國立政治大學　105　學年度碩士班招生考試試題

考 試 科 目	財務管理 41711	所 別	財務管理研究所	考 試 時 間	2 月 27 日(六) 第二節

I. Multiple-choice questions: select the most suitable answer for each question. (40%, 4% each)

1. Which one of the following can best represent the objective of a publicly listed company?
   a. Maximize earnings
   b. Maximize market shares
   c. Maximize stock price
   d. Maximize market share

2. Which one of the following methods can improve a company's liquidity?
   a. Shorten the account payable period
   b. Shorten the account receivable period
   c. Provide higher credit line to customers
   d. Concentrate the business transactions to a smaller group of customers

3. Please rank the following investment choices (from the highest priority to the lowest) for a customer who is about to retire: I. Pharmaceutical Stock; II. Utility Stock; III. Government Bond; IV. BBB Corporate Bond.
   a. I, II, III, IV
   b. II, III, IV, I
   c. III, II, IV, I
   d. III, II, I, IV

Please use the following information for questions 4 to 6.

The average risk premium for a capital market is 6.5%. The yield to maturity of 10-year government bond is 2.5%. The yield-to-maturity of 1-year government treasury is 1.5%. The average annual market return in the past 12 months is 2.5%. The systematic risk (beta) of company H is 1.5, and beta of company L is 0.8. Market beta is 1.

4. Please estimate the require rate of return for investors of companies H and L.
   a. 8.5%; 5.7%
   b. 3.0%; 2.3%
   c. 12.25%; 7.7%
   d. 2.5%; 2.5%

5. Please estimate the cost of equity for companies H and L.
   a. 8.5%; 5.7%
   b. 3.0%; 2.3%
   c. 12.25%; 7.7%
   d. 11.25%; 6.7%

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6. Following Q5, both companies H and L just paid dividend (D_0) \$1. The expected growth rates are 8% and 3% for companies H and L, respectively. What should be the intrinsic value of stocks H and L?
   a. \$216; \$38.2
   b. \$25.4; \$21.9
   c. \$33.2; \$27.8

7. Which of the following statements is false?
   a. The NPV and IRR methods would always lead to the same conclusion for a capital budgeting decision.
   b. For mutually exclusive project evaluation, the NPV method tends to choose the larger project than the smaller project.
   c. For mutually exclusive project evaluation, the IRR method tends to choose the smaller project than the larger project.
   d. It is likely that IRR method cannot conclude for a capital budgeting decision.

8. Which of the following statements is false?
   a. The higher the firm's leverage, the more the firm exploits the tax advantage of debt, and the lower its WACC.
   b. Corporate taxes lower the effective cost of debt financing, which translates into a reduction in the weighted average cost of capital.
   c. Because the firm's free cash flow is computed without considering the firm's leverage, we account for the benefit of the interest tax shield by calculating the WACC using the before tax cost of debt.
   d. The reduction in the WACC increases with the amount of debt financing.

9. Which of the following statements is false?
   a. One way to see why you sometimes choose not to invest in a positive-NPV project is to think about the decision of when to invest as a choice between two mutually exclusive projects: (1) invest today or (2) wait.
   b. You invest today only when the NPV of investing today exceeds the value of the option of waiting, which from option pricing theory we know to be always positive.
   c. When you do not have the option to wait, it is optimal to invest in any positive-NPV project.
   d. When you have the option of deciding when to invest, it is usually optimal to invest only when the NPV is positive but close to zero.

10. Which of the following statements is false?
   a. All else being equal, larger firms, because they are more diversified, have an increased probability of bankruptcy.
   b. To justify a takeover based on operating losses, management would have to argue that the tax savings are over and above what the firm would save using carryback and carryforward provisions.

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c. It is possible to combine two companies with the result that the earnings per share of the merged company exceed the premerger earnings per share of either company, even when the merger itself creates no economic value.

d. When an acquirer buys a private target, it provides the target's owners with a way to reduce their risk exposure by cashing out their investment in the private target and reinvesting in a diversified portfolio.

II. Calculations and Essays (60%; 15% each)

1. LT&T, a telecommunications firm, reported earnings before interest and taxes of $ 2 billion and interest expenses of $ 400 million. The book value of debt at the end of the year was $ 6 billion, and the average maturity of the debt is 4 years. The firm has 250 million shares outstanding, trading at $ 40 a share. The table below summarizes the relationship between interest coverage ratios and ratings for large U.S. firms.

Interest Coverage Ratio	*Rating*	*Default Spread*
> 12.5	AAA	0.20%
9.50 - 12.50	AA	0.50%
7.50 – 9.50	A+	0.80%
6.00 – 7.50	A	1.00%
4.50 – 6.00	A-	1.25%
3.50 – 4.50	BBB	1.50%
3.00 – 3.50	BB	2.50%
2.50 – 3.00	B+	3.00%
2.00 - 2.50	B	3.75%
1.50 – 2.00	B-	4.75%
1.25 – 1.50	CCC	6.00%
0.80 – 1.25	CC	7.50%
0.50 – 0.80	C	9.00%
< 0.65	D	11.00%

a. Estimate a synthetic rating for LT&T, based upon the interest coverage ratio.

b. Estimate the market value of LT&T debt.

c. The unlevered beta s 0.70. The firm faces a tax rate of 40%. The risk-free rate is 4% and the market risk premium is 8%. Please estimate the cost of capital for LT&T.

2. Increasing dividends can send a positive signal to financial markets, leading to an increase in stock prices.

a. For what types of firms are dividends most likely to operate as positive signals?

b. How would you empirically test this proposition?

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3. Unitrode Inc. is a firm that manufactures telecommunications equipment. The firm has 500 million shares outstanding, trading at $ 8 a share, and $ 2 billion in debt outstanding. You have regressed debt ratios against firm characteristics at comparable firms in the sector:

(Debt/Capital) = 0.15 + 0.80 (EBITDA/Firm Value) – 0.10 (StdDev in Operating Income)

Unitrode had earnings before interest and taxes of $ 800 million, and depreciation and amortization of $ 200 million. In addition, the standard deviation in the firm's operating income is 20%.

a. Is Unitrode under or over levered, relative to other firms in the sector?

b. What would Unitrode need to do (in terms of recapitalizing itself) to make its debt ratio comparable to those other firms in the sector?

4. Please read the following article summary of "Outback Steakhouse Parent Sets IPO" by Drew Fitzgerald and answer the questions.

Outback Steakhouse parent Bloomin' Brands Inc. filed plans for an initial public offering of up to $300 million in common stock to help pay down debt taken on from its 2007 private-equity buyout. The casual-dining company, which also owns Carrabba's Italian Grill, Bonefish Grill, Fleming's Prime Steakhouse and Wine Bar, and Roy's, has carried a heavy debt load since its predecessor accepted a roughly $3 billion bid from a group led by private-equity firms Bain Capital Partners LLC and Catterton Management Co. Bloomin's private-equity backers are now preparing to take the company public during a challenging time for the casual-dining sector, which has struggled in recent years under pressure from cost-conscious consumers and high commodity prices.

a. Why do you think Bloomin' Brands is undertaking an initial public offering to pay down its debt rather than refinancing that debt at current low interest rates?

b. Why do you think Bloomin' Brands is undertaking an initial public offering now rather than waiting for a less challenging time for the industry?

備 註	一、作答於試題上者，不予計分。 二、試題請隨卷繳交。