerful.
   c. Smaller, the IS curve is steeper and monetary policy is more powerful.
   d. Smaller, the IS curve is steeper and monetary policy is less powerful.
   e. Larger, and the IS curve will shift out by less compared than was previously the case.

6. Suppose unemployment is at the NAIRU and the government engages in expansionary fiscal policy by changing tax rates. Then, after the Fed has engaged in stabilization policy, all of the following are true EXCEPT:

   a. Government expenditures are the same.
   b. Net exports are lower.
   c. Investment is lower.
   d. Consumption is higher.
   e. Unemployment is below the NAIRU.

7. In the Great Depression the money supply fell sharply. This might have been due to:

   a. A rise in the monetary base.
   b. An outward shift of the LM curve.
   c. People holding less money in banks.
   d. Banks holding fewer excess reserves.
   e. Long and variable lags for monetary policy.

8. All of these statements about tax policy are true EXCEPT:

   a. In the IS-LM Model, tax cuts will raise interest rates.
   b. Temporary tax cuts will lower the structural budget balance.
   c. Temporary tax cuts for consumers are effective fiscal policy.
   d. Permanent tax cuts will lower the structural budget balance.
   e. A fall in tax rates can be politically hard to reverse.
9. Assume that there is no cyclical unemployment and the Fed is committed to maintaining a constant interest rate. Now suppose the interest elasticity of money demand falls permanently. If the IS curve then shifts out, the Fed will have to:

   a. Increase the monetary base more.
   b. Increase the monetary base less.
   c. Raise the reserve requirement for banks.
   d. Prevent the credit channel of monetary policy.
   e. Reduce the money multiplier.

10. In the 1990s, interest rates were relatively low compared to the 1980s. This might have been due to all of the following EXCEPT:

   a. A higher money multiplier.
   b. A higher monetary base.
   c. Contractionary fiscal policy.
   d. A rise in the structural budget balance.
   e. Temporary tax credits to businesses.
B. **IS-LM Model Problems.** Answer **BOTH** of the following questions.

1. Between 2001 and 2006, the housing market boomed, generating hundreds of billions of dollars of household wealth. By the end of 2005, the economy was above its potential level. In 2006, the Federal Reserve engaged in substantial open market sales of government securities, causing housing prices to decline significantly and reducing household wealth substantially. Because many households defaulted on their mortgages, banks became much less willing to make new loans. (35 points.)

   a. Use a standard IS-LM Model with an Okun’s Law diagram to clearly show where the economy was at the end of 2005 and how these 2006 events would affect equilibrium income, the interest rate, and the unemployment rate.
b. Provide a brief economic explanation of how these events affect your model diagrams and what happens to equilibrium income, the interest rate, and the unemployment rate. Be sure to discuss the adjustment process that moves the economy from its initial equilibrium position to its final equilibrium position.
2. In 2003, Japan’s economy was well below its potential level with a substantial structural budget deficit. In 2004 China’s economy boomed. Companies in China buy substantial amounts of business equipment from Japan. Because of a big increase in sales to China, Japanese businesses significantly increased their capital spending which also changed potential output. In consultation with the government, the Japanese central bank, the Bank of Japan, maintained a steady interest rate policy while the government raised tax rates. (35 points.)

   a. Use a standard IS-LM Model with a Budget Balance diagram to clearly show where the Japanese economy was in 2003. Then show what effects the 2004 events had on Japanese equilibrium income, interest rates, the actual budget balance and the structural budget balance.
b. Provide a **brief economic explanation** of how these events affect your model diagrams and what happens to equilibrium income, the interest rate, the actual budget balance, and the structural budget balance. Be sure to **discuss** the adjustment process that occurs as the economy moves from its initial equilibrium position to its final equilibrium position.