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請勿在本試題紙上作答，否則不予計分

Section A: Multiple Choice Questions (80 marks, 4 points each)

1. A commercial bank estimates that its net income suffers whenever interest rates increase. The bank is looking to use derivatives to reduce its interest rate risk. Which of the following strategies best protects the bank against rising interest rates?
 - a. Buying inverse floaters.
 - b. Entering into an interest rate swap where the bank receives a fixed payment stream, and in return agrees to make payments that float with market interest rates.
 - c. Purchase principal only (PO) strips that decline in value whenever interest rates rise.
 - d. Enter into a short hedge where the bank agrees to sell interest rate futures.
 - e. Sell some of the banks floating rate loans and use the proceeds to make fixed rate loans.

2. Which of the following statements is most correct?
 - a. The primary test of feasibility in a reorganization is whether every claimant agrees with the reorganization plan.
 - b. The basic doctrine of fairness states that all debt holders must be treated equally.
 - c. Since the primary issue in bankruptcy is to determine the sharing of losses between owners and creditors, the "public interest" is not a relevant concern.
 - d. While the firm is in bankruptcy, the existing management is always allowed to remain in control of the firm, though the court monitors its actions closely.
 - e. To a large extent, the decision to dissolve a firm through liquidation or to keep it alive through reorganization depends on a determination of the value of the firm if it is rehabilitated versus the value of its assets if they are sold off individually.

3. Which of the following statements is most correct?
 - a. A firm acquiring another firm in a horizontal merger will not have its required rate of return affected because the two firms will have similar betas.
 - b. Financial theory says that the choice of how to pay for a merger is really irrelevant because, although it may affect the firm's capital structure, it will not affect the firm's overall required rate of return.
 - c. The primary rationale for any operating merger is synergy, but it is also possible that mergers can include aspects of both operating and financial mergers.
 - d. In most mergers, the benefits of synergy and the price premium the acquirer pays over market price are summed and then divided equally between the shareholders of the acquiring and target firms.
 - e. The basic rationale for any financial merger is synergy and thus, development of pro-forma cash flows is the single most important part of the analysis.

(背面仍有題目,請繼續作答)

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4. Suppose a U.S. firm buys \$200,000 worth of television tubes from a Mexican manufacturer for delivery in 60 days with payment to be made in 90 days (30 days after the goods are received). The rising U.S. deficit has caused the dollar to depreciate against the peso recently. The current exchange rate is 5.50 pesos per U.S. dollar. The 90-day forward rate is 5.45 pesos/dollar. The firm goes into the forward market today and buys enough Mexican pesos at the 90-day forward rate to completely cover its trade obligation. Assume the spot rate in 90 days is 5.30 Mexican pesos per U.S. dollar. How much in U.S. dollars did the firm save by eliminating its foreign exchange currency risk with its forward market hedge?
- \$1,834.86
 - \$5,712.31
 - \$0
 - \$7,547.17
 - \$4,517.26
5. Which of the following is *not* a situation that might lead a firm to hold marketable securities?
- The firm has purchased a fixed asset that will require a large write-off of depreciable expense.
 - The firm must meet a known financial commitment, such as financing an ongoing construction project.
 - The firm must finance seasonal operations.
 - The firm has just sold long-term securities and has not yet invested the proceeds in earning assets.
 - None of the statements above is correct. (All of the situations might lead the firm to hold marketable securities.)
6. Charles River Company has just sold a bond issue with 10 warrants attached. The bonds have a 20-year maturity, an annual coupon rate of 12.0 percent, and they sold at their \$1,000 par value. The current yield on similar straight bonds is 15.0 percent. What is the implied value of each warrant?
- \$18.78
 - \$19.24
 - \$20.21
 - \$21.20
 - \$22.56
7. Which of the following statements is most correct?
- Firms which use "off balance sheet" financing, such as leasing, will show lower debt ratios once the effects of their leases are reflected in their financial statements.
 - Capitalizing a lease means that the firm issues equity capital in proportion to its current capital structure, in an amount sufficient to support the lease payment obligation.
 - The fixed charges associated with a lease can be as high as, but never greater than, the fixed payments associated with a loan.
 - Capital, or financial, leases generally provide for maintenance service on the part of the lessor and can be refinanced at the discretion of the lessee.
 - A key difference between a capital lease and an operating lease is that with a capital lease, the total lease payments on the asset are roughly equal to the full price of the asset plus a return on the investment in the asset.

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8. Which of the following statements concerning common stock and the investment banking process is *false*?
- The preemptive right gives each existing common stockholder the right to purchase his or her proportionate share of a new stock issue.
 - If a firm sells 1,000,000 new shares of Class B stock, the transaction occurs in the *primary* market.
 - Listing a large firm's stock is often considered to be beneficial to stockholders because the increases in liquidity and status probably outweigh the additional costs to the firm.
 - Stockholders have the right to elect the firm's directors, who in turn select the officers who manage the business. If stockholders are dissatisfied with management's performance, an outside group may ask the stockholders to vote for it in an effort to take control of the business. This action is called a *tender offer*.
 - A large issue of new stock could cause the stock price to fall. This loss is called "market pressure," and it is treated as a flotation cost because it is a cost associated with the new issue.
9. Driver Corporation has plans calling for a capital budget of \$60 million. Its optimal capital structure is 60 percent equity and 40 percent debt. Its earnings before interest and taxes (EBIT) were \$98 million for the year. The firm has \$200 million in assets, pays an average of 10 percent on all its debt, and faces a marginal tax rate of 35 percent. If the firm maintains a residual dividend policy and will keep its optimal capital structure intact, what will be the amount of the dividends it pays out after financing its capital budget?
- \$22.5 million
 - \$59.4 million
 - \$60.0 million
 - \$30.0 million
 - \$ 0

The following information applies to the next three problems (10-12).

Trumbull, Inc., has total value (debt plus equity) of \$5 million and \$2 million face value of 1-year zero coupon debt. The volatility (σ) of Trumbull's total value is 0.60, and the risk free rate is 5 percent. Assume that $N(d_1) = 0.9720$ and $N(d_2) = 0.9050$.

10. What is the value of Trumbull's equity if it is viewed as an option?
- \$3.000 million
 - \$3.050 million
 - \$3.138 million
 - \$4.860 million
 - \$5.000 million

(背面仍有題目,請繼續作答)

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11. What is the value of Trumbull's debt if its equity is viewed as an option?
- \$1.138 million
 - \$1.862 million
 - \$2.000 million
 - \$3.000 million
 - \$3.138 million
12. What is the yield on Trumbull's debt?
- 5.0%
 - 6.0%
 - 6.9%
 - 7.4%
 - 8.8%
13. If debt financing is used, which of the following is *true*?
- The percentage change in net operating income is greater than a given percentage change in net income.
 - The percentage change in net operating income is equal to a given percentage change in net income.
 - The percentage change in net income relative to the percentage change in net operating income depends on the interest rate charged on debt.
 - The percentage change in net operating income is less than the percentage change in net income.
 - The degree of operating leverage is greater than 1.
14. Which of the following will *not* increase the value of a real option?
- An increase in the time remaining until the real option must be exercised.
 - An increase in the volatility of the underlying source of risk.
 - An increase in the risk-free rate.
 - An increase in the cost of exercising the real option.
 - Statements b and d.
15. A company is considering an expansion project. The company's CFO plans to calculate the project's NPV by discounting the relevant cash flows (which include the initial up-front costs, the operating cash flows, and the terminal cash flows) at the company's cost of capital (WACC). Which of the following factors should the CFO include when estimating the relevant cash flows?
- Any sunk costs associated with the project.
 - Any interest expenses associated with the project.
 - Any opportunity costs associated with the project.
 - Answers b and c are correct.
 - All of the answers above are correct.

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16. Which of the following statements is most correct?

- The CAPM approach to estimating a firm's cost of common stock never gives a better estimate than the DCF approach.
- The CAPM approach is typically used to estimate a firm's cost of preferred stock.
- The risk premium used in the bond-yield-plus-risk-premium method is the same as the one used in the CAPM method.
- In practice (as opposed to in theory), the DCF method and the CAPM method usually produce exactly the same estimate for r_s .
- The statements above are all false.

17. Which of the following statements is most correct?

- One of the advantages to the firm associated with financing using preferred stock rather than common stock is that control of the firm is not diluted.
- Preferred stock provides steadier and more reliable income to investors than common stock.
- One of the advantages to the firm of financing with preferred stock is that 70 percent of the dividends paid out are tax deductible.
- Statements a and c are correct.
- Statements a and b are correct.

18. You have developed data which give (1) the average annual returns of the market for the past five years and (2) similar information on Stocks A and B. If these data are as follows, which of the possible answers best describes the historical beta for A and B?

Years	Market	Stock A	Stock B
1	0.03	0.16	0.05
2	-0.05	0.20	0.05
3	0.01	0.18	0.05
4	-0.10	0.25	0.05
5	0.06	0.14	0.05

- $b_A > 0$; $b_B = 1$.
- $b_A > +1$; $b_B = 0$.
- $b_A = 0$; $b_B = -1$.
- $b_A < 0$; $b_B = 0$.
- $b_A < -1$; $b_B = 1$.

(背面仍有題目,請繼續作答)

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19. Which of the following statements is most correct?

- a. All else equal, a bond that has a coupon rate of 10 percent will sell at a discount if the required return for a bond of similar risk is 8 percent.
- b. The price of a discount bond will increase over time, assuming that the bond's yield to maturity remains constant over time.
- c. The total return on a bond for a given year consists only of the coupon interest payments received.
- d. Both b and c are correct.
- e. All of the statements above are correct.

20. Which of the following statements is most correct?

- a. The SML relates required returns to firms' market risk. The slope and intercept of this line cannot be controlled by the financial manager.
- b. Risk refers to the chance that some unfavorable event will occur, and a probability distribution is completely described by a listing of the likelihood of unfavorable events.
- c. Portfolio diversification reduces the variability of returns on an individual stock.
- d. When company-specific risk has been diversified, the inherent risk that remains is market risk which is constant for all securities in the market.
- e. A stock with a beta of -1.0 has zero market risk.

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Section B: Essay question and problem solving (20 marks)

1. It is frequently stated that the primary purpose of the preemptive right is to allow individuals to maintain their proportionate share of the ownership and control of a corporation.
 - a. How important do you suppose this consideration is for the average stockholder of a firm whose shares are traded on the New York or American Stock Exchanges? Explain.
 - b. Is the preemptive right likely to be of more importance to stockholders of publicly owned or closely held firms? Explain.

2.

Period	United States	U.K.	Exchange rate
1	10%	5%	\$3.0
2	15%	-5%	2.5
3	-5%	15%	2.5
4	12%	8%	2.0
5	6%	10%	1.5
6			2.5

The exchange rates represent dollars for pounds at the beginning of period.

- a. What is the average return in the U.K. market from the point view of a U.S. investor?
- b. What is the average return in the U.S. market from the point view of a U.K. investor?