

Fall 2021 FI540 Investment Analysis Final Exam. Total 35 questions.

1. The means by which individuals hold their claims on real assets in a well-developed economy are
  - A. investment assets.
  - B. depository assets.
  - C. derivative assets
  - D. financial assets.
  
2. The price for which the individual investor is willing to buy the security is the:
  - A. bid price
  - B. buy price
  - C. ask price
  - D. limit price
  
3. You have never traded AAPL (no position on AAPL). You are very optimistic about Apple's stock, which order should you use when you make a trade with a goal to make a profit:
  - A. Sell Short
  - B. Buy Put Option
  - C. Buy Call Option
  - D. Buy to Cover
  
4. When trading securities, sales of securities that the seller does not own with an expectation of falling price is called a:
  - A. stop-loss
  - B. sell short
  - C. limit sell
  - D. day sell

5. When an individual buys Wal-Mart's existing common stocks WMT, transactions take place
- A. in the secondary market.
  - B. in the primary market.
  - C. must with the assistance of an investment banker.
  - D. in an Over-the-Counter (OTC) market.

6. Which one of the following is NOT a primary market function of investment bankers?
- A. search for potential issuing firms
  - B. commitment on proceeds to the issuing firm
  - C. sell shares they bought from the issuing firm to private investors
  - D. provide recommendations, such as buy, hold, or sell, on the securities they underwrite on the IPO day

7. You purchased 100 shares of ABC common stock on margin at \$60 per share. Assume the initial margin is 50% and the maintenance margin is 30%. Below what stock price level would you get a margin call? Assume the stock pays no dividend and ignore interest on margin.
- A. \$42.86
  - B. \$50.75
  - C. \$49.67
  - D. \$80.34

8. You purchased a share of stock for \$29. One year later you received \$2.25 as dividend and sold the share for \$28. Your holding-period return was \_\_\_\_\_.
- A. -3.57%
  - B. - 3.45%
  - C. 4.31%
  - D. 8.03%

9. If you are promised a nominal return of 12% on a one-year investment, and you expect the rate of inflation to be 3%, what real rate do you expect to earn according to Fisher's equation?

- A. 5.48%
- B. 8.74%
- C. 9.80%
- D. 12.00%

10. You have made a holding period return of 44% over Two Years, what is the annualized holding period return?

- A. 20%
- B. 11%
- C. 44%
- D. 22%

11. Decreasing the number of stocks in a portfolio from 50 to 10 would likely \_\_\_\_\_.

- A. increase the systematic risk of the portfolio
- B. increase the unsystematic risk of the portfolio
- C. increase the return of the portfolio
- D. decrease the total risk of the portfolio

12. You put half of your money in a stock portfolio that has an expected return of 14% and a standard deviation of 24%. You put the rest of your money in a risky bond portfolio that has an expected return of 6% and a standard deviation of 12%. The stock and bond portfolio have a correlation +1. The standard deviation of the resulting portfolio will be \_\_\_\_\_.

- A. more than 24%
- B. less than 12%
- C. more than 12% but less than 24%
- D. equal to 12%

13. Diversification is most effective when security returns are \_\_\_\_\_.
- A. positively correlated at +0.5
  - B. negatively correlated at -1
  - C. positively correlated at +1
  - D. uncorrelated at 0
14. A portfolio is composed of two stocks, A and B. Stock A has a standard deviation of return of 35% while stock B has a standard deviation of return of 15%. The correlation coefficient between the returns on A and B is 0.45. Stock A comprises 40% of the portfolio while stock B comprises 60% of the portfolio. The standard deviation (square root of the variance) of the return on this portfolio is \_\_\_\_\_.
- A. 23.00%
  - B. 19.76%
  - C. 18.45%
  - D. 17.67%
15. Asset A has an expected return of 15% and a Sharpe ratio of 0.4. Asset B has an expected return of 20% and a Sharpe ratio of 0.3. Assuming these two assets are mutually exclusive, a rational investor would prefer \_\_\_\_\_.
- A. asset A
  - B. asset B
  - C. both asset A and asset B
  - D. can't tell from the data given
16. The risk-free rate and the expected market rate of return are 0.06 and 0.12, respectively. According to the capital asset pricing model (CAPM), the expected rate of return on security X with a beta of 1.2 is equal to
- A. 0.06.
  - B. 0.144.
  - C. 0.12.
  - D. 0.132
17. The Security Market Line (SML) is
- A. also called the Capital Allocation Line.
  - B. the line that is tangent to the efficient frontier of all risky assets.
  - C. the line that represents the expected return-beta relationship.
  - D. the line that represents the relationship between an individual security's return and the market's return.

18. A preferred stock will pay a dividend of \$3.75 in the upcoming year, and every year thereafter, i.e., dividends are not expected to grow. You require a return of 10% on this stock. Use the constant growth DDM to calculate the intrinsic value of this preferred stock.

- A. \$0.375
- B. \$37.50
- C. \$31.82
- D. \$56.25

19. (Common Stock Present Value) What price would you expect to pay for a stock with 13% required rate of return, 4% rate of dividend growth, and an annual dividend of \$2.50 which will be paid one year from now?

- A. \$31.10
- B. \$27.78
- C. \$31.39
- D. \$30.28

20. You wish to earn a return of 13% on each of two stocks, X and Y. Stock X is expected to pay a dividend of \$3 in the upcoming year while Stock Y is expected to pay a dividend of \$4 in the upcoming year. The expected growth rate of dividends for both stocks is 7%. The intrinsic value of stock X \_\_\_\_\_.

- A. cannot be calculated without knowing the market rate of return
- B. will be greater than the intrinsic value of stock Y
- C. will be the same as the intrinsic value of stock Y
- D. will be less than the intrinsic value of stock Y

21. High Tech Chip Company is expected to have EPS in the coming year of \$2.50. The expected ROE is 12.5%. An appropriate required return on the stock is 11%. If the firm has a plowback ratio of 70%, the growth rate of dividends should be

- A. 6.25%
- B. 6.60%
- C. 7.50%
- D. 8.75%

22. Of the following four investments, \_\_\_\_\_ is considered the least risky.

- A. Treasury bills
- B. corporate bonds
- C. U. S. Agency issues
- D. Treasury bonds

23. The bonds of Elbow Grease Dishwashing Company have received a rating of "C" by Moody's. The "C" rating indicates the bonds are \_\_\_\_\_.

- A. high grade
- B. good grade
- C. investment grade
- D. junk bonds

24. A bond will sell at a discount when \_\_\_\_\_.

- A. yield to maturity is less than the current yield
- B. the coupon rate is greater than yield to maturity
- C. the coupon rate is greater than the current yield
- D. the coupon rate is less than yield to maturity

25. A coupon bond that pays interest annually has a par value of \$1,000, matures in 5 years, and has a yield to maturity of 10%. The intrinsic value of the bond today will be \_\_\_\_\_ if the coupon rate is 7%.

- A. \$712.99
- B. \$620.92
- C. \$1,123.01
- D. \$886.28

26. Holding other factors constant, which one of the following bonds has the shortest duration?
- A. 5-year, 0% coupon bond
  - B. 5-year, 12% coupon bond
  - C. 5 year, 14% coupon bond
  - D. 5-year, 10% coupon bond
27. A perpetuity pays \$100 each and every year forever. The duration of this perpetuity will be \_\_\_\_\_ if its yield is 9%.
- A. 7 years
  - B. 9 years
  - C. 9.39 years
  - D. 12.11 years
28. An 8% coupon rate, 30-year bond has a yield-to-maturity of 10% and a duration of 8.8 years. If the market yield drops by 15 basis points (0.15%), there will be a \_\_\_\_\_ in the bond's price.
- A. 1.15% decrease
  - B. 1.20% increase
  - C. 1.53% increase
  - D. 2.43% decrease
29. Which one of the following 12% coupon bonds, with its yield to maturity at 12%, sells at par \$1000 experiences a price increase of \$23 when the market yield drops by 56 basis points (0.56%)?
- A. The bond with a duration of 6 years.
  - B. The bond with a duration of 3 years.
  - C. The bond with a duration of 2.7 years.
  - D. The bond with a duration of 4.6 years.
30. Consider a bond selling at \$1000 par value with duration of 11.13 years and convexity of 210. Its yield to maturity is 5% at current. What would be the percentage price change according to the duration-with-convexity rule if yield increases from 5% to 6%?
- A. -9.55%
  - B. 9.55%
  - C. 10.6%
  - D. -10.6%

31. The current market price of a share of Disney stock is \$60. If a call option on this stock has a strike price of \$65, the call

- A. is out of the money.
- B. is in the money.
- C. can be exercised profitably.
- D. is out of the money and can be exercised profitably.

32. The maximum loss a buyer of a stock call option can suffer is equal to

- A. the striking price minus the stock price.
- B. the stock price minus the value of the call.
- C. the call premium.
- D. the stock price.

33. Top Flight Stock currently sells for \$53. A one-year call option with strike price of \$58 sells for \$10, and the risk-free interest rate is 5.5%. What is the price of a one-year put with strike price of \$58 according to the put-call parity theorem?

- A. \$10.00
- B. \$12.12
- C. \$16.00
- D. \$11.98

34. The current market price of a share of AT&T stock is \$50. If a call option on this stock has a strike price of \$45, the call

- A. is out of the money.
- B. sells for a higher price than if the market price of AT&T stock is \$40.
- C. is out of the money and sells for a higher price than if the market price of AT&T stock is \$40.
- D. is in the money and sells for a higher price than if the market price of AT&T stock is \$40.



35. The current market price of a share of JNJ stock is \$60. If a put option on this stock has a strike price of \$55, the put

A. is in the money.

B. sells for a lower price than if the market price of JNJ stock is \$50.

C. is out of the money and sells for a lower price than if the market price of JNJ stock is \$50.

D. is in the money and sells for a lower price than if the market price of JNJ stock is \$50.