

考 試 科 目	財務管理	系 所 別	金融學系/金融管理組	考 試 時 間	2 月 4 日(四) 第三節
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I. Explain the following term briefly (24 points, 4 points for each).

1. The yield curve
2. Weak-form efficiency
3. MIRR (modified IRR)
4. The market risk premium
5. Cyclical stocks
6. SML

II. Computational Questions (25 points, 5 points for each)

1. ABC common stock is expected to have extraordinary growth in earnings and dividends of 20% per year for 2 years, after which the growth rate will settle into a constant 6%. If the discount rate is 15% and the most recent dividend was \$2.50, what should be the approximate current share price?
2. Estimate a stock's beta based on the following information: Month 1 = Stock + 1.5%, Market + 1.1%; Month 2 = Stock + 2.0%, Market + 1.4%; Month 3 = Stock - 2.5%, Market - 2.0%.
3. The market portfolio has an expected return of 18% and the risk-free rate is 6%. An investor borrows \$100 at the risk-free rate and invests this and a further \$100 of his own in the market portfolio. What is his expected return?
4. How much debt is outstanding if the present value of a perpetual tax shield is \$300,000, the tax rate is 21% and the interest rate on the debt is 10%?
5. Evenglade Corp has 1,000 shares outstanding priced at \$10 a share. The company is unsure whether to pay out \$1 a share as a dividend or to use the money to repurchase stock. If it pays a dividend, what happens to the stock price? If it repurchases, how many shares will remain and at what price?

III. Short answer questions (10 points)

1. Based on the dividend growth model, briefly give the reason why a lower current payout will not affect the stock price. (5 points)
2. When Tri-C Corp. compares its ratios to industry averages, it has a higher current ratio, an average quick ratio, and a lower inventory turnover. What might you assume about Tri-C? (5 points)

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IV. Questions (41 points)

- Econo-Cool air conditioners cost \$300 to purchase, result in electricity bills of \$150 per year, and last for 5 years. Luxury air models cost \$500, result in electricity bills of \$100 per year, and last for 8 years. The discount rate is 21%.
    - What is the equivalent annual cost of the Econo-Cool model? (4 points)
    - What is the equivalent annual cost of the Luxury air model? (4 points)
    - Which model is more cost-effective? (2 points)
    - Now you remember that the inflation rate is expected to be 10% per year for the foreseeable future. Redo parts (a) and (b). (8 points)
  - Astromet is financed entirely by common stock and has a beta of 1.0. The firm pays no taxes. The stock has a price-earning multiple of 10 and is priced to offer a 10% expected return. The company decides to repurchase half the common stock and substitute an equal value of debt. Assume that the debt yields a risk-free 5%. Calculate the following:
    - The beta of the common stock after the refinancing (5 points)
    - The required return and risk premium on the common stock after the refinancing (6 points)
    - The required return on the company (i.e., stock and debt combined) after the refinancing (3 points)
- If EBIT remains constant:
- What is the percentage increase in earnings per share after the refinancing? (5 points)
  - What is the new price-earnings multiple? (4 points)

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- 作答於試題上者，不予計分。
- 試題請隨卷繳交。