

國立臺北商業大學 107 學年度研究所碩士班考試入學試題

准考證號碼：□□□□□□□□ (請考生自行填寫)

財務金融系碩士班

筆試科目：財務管理

共 2 頁，第 1 頁

注意事項	1. 本科目合計 100 分，答錯不倒扣。 2. 請於答案卷上依序作答，並標註清楚題號 (含小題)。 3. 考完請將答案卷及試題一併繳回。
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1. NTUB Co. recently paid \$4 as an annual dividend. Future dividends are projected at \$3.5, \$4, and \$4.5 over the next three years, respectively. Beginning four years from now, the dividend is expected to increase by 2 percent annually. What is one share of this stock worth to you today if you require a 10 percent rate of return on similar investments? (12%)
2. You own a bond that has a 5 percent annual coupon and matures five years from now. You purchased this 8-year bond at par value when it was originally issued. What is the realized capital gain (or loss) on the bond if you sell it today while the relevant market interest rate is now 4 percent? (12%)
3. Please explain. (1) What is “Pecking Order Theory”? Describe a firm’s optimal capital structure if it follows this theory. (2) What is “IPO underpricing”? Give at least two reasons to support IPO underpricing. (10%)
4. DJ corporation maintains a constant debt ratio of 40% and payout ratio of 40%. The firm has profit margin of 5% and with a total asset turnover of 1.2. (1) What is the return on equity (ROE) of DJ company? (2) What is the DJ’s sustainable growth rate? (10%)
5. Steve owns 500 shares of TSMC Co. and earns 10 percent on his investments. TSMC Co. recently stated that it will pay dividends per share of \$0.5 this year and \$0.7 next year. Steve does not want any dividend income this year but does want as much dividend income as possible next year. Ignoring taxes, what will Steve’s total homemade dividend be next year? (6%)
6. Investor Bob want his portfolio beta to be 0.8. His portfolio consists of \$5,000 invested in stock A with a beta of 1.4 and \$3,000 in stock B with a beta of 0.7. Bob has another \$4,000 to invest and want to divide it between an asset with a beta of 1.7 and a risk-free asset. How much should you invest in the risk-free asset? (15%)

背面尚有試題

7. COOL company is considering building a new \$1.2 million manufacturing facility. The new plant is expected to generate the following income in perpetuity. What is the NPV of the new plant? The company has tax rate 20 percent, and with a cost of capital of 15 percent. (10%)

Sales	\$657,900
Variable costs	\$352,900
Depreciation	\$97,500
EBIT	\$207,500

8. You are considering the following two mutually exclusive projects. (1) The crossover point of these two projects is (a)12% (b)14% (c)16% (d)18%? (2) The IRR of Project A and Project B is 23.45% and 23.27%, respectively. If your discount rate is 14%, which Project should be accepted, and why? (10%)

Year	Project A	Project B
0	\$ (70,000)	\$ (70,000)
1	\$ 40,000	\$ 33,000
2	\$ 33,000	\$ 45,000
3	\$ 30,000	\$ 25,500

9. NTUB has no debt and expects an EBIT of \$20,000 every year forever. NTUB's WACC is currently 15 percent, and its tax rate is 34 percent. (1) What is the current value of NTUB? (2) Suppose NTUB can borrow at 10 percent. What will the company's value be if it sells \$17,600 in debt? Assume debt proceeds are used to repurchase equity. And what will NTUB's cost of equity be now? (15%)