Finance 3210	Exam 2	Fall 2015

Multiple choice – 3 points each – 54 points total – Circle the correct answer

1. Suppose your grandmother had invested money in 1926. You know that she was a risk taker. Based on historical returns from 1926 to 2011, which type of security would have given her the highest return?

    A. High quality corporate bonds
    B. The common stock of the smallest firms listed on the NYSE.
    C. The common stock of the largest capitalization firms listed on the NYSE.
    D. U.S. Treasury bills.
    E. Long term government bonds.

2. Which of the following stocks is more volatile based on their historical returns?

Year	Stock A	Stock B
1	-.05	.12
2	.07	.13
3	-.09	.16
4	.11	.14
5	.20	.13

    A. A because it has a lower mean
    B. B because it has a higher mean
    C. B because it has a lower standard deviation
    D. A because it has a higher standard deviation
    E. Insufficient information

3. A stock's systematic risk is measured by its

    A. variance
    B. standard deviation
    C. coefficient of variation
    D. beta
    E. expected return

4. When calculating the expected return of an asset, a common method is the use of the Capital Asset Pricing Model (CAPM). The CAPM shows that the expected return of an asset depends upon all of the following except:

    A. The time value of money
    B. The reward for bearing systematic risk.
    C. The amount of systematic risk.
    D. The reward for bearing risk as measured by the standard deviation of the asset.
    E. All of the above are included in the CAPM estimate.

5. If capital markets are efficient, then:

   A. there is no reason to believe prices are too high or too low.
   B. it is possible to profit regularly from publicly available information.
   C. prices will adjust slowly to reflect new information.
   D. it is not possible to make money by playing the stock market.
   E. historical price trends will give you a good idea where prices are headed in the near future.

6. If we assume that the annual return on an asset is normally distributed, then approximately 95% of returns on common stock will fall between ____ percent and _____ percent if the average historical return is 12.3% with a standard deviation of 20.3%.

   A. 7.6; 33.0
   B. –7.6; 33.0
   C. –28.3; 33.0
   D. –5.1; 45.7
   E. –28.3; 52.9

7. You purchased a bond on January 1 that has a $1,000 par value and an 8% annual coupon. You paid $839.67 and you can sell the bond for $822.33 on December 31. What is your percent return for the year?

   A. –2.1%
   B. 7.5%
   C. 8.0%
   D. 11.6%
   E. 12.5%

8. A bond with a face value of $1,000 has annual coupon payments of $100 and was issued 7 years ago. The bond currently sells for $1,000 and has 8 years left to maturity. This bond's _________ must be 10%.

   I. yield to maturity
   II. current yield
   III. coupon rate

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

9. A ______ is an agent who arranges security transactions among investors.

   A. broker
   B. dealer
   C. member
   D. floor trader
   E. specialist

10. An investor who owns a well-diversified portfolio of financial assets should not be concerned with which of the following risks?

A. Systematic risk.
B. Market risk.
C. Firm specific.
D. Nondiversifiable.
E. They should not be concerned with any of these risks.

11. Which of the following is a basic component that affects the term structure of interest rates?

I. The expected rate of inflation.
II. The interest rate risk premium.
III. The real rate of interest.

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

12. Protective covenants are offered for the protection of:

A. common stockholders
B. preferred stockholders
C. bondholders
D. corporate management
E. None of the above

13. As a common stockholder in a firm, which of the following allows you to share proportionately in any new stock sold?

A. proxy voting
B. preemptive right
C. cumulative voting
D. straight voting
E. dual class stock

14. Which of the following is true about risk and return?

A. Riskier assets will, on average, earn lower returns.
B. The reward for bearing risk is known as the standard deviation.
C. Based on historical data, there is no reward for bearing risk.
D. An increase in the risk of an investment will result in a decreased risk premium.
E. In general, the higher the expected return the higher the risk.

15. The stock price of a gold-mining firm drops when it is discovered the firm's chairman has overstated minable gold reserves. This is an example of a(n) ________ risk factor.

  A. systematic
  B. nondiversifiable
  C. unsystematic
  D. market
  E. anticipated

16. The main benefit of diversification is to:

  A. increase expected return
  B. decrease risk
  C. increase investment
  D. increase market efficiency
  E. decrease expected return

17. A bond sold five weeks ago for $1,100 and sells for $1,050 today. Assuming no changes in risk, which of the following must be true?

  A. The par value of the bond must be $1,100.
  B. The bond must mature in one year.
  C. The yield to maturity has increased in the past five weeks.
  D. The bond’s current yield has decreased from five weeks ago.
  E. The bond’s yield to maturity is lower now than it was five weeks ago.

18. The current price of ABC Corporation stock is $50.00. Dividends are expected to grow at 7% forever and the most recent dividend was $1. What is the required return on ABC’s stock?

  A. 7.2%
  B. 9.1%
  C. 9.8%
  D. 10.6%
  E. 11.2%

Partial Credit – 46 points total – SHOW ALL WORK
Problem 1 (12 points) Calculate the WACC for the following firm:

Debt:	45,000 bonds with a 9% coupon rate and a current price of 106.25. The bond has 18 years to maturity. The bonds have a par value of $1,000.
Common Stock:	1,800,000 shares of common stock. The dividends have a growth rate of 7%, the current price is $65 and the dividend next year will $3.40. The beta of the stock is 1.1.
Market:	The corporate tax rate is 35%, the expected return on the market is 12.5% and the risk free rate is 5.8%.

Problem 2 (9 points)
A bond with a par value of $10,000 and a semiannual coupon rate of 4.9 percent has a yield to maturity of 5.1 percent. If the bond has 21 years to maturity, what is the dollar price of the bond?

Problem 3 (10 points)
Whatchamacallit, Inc. is experiencing phenomenal growth. The company just paid a dividend of $2.00 and expects to increase the dividend by 30% per year for the next two years and 18% per year for the following two years. After that, the company expects the dividend to grow at 4% per year forever. If the required return is 13%, how much should you pay for this stock?

Problem 4 (10 points)
What is the expected return and standard deviation for the following stock?

State of Economy	Probability	Return
Boom	.15	34%
Good	.40	15%
OK	.30	8%
Recession	??	-20%

Problem 5 (5 points) If a portfolio has a positive investment in every asset, can the standard deviation on the portfolio be less than that on every asset in the portfolio? What about the portfolio beta? Why?