Final Exam - Solution Key
Economics 160B, spring 2013

Multiple Choice:
Version A:
1) c  2) d  3) b  4) d  5) c  6) a  7) c  8) b  9) a  10) c  11) d  12) a  13) c  14) a  15) b

Version B:
1) b  2) c  3) d  4) b  5) d  6) c  7) a  8) c  9) b  10) a  11) c  12) d  13) a  14) c  15) a

Version C:
1) d  2) b  3) d  4) c  5) a  6) c  7) b  8) a  9) c  10) d  11) a  12) c  13) a  14) b  15) c

Question 1: Parity conditions
Version A:  16) d  17) a  18) b  19) d  20) c
Version B:  16) c  17) d  18) a  19) c  20) b
Version C:  16) a  17) b  18) c  19) a  20) d

Question 2: ISLM 1:
The cut in taxes raises consumption expenditure and shifts the IS curve right, which raises output and raises the interest rate, which causes the dollar to appreciate. The higher interest rate discourages investment. The currency appreciation and higher output both lower the trade balance. Real money demand does not change because the fall in interest rate and fall in output offset each other.

Under the fixed exchange rate, there is no change in the interest rate or exchange rate, so there is no crowding out of investment. Output rises even more. The trade balance still worsens because of the rise in output. Reserves rise to defend the fixed exchange rate. Real money demand rises because output is higher but there is no rise in the interest rate to counteract this.

Version A:  21) c  22) a  23) c  24) c  25) c  26) b  27) b  28) b  29) a  30) c
            31) a  32) b  33) c  34) c
Version B:  21) b  22) c  23) b  24) b  25) b  26) a  27) a  28) a  29) c  30) b
            31) c  32) a  33) b  34) b
Version C:  21) a  22) b  23) a  24) a  25) a  26) c  27) c  28) c  29) b  30) a
            31) b  32) c  33) a  34) a

Question 3: ISLM 2:
The fall in money supply shifts the LM curve left, which raises the interest rate and lowers output. The exchange rate appreciates. The effect on the trade balance is ambiguous because the appreciation lowers it but the fall in output raises it.

Under the fixed exchange rate, there is no change in the interest or output. Reserves rise.

Version A:  35) a  36) b  37) b  38) c  39) b  40) b  41) d  42) a  43) a  44) c
Version B:  35) c  36) a  37) a  38) b  39) a  40) a  41) d  42) c  43) c  44) b
Version C:  35) b  36) c  37) c  38) a  39) c  40) c  41) d  42) b  43) b  44) a
Question 4: Currency Crises

The rise in the expected future value of the mark relative to the franc raises expected returns of holding the mark, shifting the foreign returns curve right. In order to keep the exchange rate fixed, the French must let their money supply shrink and interest rates rise to compensate for the capital loss of those holding francs over time. This shifts the LM curve left.

Version A:  45) b  46) c  47) b  48) b
Version B:  45) a  46) b  47) a  48) a
Version C:  45) c  46) a  47) c  48) c

If defending the peg causes a recession, then France might be willing to let the currency depreciate if it is attacked. So even if France has reserves, a speculative attack betting on a franc depreciation could bring about a depreciation.

Question 5: Overshooting

a) Versions A and C;

b) Versions A and C: The rise in US interest rate in the short run in the graph means there is an interest rate differential making US assets more attractive than Japanese assets to international investors. The exchange rate figure shows that the dollar depreciates gradually over time, implying a an expected negative capital gain for holding dollars, to make investors
willing to hold Japanese assets despite the lower Japanese interest rate. This is UIP: an expected exchange rate change compensates for an interest rate differential.

Question 6:

The approach to take is the monetary approach, written below in percent change form. (note this includes inflation rates)

\[
(\% \text{ dollar depreciation}) = \text{U.S. inflation rate} - \text{foreign inflation rate} \\
= (\text{U.S. money supply growth rate} - \text{foreign money supply growth rate}) \\
- (\text{U.S. money demand growth rate} - \text{foreign money demand growth rate})
\]

First, if a country fixes its exchange rate to the dollar, then it must increase its money supply along with the U.S. and have the same inflation rate in the long run.

Second, this inflation can be stopped if the country holds its money supply constant, but this then requires that the exchange rate adjust. So both statements are correct.