I Multiple Choice Questions (Choose the best answer), 45%:

1. Etchabarren Electronics has made the following forecast for the upcoming year based on the company's current capitalization:

Interest expense	$2,000,000
Operating income (EBIT)	$20,000,000
Earnings per share	$3.60

The company has $20 million worth of debt outstanding and all of its debt yields 10 percent. The company's tax rate is 40 percent. The company's price earnings ratio has traditionally equaled 12, so the company forecasts that under the current capitalization its stock price will be $43.20 at year end.
The company's investment bankers have suggested that the company do a recapitalization. Their suggestion is to issue enough new bonds at a yield of 10 percent to repurchase 1 million shares of common stock. Assume that the stock can be repurchased at today's $40 stock price.
Assume that the repurchase will have no effect on the company's operating income; however, the repurchase will increase the company's dollar interest expense. Also, assume that as a result of the increased financial risk the company's price earnings ratio will be 11.5 after the repurchase. Given these assumptions, what would be the expected year-end stock price if the company proceeded with the recapitalization?
   a. $48.30
   b. $42.56
   c. $44.76
   d. $40.34
   e. $46.90

2. Assume that all interest rates in the economy decline from 10 percent to 9 percent. Which of the following bonds will have the largest *percentage increase* in price?
   a. A 10-year bond with a 10 percent coupon.
   b. An 8-year bond with a 9 percent coupon.
   c. A 10-year zero coupon bond.
   d. A 1-year bond with a 15 percent coupon.
   e. A 3-year bond with a 10 percent coupon.

3. Snowball & Company has the following balance sheet:

Current assets	$ 7,000	A/P & accruals	$ 1,500
Fixed assets	3,000	S-T (3-month) loans	2,000
		Common stock	1,500
		Ret. earnings	5,000
Total assets	$10,000	Total claims	$10,000

Snowball's after-tax profit margin is 11 percent, and the company pays out 60 percent of its earnings as dividends. Its sales last year were $10,000; its assets were used to full capacity; no economies of scale exist in the use of assets; and the profit margin and payout ratio are expected to remain constant. The company uses the AFN equation to estimate funds requirements, and it plans to raise any required external capital as short-term bank loans. If sales grow by 50 percent, what will Snowball's current ratio be after it has raised the necessary expansion funds? (Note: Ignore any financing feedback effects.)
   a. 2.36
   b. 2.00
   c. 1.78
   d. 1.50
   e. 1.34

(背面仍有題目,請繼續作答)

4. Which of the following statements is most correct?
   a. Companies can repurchase shares either (1) to change their capital structures or (2) to distribute cash to stockholders without paying cash dividends. In the second situation, tax considerations will probably play a key role in the decision to repurchase stock versus to pay more cash dividends.
   b. Stock dividends provide investors with additional shares of stock, not cash, yet many investors must pay cash in the form of taxes on the value of the stock dividends. For this reason, stock dividends are rarely used today.
   c. The bird-in-the-hand theory of dividend policy could be rejected immediately if personal income taxes were abolished.
   d. If the curve relating the WACC and the debt ratio looks like a sharp 'V', this would make it more feasible for a firm to follow the residual dividend policy than if the curve looks like a shallow bowl (or a shallow 'U').
   e. The open market type of dividend reinvestment plan is the best type for firms which need to bring in new equity capital.

(The following information applies to question 5, 6, and 7.)
Union Brick Inc. has a total market value of $200 million, consisting of 2 million shares of common stock selling for $50 per share and $100 million of 10 percent perpetual bonds currently selling at par. UBI pays out all earnings as dividends, and its marginal tax rate is 40 percent. The firm's earnings before interest and taxes (EBIT) are $30 million. Management is considering increasing UBI's debt to $140 million by calling in all the old bonds and issuing new debt with a 12 percent coupon which sells at par. The additional funds will be used to repurchase stock at the new equilibrium price. If UBI's financial leverage is increased as described, the required rate of return on common equity will increase to 15 percent.

5. What is UBI's *current* required rate of return on equity?
   a. 10%
   b. 11%
   c. 12%
   d. 13%
   e. 14%
6. What would be the value of the firm if the capital structure change were made?
   a. $192.8 million
   b. $198.2 million
   c. $202.8 million
   d. $206.0 million
   e. $208.2 million
7. Now assume that UBI's existing $100 million of debt will not be called. The cost of the additional $40 million remains at 12 percent (before tax), but the added debt burden causes the required rate of return on existing debt to increase to 11 percent. What would be the expected total dividend payment if the capital structure change were made under these conditions?
   a. $7.92 million
   b. $8.25 million
   c. $8.52 million
   d. $9.12 million
   e. $9.72 million

8. Which of the following statements is most correct?
   a. Market participants are able to eliminate virtually all market risk if they hold a large diversified portfolio of stocks.
   b. Market participants are able to eliminate virtually all company- specific risk if they hold a large diversified portfolio of stocks.
   c. It is possible to have a situation where the market risk of a single stock is less than that of a well diversified portfolio.
   d. Statements a and c are correct.
   e. Statements b and c are correct.

9. Which of the following statements concerning dividend policy is true?
   a. Dividend increase announcements are usually perceived as negative signals because they indicate a lack of good investment opportunities.
   b. Although the residual policy is typically not used to set dividends on an annual basis, it is often used to set a firm's long-run dividend policy.
   c. A constant payout ratio policy enables stockholders to accurately predict future dividends.
   d. Since there is no evidence that one investor clientele is better than another, firms can change dividend policies frequently with no adverse impact on stock price.
   e. A low regular plus extra policy is ideally suited for firms with stable earnings streams.

10. Blazer Breaks, Inc. is considering an acquisition of Laker Showtime Company. Blazer expects to receive net cash flows from Laker of $9 million the first year. For the second year, Laker is expected to have EBIT of $25 million and interest expense of $5 million. Also, in the second year only, Laker will require reinvestment of an additional 40 percent of its net income to finance future growth. Laker's applicable marginal tax rate is 34 percent. After the second year, the net cash flows from Laker to Blazer will grow at a constant rate of 4 percent. The firm has determined that 17.5 percent is the appropriate equity discount rate to apply to this merger. Assume that all cash flows are end-of-year and that the Laker acquisition will cost Blazer $45 million. Calculate the net cash flow to Blazer for the second year, use that to determine future cash flows, and determine the NPV of the proposed acquisition to Blazer.
    a. $ 0.2 million
    b. $ 6.1 million
    c. $ 8.4 million
    d. $12.6 million
    e. $34.9 million

11. Firm M is a mature firm in a mature industry. Its annual net income and net cash flow are both consistently high and very stable. The company's growth prospects are quite limited; therefore, the company's capital budget is small relative to its net income. Firm N is a relatively new firm in a new industry. Its annual operating income fluctuates considerably, but the company has substantial growth opportunities. Its capital budget is expected to be large relative to its net income for the foreseeable future. Which of the following statements is most correct?
    a. Firm M probably has a lower debt ratio than Firm N.
    b. Firm M probably has a higher dividend payout ratio than Firm N.
    c. If the corporate tax rate increases, the debt ratio of both firms is likely to fall.
    d. Statements a and b are correct.
    e. Statements b and c are correct.

12. Oakdale Furniture, Inc. has a beta coefficient of 0.7 and a required rate of return of 15 percent. The market risk premium is currently 5 percent. If we expect the inflation premium to increase by 2 percentage points and Oakdale to acquire assets which will increase its beta by 50 percent, what will be Oakdale's new required rate of return?
    a. 13.50%
    b. 22.80%
    c. 18.75%
    d. 15.25%
    e. 17.00%

13. Which of the following statements is most correct?
    a. If investors become more risk averse, but k_{RF} remains constant, the required rate of return on high-beta stocks will rise, the required return on low-beta stocks will decline, but the required return on an average-risk stock will not change.
    b. If Mutual Fund A held equal amounts of 100 stocks, each of which had a beta of 1.0, and Mutual Fund B held equal amounts of 10 stocks with betas of 1.0, then the two mutual funds would both have betas of 1.0 and thus would be equally risky from an investor's standpoint.
    c. An investor who holds just one stock will be exposed to more risk than an investor who holds a portfolio of stocks, assuming the stocks are all equally risky. Since the holder of the 1-stock portfolio is exposed to more risk, he or she can expect to earn a higher rate of return to compensate for the greater risk.
    d. Assume that the required rate of return on the market, k_M, is given and fixed. If the yield curve were upward-sloping, then the Security Market Line (SML) would have a steeper slope if 1-year Treasury securities were used as the risk-free rate than if 30-year Treasury bonds were used for k_{RF}.
    e. Statements a, b, c, and d are false.

14. Which of the following statements is most correct?
    a. Rising inflation makes the actual yield to maturity on a bond greater than the quoted yield to maturity which is based on market prices.
    b. The yield to maturity for a coupon bond that sells at its par value consists entirely of an interest yield; it has a zero expected capital gains yield.
    c. On an expected yield basis, the expected capital gains yield will always be positive because an investor would not purchase a bond with an expected capital loss.
    d. The market value of a bond will always approach its par value as its maturity date approaches. This holds true even if the firm enters bankruptcy.
    e. All of the statements above are false.

15. Which of the following statements is most correct?
    a. Suppose a firm is losing money and thus, is not paying taxes, and that this situation is expected to persist for a few years whether or not the firm uses debt financing. Then the firm's after-tax cost of debt will equal its before-tax cost of debt.
    b. The component cost of preferred stock is expressed as $k_{ps}(1 - T)$, because preferred stock dividends are treated as fixed charges, similar to the treatment of debt interest.
    c. The reason that a cost is assigned to retained earnings is because these funds are already earning a return in the business; the reason does not involve the opportunity cost principle.
    d. The bond-yield-plus-risk-premium approach to estimating a firm's cost of common equity involves adding a subjectively determined risk-premium to the market risk-free bond rate.
    e. All of the statements above are false.

II Short Essay Questions, 55%:

1. The rational investing is one of the major assumptions in classical financial theories. However, empirical evidences over decades have indicated the violation of this assumption, and the Efficient Market Hypothesis has been therefore challenged by the topic of behavioral finance.
   a. Please discuss the assumptions of EMH. (5%)
   b. Please discuss the assumptions of behavioral finance. (5%)
   c. Let's recall the performance of stock markets from late 90's to early 00's, the dotcom era. During such period, two major facts can be discovered from stock markets: (1) high stock returns, and (2) high stock return volatility. Please discuss how these two facts support EMH or behavior finance. (10%)

2. Since the discourse of the business frauds in Enron, WorldCom, and the others, the issue of corporate governance has become an attractive topic to the academic and practitioners.
   a. Please use your own words to define "corporate governance" within two sentences. (5%)
   b. Please discuss the rationales of a firm's corporate governance. (5%)
   c. Please discuss how Enron and Anderson violate the rationales (that you discussed in part B) and end up to the failure. (5%)
   d. As an investor, how you can observe whether a firm possesses a good governance mechanism? (5%)

3. Due to the limitation of traditional capital budgeting methodology, financial option pricing model has been applied on valuing a firm's capital investments. However, financial option pricing model may not be suitable to all investment projects.
   a. Please give <u>one</u> example of investment projects that are suitable to be valued by financial option pricing model. Discuss how the option pricing model can be applied on the example you provide. (i.e., you need to specify the key parameters) (5%)
   b. Please give <u>one</u> example of investment projects that are ***not*** suitable to be valued by financial option pricing model. Discuss the reasons. (5%)
   c. Please discuss the limitation of the application of financial option pricing on capital budgeting. (5%)