

系所組別：財務金融研究所在職專班甲組

考試科目：財務管理概論(專班)

考試日期：0219，節次：3

※ 考生請注意：本試題 可 不可 使用計算機

請勿在本試題紙上作答，否則不予計分

## I. Multiple-Choice Questions (75%, each question accounts for 3%)

1. You want your portfolio beta to be 1.20. Currently, your portfolio consists of \$100 invested in stock A with a beta of 1.4 and \$300 in stock B with a beta of .6. You have another \$400 to invest and want to divide it between an asset with a beta of 1.6 and a risk-free asset. How much should you invest in the risk-free asset?

A. \$0 B. \$140 C. \$200 D. \$320 E. \$400

2. What is the portfolio variance if 30% is invested in stock S and 70% is invested in stock T?

State of Economy	Probability of State of Economy	Returns if State Occurs	
		Stock S	Stock T
Boom	40%	12%	20%
Normal	60%	6%	4%

A. .002220 B. .004056 C. .006224 D. .008080 E. .098000

3. The risk-free rate of return is 4% and the market risk premium is 8%. What is the expected rate of return on a stock with a beta of 1.28?

A. 9.12% B. 10.24% C. 13.12% D. 14.24% E. 15.36%

4. Nuvo, Inc. stock has a beta of .86 and an expected return of 10.5%. The risk-free rate of return is 3.2% and the market rate of return is 11.2%. Which one of the following statements is true given this information?

- A. The return on Nuvo stock will graph below the Security Market Line.  
 B. Nuvo stock is underpriced.  
 C. The expected return on Nuvo stock based on the Capital Asset Pricing Model is 9.88%.  
 D. Nuvo stock has more systematic risk than the overall market.  
 E. Nuvo stock is correctly priced.

5. Estimates using the arithmetic average will probably tend to \_\_\_\_\_ values over the long-term while estimates using the geometric average will probably tend to \_\_\_\_\_ values over the short-term.

- A. overestimate; overestimate B. overestimate; underestimate C. underestimate; overestimate  
 D. underestimate; underestimate E. accurately; accurately

6. Capital market history shows us that the average return relationship from lowest to highest between securities is:

- A. inflation, corporate bonds, Treasuries, small company stocks, large company stocks.  
 B. inflation, Treasury Bills, large company stocks, small company stocks.  
 C. Treasury bills, government bonds, large common stocks, corporate bonds, small company stocks.  
 D. Treasury bills, large common stocks, government bonds, corporate bonds, small company stocks.  
 E. There is no ordering.

(背面仍有題目,請繼續作答)

系所組別： 財務金融研究所在職專班甲組

考試科目： 財務管理概論(專班)

考試日期：0219 · 節次 3

※ 考生請注意：本試題 可 不可 使用計算機

7. You have a sub-contracting job with a local manufacturing firm. Your agreement calls for annual payments of \$50,000 for the next five years. At a discount rate of 12 percent, what is this job worth to you today?

A. \$180,238.81 B. \$201,867.47 C. \$210,618.19 D. \$223,162.58 E. \$224,267.10

8. A bond that allows the holder to force the issuer to buy back bonds at a stated rate is called a:

A. put bond. B. call bond. C. guaranteed bond. D. TIPS bond. E. none of these.

9. The relationship between nominal interest rates on default-free, pure discount securities and the time to maturity is called the:

A. liquidity effect. B. Fisher effect. C. term structure of interest rates.  
D. inflation premium. E. interest rate risk premium.

10. B&K Enterprises will pay an annual dividend of \$2.08 a share on its common stock next year. Last week, the company paid a dividend of \$2.00 a share. The company adheres to a constant rate of growth dividend policy. What will one share of B&K common stock be worth ten years from now if the applicable discount rate is 8%? A. \$71.16 B. \$74.01 C. \$76.97 D. \$80.05 E. \$83.25

11. The total rate of return earned on a stock is comprised of which two of the following?

I. current yield II. yield to maturity III. dividend yield IV. capital gains yield  
A. I and II only B. I and IV only C. II and III only D. II and IV only E. III and IV only

12. 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 solely 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 E. I, II, III, and IV

13. Which of the following are examples of an incremental cash flow?

I. an increase in accounts receivable II. a decrease in net working capital

III. an increase in taxes IV. a decrease in the cost of goods sold

A. I and III only B. III and IV only C. I and IV only

D. I, III, and IV only E. I, II, III, and IV

系所組別：財務金融研究所在職專班甲組

考試科目：財務管理概論(專班)

考試日期：0219·節次：3

※ 考生請注意：本試題 可 不可 使用計算機

14. All else constant, the accounting break-even level of sales will decrease when the:

- A. fixed costs increase                      B. depreciation expense decreases.    C. contribution margin decreases.  
D. variable costs per unit increase.    E. selling price per unit decreases.

15. Which of the following are hidden options in capital budgeting?

- A. option to expand.    B. timing option.    C. option to abandon.  
D. All of these.            E. None of these.

16. The efficient set of portfolios

- A. contains the portfolio combinations with the highest return for a given level of risk.  
B. contains the portfolio combinations with the lowest risk for a given level of return.  
C. is the lowest overall risk portfolio.  
D. Both A and B            E. Both A and C.

17. The separation principle states that an investor will:

- A. choose any efficient portfolio and invest some amount in the riskless asset to generate the expected return.  
B. choose an efficient portfolio based on individual risk tolerance or utility.  
C. never choose to invest in the riskless asset because the expected return on the riskless asset is lower over time.  
D. invest only in the riskless asset and tangency portfolio choosing the weights based on individual risk tolerance.  
E. All of these.

18. The use of WACC to select investments is acceptable when the:

- A. correlations of all new projects are equal.  
B. NPV is positive when discounted by the WACC  
C. risk of the projects is equal to the risk of the firm.  
D. firm is well diversified and the unsystematic risk is negligible  
E. None of these.

(背面仍有題目,請繼續作答)

系所組別： 財務金融研究所在職專班甲組

考試科目： 財務管理概論(專班)

考試日期 0219 · 節次： 3

※ 考生請注意：本試題  可  不可 使用計算機

19. Betas may vary substantially across an industry. The decision to use the industry or firm beta to estimate the cost of capital depends on:

- A. how small the estimation errors are of all betas across industries.
- B. how similar the firm's operations are to the operations of all other firms in the industry.
- C. whether the company is a leader or follower.
- D. the size of the company's public float.
- E. None of these.

20. In an efficient market when a firm makes an announcement of a new product or product enhancement with superior technology providing positive NPV the price of the stock will:

- A. rise gradually over the next few days.
- B. decline gradually over the next few days.
- C. rise on the same day to the new price.
- D. stay at the same price, with no net effect.
- E. drop on the same day to the new price.

21. MM Proposition I without taxes is used to illustrate:

- A. the value of an unlevered firm equals that of a levered firm.
- B. that one capital structure is as good as another.
- C. leverage does not affect the value of the firm.
- D. capital structure changes have no effect on stockholder's welfare.
- E. All of these.

22. A firm has a debt-to-equity ratio of 1.20. If it had no debt, its cost of equity would be 15%. Its cost of debt is 10%. What is its cost of equity if there are no taxes or other imperfections?

- A. 10%
- B. 15%
- C. 18%
- D. 21%
- E. None of these.

23. If a call has a positive intrinsic value at expiration the call is said to be:

- A. funded.
- B. unfunded.
- C. at the money.
- D. in the money.
- E. out of the money.

系所組別：財務金融研究所在職專班甲組

考試科目：財務管理概論(專班)

考試日期：0219，節次：3

※ 考生請注意：本試題 可 不可 使用計算機

24. The Black-Scholes option pricing model is dependent on which five parameters?

- A. Stock price, exercise price, risk free rate, probability, and time to maturity.
- B. Stock price, risk free rate, probability, time to maturity, and variance.
- C. Stock price, risk free rate, probability, variance and exercise price.
- D. Stock price, exercise price, risk free rate, variance and time to maturity.
- E. Exercise price, probability, stock price, variance and time to maturity.

25. Several rumors concerning Wyslow, Inc. stock have started circulating. These rumors are causing the market price of the stock to be quite volatile. Given this situation, you decide to buy both a one-month put and a call option on this stock with an exercise price of \$15. You purchased the call at a quoted price of \$.20 and the put at a price of \$2.10. What will be your total profit or loss on these option positions if the stock price is \$4 on the day the options expire?

- A. -\$230 B. \$870 C. \$890 D. \$910 E. \$1,310

## II. Short Essay Questions (25%):

1. (10%). We routinely assume that investors are risk-averse return-seekers; i.e., they like returns and dislike risk. If so, why do we contend that only systematic risk and not total risk is important?
2. (10%) What are the upper and lower bounds for an American call option? Explain what would happen in each case if the bound was violated.
3. (5%) Sanjay's Incorporated is analyzing two machines to determine which one it should purchase. The company requires a 14% rate of return and uses straight-line depreciation to a zero book value. Machine A has a cost of \$290,000, annual operating costs of \$8,000, and a 3-year life. Machine B costs \$180,000, has annual operating costs of \$12,000, and has a 2-year life. Whichever machine is purchased will be replaced at the end of its useful life. Which machine should Sanjay's purchase and why?