Multiple Choice: (2 points each, 40 point total) Choose the best answer. Write answer on scantron.

Test Form A: Please indicate on your scantron your test form version.

MC#1) All of the following help explain why PPP does not hold well in the short run, except:
   a) tariffs
   b) arbitrage
   c) sticky prices
   d) nontraded goods
   e) imperfect competition

MC#2) Under the Gold Standard system:
   a) Nominal exchange rates adjusted to promote external balance.
   b) The IMF made loans to promote growth in developing countries.
   c) It was hard to maintain internal balance.
   d) All of the above.

MC#3) The EMS crisis in Europe in 1992 and the Argentina crisis in 2001-2 differ in that:
   a) the IMF intervened in Europe.
   b) Argentina had much foreign currency debt.
   c) the U.K. ran out of reserves.
   d) all of the above

MC#4) If a country experiences a recession that involves a depreciating currency value in the foreign exchange market, which of the following shocks could be the cause of that recession?
   a) Fall in investment demand
   b) Cut in taxes
   c) Rise in money supply
   d) Rise in money demand
   e) None of the above

MC#5) Which of the following have caused currency crises in cases studied in class?
   a) External imbalance
   b) Expectations of a future devaluation
   c) Internal imbalance
   d) All of the above
   e) Both (b) and (c) but not (a)

MC#6) When you purchase a sweater made in Vietnam, which of the U.S. national income accounts does this enter?
   a) GDP
   b) Consumption
   c) Trade balance
   d) All of the above
   e) Both (b) and (c) but not (a)
MC#7) The Overshooting theory is useful for explaining:
   a) High exchange rate volatility after the collapse of the Bretton Woods system
   b) The worsening of the Great Depression under the Gold Standard
   c) Excessive accumulation of reserves after the Asia Crisis of 1997
   d) Speculative attacks in the foreign exchange market
   e) Recessions after currency crises

MC#8) Which of the following helps explain failures in uncovered interest rate parity seen in class?
   a) Expectations of a currency depreciation
   b) Exogenous shocks to money demand
   c) Risk of government default
   d) All of the above

MC#9) Which of the following would suggest Serbia is a good candidate to join the European monetary union, according to the standard optimal currency area theory?
   a) Serbia trades more with Russia than with Western Europe.
   b) Serbia has a strong economy at present while Western Europe is in recession.
   c) There is low labor mobility between Serbia and Western Europe.
   d) None of the above

MC#10) Which of the following would satisfy the long run budget constraint?
   a) Trade balance is zero every year.
   b) The present value of the sum of trade balances over time is zero.
   c) The present value of national expenditures over time equals the present value of national incomes over time.
   d) All of the above.

MC#11) The IMF (International Monetary Fund) was created to:
   a) Lend reserves to countries with a permanent external imbalance.
   b) Support fixed exchange rates as part of the Bretton Woods System.
   c) Enforce fiscal austerity on poor countries to protect the interests of banks in rich countries.
   d) Carry out secret spy missions under the leadership of Tom Cruise.

MC#12) Which of the following is not a benefit of a currency board?
   a) It prevents a currency crisis from raising domestic interest rates.
   b) It cannot run out of reserves in a currency crisis.
   c) It credibly prevents excessive money printing.
   d) It helps maintain a fixed exchange rate.

MC#13) The “twin deficits” hypothesis says that which of the following will lower the U.S. current account balance (all else constant)
   a) A rise in private saving.
   b) A shift in the U.S. government budget from deficit to surplus.
   c) A cut in taxes.
   d) A rise in government saving.
MC#14) When Prof. Quinzii in the economics department bought a country house in France using a U.S. bank account, how was this recorded in the U.S. balance of payment accounts?
   a) Credit entry in the financial account and a debit entry in the financial account
   b) Credit entry in the current account and a debit entry in the financial account
   c) Two debit entries in the financial account
   d) Credit entry in the current account and a credit entry in the financial account
   e) Debit entry in the current account and a debit entry in the financial account

MC#15) Which of the following helps explain the IS curve?
   a) A rise in income raises money demand.
   b) A rise in income raises the interest rate.
   c) A rise in government spending raises income in the short run.
   d) A rise in the exchange rate (home/foreign currency) raises demand for home exports.
   e) A rise in the interest rate raises saving, and saving equals investment.

MC#16) Relative purchasing power parity requires:
   a) Real Exchange Rate = 1.
   b) The price of a Big Mac is the same in Davis as in Paris.
   c) The real exchange rate is constant.
   d) Nominal interest rates are equalized across countries.
   e) None of the above is true.

MC#17) All of the following contributed to the Asian financial crisis of 1997 except:
   a) Poor bank regulation.
   b) Contagion across countries.
   c) Excessive capital controls.
   d) IMF aid packages with conditions.

MC#18) According to the monetary approach to exchange rates, if Zimbabwe has a money supply growth rate of 5% and output growth rate of 2%, while Botswana has money supply growth rate of 3% and output growth of 4% , then the exchange rate (Zimbabwe currency per Botswanan currency) is
   a) rising 3%
   b) rising 2%
   c) falling 2%
   d) falling 3%
   e) none of the above

MC#19) In the case of the question immediately above, what should be the inflation rate of Botswana
   a) 4%
   b) 3%
   c) 1%
   d) -1%
   e) not enough information

MC#20) The monetary approach to exchange rates requires which of the following theories to hold:
   a) uncovered interest rate parity
   b) purchasing power parity
   c) real interest rate parity
   d) exchange rate overshooting
**Question 1: Overshooting**  (22 points)

Suppose there is a permanent rise in the Mexican money supply. Discuss how this can give rise to overshooting in the exchange rate between the Mexican peso and the U.S. dollar, as requested below. (Make the usual assumptions: prices are sticky in the short run and flexible in the long run, and that uncovered interest rate parity holds. Assume for simplicity, unless told otherwise, the usual case in this model, where money demand is a function of the interest rate alone and not affected by income.)

a)  (10 points) Illustrate in graphs of the Mexican money market and the foreign exchange market how this policy change affects the money and foreign exchange markets. Label your initial equilibrium point A, label the short-run equilibrium point B, and your long-run equilibrium point C. Label all axes, and indicate curve shifts with arrows. Explain the reason for each curve shift briefly.

b)  (6 points) Using three time series diagrams, illustrate how the following variables change over time: exchange rate (E_{peso/$}), Mexican interest rate, and the equilibrium quantity of real money demanded in Mexico. Be sure to clearly indicate the relative positions of the initial value, short run and long run.
c) (6 points) Given our study of the macroeconomy using the IS-LM model, we know now that a change in money supply can affect the level of output in an economy in the short run, and money demand can be affected by income. How would this change the effect of the money supply shock above on the short-run level of the exchange rate, its long-run level, and so the amount of overshooting? Discuss what things would change in your diagram in part (a) above.

**Note for the following three questions:** make the usual assumptions of the IS-LM model unless told otherwise: UIP holds, consumption is just a function of disposable income (with MPC<1); investment is just a function of the interest rate; money demand is a function of both income and interest rate, and for simplicity assume trade balance is a function only of the real exchange rate and not of incomes. Assume all shocks are temporary.

**Question 2: IS-LM 1** (14 points total)
Suppose China fixes its exchange rate to the U.S. dollar, but there is a shock to exchange rate expectations: traders in the foreign exchange market expect the Chinese currency in the future will appreciate (fall in the exchange rate yuan/dollar). Draw the foreign exchange market and IS-LM graphs for China (exchange rate = yuan/dollar) to illustrate the short-run macroeconomic effects of this shock. Be sure to label all axes and curves, indicate curve shifts with an arrow, and mark initial equilibrium as point A and the short run equilibrium as B. Explain each curve shift briefly. (8 points)
What will the effect be on the following variables for China: (Mark on your scantron) (1 point each)

MC#21) Money supply:  a) rise  b) fall  c) no change  d) ambiguous
MC#22) Interest rate:  a) rise  b) fall  c) no change  d) ambiguous
MC#23) Foreign exchange reserves a) rise  b) fall  c) no change  d) ambiguous
MC#24) Trade balance:  a) rise  b) fall  c) no change  d) ambiguous
MC#25) Investment:  a) rise  b) fall  c) no change  d) ambiguous
MC#26) Output:  a) rise  b) fall  c) no change  d) ambiguous

**Question 3: IS-LM 2** (13 points, 1 point each MC item)

Use the IS-LM model to predict the effects of a shock raising money demand (a rise in money demand for any given interest rate or output level). Write answers on your scantron. You may draw a graph for your own help, but it will not be graded.

a) First, suppose a country with a flexible exchange rate regime. What will be the effect of the shock on the following in the short run?

MC#27) Position of LM curve: a) rise  b) fall  c) no change  d) ambiguous
MC#28) Position of IS curve: a) rise  b) fall  c) no change  d) ambiguous
MC#29) output:  a) rise  b) fall  c) no change  d) ambiguous
MC#30) interest rate:  a) rise  b) fall  c) no change  d) ambiguous
MC#31) exch. rate (home currency/foreign): a) rise  b) fall  c) no change  d) ambiguous
MC#32) investment:  a) rise  b) fall  c) no change  d) ambiguous
MC#33) trade balance:  a) rise  b) fall  c) no change  d) ambiguous
MC#34) consumption:  a) rise  b) fall  c) no change  d) ambiguous

\(^{\dag}\)Position: rise here means moves upward, a rise in the intercept with the vertical axis.

b) Now instead suppose the country fixed its exchange rate to another currency. What will be the effect of the money demand shock on the following?

MC#35) Position of LM curve: a) rise  b) fall  c) no change  d) ambiguous
MC#36) money supply:  a) rise  b) fall  c) no change  d) ambiguous
MC#37) interest rate:  a) rise  b) fall  c) no change  d) ambiguous
MC#38) output:  a) rise  b) fall  c) no change  d) ambiguous
MC#39) central bank holdings of foreign reserves: a) rise  b) fall  c) no change  d) ambiguous

**Question 4: IS-LM 3** (16 points, 1 point each MC item)

Use the IS-LM model to predict the effects of an exogenous shock to tastes that lowers foreign demand for home goods, which lowers the trade balance for any given exchange rate or income level. Write answers on your scantron. You may draw a graph for your own help, but it will not be graded.

Supposing a flexible exchange rate, what will be the effect of the shock on the short run values of the following variables:

MC#40) Position of LM curve: a) rise  b) fall  c) no change  d) ambiguous
MC#41) Position of IS curve: a) rise  b) fall  c) no change  d) ambiguous
MC#42) output:  a) rise  b) fall  c) no change  d) ambiguous
MC#43) interest rate:  a) rise  b) fall  c) no change  d) ambiguous
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<tr>
<th>Question 5: Parity Conditions</th>
<th>(14 points total, 2 points each item)</th>
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<tr>
<td><strong>Suppose that the following conditions all hold:</strong> uncovered interest rate parity (UIP), covered interest rate parity (CIP), real interest rate parity (RIP), absolute purchasing power parity (PPP) and relative purchasing power parity (RPPP). And suppose you have the following information:</td>
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<td>- The current spot exchange rate is 1 pound per Canadian dollar (C$).</td>
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<td>- The nominal interest rate on 1-year British pound deposits is 3% (0.03).</td>
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<tr>
<td>- The nominal interest rate on 1-year Canadian dollar deposits is 4% (0.04).</td>
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<td>- The expected inflation rate for the coming year in Canada is 2% (0.02)</td>
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<td>For each of the following, compute a value using the information above.</td>
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<td><strong>The forward rate for one year from now (pound per C$).</strong></td>
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<td><strong>MC#56)</strong></td>
<td>a) 0.98  b) 0.99  c) 1  d) 1.01  e) none of the above</td>
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<td><strong>What one parity condition allows you to compute this with the information above:</strong></td>
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<td><strong>MC#57)</strong></td>
<td>a) PPP  b) RPPP  c) UIP  d) CIP  e) RIP</td>
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<td><strong>The expected inflation rate in Britain for the coming year.</strong></td>
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<td><strong>MC#58)</strong></td>
<td>a) 0  b) 0.01  c) 0.02  d) 0.03  e) none of the above</td>
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<td><strong>The real interest rate in Canada.</strong></td>
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<td><strong>MC#59)</strong></td>
<td>a) -0.02  b) 0  c) 0.02  d) 0.04  e) none of the above</td>
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<td><strong>The real interest rate in Britain.</strong></td>
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<td><strong>MC#60)</strong></td>
<td>a) 0  b) 0.01  c) 0.02  d) 0.03  e) none of the above</td>
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<td><strong>The real exchange rate (UK / EU).</strong></td>
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<tr>
<td><strong>MC#61)</strong></td>
<td>a) 0.98  b) 0.99  c) 1  d) 1.01  e) none of the above</td>
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<tr>
<td><strong>The expected future spot exchange rate for one year from now (pound per C$).</strong></td>
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<tr>
<td><strong>MC#62)</strong></td>
<td>a) .98  b) .99  c) 1  d) 1.01  e) none of the above</td>
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**Question 6: Essay: Financial market openness and capital controls** (22 points)

Some analysts believe countries would benefit if they gave up financial market openness and instead imposed capital controls. First, explain the benefits of financial market openness, according to the theory of intertemporal macroeconomics (which used the long run budget constraint). Second, explain how capital controls could be helpful for a country fighting a currency crisis, and for preventing the usual cause of currency crises in the first place. Discuss briefly how well these costs and benefits relate to the case of Greece, and draw a conclusion regarding whether Greece would benefit from capital controls.
Nothing below this line or on the next page will be graded