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| 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 18 日(一) 第二節 |
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I. Explain the following term briefly (24 points, 4 points for each)

1. Strong-form efficient.
2. Random walk.
3. Value as a going concern.
4. The current yield of a bond
5. Convertible bond.
6. Senior debt.

II. Computational Questions (30 points, 5 points for each)

1. 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?
2. A stock is expected to pay a year-end dividend of \$8 and then to sell at a price of \$109. The risk-free interest rate is 4%, the expected market return is 12% and the stock has a beta of 0.8. What is the stock price today?
3. Suppose that the total value of dividends to be paid by companies in the Narnian stock market index is \$100 billion. Investors expect dividends to grow over the long term by 5% annually, and they require a 10% return. Now a collapse in the economy leads investors to revise their growth estimate down to 4%. By how much should market values change?
4. How much of a stock's \$30 price is reflected in PVGO if it expects to earn \$4 per share, has an expected dividend of \$2.50, and a required return of 20%?
5. An all-equity firm has 1 million shares outstanding with a market value of \$10 million. It does not pay tax and has an operating income of \$1.5 million. If \$2 million of 10% debt is issued and the proceeds used to repurchase shares of stock, what does then the firm's EPS change?
6. A stock is currently priced at \$65 per share and will pay a \$4 dividend in one year. What must the stock sell for in one year to meet investors' expectations of a 15% after-tax return if dividends are taxed at 28% and there are no capital gains taxes?

III. Short Answer Questions (10 points, 5 points for each)

1. Why are Investors willing to purchase stocks having high P/E ratios?
2. Which of the following pair of firms do you think should be more highly levered: A retailing firm with prime downtown real estate, or a social media company whose major assets are its unique software and client loyalty? And why?

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IV. Questions (36 points)

1. Astromet is financed entirely by common stock and has a beta of 1.0. The firm pays no taxes. The stock has a price-earnings 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 beta of the common stock after the refinancing. (5 points)
- the required return and risk premium on the common stock before the refinancing. (4 points)
- the required return and risk premium on the common stock after the refinancing. (6 points)

Assume that the operating profit of the firm is expected to remain constant. Give

- the percentage increase in earnings per share after the refinancing. (6 points)
- the new price-earnings multiple. (Hint: Has anything happened to the stock price?) (5 points)

2. Plank's Plants had net income of \$2,000 on sales of \$50,000 last year. The firm paid a dividend of \$500. Total assets were \$100,000, of which \$40,000 was financed by debt.

- What is the firm's sustainable growth rate? (5 points)
- What would be the maximum possible growth rate if the firm did not issue any debt next year?(5 points)

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- 作答於試題上者，不予計分。
- 試題請隨卷繳交。