本試題是否可以使用計算機：☑可使用　，　☐不可使用　（請命題老師勾選）

I. Multiple-choice questions: select the most suitable answer for each question. (4 points each)

1. The primary goal of a publicly-owned firm interested in serving its stockholders should be to
   a. Maximize expected total corporate profit.
   b. Maximize expected EPS.
   c. Minimize the chances of losses.
   d. Maximize the stock price per share.
   e. Maximize expected net income.

2. Stock A and Stock B each have an expected return of 15 percent, a standard deviation of 20 percent, and a beta of 1.2. The returns of the two stocks are not perfectly correlated; the correlation coefficient is 0.6. You have put together a portfolio which is 50 percent Stock A and 50 percent Stock B. Which of the following statements is most correct?
   a. The portfolio's expected return is 15 percent.
   b. The portfolio's beta is less than 1.2.
   c. Statements a and b are correct.
   d. All of the statements above are correct.

3. Which is the best measure of risk for an asset held in isolation? Which is the best measure for an asset held in a diversified portfolio?
   a. Variance; correlation coefficient.
   b. Standard deviation; correlation coefficient.
   c. Beta; variance.
   d. Coefficient of variation; beta.
   e. Beta; beta.

4. Which of the following is not a reasonable (or workable) assumption for the stock valuation model
$$\hat{P}_0 = \frac{D_0(1+g)}{k_s - g}$$
   if the model is to give the total present value?
   a. Growth is negative.
   b. There will be no growth.
   c. The growth rate exceeds the required return.
   d. The required return is high (30%).
   e. All of the above are workable assumptions in the sense that the model can be used even if they hold true.

5. The common stock of Anthony Steel has a beta of 1.20. The risk-free rate is 5 percent and the market risk premium (k_M - k_{RF}) is 6 percent. What is the company's cost of common stock, k_s?
   a. 7.0%
   b. 7.2%
   c. 11.0%
   d. 12.2%
   e. 12.4%

6. In comparing two mutually exclusive projects of equal size and equal life, which of the following statements is most correct?
   a. The project with the higher NPV may not always be the project with the higher IRR.
   b. The project with the higher NPV may not always be the project with the higher MIRR.
   c. The project with the higher IRR may not always be the project with the higher MIRR.
   d. All of the answers above are correct.
   e. Answers a and c are correct.

7. Ridgefield Enterprises has total assets of $300 million. The company currently has no debt in its capital structure. The company's basic earning power is 15 percent. The company is contemplating a recapitalization where it will,issue debt at 10 percent and use the proceeds to buy back shares of the company's common stock. If the company proceeds with the recapitalization, its operating income, total assets, and tax rate will remain the same. Which of the following will occur as a result of the recapitalization?
   a. The company's ROA will decline.
   b. The company's ROE will increase.
   c. The company's basic earning power will decline.
   d. Answers a and b are correct.
   e. All of the above answers are correct.

8. Which of the following is true regarding project evaluation?
   a. Financing costs must be included in the statement of cash flows because they are not accounted for elsewhere.
   b. The stand-alone principle calls for evaluation of a project based on its incremental cash flows.
   c. Changes in NWC are not considered incremental cash flows.
   d. When fixed assets are sold at the project end, there are usually no tax consequences of the sale.
   e. Whether straight-line depreciation or MACRS is used will have no impact on project NPV.

9. Which capital investment evaluation technique is described by the following characteristics? (1) Closely related to NPV; (2) Easy to understand and communicate; (3) May lead to incorrect decisions when comparing mutually exclusive investments; (4) May be useful when the available investment budget is limited.
   a. NPV
   b. PI
   c. IRR
   d. AAR
   e. Payback period

(The following information applies to the next two problems.)
The Kimberly Corporation is a zero growth firm with an expected EBIT of $100,000 and a corporate tax rate of 30 percent. Kimberly uses $500,000 of 12.0 percent debt financing, and the cost of equity to an unlevered firm in the same risk class is 16.0 percent.

10. What is the value of the firm according to MM with corporate taxes?
   a. $400,000
   b. $437,500
   c. $587,500
   d. $625,000
   e. $775,000

11. What is the firm's cost of equity?
   a. 18.0%
   b. 20.0%
   c. 24.0%
   d. 28.0%
   e. 32.0%

12. Matrix Corporation follows the residual dividend policy. In a year with an exceptionally large capital budget and normal earnings, the firm would most likely
   a. Keep the same payout ratio as in a normal year.
   b. Increase its payout ratio.
   c. Decrease its payout ratio.

13. A firm has a return on equity of 16%, a dividend payout ratio of 40%, an equity multiplier of 1.6, and a profit margin of 4.2%. What is the sustainable growth rate?
   a. 2.0%
   b. 2.9%
   c. 5.3%
   d. 8.7%
   e. 10.6%

(背面仍有題目,請繼續作答)

14. Your company has decided that its capital budget during the coming year will be $20 million. Its optimal capital structure is 60 percent equity and 40 percent debt. Its earnings before interest and taxes (EBIT) are projected to be $34.667 million for the year. The company has $200 million of assets; its average interest rate on outstanding debt is 10 percent; and its tax rate is 40 percent. If the company follows the residual dividend policy and maintains the same capital structure, what will its dividend payout ratio be?
   a. 15%
   b. 20%
   c. 25%
   d. 30%
   e. 35%

15. S. Claus & Company is planning a zero coupon bond issue. The bond has a par value of $1,000, matures in 2 years, and will be sold at a price of $826.45. The firm's marginal tax rate is 40 percent. What is the annual after-tax cost of debt to the company on this issue?
   a. 4.0%
   b. 6.0%
   c. 8.0%
   d. 10.0%
   e. 12.0%

16. Which of the following actions assist managers in defending against a hostile takeover?
   a. Establishing a poison pill provision.
   b. Granting lucrative golden parachutes to senior managers.
   c. Establishing a super-majority provision in the company's bylaws which raises the percentage of the board of directors that must approve an acquisition from 50 percent to 75 percent.
   d. All of the answers above are correct.
   e. None of the answers above is correct.

17. Which of the following statements is most consistent with the evidence regarding market efficiency?
   a. Security prices will rapidly reflect new information.
   b. It is easy to forecast the direction of future security price changes in the short run.
   c. Short-run price changes occur independent of information coming to the market.
   d. On average, most stocks are mispriced.
   e. In the absence of legal constraints, investors with inside information will not be able to earn excess returns.

18. Recycler Battery Corporation (RBC) issued zero coupon bonds 5 years ago at a price of \$214.50 per bond. RBC's zeros had a 20-year original maturity, with a \$1,000 par value. The bonds were callable 10 years after the issue date at a price 7 percent over their accrued value on the call date. If the bonds sell for \$239.39 in the market today, what annual rate of return should an investor who buys the bonds today expect to earn on them?
    a. 15.7%
    b. 12.4%
    c. 10.0%
    d. 9.5%
    e. 8.0%

19. Which of the following would decrease a portfolio's systematic risk?
    a. Common stock is sold and replaced with Treasury bills.
    b. Stocks with a beta equal to the market beta are added to a portfolio of Treasury bills.
    c. Low-beta stocks are sold and replaced with high-beta stocks.
    d. A stock is sold in favor of a different stock with the same beta.
    e. The portfolio beta is less than one and the risk-free rate declines.

20. Your broker offers you the opportunity to purchase a bond with coupon payments of \$90 per year and a face value of \$1000. If the yield to maturity on similar bonds is 8%, this bond should:
    a. Sell for the same price as the similar bond regardless of their respective maturities.
    b. Sell at a premium.
    c. Sell at a discount.
    d. Sell for either a premium or a discount but it's impossible to tell which.
    e. Sell for par value.

II. Short Essay Questions: please answer the following questions precisely. (10 points each)

1. Please discuss the advantages and disadvantages of going public.

2. Explain in words what beta is. Is it possible for an asset to have a negative beta? What would the expected return on such an asset be?