MULTIPLE CHOICE. All questions carry 4 points. Choose the one alternative that best completes the statement or answers the question.

1) Given \( P_{US} \) and \( Y_{US} \).
   A) An increase in the European money supply causes the euro to depreciate against the dollar, but it does not disturb the U.S. money market equilibrium.
   B) An increase in the European money supply causes the euro to appreciate against the dollar, but it does not disturb the U.S. money market equilibrium.
   C) An increase in the European money supply causes the euro to depreciate against the dollar, and it creates excess demand for dollars in the U.S. money market.
   D) An increase in the European money supply causes the euro to appreciate against the dollar, and it creates excess demand for dollars in the U.S. money market.
   E) None of the above.

2) An economy’s long-run equilibrium is
   A) the equilibrium that would occur if prices were perfectly fixed to preserve full employment.
   B) the equilibrium that would occur if prices were perfectly flexible and always adjusted immediately to preserve full employment.
   C) the equilibrium that would occur if prices were perfectly flexible and always adjusted immediately.
   D) the equilibrium that would occur if prices were perfectly flexible.
   E) the equilibrium that would occur if prices were perfectly fixed at the full employment point.

3) The long run effects of money supply change:
   A) proportional effect on the long–run values of the interest rate or real output, a proportional change in the price level’s long-run value in the same direction.
   B) ambiguous effect on the long–run values of the interest rate or real output, a disproportional change in the price level’s long-run value in the same direction.
   C) no effect on the long–run values of the interest rate or real output, no change in the price level’s long-run value.
   D) ambiguous effect on the long–run values of the interest rate or real output, a proportional change in the price level’s long-run value in the opposite direction.
   E) no effect on the long–run values of the interest rate or real output, a proportional change in the price level’s long-run value in the same direction.

4) After a permanent increase in the money supply,
   A) the exchange rate overshoots in the short run.
   B) the exchange rate overshoots in the long run.
   C) the exchange rate smoothly appreciates in the short run.
   D) the exchange rate smoothly depreciates in the short run.
   E) None of the above.
5) If there is initially
   A) excess demand for money, the interest rate falls, and if there is initially an excess supply, it rises.
   B) excess supply of money, the interest rate increases, and if there is initially an excess demand, it falls.
   C) **excess supply of money, the interest rate falls, and if there is initially an excess demand, it rises.**
   D) excess supply of money, the interest rate falls, and if there is initially an excess demand, it further falls.
   E) None of the above.

6) A reduction in a country’s money supply causes:
   A) does not affect its currency in the foreign market.
   B) **its currency to appreciate in the foreign exchange market.**
   C) affects other countries currency in the foreign market.
   D) does affect its currency in the foreign market in an ambiguous manor.
   E) its currency to depreciate in the foreign exchange market.

7) Which of the following statements is the most accurate? The law of one price states:
   A) identical goods sold in different countries must sell for the same price when their prices are expressed in terms of the same currency.
   B) in competitive markets free of transportation costs and official barrier to trade, identical goods sold in the same country must sell for the same price when their prices are expressed in terms of the same currency.
   C) **in competitive markets free of transportation costs and official barrier to trade, identical goods sold in different countries must sell for the same price when their prices are expressed in terms of the same currency.**
   D) in competitive markets free of transportation costs and official barrier to trade, identical goods sold in different countries must sell for the same price.
   E) None of the above.

8) Which of the following statements is the most accurate?
   A) Relative PPP implies absolute PPP.
   B) There is no causality relation between the two.
   C) **Absolute PPP implies relative PPP.**
   D) Absolute PPP does not imply relative PPP.
   E) None of the above.

9) The monetary approach makes the general prediction that
   A) the exchange rate, which is the relative price of American and European money, is fully determined in the short run by the relative supplies of those monies and the relative demands for them.
   B) the exchange rate, which is the relative price of American and European money, is fully determined in the short- and long run by the relative supplies of those monies and the relative demands for them.
   C) the exchange rate, which is the relative price of American and European money, is fully determined in the long run by the relative supplies of those monies.
   D) **the exchange rate, which is the relative price of American and European money, is fully determined in the long run by the relative supplies of those monies and the relative demands for them.**
   E) None of the above.
10) Under the monetary approach to the exchange rate,
   A) an interest rate increase is associated with higher expected inflation and a currency that will be weaker on all future dates.
   B) an interest rate increase is associated with higher expected deflation and a currency that will be weaker on all future dates.
   C) an interest rate increase is associated with higher expected deflation and a currency that will be strengthened on all future dates.
   D) an interest rate increase is associated with higher expected inflation and a currency that will be strengthened on all future dates.
   E) an interest rate decrease is associated with higher expected inflation and a currency that will be weaker on all future dates.

11) Under the monetary approach to the exchange rate,
   A) a rise in the money supply will cause immediate currency appreciation.
   B) a reduction in the money supply will cause immediate currency depreciation.
   C) a rise in the money supply will cause depreciation.
   D) a rise in the money supply will cause currency depreciation.
   E) a rise in the money supply will cause immediate currency depreciation.

12) Which one of the following statements is the most accurate?
   A) It is hard to tell whether departures from PPP are greater in the short run than in the long run.
   B) Departures from PPP may often be greater in the short run than in the long run.
   C) Departures from PPP are similar in both the short run and long run.
   D) Departures from PPP are always greater in the short run than in the long run.
   E) Departures from PPP are even greater in the long run than in the long run.

13) The PPP theory fails in reality because
   A) the inflation data reported in different countries are based on different commodity baskets.
   B) transport costs and restrictions on trade.
   C) monopolistic or oligopolistic practices in goods markets.
   D) A, B, and C.
   E) A and B only.

14) An increase in the world relative demand for U.S. output causes
   A) a long-run real appreciation of the dollar against the euro.
   B) a short-run real depreciation of the dollar against the euro.
   C) a long-run real depreciation of the dollar against the euro.
   D) A and B only.
   E) None of the above.

15) When the real exchange rate rises,
   A) Imports measured in terms of domestic output will never be affected.
   B) Imports measured in terms of domestic output will fall.
   C) Imports measured in terms of domestic output will rise.
   D) Imports measured in terms of domestic output may rise or fall.
   E) None of the above.
16) Which one of the following statements is the most accurate?
   A) A decrease in the real exchange rate and a decrease in disposable income improve the current account.
   B) An increase in the real exchange rate and an increase in disposable income improve the current account.
   C) A decrease in the real exchange rate and an increase in disposable income improve the current account.
   D) An increase in the real exchange rate and a decrease in disposable income improve the current account.
   E) None of the above.

17) How would you define a DD schedule?
   A) the combinations of output and the exchange rate that must hold when the output market is in short-run equilibrium
   B) the combinations of output and the exchange rate that must hold when the home money market and the foreign exchange market are in equilibrium
   C) factors of production in the long run
   D) Both A and B.
   E) None of the above.

18) How is the AA schedule derived?
   A) It is derived by the schedule of exchange rate and output combinations that are consistent with equilibrium in the domestic bond market and the foreign asset market.
   B) It is derived by the schedule of exchange rate and output combinations that are consistent with equilibrium in the domestic money market and the foreign exchange market.
   C) It is derived by the schedule of interest rate and output combinations that are consistent with equilibrium in the domestic money market and the foreign exchange market.
   D) It is derived by the schedule of exchange rate and output combinations that are consistent with equilibrium in the foreign money market and the domestic exchange market.
   E) None of the above.

19) CHINA’S inflation rate rose to 4.9% in January. The Economist article “Learning to like inflation” argues that
   A) The optimal inflation rate in an emerging economy is often higher than in the developed world because of something called the “Balassa–Samuelson effect”
   B) Some economists, however, believe that China should welcome higher inflation as a more effective way to rebalance its economy than a currency appreciation.
   C) A part of the inflation is also doing to rising wages. If wages rise, workers’ share of the cake will rise, boosting consumption and helping to reduce China’s external surplus.
   D) Only A above
   E) All of A, B, and C.
20. Using figures for both the short run and the long run show the effects of a permanent increase in the U.S. money supply on dollar/euro nominal exchange rate. Assume that European money supply, output, and interest rate is constant. Assume that the U.S. real national income is constant. Try to line up your figures to the short and long run equilibrium side by side to show how exchange rate depreciates more than its long run value. [6 points]

Answer: Figure 14 – 12 in the textbook.

21. Suppose Russia’s inflation rate is 200% over one year but the inflation rate in Switzerland is only 2%. According to relative PPP, what should happen over the year to the Swiss franc’s exchange rate [i.e., appreciation/depreciation] against the Russian ruble? Be precise in your calculations. [4 points]

Answer: The Ruble should depreciate against SFr by $200 - 2 = 198$ percent, by relative purchasing power parity.

22. Suppose the price of a big mac in China is 16 Yuan, while in the US its price is $4. If the Yuan dollar exchange rate is 8 Yuan/dollar, by how much is the Yuan under/overvalued? Show your work. [4 points]

Answer: The price of Big Mac in China is $16/8 = 2$, whereas in US it is $4$. Had the exchange rate been 4 Yuan/dollar, the law of one price would hold. Thus, Yuan is undervalued by $100\% = (8-4)/4$, if you take 4 (the “correct” exchange rate) as the base. If you instead take the prevailing exchange rate 8 as the base then Yuan is undervalued by $50\% = (8-4)/8$. [Note: Full credit for both answers.]

23. If the expected real interest rate in the US and Euro area are 6% and 4% respectively, by how much is the US real exchange rate expected to appreciate/depreciate? [5 points]

Answer: the real exchange rate depreciation equals the difference between real interest rates. Thus it will depreciate by $6 - 4 = 2$ percent.
24. What is the impact of an increase in the government spending on the DD schedule? Explain graphically. [5 points]

Answer: Figure 16-5 in the textbook.

25. Why do real wages rise over time in poor countries? [Hint: Balassa – Samuelson effect] [4 points]

Answer: The productivity in the traded sector rise over time as poor countries’ technology catches up with the rich. It increases wages in the traded sector. The labor becomes costly in the nontraded sector as well. Wages rise overall. It is called Balassa – Samuelson effect.