### 銘傳大學九十二學年度風險管理與統計資訊研究所碩士班招生考試

#### 財務金融學系

## 第一節

# 財務管理 試題 (限用答案本作答)

#### \*\*\*\*\*可使用電子計算機\*\*\*\*\*

一、單選題: (每題2分,共40分)

- ( ) 1. In the late 1990s, several Taiwan stock-listing firms were confronted with financial difficulties. Most of their management team concealed or escaped abroad while a few were willing to take responsibility to deal with their employees and creditors. We usually call this contrast for the standards of conduct or moral behavior as (A) agency problems (B)stock options plan (C) managerial incentives (D)business ethics.
- ( ) 2. Which of the following statements is most appropriate to explain why a firm has a large amount of unrealized loss on long-term investment? (A) The firm focused too much on some customers, which results in large bad debt (B) The firm borrowed too much, which results in insolvency (C) The firm invested a lot in securities and the prices plump (D) The firm expanded rapidly, which results in short of money.
- ( ) 3. A small firm issues a bond with the same feature as the bond of a large firm. The interest rate of the small firm bond is higher than that of the large firm. This condition can be best explained by (A) real interest rate (B) maturity risk premium (C)inflation premium (D)default risk premium.
- ( ) 4. You are prepared to evaluate stocks X, Y, and Z with the following data:

<u>Stock</u>	Expected Return	Standard Deviation	<u>Beta</u>
Х	16%	20%	1.1
Y	18%	25%	0.8
Ζ	20%	22%	1.4

Supposed that you are a risk minimizer. You would choose stock \_\_\_\_\_\_ if you use "coefficient of variation" as the benchmark, and stock \_\_\_\_\_\_ if you consider to hold it to be part of your well diversified portfolio (A) X,Y (B)Y,X (C)Z,Y

(D)Z,X

- ()5. Which of the following statements is correct for the marginal cost of capital (MCC)?(A) The more the equity a firm uses, the lower the MCC (B) The MCC calculation does not consider tax rate (C) Debt amount usually does not affect the MCC (D) The MCC usually jumps up when the capital amount exceeds some breakup points.
- ()6. Orange Company sets up a target debt ratio of 40%. It's cost of debt is 8% and tax rate is 25%. The company uses the CAPM to calculate its cost of equity. Orange's beta is 1.2 and the risk-free rate and market return are 4% and 14%, respectively. Now Orange Co. has the following independent investment opportunities:

<u>Project</u>	<u>Costs(mil)</u>	<u>IRR</u>
А	\$ 100	12.5%
В	200	14.0%
С	300	10.5%
D	150	13.0%

Suppose that Orange Co. can raise funds easily. How much should the company invest? (A) \$350 mil (B)\$450 mil (C)\$600 mil (D) 650mil.

- ( )7. A firm plans to invest in a project which is riskier than the current risk of the firm. Which of the following statement is most appropriate for the firm to evaluate the project? (A) Use a higher rate as the discount rate (B) Ignore the risk if the investment amount is small and reject the project if the amount is large (C) Accept the project if the difference between IRR and MIRR is small and reject it if the difference is large (D)Estimate the cash flows conservatively.
- ()8. Which of the following statements about capital structure is most correct? (A) The signaling theory suggests that managers can decrease the amount of debt to convey positive information (B) The trade-off theory suggests that there exists an optimal capital structure (C) The clientele effect implies that managers prefer to pay cash dividends as much as they can (D) Agency theory indicates that debtholders hope managers to borrow as much as they can.
- ()9. Which of the following statements related to the dividend policies is most correct?(A) Cash dividends may result in high agency costs (B) The MM irrelevance theory of dividends means that firms will not pay dividends although dividends contain information (C) The bird-in-the-band theory states that investors prefer capital gains than cash dividends (D) The residual dividend policy means that managers will try

hard to pay dividends.

- ( )10. Which of the following comparisons for a firm' s bonds with the same term but different features are correct? a. The yield to maturity of debentures will be higher than that of mortgage bonds. b. The yield to maturity of callable bonds will be higher than that of mortgage bonds c. The yield to maturity of zero coupon bonds will be higher than that of fixed-interest bonds. d. The yield to maturity of subordinated debentures will be higher than that of debentures. (A) ab (B)bcd (C)bc (D)abc.
- ( )11. The preemptive right allows shareholders to (A) receive gifts at the annual meeting data (B) obtain cash dividends (C) prevent from dilution of ownership interests (D) have a priority to buy new-issued bonds.
- ()12. A high-tech firm which keeps a high amount of deposit in bank in order to keep its daily operations. What kind of policy does the firm adopt? (A) Relaxed policy (B) Moderate policy (C) Restricted policy (D) Optimal policy.
- ( )13. If a firm has a relatively high fluctuation in cash flows, then by Miller-Orr model, the cash balance target and upper limit, respectively, will be (A) lower, higher (B) higher, lower (C) higher, higher (D) lower, lower
- ( )14. The financial manager of firm ABC uses historical data to draw a graph of its need for additional funds. The vertical axis is the dollar amount and the horizontal axis is the growth rate in sales. If firm ABC decides to increase its cash dividend payout ratio, assuming other things constant, what will the line in the graph change? (A) The line shifts parallely to the left (B) The slope coefficient rises (C) The line shifts parallely to the right (D) The slope coefficient falls.
- ( )15. The CEO of firm X, Mr. A, endeavored to acquiring firm Y since he thought that he can de better. After the acquisition, firm Y' s performance turned out to be much worse, Which of the following item can best explain this phenomenon? (A) Agency Problem (B) Proxy Fights (C) Hubris (D) Moral Hazard.
- ( )16. Which of the following actions are most likely to affect the ownership structure of a firm? a. Stock Splits b. Outside directors serve in the board c. Mergers and Acquisitions d. Cross Shareholding (A)ab (B)cd (C)bc (D)bcd.
- ( ) 17. What are the following two events called? a. Mangers use junk bonds and loans to

buy their firm resulting in an extremely high debt ratio. b. An outsider solicits the stockholder' consent to vote in the annual meeting. (A) a is an LBO, b is a tender offer (B) a is a poison pill, b is a proxy fight (C) a is a greenmail, b is an executive stock option (D) a is an LBO, b is a proxy fight.

- ()18. You must pay out \$1 million at the end of years 1, 2, 3. Current yields on zero coupon bonds are 12%. You intend to immunize by purchasing bonds with a single duration. This duration should be: (A) 3.000 years (B) 1.925 years (C) 2.000 years (D) 1.6888 years.
- ( )19. If an investor believes that a stock price is going to be quite variable over his holding period and that it is more likely to decrease than increase, in which of the following transactions might the investor enganges? (A) Write a straddle (B) Purchase a strap (C) Write a strip (D) Purchase a strip.
- ()20. Your firm has a subsidiary in England that receives most of its income in pounds. You would like to borrow money to expand its operations, but do not have access to the British debt market. Which of the following would be your best bet for limiting exchange rate risk? (A) Entering into an interest rate swap (B) Entering into a currency swap (C) Buying a call option on pounds (D) Buying a put option on pounds.
- 二、計算與申論題:(每題 15 分,共 60 分)
- 元富公司的貝他係數為 1.5,目標資本結構係由 40%的負債、60%的普通股權 益所構成,且都依照此一目標資本結構來籌措投資專案資金。
   近來,元富公司考慮投資一個與本業無關的新專案,此新專案的預期報酬率 為 13.5%;而市場剛好有兩家公司的業務性質與該專案相同,這兩家公司的 平均貝他係數為 1.2,平均負債比率為 50%。
   假設上述三家公司的稅率均為 34%,無風險利率為 10%,市場風險溢酬為 5%, 且元富公司的稅前負債成本為 14%。
  - 試問:(1) 在公司未使用負債的情況下,新專案的貝他係數為何? (5分)
    - (2) 當元富公司接受該新專案時,新專案的貝他係數為何? (5分)
    - (3) 元富公司應否接受此新專案? (5分)
- 假設你三年前擁有一張五年期的外匯交換(Currency Swaps)合約,亦即你向市場借得\$100萬,並與 A 公司換取 DM250萬來支用。這一外匯交換合約係雙方約定每年以利率 8%(\$)與 4%(DM)來付款。若今年(第三年)年終匯款為 2DM//\$,且年初與年終的市場利率均為 10%(\$)與 6%(DM)。 試問:(1)就今年而言,你將因此一合約而帶來多少現金利得?(7分)

(2)在外匯交換的次級市場,此一 Currency Swap 於今年年終應價值多 少?(8分)

3. 元富公司擁有一個投資\$1000 萬於 IBM 股票及投資\$500 萬於 AT&T 股票的投資組合。已知 IBM 股票每日價格波動性為 2%, AT&T 股票的每日價格波動性為 1% (其波動型態均呈現常態分配),且兩股票間的報酬率相關係數為 0.7。 試問:該投資組合 10 天期、99%信賴區間的風險值 (VaR)為何?

(暗示 Pr(-2.33<u><</u> z) = 0.99)

4. (1)何謂「Fisher Separation Theorem」?試繪圖說明之。(7分)
(2)在資本市場中,如何解決 Fisher Separation 問題,並達成市場的配置效率
(Allocation Efficiency)?又爲何已達成了配置效率?(8分)

# 試題完