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

1) If an identical product can be sold in two different markets, and no restrictions exist on the sale or transportation costs, the product's price should be the same in both markets. This is known as: 1) ______

A) the law of one price.
B) equilibrium.
C) relative purchasing power parity.
D) interest rate parity.

2) *The Economist* publishes annually the "Big Mac Index" by which they compare the prices of the McDonald's Corporation's Big Mac hamburger around the world. The index estimates the exchange rates for currencies based on the assumption that the burgers in question are the same across the world and therefore, the price should be the same. If a Big Mac costs $2.54 in the United States and 294 yen in Japan, what is the estimated exchange rate of yen per dollar as hypothesized by the Hamburger index? 2) ______

A) $0.0086/¥
B) $0.0081/¥
C) ¥124/$
D) ¥115.75/$

3) If the current exchange rate is 113 Japanese yen per U.S. dollar, the price of a Big Mac hamburger in the United States is $3.41, and the price of a Big Mac hamburger in Japan is 280 yen, then other things equal, the Big Mac hamburger in Japan is: 3) ______

A) under priced.
B) correctly priced.
C) over priced.
D) There is not enough information to determine if the price is appropriate or not.

4) The price of a Big Mac in the U.S. is $3.41 and the price in Mexico is Peso 29.0. What is the implied PPP of the Peso per dollar? 4) ______

A) Peso 11.76/$1
B) Peso 10.8/$1
C) Peso 8.50/$1
D) None of the above

5) Assume the implied PPP rate of exchange of Mexican Pesos per U.S. dollar is 8.50 according to the Big Mac Index. Further, assume the current exchange rate is Peso 10.80/$1. Thus, according to PPP and the Law of One Price, at the current exchange rate the peso is: 5) ______

A) overvalued.
B) correctly valued.
C) undervalued.
D) There is not enough information to answer this question.

6) According to the Big Mac Index, the implied PPP exchange rate is Mexican peso 8.50/$1 but the actual exchange rate is peso10.80/$1. Thus, at current exchange rates the peso appears to be ________ by ________. 6) ______

A) overvalued; approximately 27%
B) undervalued; approximately 27%
C) undervalued; approximately 21%
D) overvalued; approximately 21%

7) Other things equal, and assuming efficient markets, if a Honda Accord costs $24,682 in the U.S., then at an exchange rate of $1.57/£, the Honda Accord should cost _______ in Great Britain. 7) ______

A) £24,682
B) £15,721
C) £10,795
D) £38,751

8) One year ago the spot rate of U.S. dollars for Canadian dollars was $1/C$1. Since that time the rate of inflation in the U.S. has been 4% greater than that in Canada. Based on the theory of Relative PPP, the current spot exchange rate of U.S. dollars for Canadian dollars should be approximately: 8) ______

A) $1/C$
B) $1.04/C$
C) $0.96/C$
D) Relative PPP provides no guide for this type of question.

9) _______ states that differential rates of inflation between two countries tend to be offset over time by an equal but opposite change in the spot exchange rate. 9) ______

A) Relative Purchasing Power Parity
B) The Fisher Effect
C) Absolute Purchasing Power Parity
D) The International Fisher Effect

10) Two general conclusions can be made from the empirical tests of purchasing power parity (PPP): 10) ______

A) PPP holds up well over the long run but poorly for the short run, and the theory holds better for countries with relatively high rates of inflation.
B) PPP holds up well over the long run but poorly for the short run, and the theory holds better for countries with relatively low rates of inflation.
C) PPP holds up well over the short run but poorly for the long run, and the theory holds better for countries with relatively high rates of inflation.
D) PPP holds up well over the short run but poorly for the long run, and the theory holds better for countries with relatively low rates of inflation.

11) A country's currency that strengthened relative to another country's currency by more than that justified by the differential in inflation is said to be _______ in terms of PPP. 11) ______

A) undervalued
B) under compensating
C) overvalued
D) over compensating

12) If we set the *real effective exchange rate index* between Canada and the United States equal to 100 in 1998, and find that the U.S. dollar has risen to a value of 112.6, then from a competitive perspective the U.S. dollar is: 12) ______

A) very competitive.
B) undervalued.
C) overvalued.
D) There is not enough information to answer this question.

13) If we set the *real effective exchange rate index* between the United Kingdom and the United States equal to 100 in 2005, and find that the U.S. dollar has changed to a value of 91.4, then from a competitive perspective the U.S. dollar is: 13) ______

A) undervalued.
B) equally valued.
C) overvalued.
D) There is not enough information to answer this question.

14) The government just released international exchange rate statistics and reported that the *real effective exchange rate index* for the U.S. dollar vs the Japanese yen decreased from 105 last year to 95 currently and is expected to fall still further in the coming year. Other things equal U.S. ________ to/from Japan think this is good news and U.S. ________ to/from Japan think this is bad news. 14) ______

A) importers; importers
B) importers; exporters
C) exporters; importers
D) exporters; exporters

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

15) If a market basket of goods cost $100 is the US and €70 in France, then the PPP exchange rate would be $.70/€. 15) ______

16) The assumptions for relative PPP are more rigid than the assumptions for absolute PPP. 16) ______

17) Empirical tests prove that PPP is an accurate predictor of future exchange rates. 17) ______

18) Consider the price elasticity of demand. If a product has price elasticity less than one it is considered to have relatively *elastic* demand. 18) ______

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

19) The authors state that empirical tests of purchasing power parity "have, for the most part, not proved PPP to be accurate in predicting future exchange rates." The authors then state that PPP does hold up reasonably well in two situations. What are some reasons why PPP does not accurately predict future exchange rates, and under what conditions might we reasonably expect PPP to hold?

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

20) _______ states that nominal interest rates in each country are equal to the required real rate of return plus compensation for expected inflation. 20) ______

A) The Fisher Effect
B) Relative PPP
C) The Law of One Price
D) Absolute PPP

21) In its approximate form the Fisher effect may be written as ________. Where: i = the nominal rate of interest, r = the real rate of return and π = the expected rate of inflation. 21) ______

A) $i = r + \pi$
B) $i = r + 2\pi$
C) $i = (r)(\pi)$
D) $i = r + \pi + (r)(\pi)$

22) Assume a nominal interest rate on one-year U.S. Treasury Bills of 2.60% and a real rate of interest of 1.00%. Using the Fisher Effect Equation, what is the approximate expected rate of inflation in the U.S. over the next year? 22) ______

A) 1.00%
B) 1.60%
C) 2.10%
D) 2.05%

23) Assume a nominal interest rate on one-year U.S. Treasury Bills of 3.80% and a real rate of interest of 2.00%. Using the Fisher Effect Equation, what is the exact expected rate of inflation in the U.S. over the next year? 23) ______

A) 1.84%
B) 1.76%
C) 1.72%
D) 1.80%

24) The relationship between the percentage change in the spot exchange rate over time and the differential between comparable interest rates in different national capital markets is known as: 24) ______

A) relative PPP.
B) the international Fisher Effect.
C) absolute PPP.
D) the law of one price.

25) According to the international Fisher Effect, if an investor purchases a five-year U.S. bond that has an annual interest rate of 5% rather than a comparable British bond that has an annual interest rate of 6%, then the investor must be expecting the ________ to ________ at a rate of at least 1% per year over the next 5 years. 25) ______

A) U.S. dollar; depreciate
B) British pound; revalue
C) British pound; appreciate
D) U.S. dollar; appreciate

26) ________ states that the spot exchange rate should change in an equal amount but in the opposite direction to the difference in interest rates between two countries. 26) ______

A) The Fisher Effect
B) Fisher-closed
C) Fisher-open
D) none of the above

27) *Exchange rate pass-through* may be defined as: 27) ______

A) the PPP of lesser-developed countries.
B) the degree to which the prices of imported and exported goods change as a result of exchange rate changes.
C) the practice by Great Britain of maintaining the relative strength of the currencies of the Commonwealth countries under the current floating exchange rate regime.
D) the bid/ask spread on currency exchange rate transactions.

28) Phillips NV produces DVD players and exports them to the United States. Last year the exchange rate was \$1.25/euro and Plillips charged 120 euro per player in Euroland and \$150 per DVD player in the United States. Currently the spot exchange rate is \$1.45/euro and Phillips is charging \$160 per DVD player. What is the degree of pass through by Phillips NV on their DVD players? 28) ______

A) 41.7%
B) 92%
C) 33.3%
D) 4.1%

29) Jaguar has full manufacturing costs of their S-type sedan of £22,803. They sell the S-type in the UK with a 20% margin for a price of £27,363. Today these cars are available in the US for $55,000 which is the UK price multiplied by the current exchange rate of $2.01/£. Jaguar has committed to keeping the US price at $55,000 for the next six months. If the UK pound appreciates against the USD to an exchange rate of $2.15/£, and Jaguar has not hedged against currency changes, what is the amount the company will receive in pounds at the new exchange rate? 29) ______

A) £27,363 B) £22,803 C) £25,581 D) £55,000

30) Jaguar has full manufacturing costs of their S-type sedan of £22,803. They sell the S-type in the UK with a 20% margin for a price of £27,363. Today these cars are available in the US for $55,000 which is the UK price multiplied by the current exchange rate of $2.01/£. Jaguar has committed to keeping the US price at $55,000 for the next six months. If the UK pound appreciates against the USD to an exchange rate of $2.15/£, and Jaguar has not hedged against currency changes, what is the percentage margin the company will realize given the new exchange rate? 30) ______

A) 20.0% B) 15.3% C) 7.2% D) 12.4%

31) The price elasticity of demand for DVD players manufactured by Sony of Japan is greater than one. If the Japanese yen appreciates against the U.S. dollar by 10% and the price of the Sony DVD players in the U.S also rises by 10%, then other things equal, the total dollar sales revenues of Sony DVDs would: 31) ______

A) increase. B) decline.
C) stay the same. D) insufficient information

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

32) The final component of the equation for the Fisher Effect, (r)(π), where r = the real rate of return and π = the expected rate of inflation, is often dropped from the equation because the number is simply too large for most Western economies. 32) ______

33) Empirical studies show that the Fisher Effect works best for short-term securities. 33) ______

34) The current U.S. dollar-yen spot rate is ¥125/$. If the 90-day forward exchange rate is ¥127/$ then the yen is at a forward premium. 34) ______

35) The premium or discount on forward currency exchange rates between any two countries is visually obvious when you plot the interest rates of each country on the same yield curve. The currency of the country with the higher yield curve should be selling at a forward discount. 35) ______

36) Use interest rate parity to answer this question. A U.S. investor has a choice between a risk-free one-year U.S. security with an annual return of 4%, and a comparable British security with a return of 5%. If the spot rate is $1.43/£, the forward rate is $1.44/£, and there are no transaction costs, the investor should invest in the U.S. security. 36) ______

37) Both covered and uncovered interest arbitrage are risky operations in the sense that even without default in the securities, the returns are unknown until all transactions are complete. 37) ______

38) All that is required for a covered interest arbitrage profit is for interest rate parity to not hold. 38) ______

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

39) The authors describe an application of uncovered interest arbitrage (UIA) known as "yen carry trade." Define UIA and describe the example of yen carry trade. Why would an investor engage in the practice of yen carry trade and is there any risk of loss or lesser profit from this investment strategy?

40) The Fisher Effect is a familiar economic theory in the domestic market. In words, define the Fisher Effect and explain why you think it is also appropriately applied to international markets.

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

41) If the forward rate is an unbiased predictor of the expected spot rate, which of the following is NOT true? 41) ______

A) The distribution of possible actual spot rates in the future is centered on the forward rate.

B) The expected value of the future spot rate at time 2 equals the present forward rate for time 2 delivery, available now.

C) The future spot rate will actually be equal to what the forward rate predicts.

D) All of the above are true.

42) Which of the following is NOT an assumption of market efficiency? 42) ______

A) Instruments denominated in other currencies are perfect substitutes for one another.

B) All relevant information is quickly reflected in both spot and forward exchange markets.

C) Transaction costs are low or nonexistent.

D) All of the above are true.

43) Empirical tests have yielded ________ evidence about market efficiency with a general consensus that developing foreign markets are ________. 43) ______

A) consistent; inefficient
B) conflicting; efficient
C) conflicting; not efficient
D) none of the above

44) A ________ is an exchange rate quoted today for settlement at some time in the future. 44) ______

A) spot rate
B) yield curve
C) currency rate
D) forward rate

45) Assume the current U.S. dollar-British spot rate is 0.6993£/$. If the current nominal one-year interest rate in the U.S. is 5% and the comparable rate in Britain is 6%, what is the approximate forward exchange rate for 360 days? 45) ______

A) £0.6993/$
B) £0.7060/$
C) £1.42/$
D) £1.43/$

46) Assume the current U.S. dollar-yen spot rate is 90 ¥/$. Further, the current nominal 180-day rate of return in Japan is 1% and 2% in the United States. What is the approximate forward exchange rate for 180 days? 46) ______

A) ¥90.89/$
B) ¥89.55/$
C) ¥89.12/$
D) ¥90.45/$

47) The current U.S. dollar-yen spot rate is 125¥/$. If the 90-day forward exchange rate is 127 ¥/$ then the yen is selling at a per annum ________ of ________. 47) ______

A) discount; 6.30%
B) premium; 6.30%
C) discount; 1.57%
D) premium; 1.57%

48) The theory of ________ states that the difference in the national interest rates for securities of similar risk and maturity should be equal to but opposite in sign to the forward rate discount or premium for the foreign currency, except for transaction costs. 48) ______

A) the law of one price
B) absolute PPP
C) international Fisher Effect
D) interest rate parity

49) With *covered interest arbitrage*: 49) ______

A) a "riskless" arbitrage opportunity exists.
B) the arbitrageur trades in both the spot and future currency exchange markets.
C) the market must be out of equilibrium.
D) all of the above

50) Covered interest arbitrage moves the market ________ equilibrium because ________. 50) ______

A) away from; purchasing a currency on the spot market and selling in the forward market increases the differential between the two
B) toward; purchasing a currency on the spot market and selling in the forward market narrows the differential between the two
C) toward; investors are now more willing to invest in risky securities
D) away from; demand for the stronger currency forces up interest rates on the weaker security

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

51) If exchange markets were not efficient, it would pay for a firm to spend resources on forecasting exchange rates. 51) ______

52) If the forward exchange rate is an unbiased predictor of future spot rates, then future spot rates will always be equal to current forward rates. 52) ______

53) COVERED interest arbitrage (CIA), is where investors borrow in countries and currencies exhibiting relatively low interest rates and convert the proceeds into currencies that offer much higher interest rates. The transaction is "covered," because the investor does not sell the higher yielding currency proceeds forward. 53) ______

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

54) According to the International Fisher Effect, the forecast change in the spot rate between two countries is equal to: 54) ______

A) but the opposite sign to the difference between nominal interest rates.

B) but the opposite sign to the difference between real interest rates.

C) the current spot rate multiplied by the ratio of the inflation rates in the respective countries.

D) but the opposite sign to the difference between inflation rates.

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

55) In their approximate form, PPP, IRP, and forward rates as an unbiased predictor of the future spot rate lead to similar forecasts of the future spot rate. 55) ______

1) A
2) D
3) A
4) C
5) C
6) C
7) B
8) B
9) A
10) A
11) C
12) C
13) A
14) C
15) FALSE
16) FALSE
17) FALSE
18) FALSE
19) PPP does not hold because goods and services do not move without cost between countries and markets. Often, goods and services are nor perfect substitutes in every market for reasons of availability, taste, quality, and production techniques. Having said that, PPP does appear to work reasonably well over the long run and especially in countries with higher rates of inflation and underdeveloped capital markets.
20) A
21) A
22) B
23) B
24) B
25) D
26) C
27) B
28) A
29) C
30) D
31) B
32) FALSE
33) TRUE
34) FALSE
35) TRUE
36) FALSE
37) FALSE
38) TRUE

39) UIA is the practice of investors borrowing money in countries where interest rates are relatively low, converting the loan proceeds into a currency where rates are relatively high, investing at the higher rate, subsequently converting the proceeds back into the original currency to repay the proceeds from the loan and hopefully realizing a greater return from this practice than if the borrowing and investing had all taken place in the original currency. The arbitrage is uncovered because at the time of the investment the investor does not lock in a forward exchange rate and therefore bears the risk that currency exchange rates will change in an unfavorable manner. The yen carry trade exists because rates in Japan are so very low that investors borrow yen, convert to another currency, say U.S. dollars, invest at much higher interest rates, often in default-risk free Treasury securities, then convert back to yen, repay the original loan and walk away with a significantly greater return than otherwise available. The risk in this process is neither from the investment nor from the loan. The risk is that exchange rates may change unfavorably and the investor takes a loss rather than a profit.
40) Irving Fisher was an early 20th century economist who hypothesized that all market determined nominal interest rates had at least two basic components. First, a real return is required to compensate investors for postponing current consumption. This real rate is constant and unaffected by expectations about inflation. Second, an expected inflation component is required so that investors would not expect to lose purchasing power by the act of forgoing current consumption. Intuitively, if capital can move freely among international markets these same requirements must exist in each of the capital markets and the Fisher Effect would apply internationally as well as domestically.
41) C
42) D
43) C
44) D
45) B
46) B
47) A
48) D
49) D
50) B
51) TRUE
52) FALSE
53) FALSE
54) A
55) TRUE