5 CURRENCY EXCHANGE R...TANDING EQUILIBRIUM VALUE

1. An investor has entered into a 90-day forward contract to purchase 2 million GBP at an all-in rate of USD 1.4612. In 30 days, the following quotes were available:

	USD/GBP
spot rate	1.4522-24
30-day forward rate	1.4618-21
60-day forward rate	1.4621-25
90-day forward rate	1.4632-36

Interest rate information:

Interest rates	When contract was initiated		Currently (t = 30)	
	USD	GBP	USD	GBP
30-day	0.20%	0.32%	0.20%	0.32%
60-day	0.21%	0.32%	0.21%	0.32%
90-day	0.21%	0.33%	0.21%	0.33%

The mark-to-market value of the forward contract is closest to:

(A) USD 1800

(B) USD 1999

(C) USD 2599

2. Assume that the domestic nominal rate of return is 4% and the foreign nominal rate of return is 5%. If the current exchange rate is DC/FC 0.400, the forward rate consistent with covered interest rate parity is:

(A) 0.400.

(B) 0.396.

(C) 0.318.

3. Which of the following statements about foreign currency bid-ask spreads is least accurate? Foreign currency bid-ask spreads:

(A) increase as the size of the transaction decreases.

(B) are influenced by time window in a trading day.

(C) are a function of transaction volume and volatility.

4. Which of the following statements regarding relative purchasing power parity is most accurate? Relative purchasing power states that exchange rates:
   (A) will change to reflect differences in inflation between countries.
   (B) will change to reflect differences in nominal interest rates between countries.
   (C) will change to reflect differences in real interest rates between countries.

5. The following information is gathered for three countries:

Country	Comment
A	Current account deficit is very large relative to GDP
B	Imports highly price-elastic goods
C	Exports global commodities

   Which country will most likely see its current account deficit restored to sustainable level more rapidly under the flows mechanism of balance of payments?
   (A) Country B
   (B) Country A
   (C) Country C

6. Country P has high capital mobility and has recently switched from a balanced fiscal policy to an expansionary fiscal policy. Over time this expansionary fiscal policy is expected to lead to an increase in the government debt-to-GDP ratio.
   If we simultaneously consider both the Mundell-Fleming and the portfolio balance model, in the short term country P's currency is most likely to:
   (A) appreciate.
   (B) remain stable.
   (C) depreciate.

7. Ackerman explains to Bos that a theoretical relationship exists between forward rates and future spot rates, called the forward rate parity. This relation suggests that:
   (A) the forward rate is a biased predictor of the expected future spot rate, and uncovered interest rate parity would not hold.
   (B) the forward rate is an unbiased predictor of the expected future spot rate, and uncovered interest rate parity would hold.
   (C) the forward rate is an unbiased predictor of the expected future spot rate, and uncovered interest rate parity would not hold.

8. Assume an investor living in Japan can borrow in the domestic yen (JPY) or in the foreign U.S. dollar (USD). Given the following information, determine whether an arbitrage opportunity exists. If so, how much would the investor profit by borrowing JPY 58,175,000 or the equivalent in USD? (Assume a period of one year.)

Spot rate (JPY/USD)	116.35
Forward rate (JPY/USD)	112.99
Domestic (Japanese) interest rate (%)	1.50
Foreign (U.S.) interest rate (%)	4.00

(A) An arbitrage opportunity results in a profit of JPY 25,170.

(B) An arbitrage opportunity results in a profit of JPY 292,825.

(C) An arbitrage opportunity results in a profit of JPY 27,963.

9. Given the following quotes for the Canadian dollar (CAD) and the British pound (GBP), the implied CAD/GBP bid-ask quotes are closest to:

CAD/USD 1.59031 – 1.59701

GBP/USD 0.69459 – 0.69686

(A) CAD/GBP 2.2895 – 3.2886.

(B) CAD/GBP 2.2821 – 2.2992.

(C) CAD/GBP 2.2992 – 2.3163.

10. The return distribution of FX carry trade is characterized by:

(A) negative skewness and positive excess kurtosis.

(B) positive skewness and positive excess kurtosis.

(C) negative skewness and negative excess kurtosis.

11. Terrance Burnhart, a junior analyst at Wertheim Investments Inc., was discussing the concepts of purchasing power parity (PPP) and uncovered interest rate parity (UIRP) with his colleague, Francis Ferngood. During the conversation Burnhart made the following statements:

Statement 1: Absolute PPP is based on a number of unrealistic assumptions that limits its real-world usefulness. These assumptions are: that all goods and services can be transported among countries at no cost; and all countries use the same basket of goods and services to measure their price levels.

Statement 2: UIRP rests on the idea of equal real interest rates across international borders. Real interest rate differentials would result in capital flows to the higher real interest rate country, equalizing the rates over time. Another way to say this is that differences in interest rates are equal to differences in expected changes in exchange rates.

With respect to these statements:

(A) both are correct.

(B) only statement 2 is correct.

(C) only statement 1 is correct.

12. One-year interest rates are 7.5% in the U.S. and 6.0% in New Zealand. The current spot exchange rate is USD/NZD 0.5500. If uncovered interest rate parity holds, the expected spot rate in one year must be closest to:

(A) USD/NZD 0.55825.

(B) USD/NZD 0.56675.

(C) USD/NZD 0.54233.

13. A bank in Canada is quoting CAD/USD 1.4950 – 1.5005, and USD/EUR 0.9350 – 0.9400. What is bid/ask exchange rate for CAD/EUR?

(A) CAD/EUR 0.6254 – 0.6264.

(B) CAD/EUR 1.3978 – 1.4105.

(C) CAD/EUR 1.5904 – 1.6048.

14. Zimbaya is a developed economy with high capital mobility. Deborah Isaccson is evaluating the Zim (Z$), the national currency of Zimbaya. Which of the following is most likely to lead to appreciation of Z$? If Zimbaya starts following:

(A) an expansionary fiscal policy.

(B) a restrictive fiscal policy.

(C) a loose monetary policy.

15. Which of the following statements regarding purchasing power parity (PPP) is least accurate?

(A) Relative PPP states that prices for goods and services are the same whether it is for one good or for a basket of goods.

(B) Absolute PPP is similar to the law of one price, except it concerns a basket of goods rather than a single good.

(C) Under absolute PPP the foreign price level expressed in domestic currency terms should be equal to the domestic country's price level.

16. Today, the spot rate on pounds sterling is $0.6960 and 90-day forward pounds are priced at $0.6925. The forward discount/premium is:

(A) discount of $0.0035

(B) premium of $0.0035

(C) premium of $0.0005

17. Country P has high capital mobility and has recently switched from balanced fiscal policy to an expansionary fiscal policy. Over time this expansionary is expected to lead to an increase in government debt to GDP ratio.
If we simultaneously consider both the Mundell-Fleming and the portfolio balance model, in the long run country P's currency is most likely to:
(A) depreciate.
(B) remain stable.
(C) appreciate.

18. Under high capital mobility, the Mundell-Fleming model to determine exchange rate focuses on the impact of:
(A) interest rates.
(B) trade balance.
(C) inflation.

19. Assume an investor living in Mauritius can borrow in $ or in Mauritius Rupee (MUR). Given the following information, determine whether an arbitrage opportunity exists. If so, how much would the arbitrageur profit by borrowing MUR 1,000,000 or the equivalent in $? (Assume a period of one year and state the profit in domestic currency terms.)

Spot rate (MUR/$)	30.73000
Forward rate (MUR/$)	31.50000
Domestic (MUR) interest rate (%)	6.50%
Foreign ($) interest rate (%)	5.20%

Which of the following is closest to the correct answer?
(A) Borrow $. Arbitrage profits are $13,340.
(B) Borrow MUR. Arbitrage profits are MUR 13,340.
(C) Borrow domestic. Arbitrage profits are $39,685.

20. If the one-year forward exchange rate is DC/FC 2 and the spot rate is DC/FC 1.9 when the foreign rate of return is 12% and the domestic return is 10%, which of the following statements would be most accurate?
(A) The arbitrage possibilities cannot be determined with the data given.
(B) Arbitrage is possible here, investors should borrow foreign, lend domestic.
(C) Arbitrage is possible here, investors should borrow domestic, lend foreign.

21. Ashok Jain is assessing the currency value of Lutina. Jain believes that prices are sticky in the short term and, hence, do not immediately reflect changes in monetary policy. If Lutina announces a change to a restrictive monetary policy, Jain would most likely conclude that Lutina's currency would:
    (A) excessively appreciate in the long-term.
    (B) excessively depreciate in the long-term.
    (C) excessively appreciate in the short-term.

22. Which of the following is least likely a warning sign of an impending currency crisis?
    (A) Money supply relative to bank reserves shrinks.
    (B) Liberalized capital markets that allow for a free flow of capital.
    (C) Terms of trade deteriorate.

23. Donna Ackerman, CFA, is an analyst in the currency trading department at State Bank. Ackerman is training a new hire, Fred Bos, a recent college graduate with a BA in economics.

    Ackerman and Bos have the following information available to them:

Spot Rates		
	Bid Price	Ask Price
EUR/USD	€1.0000	€1.0015
GBP/USD	£2.0000	£2.0100
EUR/GBP	€0.3985	€0.4000

    Ackerman and Bos are interested in pursuing profitable arbitrage opportunities for State Bank. What will be the profits from triangular arbitrage, starting with $1,000?
    (A) $245.65.
    (B) $248.46.
    (C) $243.78.

24. Tim Kramer is assessing the risks of the carry trade for his firm. He obtains a distribution of expected returns for the carry trade. This distribution is most likely to exhibit:
    (A) a normal distribution.
    (B) fat tails and a positive skew.
    (C) fat tails and a negative skew.

25. The domestic interest rate is 9% and the foreign interest rate is 7%. If the forward exchange rate is DC/FC 5.00, what spot exchange rate is consistent with covered interest parity?
    (A) 5.09.
    (B) 4.91.
    (C) 4.83.

26. Under the Mundell-Fleming model and the portfolio balance approach to exchange rate determination, a country following sustained expansionary fiscal policy would see its currency:
    (A) appreciate in the short-run and appreciate in the long-run.
    (B) appreciate in the short-run and depreciate in the long-run.
    (C) depreciate in the short-run and depreciate in the long-run.

27. Given the following information, what is the forward exchange rate implied by interest rate parity?
    - U.S. interest rate = 9%
    - North Korea interest rate = 10%.
    - Spot rate = 1.65 KPW/$.

    (A) 1.635 KPW/$.
    (B) 0.612 KPW/$.
    (C) 1.665 KPW/$.

28. Given currency quotes in DC/FC, if: $1+r_{DC} < (1+r_{FC})$ x (forward rate/spot rate) funds will:
    (A) flow into the domestic country.
    (B) flow in and out of the domestic country.
    (C) flow out of the domestic country.

29. Which of the following is least likely a warning sign of an impending currency crisis?
    (A) Floating exchange rates
    (B) Official foreign exchange reserves decline dramatically.
    (C) Currency value is substantially higher than the mean-reverting level.

30. Ninety days ago, Marc Samuelson entered into a 180-day forward contract to purchase 1 million CHF at an all-in rate of $1.0225/CHF.
    The following USD/CHF quotes are currently available in the market:

Spot	1.0301/1.0302
30 days	–12.3/–11.9
90 days	–16.0/–14.8
180 days	–18.9/–17.8

Interest rates:

90-day CHF	1.02%
180-day CHF	1.03%
90-day USD	1.00%
180-day USD	0.99%

The mark-to-market value of Samuelson's position is closest to:

(A) $5,985

(B) $7,585

(C) –$6,735

31. Given spot exchange rate of CAD/EUR 1.425-1.435, The spread is closest to:

(A) CAD 0.0010

(B) 10 pips EUR

(C) CAD 0.010

32. The carry trade is most likely to be profitable when:

(A) uncovered interest rate parity holds.

(B) the forward rate is biased estimator of future spot rate.

(C) the Fisher relation is violated.

33. The forward rate on a 90-day contract is FC/USD 5 and the spot is FC/USD 4. The USD is trading at a forward:

(A) premium of 1.0.

(B) premium of 0.8.

(C) discount of 1.0.

34. Professor Imada Suzaken made the following statement to his economics class: "If you can earn 8% on A-rated bonds in the U.S. but only 6% on similar bonds in Canada, Canadian investors may want to buy those bonds in the U.S. for the excess return. However, after collecting the extra dollars, the investors would lose those profits when they converted their gains into their home currency." Suzaken's statement most accurately describes:

(A) uncovered interest-rate parity.

(B) purchasing-power parity.

(C) covered interest rate parity.

35. The no-arbitrage one-year forward USD/EUR rate is closest to:
   (A) USD/EUR 0.7925.
   (B) USD/EUR 0.8082.
   (C) USD/EUR 0.8073.

36. For this question only, assume that the United States has a current account surplus versus the U.K. The amount by which the £/$ has to change to restore current account balance is least likely to depend on:
   (A) the initial level of current account surplus.
   (B) the projected current account deficit.
   (C) the response of import and export demand to changes in export prices.

37. For an investor pursuing a carry-trade, the funding currency would most likely be the:
   (A) Pound.
   (B) Euro.
   (C) U.S. Dollar.

38. Which of the following is least likely to be a warning sign for currency crisis?
   (A) Real exchange rate substantially lower than mean reverting level.
   (B) Nominal credit relative to bank reserves increase.
   (C) Inflation increases.

39. Which of the following is least likely the objective of central bank intervention?
   (A) reduce excessive inflow of foreign capital
   (B) prevent appreciation of domestic currency
   (C) have ability to pursue an independent monetary policy