Multiple Choice:

Versions A&B: 1) a  2) a  3) d  4) c  5) b  6) d  7) a  8) b  9) c  10) b

Versions C&D: 1) c  2) a  3) a  4) d  5) c  6) b  7) d  8) a  9) b  10) b

Question 1:

a) Using relative PPP:

Versions A&B: \( \left( \frac{E_\$/euro - E_$/euro}{E_$/euro} \right) = \Pi^e_{US} - \Pi^e_{EU} = 1\% - (-1\%) = 2\% \)

Versions C&D: \( \left( \frac{E_\$/euro - E_$/euro}{E_$/euro} \right) = \Pi^e_{US} - \Pi^e_{EU} = 1\% - 2\% = -1\% \)

b) Using UIP:

Versions A&B: \( \left( \frac{E_\$/euro - E_$/euro}{E_$/euro} \right) = i^$/ - i_{euro} = 3\% - 2\% = 1\% \)

Versions C&D: \( \left( \frac{E_\$/euro - E_$/euro}{E_$/euro} \right) = i^$/ - i_{euro} = 5\% - 1\% = 4\% \)

c) Using UIP and CIP:

Versions A&B: \( \left( \frac{E_\$/euro - E_$/euro}{E_$/euro} \right) \left( \frac{F_$/euro - E_$/euro}{E_$/euro} \right) = (1.1 - 1) / 1 = 0.1 \) (or 10%)

Versions C&D: \( \left( \frac{E_\$/euro - E_$/euro}{E_$/euro} \right) \left( \frac{F_$/euro - E_$/euro}{E_$/euro} \right) = (1.2 - 1) / 1 = 0.2 \) (or 20%)

d) not enough information to know.

Question 2:

a)

\[
E_{$/euro} = \frac{P_{US}}{P_{E}} \frac{M_{US}}{L_{US}(i^\$)Y_{US}} = \frac{M_{US}}{L_{US}(i^\$)Y_{US}} \left( \frac{M_{US}}{L_{US}(i^\$)Y_{US}} \right) = \frac{(M_{US} / M_{E})}{(L_{US}(i^\$)Y_{US})}
\]

Where \( M \) is money supply, \( L \) is liquidity demand function of the interest rate \( i \), and \( Y \) is output.

The equation says that a rise in U.S. money supply relative to money demand (relative to the foreign country) will cause higher price in the U.S and a rise in \( E_{$/euro} \) exchange rate (dollar depreciation).

b) To be able to solve for prices, we must assume that prices are flexible (long run) and adjust to clear the money market. We need PPP to hold in order to draw a link from prices to the exchange rate.

c) A rise in U.S. money demand function \( L \) would lead to a fall in U.S. price level and dollar appreciation (fall \( E_{$/euro} \)).

Question 3:

The real money supply line shifts left only in the short run, because prices adjust in the long run in proportion to the change in nominal money supply. The domestic returns curve shifts up only in the
short run for the same reason. The FR curve shifts left in the short run and long run because of the expected future higher value of the dollar compared to the case before the money supply change.

c) There is no arbitrage opportunity in the asset market, because UIP and CIP hold at all times.

d) Use the failure of PPP in the short run to make a profit: in the short run while the real exchange rate is low and hence Japanese goods are cheap compared to the U.S., convert the $100 to yen in the current spot market, and use the yen to buy goods in Japan, then resell them in the U.S for more than $100 (all in the short run).

**Question 4:**
Paragraph should include the following points: The national income accounting identity can be rewritten: CA = (Y-C-T) - (G-T) – I = private saving - government budget deficit – investment. This says that a worsening government budget deficit (ie. drop in government saving) will lead to a falling current account, if all else is constant. But in practice other things in the equation can also be changing, such as private saving, and can affect the current account.

Potential explanations: fall in private saving rise in investment. Data suggest the first explanation rather than the second.