Question 1. Review of Open Economy Macroeconomics (20 points)

For this question, write no more than one short paragraph for each question. If you need to review this material, see Abel and Bernanke (1994) "Macroeconomics" Chapters 2 and 5.

i) Write down the income-expenditure identity for an open economy. Define each component of total spending carefully, noting the identity of the spender and the composition of their spending. (5 points)

ii) What role do net exports play in the determination of aggregate demand in the aggregate economy? (e.g. What effects would an increase in net exports have for equilibrium demand?) Define the difference between net exports and the current account balance. (5 points)

iii) Define the capital account. Explain why a current account surplus implies a capital account deficit. i.e. why a current account surplus represents net lending abroad. (5 points)

iv) Write down the uses of saving equation for an open economy in which you clearly differentiate between private and government savings and specify the sources of government savings. What will be the effects for the current account, for private savings and domestic investment if there is a rise in government spending that is not financed by current taxes? (5 points)

Question #2. The Mexican Currency Crisis. (30 points).

i) Write a chronological list of the major movements in the peso/$US exchange rate that have occurred between December 19th 1994 and January 26th 1995 that we have discussed in class. (You do not have to relate daily peso exchange rates!) For each item in this list, suggest the major cause of movement in the value of the currency. (15 points)

ii) Suggest two ways in which these currency movements might affect the "real" Mexican economy, and explain each in one sentence. (5 points)

iii) Suggest two ways in which these currency movements might affect the US economy, and explain each in one sentence. (5 points)

iv) Suggest two ways in which foreign investors' confidence might be restored by the establishment of a currency board rather than by monetary policy continuing to be conducted by a central bank. (5 points)
Question 3. The Foreign Exchange Market (50 points)

i) Using the actual spot exchange rates presented in Table 1-1 of the textbook, compute the following:

   a) the implicit or "cross-rates" between the German mark and British pound, Japanese Yen and Mexican peso, the Canadian dollar and French franc, and the German mark and Japanese Yen. Be clear about how you are defining the exchange rate in each case. Why might you expect cross rates and direct rates to be equalized? (8 points)

   b) the annualized percentage ninety-day forward premiums of the $US against the Canadian dollar, French franc, German mark, Japanese Yen, and British pound. In each case, explain in a sentence what the computed value implies about expectations of the future spot exchange rate of the $US. (8 points)

ii) Using the June figures for futures contracts in Table 1-2 of the textbook, compute the approximate 30-day premiums on the Canadian dollar, German mark, Japanese Yen, and British pound. Should these premia be identical to those that would obtain in the forward market for 30-day contracts? Why or why not? (8 points)

iii) Using Table 1-3 in the textbook, describe which Swiss franc options are "in the money" and which are "out of the money". Explain briefly. (8 points)

iv) Using Table 1-3 in the textbook, calculate the intrinsic values of June call options for the British pound and German mark. Compute the time value of those options that are "out of the money." What do the pound and mark forward rates shown in Table 1-1 suggest about the time values computed here? (8 points)

v) Suppose that 1 Yen = $0.0077 in London, $1 = DM 2.00 in New York, and DM 1.00 = 65 Yen in Paris.

   a) If you began by holding 10,000 Yen, how could you make a profit from these exchange rates? (5 points)

   b) Find the arbitrage profit per Yen initially traded (ignore transactions costs). (5 points)