

Second Examination

FIN350 – Introduction to Investing

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Multiple Choice Questions

Select the best answer by circling the letter that corresponds to it.

1. The constant growth model is valid, only when
 - a. The periodic required rate and the growth rate are equal
 - b. The periodic required rate is less than the growth rate
 - c. The required rate is negative
 - d. The periodic required rate is greater than the growth rate

2. In technical analysis, the price or level above which a stock or the market as a whole is unlikely to rise is called the
 - a. Resistance level
 - b. Corrective level
 - c. Support level
 - d. Primary level

3. The _____ form of EMH suggests that there is little to be gained from studying past market data, or any other public information about firms.
 - a. Superstrong
 - b. Semistrong
 - c. Weak
 - d. Strong

4. If you believe in the _____ form of EMH, you believe that you cannot consistently earn positive excess returns by charting stocks, or looking at candlestick charts.
 - a. Superstrong
 - b. Semistrong
 - c. Weak
 - d. Strong

5. Which of the following is true?
 - a. The weak form of EMH encompasses the strong form of EMH
 - b. The semistrong form of EMH encompasses the strong form of EMH
 - c. The weak form of EMH encompasses the semistrong form of EMH
 - d. The strong form of EMH encompasses the semistrong form of EMH

6. Under the pure expectations theory, a downward sloping yield curve would indicate that investors are expecting a/an
 - a. Increase in interest rates
 - b. Decrease in interest rates
 - c. Interest rates are expected to remain constant
 - d. First an increase and then a decrease in interest rates

7. The _____ the liquidity of a bond, the _____ will be the liquidity premium required by investors.
- worse...smaller
 - Better...smaller
 - Better...greater
 - Worse...lower
8. Which of the following bonds is the least sensitive to changes in interest rates?
- 10 year maturity, 12% coupon
 - 10 year maturity, 10% coupon
 - 8 year maturity 10% coupon
 - 6 year maturity, 10% coupon
9. Which of the following bonds is the most sensitive to changes in interest rates?
- 10 year maturity, 5% coupon
 - 10 year maturity, 10% coupon
 - 8 year maturity 10% coupon
 - 6 year maturity, 10% coupon
10. The duration of a zero-coupon bond is
- Equal to 1 year
 - Equal to its time to maturity
 - Greater than its time to maturity
 - Less than its time to maturity
11. A ten year, 5% coupon bond is currently trading at a YTM of 7%. A year from now, the price of this bond will be
- Higher than it is today
 - Lower than it is today
 - Same as today
 - Cannot be determined with the given information
12. A bond's price and yield to maturity are
- Positively related
 - Negatively related
 - Not related
 - Exponentially related
13. The prime rate is the rate at which
- Banks borrow from each other
 - Banks lend to large corporations
 - Large corporations lend to banks
 - Large corporations lend/borrow among each other
14. The 3-month Eurodeposit rate is expected to be
- Lower than the 3-month CD rate
 - Higher than the 3-month CD rate
 - Equal to the 3-month CD rate
 - Cannot be determined
15. Which trin (Closing Arms Ratio) would indicate a bullish market?
- $\frac{3}{4}$
 - 1
 - 1.2
 - 2

16. Which of the following about stock returns in the month of January is true?
- Small stocks post exceptionally low returns
 - Large stocks post exceptionally low returns
 - Large stocks post exceptionally high returns
 - Small stocks post exceptionally high returns
17. You overheard two S&P500 executives talk on the elevator about a pending hostile takeover attempt on one of the companies. They were barely whispering and you don't think anyone outside of the company knows of this. If you use this information to make an investment decision, and earn positive excess returns, this would be a violation of:
- Weak form EMH
 - Semistrong form EMH
 - Strong form EMH
 - Superior form EMH
18. You have been analyzing the cash flows of Alcoa, and realized that operating cash flows divided by interest expenses would be the best indicator of how the stock is going to be doing in the next quarter. You later find out that this applies to all companies in the aluminum and steel industry. If you earn positive excess returns using this analysis, this would be in violation of (not conform with):
- Weak form EMH
 - Semistrong form EMH
 - Strong form EMH
 - Superior form EMH
19. You found out that if a stock closes the day lower two days in a row, it will close the day lower for the next two days as well. You decide to take advantage of this. If you actually make money (earn positive excess returns), this would be in violation of
- Weak form EMH
 - Semistrong form EMH
 - Strong form EMH
 - Superior form EMH
20. When calculating the price of a money market security using the discount basis, we assume that
- There are 360 days in a year and 31 days in a month
 - There are 365 days in a year and 31 days in a month
 - There are 360 days in a year and 30 days in a month
 - There are 360 days in a year and 30 or 31 days in a month

Problems

Show all work. Do not answer the question on the question sheets. Use the blank sheets of paper provided to you.

1. Company X has a total debt ratio of 60%. Sales are \$40,000,000 and total asset turnover is 2. They have also reported a net income (profit) of 15 cents per dollar of sales.
 - i. What is X's return on equity (ROE)? (7 points)
 - ii. X always pays 80% of all net income in dividends. There are 3,000,000 shares of stock outstanding. The net income (thus, the dividends) are expected to decrease by 3% every quarter, and investors demand an annual return on the stock of 16% (APR), what is a fair price for the stock? (8 points)
2. The following information is from Company Y's stock quote:
 - Opening price: \$12.00
 - Closing price \$10.00
 - Day's hi: \$13.00
 - Day's lo: \$10
 - Volume: 321,000 shares
 - 52-week hi: \$32.33
 - 52-week low: \$10.00
 - (a) Construct a candlestick chart for Y. (7 points)
 - (b) After you look at the candlestick charts for Y for the last two weeks, you notice a specific pattern, known among technical analysts as "the bull is about to wake up pattern," which is interpreted as a bullish signal about the stock. As an informed investor, you also know that the markets are semistrong form efficient (i.e. the semistrong form of EMH holds). What would be your recommended course of investment for Y's stock? Why? (8 points)
3. Company Z, which has just gone public, will make quarterly dividend payments, which start next quarter and will remain at \$1 per share for the next two years (8 quarters). Afterwards, the dividends are expected to grow at a quarterly rate of 6%. Investors require an annual return of 36% from Z's stock.
 - i. What would be a fair price for the stock now? (5 points)
 - ii. If you plan on selling the stock in 5 years, how much would you expect to receive, i.e. what will the stock price be 5 years from now? (5 points)