

考 試 科 目	財務管理 U1228	所 別	金融學系/財務工程組	考 試 時 間	2 月 27 日 ( 六 ) 第 1 節
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## I. Explain the following terms briefly (24 points, each 4 points)

1. The trade-off theory of capital structure
2. Pecking-order theory
3. A policy of dividend smoothing
4. Semistrong form of market efficiency
5. A firm's liquidation value
6. The payback rule

## II. Computational Question (30 points, each 6 points)

1. What is the amount of the annual interest tax shield for a firm with \$3 million in debt that pays 12% interest if the firm is in the 35% tax bracket?
2. Wilt's has earnings per share of \$2.98 and dividends per share of \$.35. What is the firm's sustainable rate of growth if its return on assets is 14.6% and its return on equity is 18.2%?
3. ABC common stock is expected to have extraordinary growth 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?
4. What is the rate of return for an investor who pays \$1,054.47 for a 3-year bond with coupon of 6.5% and sells the bond 1 year later for \$1,037.19?
5. Calculate the expected rate of return for the following portfolio, based on a Treasury bill yield of 4% and an expected market return of 13%: (Show your work)

Stock	Weight	Beta
A	20%	1.6
B	25%	1.2
C	10%	1.0
D	30%	0.9
E	15%	0.8

## III. Short answer questions (12 points, each 6 points)

1. Why might a bond's current yield offer an incomplete idea of what return the investor is receiving?
2. The stock of Newmont Mining, the world's largest gold producer, has above-average volatility but a relatively low beta. Why?

## IV. Questions (34 points)

1. Nodebt Inc. is a firm with all-equity financing. Its equity beta is 0.8. The Treasury bill rate is 4%, and the market risk premium is expected to be 10%.  
(a) What is Nodebt's asset beta? (5 points)

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(b) What is Nodebt's WACC? (6 points)

2. Buggins Inc. is financed equally by debt and equity, each with a market value of \$1 million. The cost of debt is 5%, and the cost of equity is 10%. The company now makes a further issue of debt and uses the proceeds to repurchase equity. This causes the cost of debt to rise to 6% and the cost of equity to rise to 12%. Assume the firm pays no taxes.

(a) How much debt does the company now have? (6 points)

(b) What is the overall cost of capital? (5 points)

3. Surf & Turf Hotels is a mature business, although it pays no cash dividends. Next year's earnings are forecast at \$56 million. There are 10 million outstanding shares. The company has traditionally used 50% of earnings to repurchase shares of stock and reinvested the remaining earnings. With reinvestment, the company has generated steady growth averaging 5% per year. Assume the cost of equity is 12%.

(a) Calculate Surf & Turf's current stock price, using the constant-growth discount cash flow (DCF) model. (6 points)

(b) Now Surf & Turf's CFO announces a switch from repurchases to a regular cash dividend. Next year's dividend will be \$2.8 per share. The CFO reassures investors that the company will continue to pay out 50% of earnings and reinvest 50%. All future payouts will come as dividends, however. What would you expect to happen to Surf & Turf's stock price? Ignore taxes. (6 points)

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- 一、作答於試題上者，不予計分。
- 二、試題請隨卷繳交。