I. Multiple Choice Questions(90%)

1.A risk averse manager would

a. Take on projects that maximize shareholder wealth

b. Consistently accept projects that are above the firm's level of risk

c. Consistently accept projects that are well below the firm's desired risk

d. Only take risky projects

2. XYZ, Inc. had a great year. Sales reached an all-time high of $25 million, with a gross margin of $8.5 million. Depreciation was recorded at $850,000. Earnings before interest and taxes were $3 million, interest was $1.5 million, and total taxes were $600,000. The firm's operating cash flow (OCF) was:

a. $9,100,000 b. $7,050,000 c. $3,250,000 d. $2,400,000

3. In May, ABC, Inc. increased its inventory of home composting kits, expecting sales to spike with warmer weather. This decision resulted in __________ for the firm.

a. a decrease in depreciation expense b. an inflow of cash

c. a decrease in earnings d. an outflow of cash

4. The separation of investment and financing decision rule suggests:

a. firms need not worry about satisfying financial market demands

b. firms should accept all positive-NPV investment projects

c. firms must satisfy the personal preferences of present and potential investors

d. firms should be concerned that investors in the market will capitalize an investment project's positive-NPV value

5. You have an opportunity to invest in a deal that will make yearly payments forever. These payments will grow at a rate of 5% per year. You will receive your first payment of $2,000 one year from today. Due to the risks associated with this investment, you will require a return of 10%. How much are you willing to pay for this deal today?

a. $40,000.00 b. $27,584.26 c. $32,995.58 d. $20,000.00

6. In looking at the current yield curve you see the following spot rates: one year 6.19%, two years 5.90%, and three years 5.71%. If you assume that the yield curve is best explained by the "pure expectations theory", what is the expected one-year rate two years from now?

a. 5.9% b. 5.04% c. 5.71% d. 5.33%

7. Ted, a private investor, purchases a six-month (182-day) T-bill with a $10,000 par value for $9,700. If Moe holds the T-bill to maturity what is his bond equivalent yield?

a. 3.09% b. 6.20% c. 6.52% d. 3.26%

8.The Fama-French model asserts that a firm's exposure to SMB and HML risk are important in explaining expected returns. Which of the following is consistent with the F-F model?

a. a firm with a negative size beta and an average book-to-market beta has high expected returns

b. a firm with an average size beta and a positive book-to-market beta has low expected returns

c. a firm that has a positive size beta and a positive book-to-market beta has high expected return

d. a new internet company with a low book value of equity, but high market value of equity and high returns

9. John has $1,000 to invest, but he is willing to borrow money to increase the size of his investment. How much should John borrow to construct a portfolio with an expected return of 12% if the risk-free rate is 4% and the expected return of the optimal portfolio is 10%?

a. $100　　b. $200　　c. $333.33　　d. $666.67

10. If you discounted a set of positive real cash flows with a nominal discount rate and inflation were positive, you would __________ the present value of those cash flows.

a. underestimate　　b. overestimate　　c. correctly calculate

d. It depends on other factors.

11. A firm with greater operating leverage:

a. Shows a lower percentage change in earnings for a given percentage change in sales.

b. Shows a higher percentage change in earnings for a given percentage change in sales.

c. Tends to make greater use of variable costs in its cost structure.

d. Will have greater sales than otherwise identical firms.

12. Two firms have the same asset beta but different equity betas. The direct cause is likely:

a. The importance of variable costs varies across these firms

b. The firms have different proportions of debt relative to equity

c. One firm's sales are more cyclical than the other

d. All of the above

13. According to behaviorists, noise traders affect prices in financial markets by:

a. trading on beliefs not fully justified by fundamental news

b. decreasing the risk for rational investors who might otherwise trade against them

c. creating riskless arbitrage opportunities for more informed traders

d. seeking to exploit small pricing irregularities when a stock is undervalued or overvalued

14. Bob is suggesting that his company issue debt in order to finance an upcoming project, even though the firm has large cash reserves. He believes the market is currently underpricing his firm's stock, and would like investors to be convinced that the firm's true value is much higher. Which of the following capital structure theories provide the best explanation for Bob's suggestion?

a. trade-off model　　b. pecking-order hypothesis　　c. signaling model

d. managerial opportunism hypothesis

15. Gouge-M is considering adding a cash discount to its credit terms. If Gouge-M offers 3 /

15 net 30 rather than its current net 30 policy, what annualized rate is the company charging customers who do not take the discount? Assume a 365-day year.

a. 7.526 percent　b. 37.629 percent　c. 70.874 percent　d. 75.258 percent

16. If expected inflation in the U.S. is 1%, expected inflation in France is 14%, and the one-year risk-free rate in the U.S. is 3%, what would the one-year risk-free rate have to be in France for real interest rate parity to hold?

a. 18.594%　b. 17.42%　c. 16.4125%　d. 16.257%

17. When evaluating an acquisition, you should:

a. concentrate on book values and ignore market values.

b. focus on the total cash flows of the merged firm.

c. apply the rate of return that is relevant to the incremental cash flows.

d. ignore any one-time acquisition fees or transaction costs.

18. If the producer of a product has entered into a fixed price sale agreement for that output, the producer faces:

a. an uncertain profit if the input prices are volatile. This risk can be reduced by a short hedge.

b. an uncertain profit if the input prices are volatile. This risk can be reduced by a long hedge.

c. a modest profit if the input prices are stable. This risk can be reduced by a long hedge.

d. a modest profit if the input prices are stable. This risk can be reduced by a short hedge.

19. If the total long term financing of the firm is greater than the total financing needs for part of the year, and less than the needs for some of the year due to seasonal fluctuations, the company will most likely:

a. hold excess cash.

b. borrow short term and hold excess cash.

c. hold excess cash and reduce business activities.

d. invest in marketable securities and borrow short term.

20. A convertible bond has an option value which is equal to:

a. the market value of the convertible bond minus the straight bond value.

b. The market value of the convertible bond minus the conversion value.

c. the market value of the convertible bond minus the conversion premium.

d. the market value of the convertible bond minus the maximum of the straight bond value or conversion value.

21. The call option on a dividend paying stock compared to a non-dividend paying stock is:

a. more valuable because of the extra dividend payment.

b. equal in value because cash dividends are paid on stock only.

c. less valuable because cash dividends are paid on stock only.

d. less valuable if the dividend paying stock is in-the-money while the non-dividend paying stock if out-of-the-money.

22. Given an exercise price, time to maturity, and European put-call parity, the present value of the strike price plus the call option is equal to:
  a. the present value of the stock minus a put option.
  b. a put option minus the market value of the share of stock.
  c. the value of a U.S. Treasury bill.
  d. the share of stock plus the put option.

23. Which one of the following is an argument in favor of a low dividend policy?
  a. the tax on capital gains is deferred until the gain is realized
  b. few, if any, positive net present value projects are available to the firm
  c. a majority of stockholders have other investment opportunities that offer higher rewards with similar risk characteristics
  d. corporate tax rates exceed personal tax rates

24. The basic lesson of MM theory is that the value of a firm is dependent upon the:
  a. capital structure of the firm.
  b. total cash flows of the firm.
  c. percentage of a firm to which the bondholders have a claim.
  d. size of the stockholders claims on the firm.

25. The increase in risk to equityholders when financial leverage is introduced is evidenced by:
  a. higher EPS as EBIT increases.
  b. a higher variability of EPS with debt than all equity.
  c. increased use of homemade leverage.
  d. equivalence value between levered and unlevered firms in the presence of taxes.

26. Individuals that continually monitor the financial markets seeking mispriced securities:
  a. tend to make substantial profits on a daily basis.
  b. tend to make the markets more efficient.
  c. are never able to find a security that is temporarily mispriced.
  d. are always quite successful using only well-known public information as their basis of evaluation.

27. The beta of a firm is more likely to be high under what two conditions?
  a. High cyclical business activity and high operating leverage
  b. High cyclical business activity and low operating leverage
  c. Low cyclical business activity and low financial leverage
  d. Low cyclical business activity and low operating leverage

28. If a firm has low fixed costs relative to all other firms in the same industry, a large change in sales volume (either up or down) would have:
  a. a smaller change in EBIT for the firm versus the other firms.

b. no effect in any way on the firms as volume does not effect fixed costs.

c. a decreasing effect on the cyclical nature of the business.

d. a larger change in EBIT for the firm versus the other firms.

29. In a portfolio of risky assets, the response to a factor, Fi, can be determined by:

a. summing the weighted β_i s and multiplying by the factor F_i.

b. summing the F_i s.

c. adding the average weighted expected returns.

d. summing the weighted random errors.

30. In the one factor (APT) model, the characteristic line to estimate βi passes through the origin, unlike the estimate used in the CAPM because:

a. the relationship is between the actual return on a security and the market index.

b. the relationship measures the change in the security return over time versus the change in the market return.

c. the relationship measures the change in excess return on a security versus GNP.

d. the relationship measures the change in excess return on a security versus the return on the factor about its mean of zero.

II. Problems(10%)

1. A company forecasts the following free cash flows (shown in millions of dollars). If the weighted average cost of capital is 13 percent and the free cash flows are expected to continue growing at the same rate after Year 3, what is the Year 0 value of operations, to the nearest million?

Year:	1	2	3
Free cash flow:	-$20	$40	$42

2. DEF Corporation has established a target capital structure of 40 percent debt and 60 percent common equity. The firm expects to earn $600 in after-tax income during the coming year, and it will retain 40 percent of those earnings. The current market price of the firm's stock is P_0 = $28; its last dividend was D_0 = $2.20, and its expected growth rate is 6 percent. DEF can issue new common stock at a 15 percent flotation cost. What will DEF's marginal cost of equity capital be if it must fund a capital budget requiring $600 in total new capital?