MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) The difference between nominal and real interest rates is that
   A) Nominal interest rates are measured in monetary terms, while real interest rates are measured in terms of a country’s output
   B) Nominal interest rates can fluctuate, while real interest rates always remain fixed
   C) Nominal interest rates are measured in terms of a country’s output, while real interest rates are measured in monetary terms
   D) Real interest rates are the same in every country, while nominal interest rates are different for every country
   E) Real interest rates can fluctuate, while nominal interest rates always remain fixed

2) The expected real interest rate \( r^e \) in terms of the nominal interest rate \( R \) and the expected inflation rate \( \pi^e \) is given by
   A) \( r^e = R - \pi^e \)
   B) \( r^e = \pi^e + R \)
   C) \( r^e = 2\pi^e + R^2 \)
   D) \( r^e = \pi^e + R^2 \)
   E) \( r^e = R^2 - \pi^e \)

3) Which of the following statements is the most accurate?
   A) PPP is sometimes a reasonable approximation to the data.
   B) Relative PPP is sometimes a reasonable approximation to the data but usually performs poorly.
   C) Relative PPP is not a reasonable approximation to the data.
   D) Relative PPP is sometimes a reasonable approximation to the data.
   E) PPP is sometimes a reasonable approximation to the data but usually performs poorly.

4) Which one of the following statements is the most accurate?
   A) Departures from PPP may often be greater in the short run than in the long run.
   B) Departures from PPP are similar in both the short run and long run.
   C) It is hard to tell whether departures from PPP are greater in the short run than in the long run.
   D) Departures from PPP are even greater in the long run than in the long run.
   E) Departures from PPP are always greater in the short run than in the long run.
5) Under Purchasing Power Parity,
   A) $E$/E = $P_{US}$/$P_{E}$
   B) $E$/E = $P_{US}$/PE
   C) $E$/E = $P_{E}$/$P_{US}$
   D) $E$/E = PE/PES
   E) None of the above.

6) Which of the following statements is most accurate?
   A) A relative expansion of U.S. output causes a long-run appreciation of the dollar against the euro, while a relative expansion of European output causes a long-run real depreciation of the dollar against the euro.
   B) A relative expansion of U.S. output causes a long-run depreciation of the dollar against the euro, while a relative expansion of European output causes a long-run real appreciation of the dollar against the euro.
   C) A relative expansion of U.S. output causes a long-run depreciation of the dollar against the euro, while a relative decline of European output causes a long-run real appreciation of the dollar against the euro.
   D) A relative decline of U.S. output causes a long-run depreciation of the dollar against the euro, while a relative decline of European output causes a long-run real appreciation of the dollar against the euro.
   E) A relative decline of U.S. output causes a long-run depreciation of the dollar against the euro, while a relative expansion of European output causes a long-run real appreciation of the dollar against the euro.

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

8) Which of the following statements is the most accurate?
   A) Absolute PPP implies relative PPP.
   B) Absolute PPP does not imply relative PPP.
   C) Relative PPP implies absolute PPP.
   D) There is no causality relation between the two.
   E) None of the above statements is true.
9) In the long run
   A) Exchange rates obey absolute PPP when all disturbances are monetary in nature
   B) Exchange rates obey absolute PPP when all disturbances occur in the output markets
   C) Exchange rates obey relative PPP when all disturbances occur in the output markets
   D) Exchange rates are unlikely to obey relative PPP when all disturbances are monetary in nature
   E) Exchange rates are unlikely to obey relative PPP when all disturbances occur in the output markets

10) Under the monetary approach to the exchange rate,
   A) An interest rate increase is associated with higher expected deflation and a currency that will be weaker on all future dates.
   B) An interest rate increase is associated with higher expected inflation and a currency that will be weaker on all future dates.
   C) An interest rate increase is associated with higher expected inflation and a currency that will be strengthened on all future dates.
   D) An interest rate increase is associated with higher expected deflation 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 Purchasing Power Parity,
   A) E$/E = P_US + P_E
   B) E$/E = P_US/P_E
   C) E$/E = P_US - P_E
   D) E$/E = P_E/P_ES
   E) None of the above.

12) Which one of the following statements is the most accurate?
   A) Relative price changes could not lead to PPP violations even if trade were free and costless.
   B) Relative price changes could lead to PPP violations even if trade were free and costless.
   C) Price changes could lead to PPP violations even if trade were free and costless.
   D) Relative price changes could lead to PPP violations only if trade were free and costless.
   E) None of the above statements is true.
13) If people expect relative PPP to hold,  
A) The difference between the interest rates offered by dollar and euro deposits will equal the difference between the inflation rates expected, over the relevant horizon, in the United States and Europe, in the short run.  
B) The difference between the interest rates offered by dollar and euro deposits will be above the difference between the inflation rates expected, over the relevant horizon, in the United States and Europe.  
C) The difference between the interest rates offered by dollar and euro deposits will equal the difference between the inflation rates expected in Europe and the United States.  
D) The difference between the interest rates offered by dollar and euro deposits will equal the difference between the inflation rates expected, in the United States and Europe, over the relevant horizon.  
E) None of the above statements is true.

14) Under PPP (and by the Fisher Effect),  
A) A rise in a country’s expected inflation rate will eventually cause a less than proportional rise in the interest rate that depositors of its currency offer to accommodate the rise in expected inflation.  
B) A fall in a country’s expected inflation rate will eventually cause an equal rise in the interest rate that depositors of its currency offer.  
C) A rise in a country’s expected inflation rate will eventually cause a more than proportional rise in the interest rate that depositors of its currency offer in order to accommodate for the higher inflation.  
D) A rise in a country’s expected inflation rate will eventually cause an equal rise in the interest rate that depositors (or deposits–see page 396) of its currency offer.  
E) None of the above statement is true.

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

16) An increase in the world relative demand for U.S. output causes  
A) a long–run real depreciation of the dollar against the euro  
B) a long–run real appreciation of the dollar against the euro  
C) a short–run real depreciation of the dollar against the euro  
D) A and B only  
E) None of the above
17) In May 2004, the world’s cheapest Big Macs were sold in
   A) China
   B) the Philippines
   C) Ukraine
   D) the Czech Republic
   E) Russia

18) Interest rate differences between countries depend on
   A) differences in expected inflation and nothing else
   B) neither differences in expected inflation, nor on expected changes in the real exchange rate
   C) differences in expected changes in the real exchange rate, but not on expected inflation
   D) differences in expected inflation, but not on expected changes in the real exchange rate
   E) differences in expected inflation, and on expected changes in the real exchange rate

19) In practice,
   A) Changes in national price levels raise the exchange rate.
   B) Changes in national price levels often tell us about exchange rate movements.
   C) Changes in national price levels often tell us little or nothing about exchange rate movements.
   D) Changes in national price levels lower the exchange rate.
   E) None of the above statements is true.

20) Which of the following statements is the most accurate?
    A) Predictions about long-run movements in exchange rates are important even in the short run.
    B) Predictions about long-run movements in exchange rates are not important the short run.
    C) Predictions about long-run movements in exchange rates are often not important in the short run.
    D) Predictions about long-run movements in exchange rates are important only in the long run.
    E) None of the above.

21) When the domestic money prices of goods are held constant
    A) A nominal dollar appreciation makes U.S. goods cheaper compared with foreign goods
    B) A nominal dollar appreciation makes U.S. goods more expensive compared with foreign goods
    C) A nominal dollar depreciation makes U.S. goods cheaper compared with foreign goods
    D) A and C only.
    E) B and C only.
22) Under sticky prices,  
A) A fall in the money supply keeps the interest rate intact to preserve money market equilibrium.  
B) A fall in the money supply raises the interest rate to preserve money market equilibrium.  
C) A fall in the money supply reduces the interest rate to preserve money market equilibrium.  
D) A fall in the money supply does not affect the interest rate in the short run, only in the long run.  
E) None of the above statements is true.

23) In order for the condition $E_$/HK$ = P_{us}/PHK$ to hold, what assumptions does the principle of purchasing power parity make?  
A) Markets are perfectly competitive, i.e., $P = MC$.  
B) The factors of production are identical between countries.  
C) No transportation costs and restrictions on trade; commodity baskets that are a reliable indication of price level.  
D) No arbitrage exists.  
E) None of the above.

24) Which of the following statements is the most accurate?  
A) The prices of identical commodity baskets, when converted to a single currency, are the same across countries.  
B) The prices of identical commodity baskets, when converted to a single currency, differ substantially across countries.  
C) The prices of identical commodity baskets, when converted to a single currency, are often the same across countries.  
D) The prices of identical commodity baskets, when converted to a single currency, do not differ substantially across countries.  
E) None of the above statements is true.

25) Which of the following statements is the most accurate?  
A) In the long run, national price levels play a key role only in determining the relative prices at which countries' products are traded.  
B) In the long run, national price levels play a key role in determining both interest rates and the relative prices at which countries' products are traded.  
C) In the long run, national price levels play a key role only in determining interest rates.  
D) In the long run, national price levels play a minor role in determining both interest rates and the relative prices at which countries' products are traded.  
E) None of the above.
26) What is the best way to describe aggregate demand?
   A) Exports decrease; imports increase.
   B) Quantity required to satisfy equilibrium.
   C) Amount of a country's goods and services demanded by household and firms throughout the world.
   D) Individual's demand.
   E) None of the above.

27) In the short run, with prices fixed, how would an increase in government spending affect the DD–AA schedule?
   A) It will increase output and depreciate the currency.
   B) It will increase output and appreciate the currency.
   C) It will decrease output and appreciate the currency.
   D) It will decrease output and depreciate the currency.
   E) None of the above.

28) Assume the economy is initially consuming along the inter–temporal budget constraint at point A, where no saving occurs. How does a fall in the real interest rate (r) affect present consumption?
   A) Present consumption increases.
   B) Present consumption decreases.
   C) Present consumption is unaffected.
   D) Present consumption's change is ambiguous.
   E) Not enough information is provided.

29) Which one of the following statements is most accurate?
   A) In the long run, foreign output depends only on foreign disposable income.
   B) In the long run, domestic output depends only on the available domestic supplies of factors of production.
   C) In the short run, domestic output depends only on the available domestic supplies of factors of production.
   D) All of the above.
   E) None of the above.

30) In the short–run, any rise in the nominal exchange rate, E, will cause
   A) A downward shift in the aggregate demand function and an expansion of output
   B) An downward shift in the aggregate demand function and a reduction in output
   C) An upward shift in the aggregate demand function and a reduction in output
   D) An upward shift in the aggregate demand function but leaves output intact
   E) An upward shift in the aggregate demand function and an expansion of output
31) Which of the following have to be in equilibrium for the economy to be in equilibrium?

A) The money market only.
B) The savings and investment markets.
C) The goods market only.
D) The output and assets markets.
E) The goods and output markets.

32) The current account increases when:

A) Disposable income increases.
B) Domestic prices fall.
C) Exports fall.
D) Real exchange rate increases.
E) Real exchange rate decreases.

33) In the short-run, a temporary increase in the money supply

A) Shifts the AA curve to the left, increases output and depreciates the currency
B) Shifts the AA curve to the left, decreases output and depreciates the currency
C) Shifts the AA curve to the right, increases output and appreciates the currency
D) Shifts the AA curve to the left, increases output and appreciates the currency
E) Shifts the AA curve to the right, increases output and depreciates the currency

34) In the short-run, a reduction in the exchange rate, i.e. currency appreciation,

A) Lowers aggregate demand and lowers output
B) Raises aggregate demand and raises output
C) Raises aggregate demand and does not affect output
D) Lowers aggregate demand and raises output
E) Raises aggregate demand and lowers output

35) What is an accurate assumption about disposable income if it increases?

A) An increase in consumption
B) A decrease in consumption
C) A decrease in output
D) A decrease in exchange rate
E) An increase in exchange rate
36) Why do real exchange rates affect the current account?
   A) It shows changes in the price of domestic goods and service relative to foreign.
   B) It reflects changes of the inflation rate.
   C) It shows the nominal exchange rates in real terms.
   D) It shows the EX-IM differences.
   E) None of the above.

37) A rise in the interest rate of foreign currency deposits has the same effect on the equilibrium of the asset markets as:
   A) a rise in inflation
   B) a rise in interest rates.
   C) a currency depreciation.
   D) an expected future currency depreciation.
   E) a rise in money demand.

38) Which of the following statements is the most accurate? In general,
   A) The monetary approach to the exchange rate neither long run nor short run theory.
   B) The monetary approach to the exchange rate is both a short and long run theory.
   C) The monetary approach to the exchange rate is a short run theory.
   D) The monetary approach to the exchange rate is a long run theory.
   E) None of the above statement is true.

39) Which of the following statements is most accurate?
   A) The United States price level will place a relatively heavy weight on commodities produced and consumed in America, and the European price level will place a relatively heavy weight on commodities produced and consumed in Europe
   B) The United States price level will place a relatively light weight on commodities produced and consumed in America, and the European price level will place a relatively light weight on commodities produced and consumed in Europe
   C) The United States price level will place a relatively light weight on commodities produced and consumed in Europe, and the European price level will place a relatively heavy weight on commodities produced and consumed in America
   D) The United States price level will place a relatively heavy weight on commodities produced and consumed in Europe, and the European price level will place a relatively heavy weight on commodities produced and consumed in America
   E) The United States price level will place a relatively light weight on commodities produced and consumed in America, while the European price level will place a relatively heavy weight on commodities produced and consumed in Europe
40) Which of the following statements is the most accurate? The law of one price states:

A) 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.

B) Identical goods sold in different countries 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.

41) Which of the following statements is the most accurate? In general, under the monetary approach to the exchange rate,

A) The interest rate is independent of the money supply growth rate in the long run.

B) The interest rate is not independent of the money supply growth rate in the long run, but independent in the short run.

C) The interest rate is not independent of the money supply growth rate in the long run.

D) The interest rate is not independent of the money supply growth rate in the short run.

E) None of the above statement is true.

42) Which of the following statements is most accurate?

A) In the money market, an increase in U.S. money supply growth rate leads to a decrease in the long-run nominal dollar/euro exchange rate

B) In the money market, an increase in European money supply growth leads to an increase in the long-run nominal dollar/euro exchange rate

C) In the money market, an increase in U.S. money supply level leads to a proportional increase in the long-run nominal dollar/euro exchange rate

D) In the money market, an increase in U.S. money supply level leads to a proportional decrease in the long-run nominal dollar/euro exchange rate

E) In the money market, an increase in European money supply level leads to a proportional increase in the long-run nominal dollar/euro exchange rate

43) When all variables start out at their long-run levels, the most important determinant of long-run swings is nominal exchange rates is

A) a shift in relative money supply growth rates

B) a change in relative output supply

C) a change in relative output demand

D) a shift in relative money supply levels

E) None of the above.
44) In the short run, a permanent increase in the domestic money supply causes

A) an upward shift in the DD curve which is greater than that caused by an equal but transitory increase
B) an upward shift in the AA curve which is greater than that caused by an equal but transitory increase
C) an upward shift in the AA curve which is smaller than that caused by an equal but transitory increase
D) a downward shift in the AA curve which is smaller than that caused by an equal but transitory increase
E) a downward shift in the AA curve which is greater than that caused by an equal but transitory increase

45) Which one of the following statements is most accurate?

A) Factors of production can only be under-employed in the short run.
B) Factors of production can be over- or under-employed in the long run.
C) Factors of production can be over- or under-employed in the short run.
D) Factors of production can only be over-employed in the short run.
E) None of the above.

46) When EP*/P rises,

A) IM is not affected.
B) IM will fall.
C) IM may rise or fall.
D) IM will rise.
E) None of the above.

47) In the short run,

A) The interest rate can decrease when the domestic money supply falls.
B) The interest rate rises in the same proportion as the domestic money supply falls.
C) The interest rate stays constant when the domestic money supply falls.
D) The interest rate can rise when the domestic money supply falls.
E) None of the above statements is true.
48) Floating exchange rates

A) systematically lead to much larger but less frequent short-run deviations from the relative PPP
B) systematically lead to much smaller but more frequent short-run deviations from the relative PPP
C) systematically lead to larger and more frequent short-run deviations from the relative PPP
D) systematically lead to much smaller and less frequent short-run deviations from the relative PPP
E) systematically lead to much larger and more frequent short-run deviations from the relative PPP

49) The aggregate demand for home input can be written as a function of:

I. Real exchange rate.
II. Government spending.
III. Disposable income.

A) I only
B) III only
C) II and III
D) I and III
E) I, II, and III

50) Under sticky prices,

A) An interest rate rise is associated with higher expected inflation and a long-run currency appreciation, so the currency appreciates immediately.
B) An interest rate rise is associated with lower expected inflation and a long-run currency depreciation, so the currency appreciates immediately.
C) An interest rate rise is associated with lower expected deflation and a long-run currency appreciation, so the currency appreciates immediately.
D) An interest rate rise is associated with lower expected inflation and a long-run currency depreciation, so the currency depreciates immediately.
E) An interest rate rise is associated with lower expected inflation and a long-run currency appreciation, so the currency appreciates immediately.
SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

51) Fill in the following table, assuming the law of one price prevails.

<table>
<thead>
<tr>
<th>Price in the United States of a Sweater Expressed in Dollars, $P_{US}^i$</th>
<th>Price in Europe Expressed in Euro, $P_{E}^i$</th>
<th>Exchange Rate Between the Dollar and the Euro, $E_{S/E}^i$</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0.78125</td>
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<tr>
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<td>80</td>
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</tr>
<tr>
<td>115</td>
<td>139</td>
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</tr>
</tbody>
</table>

52) Fill in the following table, assuming the law of one price prevails.

<table>
<thead>
<tr>
<th>Price in the United States of a Sweater Expressed in Dollars, $P_{US}^i$</th>
<th>Price in Europe Expressed in Euro, $P_{E}^i$</th>
<th>Exchange Rate Between the Dollar and the Euro, $E_{S/E}^i$</th>
</tr>
</thead>
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<tr>
<td>100</td>
<td>110</td>
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</tr>
</tbody>
</table>

53) 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 against the Russian ruble?

54) Assume that the dollar/pound exchange rate is $1.50 per pound. A sweater that sells for $45 in New York must sell for how many pounds in London?
55) Explain the following figure:

56) Find the real exchange rate for the following case: Assume that the representative basket of European goods costs 100 euros and the representative U.S. basket costs $125, and the dollar/euro exchange rate is $0.75 per euro, then the price of the European basket in terms of U.S. basket is:

57) Assuming relative PPP, fill in the table below:

<table>
<thead>
<tr>
<th>E$/E, t</th>
<th>E$/E, t-1</th>
<th>E$/E, t-1</th>
<th>ΠUS, t</th>
<th>ΠE, t</th>
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<td>2.9</td>
<td>0.13</td>
<td></td>
</tr>
</tbody>
</table>

58) Find the real exchange rate for the following case: Assume that the representative basket of European goods and services costs 40 euros and the representative U.S. basket costs $50, and the dollar/euro exchange rate is $0.90 per euro, then the price of the European basket in terms of U.S. basket is ________.