

淡江大學 95 學年度碩士班招生考試試題

系別：財務金融學系

科目：財 務 管 理

74-1

准帶項目請打「V」	
✓	簡單型計算機

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本試題雙面印製

20%

1. Fill in the blanks, using the terms listed at the end of this question.

- (a) An issue of bonds that is sold simultaneously in several countries is called a(n) _____.
- (b) If a lender ranks behind the firm's general creditors in the event of default, his or her loan is said to be _____.
- (c) Unsecured bonds are usually termed _____.
- (d) Where there is a(n) _____, securities are sold directly to a small group of institutional investors. These securities cannot be resold to individual investors.
- (e) A(n) _____ bond can be exchanged for shares of the issuing corporation.

Terms: lease, funded, floating-rate, eurobond, exercise price, commercial paper, convertible, term loan, subordinated, call, sinking fund, prime rate, debentures, mortgage bond, private placement, public issue, senior, unfunded, eurodollar rate, warrant

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2. Machines A and B are mutually exclusive and are expected to produce the following cash flows :

Machine	CASH FLOWS, THOUSANDS OF DOLLARS			
	C0	C1	C2	C3
A	-100	+110	+121	
B	-120	+110	+121	+133

The opportunity cost of capital is 10 percent.

- (a) Calculate the NPV of each machine.
- (b) Use present value tables to calculate the equivalent annual cash flow from each machine.
- (c) Which machine should you buy ?
- (d) Machine C was purchased 5 years ago for \$ 200,000 and produce an annual cash flow of \$80,000. It has to salvage value but is expected to last another 5 years. The company can replace machine C with B either now or at the end of 5 years. Which should it do?

10%

- 3. (a) Company A's dividends per share are expected to grow indefinitely by 5 percent a year. If next year's dividend is \$10 and the market capitalization rate is 8 percent, what is the current stock price ?
- (b) If company A were to distribute all its earnings, it could maintain a level dividend stream of \$15 a share. How much, therefore, is the market actually paying per share for growth opportunities ?

◀ 注意背面尚有試題 ▶

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10%

4. Consider a three-factor APT model. The factors and associated risk premiums are:

Factor	Risk Premium
Change in GNP	5%
Change in energy prices	-1
Change in long-term interest rates	+2

Calculate expected rates of return on the following stocks. The risk-free interest rate is 7 percent.

- (a) A stock with average exposure to each factor (i.e., with $b=1$ for each)
- (b) An aluminum company stock with average sensitivity to changes in interest rates and GNP, but negative exposure of $b=-1.5$ to the energy factor. (The aluminum company is energy-intensive and suffers when energy prices rise.)

10%

5. A project costs \$100,000 and offers a single \$150,000 cash flow 1 year hence. The project beta is 2.0, the market risk premium ($r_m - r_f$) is 6.5 percent, and the risk-free interest rate is 2.0 percent. Use the capital asset pricing model to find the opportunity cost of capital and the present value of the project.

10%

6. Compute the present value of interest tax shields generated by following two debt issues. Consider corporate taxes only. The marginal tax rate is $T_c=0.35$.

- (a) A \$1000, 1-year loan at 8 percent.
- (b) A \$1,000 perpetuity at 7 percent.

10%

7. Suppose that you hold a share of stock and a put option on that share. What is the payoff when the option expires if:

- (a) The stock price is below the exercise price?
- (b) There is another strategy involving calls and borrowing and lending which gives the payoffs as the strategy described above. What is the alternative strategy?

10%

8. Company B has outstanding 10 million warrants, each of which may be converted into one share of common stock. Assume that net income is \$40 million and that there are 20 million shares outstanding.

- (a) Calculate earnings per shares.
- (b) Calculate earnings per share on a fully diluted basis.