Economics 102

FINAL EXAM

PLEASE NOTE:

The exam has 4 parts. Each of the 4 parts is of equal value. Total time: 2 hours.

Answer the last part (Part D) on the sheet provided.

For each of the other 3 parts (A through C), PLEASE USE A SEPARATE EXAM BOOK FOR EACH PART; i.e., submit a total of 3 exam books. On the outside of each book please put (a) your name, (b) your TA’s name, and (c) the question (A,B, or C) being answered.

PART A (30 minutes)

Explain the relationship between EACH of the following pairs. In most cases, to explain the relationship you will need to begin by defining the concepts involved.

(1) saving AND investment

(2) minimum wage AND structural unemployment

(3) production possibilities frontier (PPF) AND economic growth

(4) “supply shock” caused by a sudden rise in the price of oil purchased by Americans from OPEC nations AND rising unemployment in America

NOTE: If you use symbols and causal arrows in answering any question in Part B or Part C, be sure to define your symbols.
PART B (30 minutes)

For many years now, Japan has been suffering from slow or at times contracting economic activity and deflation. In response, policymakers in Japan have taken a number of steps to stimulate the economy through monetary and fiscal policies. Notably, in February 1999 the Bank of Japan lowered the over-night nominal interest rate to zero, as low as it can go.

Federal Reserve Bank of San Francisco, June, 2005

(1) In general, what can a central bank do (in this case, the Bank of Japan) to lower interest rates?

(2) Why were lower interest rates expected to stimulate the Japanese economy? Specifically:

   (a) Why should lower interest rates stimulate domestic spending in Japan?

   (b) How should lower interest rates affect Japan’s foreign trade?

Use causal arrows to explain your answers to both (a) and (b).

(3) If the Japanese nominal interest rate is zero, what is Japan’s real rate of interest? Explain your answer.

PART C (30 minutes)

The shape of this most recent business cycle was substantially affected by countercyclical government policies. The tax cuts enacted in this cycle had been proposed not as countercyclical measures but as part of a long-term shift in tax policy. Their timing was fortuitous.


(1) If an economy is headed for a recession, how will a tax cut help to make that recession less severe? Include in your answer:

   (a) which kinds of spending will be stimulated by a tax cut, and

   (b) how those spending increases will affect the Consumer Price Index (CPI).

(2) Assume at present in America:

   (i) total unemployment is 5%, and

   (ii) the natural rate of unemployment is 4.75%.

Now assume that on January 1, 2006, structural unemployment drops by 2%, but total unemployment remains at 5%. In response to this change in unemployment, which countercyclical tools, if any, should be used? Use a Phillips Curve to explain your answer.