Name____________________ Student ID_______________ Section (or TA) ___________

Midterm - Economics 160B, Fall 2011 Version A

You will have 75 minutes to complete this exam. There are 5 pages and 108 points total. Good luck.

Multiple choice: Mark best answer on your scantron. (3 points each, 30 points total)

1) According to the ‘asset approach’ to exchange rates, if Canada has a flexible exchange rate and its Central Bank raises its money supply temporarily, the short-run effect will be to make its interest rates ____ and the value of Canada’s currency ____.
   a) fall, depreciate.
   b) fall, appreciate.
   c) rise, depreciate
   d) rise, appreciate.

2) European officials are trying to convince China to purchase Italian government bonds from the Italian government. Where would this enter the Italian balance of payments accounts?
   a) Financial account
   b) Current account
   c) Both financial and current accounts
   d) Does not enter the balance of payments

3) If you purchased a Lady Gaga Halloween costume made in India, which of the following U.S. national income account categories will this purchase affect?
   a) Consumption
   b) GDP
   c) Current account
   d) Both a and c

4) According to the trilemma theory, if a country wants monetary policy independence, then it must also have:
   a) flexible exchange rate
   b) capital controls
   c) either (a) or (b)
   d) both (a) and (b)

5) Which of the following would tend to make Purchasing Power Parity fail?
   a) Financial market risk premium.
   b) Transportation costs.
   c) Capital controls.
   d) Inflation.

6) The overshooting helps explains what feature of the foreign exchange market?
   a) high degree of global integration
   b) low trading volume
   c) existence of a risk premium.
   d) high volatility of the exchange rate.

7) Poland fixes its exchange rate to the euro. If the European central bank lowers the euro interest rate, this will cause Poland’s foreign reserve holdings to _____ and its money supply to ____.
   a) rise, rise
   b) fall, fall
   c) rise, fall
   d) fall, rise

8) Which of the following violates the Long Run Budget Constraint:
   a) trade balance is 0 in all years
   b) trade balance is negative in all years
   c) national expenditure (GNE) is larger than national income (GDP) in <u>some</u> years.
   d) both (b) and (c)

9) According to the intertemporal model, one of the benefits of financial globalization is:
   a) capital control
   b) current account balance
   c) consumption smoothing
   d) output fluctuation

10) According to the monetary approach to exchange rates, if U.S. money supply growth is 2% higher than Mexico, and U.S. output growth is 2% lower than Mexico, then the value of the dollar should:
   a) appreciate.
   b) depreciate.
   c) not change.
   d) impossible to tell.

Question 1: Interest Rate and Purchasing Power Parities (20 points total, 5 points each)

Suppose you are a currency speculator trying to forecast what will happen to the value of the dollar over the next year. Suppose all of our usual theories hold (uncovered, covered and real interest rate parity, and absolute and relative purchasing power parity, as well as the Fisher effect for nominal interest rates). For each of the separate cases below, use the information in that case to compute the expected appreciation of the euro ($(E^e_{\$/euro} - E_{\$/euro}) / E_{\$/euro}$), or state if there is not enough information. State the name of which parity condition(s) you are using, and show your work.

a) Expected inflation over the next year is expected to be1% in the U.S. and -1% in Europe.

b) The nominal interest rate in the U.S. for a 1year dollar deposit is 3%, and that for a euro deposit is 2%.

c) The current spot exchange rate is 1 dollar per euro, and the forward rate for a year from now is 1.1 dollars per euro.

d) The <u>real</u> interest rate in the U.S. (ex-ante, annual) is 3% and expected inflation in Europe is 2%.

Question 2: Monetary approach to exchange rates (15 points)

a) (6 points) Write the equation for the monetary approach to the exchange rates in levels form (not percent change form) for the dollar/euro exchange rate (E$/euro). Define your terms and explain the meaning of this equation in a sentence or two.

b) (3 points) Explain the main assumptions one needs to make to use this equation about the behavior of goods and money markets.

c) (6 points) Some economists have hypothesized that our recent financial crisis was due to a sudden exogenous rise in the level of money demand (shift in the real money demand curve in the money market). Assuming all else (exogenous things) constant, explain what the monetary approach says should be the effect on the value of the exchange rate ($E_{\$/euro}$) and U.S. price level.

Question 3: The Asset Approach and Exchange Rate Overshooting (3~~0~~1 points)

Use the overshooting model to explain how a permanent fall in U.S. nominal money supply can lead to exchange rate overshooting in the exchange rate between the U.S dollar and Japanese yen $E_{\$/Y}$. (Make the usual assumption of the overshooting model, including that prices are sticky in the short run and flexible in the long run, and that UIP and CIP hold.)

a) (14 points) Illustrate in graphs of the U.S. money market and the foreign exchange market how this policy can generate exchange rate overshooting. Label your initial equilibrium point A, label the short-run equilibrium point B, and your long-run equilibrium point C. (You can put short run and long run on the same graphs.) Label all axes, and indicate curve shifts with arrows. Explain the reason for each curve shift briefly.

b) (9 points) Using a set of three time series diagrams, illustrate how the nominal exchange rate ($E_{\$/Y}$), U.S. nominal interest rate, and U.S. real exchange rate ($E_{\$/Y}\ P_{Japan}/\ P_{US}$) change over time. Be careful about how the long run value relates to the initial value.

c) (4 points) Is there an arbitrage opportunity here to make a profit <u>in the financial market?</u> If so, explain the sequence of deposits, loans, and currency exchanges (and their timing) that you could use to make a profit off of this set of events.

d) (4 points) Is there an arbitrage opportunity here to make a profit <u>in the goods market?</u> If so, explain the sequence of purchases and sales of goods, and the currency exchanges that you could use to make a profit off of this set of events. Assume you have $100 to start off, and assume there are no trading or transportation costs of any kind.

<u>**Question 4 : National income accounting and Balance of Payments**</u> (12 points)

Recently the U.S. current account deficit has begun to worsen again, even though the government is working hard to reduce the government budget deficit with budget cuts. Using the national income accounting identity, explain in a paragraph the relationship between the current account deficit and the government budget deficit. Discuss one explanation for why the current account deficit could be worsening despite a smaller government budget deficit. (your answer can continue on the next page.)

(11/2/11)