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 7:30 p.m. on June 21, 2005.

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. (30 points.)

1. Suppose that the economy becomes less sensitive to falling interest rates when interest rates are already low. Then we can best represent this as:
   a. A fall in the money multiplier.
   b. The LM curve not shifting out as far as it ordinarily would.
   c. The IS curve becoming steeper at low interest rates.
   d. A fall in the interest elasticity of money.

2. Crowding out is not an issue in the US because:
   a. Fiscal policy is rarely used due to inside lags.
   b. Monetary policy is regarded as superior to fiscal policy.
   c. The Fed increases the money supply as interest rates rise.
   d. The LM curve in the US is very steep.

3. Suppose that next year there will be a significant permanent increase in the sales tax. Then we would expect:
   a. The IS curve to shift out next year.
   b. The IS curve to shift in this year.
   c. The actual and structural deficits to increase next year.
   d. The IS curve to shift out this year.

4. Suppose the economy is at the NAIRU and productivity increases by 5%. Then, all else constant, a stabilizing central bank should:
   a. Raise interest rates.
   b. Increase the monetary base.
   c. Raise the reserve requirement.
   d. Raise the discount rate.

5. According to the “q” theory of investment, a fall in interest rates raises equity prices, which causes business firms to issue more stock and hence raise investment. In the IS-LM framework, we can analyze this by:
   a. A shift in of the IS curve and a shift out of the LM curve.
   b. A shift out of the IS curve and a shift out of the LM curve.
   c. A shift in of the IS curve and a shift in of the LM curve.
   d. A shift out of the IS curve and a shift in of the LM curve.
6. All of these factors affect the power of monetary policy EXCEPT:
   a. The money multiplier.
   b. The expenditure multiplier.
   c. The responsiveness of exports to changes in foreign income.
   d. The responsiveness of money demand to changes in interest rates.

7. Suppose the private saving rate falls in the US and people use the money to purchase new imports from abroad. Then:
   a. The IS curve would not shift.
   b. The IS curve would shift in.
   c. The IS curve would shift out.
   d. The multiplier would rise.

8. All of these can be good economic policy to stimulate an economy this year EXCEPT:
   a. Cyclical budget deficits.
   b. A permanent income tax cut to the poor.
   c. A temporary investment credit expiring at the end of the year.
   d. A temporary income tax cut to the middle class.

9. The Economist news magazine is predicting a sharp fall in house prices in the US. This would likely lead to all of the following EXCEPT:
   a. A shift in of the IS curve of the US as consumer confidence falls.
   b. A shift in of the IS curves of the trading partners of the US.
   c. A fall in interest rates in the US.
   d. An improvement in the US budget balance.

10. The “expansionary fiscal contraction” theory claims that when the government reduces the budget deficit, consumer confidence rises. So, according to this theory, a large improvement in the structural budget balance will ultimately lead to:
   a. An inward shift out of the IS curve.
   b. Lower interest rates.
   c. An outward shift of the IS curve.
   d. Higher interest rates.
   e. An indeterminate shift of the IS curve.
B. IS-LM Model. Answer both of the following questions.

1. In 1996, the Greek economy was operating well below its potential output with a budget deficit of 3% of GDP. That same year, Athens was awarded the 2004 Summer Olympics. This generated a massive building boom that was financed by sharp increases in government spending. By 2004, the economy was operating well above its potential level. (For simplicity of analysis, assume that potential output did NOT change during this period of time.) (40 points.)

   a. Based only on this information, use a standard IS-LM model and Budget Balance line to clearly show what effects this building boom had on Greece’s level of economic output, interest rates, the actual budget balance, and the structural budget balance. Be sure to provide a brief economic explanation of what is happening.
b. The European Central Bank (ECB) sets interest rates in Greece, NOT the Greek central bank. Explain how your results in “part a” would change if the ECB maintained fixed interest rates during this time period.
c. The Euro Zone has strict budget guidelines that deficits cannot exceed 3% of GDP. If the budget deficit were to exceed this limit, the Greek government would have to change its tax policies. Identify and explain 3 specific tax changes that the Greek government could implement that would attempt to bring the budget back into compliance with the guidelines while also minimizing any rise in unemployment.
2. President Bush has advocated the reform of Social Security because Americans are under-saving for their retirements. Suppose that the U.S. economy is 1% above potential output in 2005. In response to the President’s warnings about Social Security, the private saving rate in the U.S. increases substantially. However, in order to maintain their standards of living, consumers significantly increase their purchases of lower priced imports. The output ratio changes by 3 percentage points. (30 points.)

a. Based only on this information, use a standard IS-LM model and Okun’s Law diagram to clearly show what effects this would have on equilibrium income, interest rates, and the unemployment rate.
b. Provide a brief economic explanation of the adjustment process.

c. On your diagram in “part a”, clearly show what the Federal Reserve would do to move the economy to potential output.
d. Provide a brief explanation of exactly what action(s) the Fed would take and briefly explain any challenges they might encounter in achieving their goal of attaining potential output.