Money and Banking - Quiz 2

Name:______________________ Student ID #_________________________

Part I Multiple Choices: (only one of the four options is correct)

1) Which of the following statements comparing the European System of Central Banks and the Federal Reserve System is TRUE? **A**
A) The budgets of the Federal Reserve Banks are controlled by the Board of Governors, while the National Central Banks control their own budgets and the budget of the European Central Bank.
B) The European Central Bank has similar power over the National Central Banks when compared to the level of power the Board of Governors has over the Federal Reserve Banks.
C) Just like the Federal Reserve System, monetary operations are centralized in the European System of Central Banks with the European Central Bank.
D) The European Central Bank's involvement in supervision and regulation of financial

2) Bank loans from the Federal Reserve are called ________ and represent a ________ of funds. **B**
A) discount loans; use B) discount loans; source
C) fed funds; use D) fed funds; source

3) Bank's make their profits primarily by issuing **C**
A) equity. B) negotiable CDs.
C) loans. D) NOW accounts.

4) Banks may borrow from or lend to another bank in the Federal Funds market. A loan of excess reserves from one bank to another bank is recorded as a(n) ________ for the borrowing bank and a(n) ________ for the lending bank.D
A) asset; asset B) asset; liability
C) liability; liability D) liability; asset

5) What makes the Federal Reserve so unique compared to other central banks around the world is its
B
A) centralized structure. B) decentralized structure.
C) regulatory functions. D) monetary policy functions.

6) Nonfinancial businesses in Germany, Japan, and Canada raise most of their funds **C**
A) by issuing stock. B) by issuing bonds.
C) from nonbank loans. D) from bank loans.

7) The principal-agent problem **C**
A) occurs when managers have more incentive to maximize profits than the stockholders-owners do.
B) in financial markets helps to explain why equity is a relatively important source of finance for American business.
C) would not arise if the owners of the firm had complete information about the activities of the managers.
D) explains why direct finance is more important than indirect finance as a source of business finance.

8) Debt deflation occurs when **A**
A) an economic downturn causes the price level to fall and a deterioration in firms' net worth because of the increased burden of indebtedness.
B) rising interest rates worsen adverse selection and moral hazard problems.
C) lenders reduce their lending due to declining stock prices (equity deflation) that lowers the value of collateral.

D) corporations pay back their loans before the scheduled maturity date.

9) Mortgage brokers often did not make a strong effort to evaluate whether the borrower could pay off the loan. This created a **B**
A) decline in mortgage applications. B) severe adverse selection problem.
C) call to deregulate the industry. D) decrease in the demand for houses.

10) The sum of the Fed's monetary liabilities and the U.S. Treasury's monetary liabilities is called
A) the money supply. **D**
B) currency in circulation.
C) bank reserves.
D) the monetary base.

11) The effect of an open market purchase on reserves differs depending on how the seller of the bonds keeps the proceeds. If the proceeds are kept in ________, the open market purchase has no effect on reserves; if the proceeds are kept as ________, reserves increase by the amount of the open market purchase. C
A) deposits; deposits
B) deposits; currency
C) currency; deposits
D) currency; currency

12) In the simple deposit expansion model, an expansion in checkable deposits of $1,000 when the required reserve ratio is equal to 20 percent implies that the Fed C
A) sold $200 in government bonds.
B) sold $500 in government bonds.
C) purchased $200 in government bonds.
D) purchased $500 in government bonds.

13) Everything else held constant, in the market for reserves, when the supply for federal funds intersects the reserve demand curve on the downward sloping section, decreasing the interest rate paid on excess reserves C
A) increases the federal funds rate.
B) lowers the federal funds rate.
C) has no effect on the federal funds rate.
D) has an indeterminate effect on the federal funds rate.

14) Everything else held constant, when a country's currency depreciates, its goods abroad become ________ expensive while foreign goods in that country become ________ expensive. D
A) more; less
B) more; more
C) less; less
D) less; more

15) Which of the following appears in the capital account part of the balance of payments? B
A) A gift to an American from his English aunt.
B) A purchase by the Honda corporation of a U.S. Treasury bill.
C) A purchase by the Bank of England of a U.S. Treasury bill.
D) Income earned by the Honda corporation on its automobile plant in Ohio.

Part II Analytical Exercises

1. The following table gives the current interest rate and expected future interest rates for one year bonds. Assuming that the **risk premium** for a bond with a term to maturity n is (1% * n-1%). Then according to the ***liquidity premium theory***, what is the yield to maturity for a bond with 5 years left to maturity and has identical face value and coupon rate as the one year bonds? (5')

Year	Expected Interest Rate (%)
1	10
2	9
3	8
4	7
5	6
6	5

Answer:

（10%＋9%＋8%＋7%＋6%） / 5+ （5%－1%） ＝12%

3. Suppose you have just inherited $10,000 and are considering the following options for investing the money to maximize your return:
Option 1: Put the money in an interest-bearing checking account, which earns 2%. The FDIC insures the account against bank failure.
Option 2: Invest the money in a corporate bond, with a stated return of 5%, but there is a 10% chance the company could go bankrupt.
Option 3: Loan the money to one of your friends' roommates, Mike, at an agreed-upon interest rate of 8%, but you believe there is a 7% chance that Mike will leave town without repaying you.
Option 4: Hold the money in cash and earn zero return.
a. If you are risk-neutral (that is, neither seek out nor shy away from risk), which of the four options should you choose to maximize your expected return? (*Hint:* To calculate the *expected return* of an outcome, multiply the probability that an event will occur by the outcome of that event). (5')

Answer:

	Expected Net Return Rate
Option 1	2%
Option 2	5%*0.9-1*0.1=-5.5%
Option 3	8%*0.93-1*0.07=0.44%
Option 4	0

Hence I would choose option 1.

b. Suppose Option 3 is your only possibility. If you could pay your friend some money to find out extra information about Mike that would indicate with certainty whether he will leave town without paying or not, how much (at most) are you willing to pay? (5')

Answer: The expected net return if you pay x is

93%*(10000*8%-x)+7%(-x)=744-x

The expected net return if you do not pay this money is （this is higher than 0, so you will still lend Mike the money）

93%*10000*8%-7%(-10000)=44

Hence the maximum amount of money you are willing to pay is
x = 744-44=700.