

國立中正大學

108 學年度碩士班招生考試

試題

[第 1 節]

系所組別	財務金融學系
科目名稱	財務管理

—作答注意事項—

※作答前請先核對「試題」、「試卷」與「准考證」之系所組別、科目名稱是否相符。

1. 預備鈴響時即可入場，但至考試開始鈴響前，不得翻閱試題，並不得書寫、畫記、作答。
2. 考試開始鈴響時，即可開始作答；考試結束鈴響畢，應即停止作答。
3. 入場後於考試開始 40 分鐘內不得離場。
4. 全部答題均須在試卷（答案卷）作答區內完成。
5. 試卷作答限用藍色或黑色筆（含鉛筆）書寫。
6. 試題須隨試卷繳還。

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Part A. Multiple Choice Questions (75 points, 2.5 points for each question. Please select the best answer.)

- Suppose you pay \$9,800 for a \$10,000 par Treasury bill maturing in 2 months. What is the annual percentage rate of return for this investment?
A. 2.04% B. 12 % C. 12.24% D. 12.89%
- The market risk premium is defined as _____.
A. the difference between the return on an index fund and the return on Treasury bills
B. the difference between the return on a small-firm mutual fund and the return on the Standard & Poor's 500 Index
C. the difference between the return on the risky asset with the lowest returns and the return on Treasury bills
D. the difference between the return on the highest-yielding asset and the return on the lowest-yielding asset
- An investor invests 70% of her wealth in a risky asset with an expected rate of return of 15% and a variance of 5%, and she puts 30% in a Treasury bill that pays 5%. Her portfolio's expected rate of return and standard deviation are _____ and _____ respectively.
A: 10%; 6.7% B: 12%; 22.4% C: 12%; 15.7% D: 10%; 35%
- Adding additional risky assets to the investment opportunity set will generally move the efficient frontier _____ and to the _____.
A. up; right B. up; left C. down; right D. down; left
- Rational risk-averse investors will always prefer portfolios _____.
A. located on the efficient frontier to those located on the capital market line
B. located on the capital market line to those located on the efficient frontier
C. at or near the minimum-variance point on the efficient frontier
D. that are risk-free to all other asset choices
- Consider two perfectly negatively correlated risky securities, A and B. Security A has an expected rate of return of 16% and a standard deviation of return of 20%. B has an expected rate of return of 10% and a standard deviation of return of 30%. The weight of security B in the minimum-variance portfolio is _____.
A.10% B.20% C.40% D.60%
- According to Tobin's separation property, portfolio choice can be separated into two independent tasks consisting of _____ and _____.
A. identifying all investor imposed constraints; identifying the set of securities that conform to the investor's constraints and offer the best risk-return trade-offs
B. identifying the investor's degree of risk aversion; choosing securities from industry groups that are consistent with the investor's risk profile
C. identifying the optimal risky portfolio; constructing a complete portfolio from T-bills and the optimal risky

portfolio based on the investor's degree of risk aversion

D. choosing which risky assets an investor prefers according to the investor's risk-aversion level; minimizing the CAL by lending at the risk-free rate

8. The measure of risk used in the capital asset pricing model is _____.

- A. specific risk
- B. the standard deviation of returns
- C. reinvestment risk
- D. beta

9. Joe bought a stock at \$57 per share. The price promptly fell to \$55. Joe held on to the stock until it again reached \$57, and then he sold it once he had eliminated his loss. If other investors do the same to establish a trading pattern, this would contradict _____.

- A. the strong-form EMH
- B. the weak-form EMH
- C. technical analysis
- D. the semistrong-form EMH

10. Even if the markets are efficient, professional portfolio management is still important because it provides investors with:

- I. Low-cost diversification
- II. A portfolio with a specified risk level
- III. Better risk-adjusted returns than an index

- A. I only
- B. I and II only
- C. II and III only
- D. I, II, and III

11. One of the indirect costs of bankruptcy is the incentive for managers to take large risks. When following this strategy:

- A. the firm will rank all projects and select the project which results in the highest expected firm value.
- B. bondholders expropriate value from stockholders by selecting high-risk projects.
- C. stockholders expropriate value from bondholders by selecting high-risk projects.
- D. the firm will always select the lowest-risk project available.

12. The free cash flow hypothesis states:

- A. that firms with greater free cash flow will pay more in dividends thereby reducing the risk of financial distress.
- B. that firms with greater free cash flow should issue new equity to help minimize the wasting of resources by managers.
- C. that issuing debt requires interest and principal payments to be paid thereby reducing the potential of management to waste resources.
- D. that firms with higher levels of free cash flow should reduce their debt levels.

13. The information content of a dividend increase generally signals that:
- A. the firm has a one-time surplus of cash.
 - B. the firm has several net present value projects to pursue.
 - C. management believes the future earnings of the firm will be strong.
 - D. the firm has more cash than it needs due to sales declines.
14. Stock splits are often used to:
- A. adjust the market price of a stock such that it falls within a preferred trading range.
 - B. decrease the excess cash held by a firm.
 - C. increase both the number of shares outstanding and the market price per share.
 - D. adjust the debt-equity ratio such that it falls within a preferred range.
15. If you consider stockholders to be the owners of a firm, then those stockholders:
- A. own a call option on the firm with an exercise price equal to the firm's total equity.
 - B. own a put option on the firm with an exercise price equal to the firm's total debt.
 - C. have written a put option on the firm with an exercise price equal to the firm's total equity.
 - D. have written a call option on the firm with an exercise price equal to the firm's total debt.
16. If its yield to maturity is less than its coupon rate, a bond will sell at a _____, and increases in market interest rates will _____.
- A. discount; decrease this discount
 - B. discount; increase this discount
 - C. premium; decrease this premium
 - D. premium; increase this premium
17. The internal rate of return (IRR):
- I. rule states that a typical investment project with an IRR that is less than the required rate should be accepted.
 - II. is the rate generated by the cash flows of an investment.
 - III. is the rate that causes the net present value of a project to exactly equal zero.
 - IV. can effectively be used to analyze all investment scenarios.
- A. I and IV only
 - B. II and III only
 - C. I, II, and III only
 - D. II, III, and IV only
18. Working capital management includes decisions concerning which of the following?
- I. accounts payable
 - II. long-term debt
 - III. accounts receivable
 - IV. inventory

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- A. I and II only
- B. I and III only
- C. I, II, and III only
- D. I, III, and IV only

19. One purpose of identifying all of the incremental cash flows related to a proposed project is to:
- A. isolate the total sunk costs so they can be evaluated to determine if the project will add value to the firm.
 - B. eliminate any cost which has previously been incurred so that it can be omitted from the analysis of the project.
 - C. include both the proposed and the current operations of a firm in the analysis of the project.
 - D. identify any and all changes in the cash flows of the firm for the past year so they can be included in the analysis.
20. You own a bond that has a 7% coupon and matures in 12 years. You purchased this bond at par value when it was originally issued. If the current market rate for this type and quality of bond is 7.5%, then you would expect:
- A. the bond issuer to increase the amount of each interest payment on these bonds.
 - B. the yield to maturity to remain constant due to the fixed coupon rate.
 - C. to realize a capital loss if you sold the bond at the market price today.
 - D. today's market price to exceed the face value of the bond.
21. A stock listing contains the following information:
P/E = 17.5, closing price = 33.10, dividend = 0.80, YTD% change = 3.4%, and net change = - 0.50. Which of the following statements are correct given this information?
- I. The stock price has increased by 3.4% during the current year.
 - II. The closing price on the previous trading day was \$32.60.
 - III. The earnings per share are approximately \$1.89.
 - IV. The current yield is 17.5%.
- A. I and II only
 - B. I and III only
 - C. II and III only
 - D. III and IV only
22. FL Co. paid a \$1.00 per share annual dividend last week. Dividends are expected to increase by 5% annually. What is one share of this stock worth today if the appropriate discount rate is 14%?
- A. \$7.14
 - B. \$7.50
 - C. \$11.11
 - D. \$11.67

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23. The risk premium is computed by _____ the average return for the investment.
- A. subtracting the inflation rate from
 - B. subtracting the average return on the U.S. Treasury bill from
 - C. adding the inflation rate to
 - D. subtracting the average return on long-term government bonds from
24. One year ago, you purchased a stock at a price of \$30 a share. Today, you sold the stock and realized a total return of 25%. Your capital gain was \$6 a share. What was your dividend yield on this stock?
- A. 1.25%
 - B. 3.75%
 - C. 5.00%
 - D. 6.25%
25. The _____ tells us that the expected return on a risky asset depends only on that asset's nondiversifiable risk.
- A. Efficient Markets Hypothesis (EMH)
 - B. systematic risk principle
 - C. unsystematic risk principle
 - D. principle of diversification
26. The observed empirical fact that stocks attract particular investors based on the firm's dividend policy and the resulting tax impact on investors is called the:
- A. clientele effect.
 - B. MM Proposition I.
 - C. MM Proposition II.
 - D. information content effect.
27. An advantage of the APT over CAPM is:
- A. APT can handle multiple factors.
 - B. if the factors can be properly identified, the APT may have more explanation/predictive power for returns.
 - C. the APT forces unsystematic risk to be negative to offset systematic risk; thus making the total portfolio risk free, allowing for an arbitrage opportunity for the astute investor.
 - D. Both A and B.
28. Suppose Sunshine Corporation's common stock has a beta of 0.8. If the risk-free rate is 4% and the expected market return is 9%, the expected return for Sunshine's common stock is:
- A. 3.2%.
 - B. 4.0%.
 - C. 7.2%.
 - D. 8.0%.

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29. If the risk of an investment project is different than the firm's risk then:

- A. you must adjust the discount rate for the project based on the firm's risk.
- B. you must adjust the discount rate for the project based on the project risk.
- C. you must exercise risk aversion and use the market rate.
- D. an average rate across prior projects is acceptable because estimates contain errors.

30. Ritter's study of Initial Public Offerings (IPOs) showed that the post offering stock performance was:

- A. incorrectly priced at issuance because over the next five years the abnormal returns were greater than zero on average.
- B. less than the control group by about 2% in the five years following the IPO.
- C. immaterial to the pricing of the IPO because future market performance is unknown at issuance.
- D. equal across IPOs, irrespective of risk or which year they were issued.

Part B. Problem Sets (25 Points)

1. Suppose the Stock Return of CCU stock can be expressed as a two-factor model (R_{CCU} is the excess return of the CCU stock over the risk-free rate, R_{f1} are the excess returns of the mimicking portfolios on factor 1, and e is an firm-specific shock to the CCU company):

$$R_{CCU} = \alpha + \beta_1 R_{f1} + \beta_2 R_{f2} + e$$

- A. Please Construct a Portfolio to hedge away the risk of Factor 1 and Factor 2. (7 points)
- B. Is there an arbitrage opportunity? Why? (6 points, you don't get points if you do not answer why.)

2. Philly Corp. currently has 600,000 shares of stock outstanding that sell for \$50 per share. Assuming no market imperfections or tax effects exist, what will the share price and the number of shares outstanding be after:

(Note: The following three questions are independent. You have to show your equations and calculations for each of your answers. Do not round intermediate calculations. Round your final answer to 2 decimal places.)

- A. Philly Corp. has a 15 percent stock dividend? (4 points)
- B. Philly Corp has a two-for-one stock split? (4 points)
- C. Philly Corp. has a three-for-four reverse stock split? (4 points)