國立高雄應用科技大學
100 學年度碩士班招生考試
財經與商務決策研究所

准考證號碼□□□□□□□□□　（考生必須填寫）

財務管理

注意：a.本試題選擇題計 60 分，計算題 40 分，共 100 分。
b.作答時不必抄題。
c.考生作答前請詳閱答案卷之考生注意事項。

選擇題（20 題，每題 3 分，共計 60 分）

1. The total interest paid on a zero-coupon bond is equal to:
   (a) zero.
   (b) the face value minus the issue price.
   (c) the face value minus the market price on the maturity date.
   (d) $1,000 minus the face value.
   (e) $1,000 minus the par value.

2. The underlying assumption of the dividend growth model is that a stock is worth:
   (a) the same amount to every investor regardless of their desired rate of return.
   (b) the present value of the future income which the stock generates.
   (c) an amount computed as the next annual dividend divided by the market rate of return.
   (d) the same amount as any other stock that pays the same current dividend and has the same required rate of return.
   (e) an amount computed as the next annual dividend divided by the required rate of return.

3. 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.
   (e) None of the above.

4. One year ago, you purchased a stock at a price of $32 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) 6.25%
(d) 18.75%
(e) 21.25%

5. The betas along with the factors in the APT adjust the expected return for:
(a) calculation errors.
(b) unsystematic risks.
(c) spurious correlations of factors.
(d) differences between actual and expected levels of factors.
(e) All of the above.

6. MM Proposition I with corporate taxes states that:
(a) capital structure can affect firm value.
(b) by raising the debt-to-equity ratio, the firm can lower its taxes and thereby increase its total value.
(c) firm value is maximized at an all debt capital structure.
(d) All of the above.
(e) None of the above.

7. The interest tax shield has no value for a firm when:
I. the tax rate is equal to zero.
II. the debt-equity ratio is exactly equal to 1.
III. the firm is unlevered.
IV. a firm elects 100% equity as its capital structure.
(a) I and III only
(b) II and IV only
(c) I, III, and IV only
(d) II, III, and IV only
(e) I, II, and IV only

8. The asset beta of a levered firm is generally:
(a) equal to the equity beta.
(b) different from the equity beta.
(c) different from the debt beta.
(d) the simple average of the equity beta and debt beta.
(e) Both B and C.

9. Which one of the following statements is correct concerning market efficiency?
(a) Real asset markets are more efficient than financial markets.
(b) If a market is efficient, arbitrage opportunities should be common.
(c) In an efficient market, some market participants will have an advantage over others.

(d) A firm will generally receive a fair price when it sells shares of stock.
(e) New information will gradually be reflected in a stock's price to avoid any sudden change in the price of the stock.

10. The slope of an asset's security market line is the:
(a) reward-to-risk ratio.
(b) portfolio weight.
(c) beta coefficient.
(d) risk-free interest rate.
(e) market risk premium.

11. If a stock portfolio is well diversified, then the portfolio variance:
(a) will equal the variance of the most volatile stock in the portfolio.
(b) may be less than the variance of the least risky stock in the portfolio.
(c) must be equal to or greater than the variance of the least risky stock in the portfolio.
(d) will be a weighted average of the variances of the individual securities in the portfolio.
(e) will be an arithmetic average of the variance of the individual securities in the portfolio.

12. According to the Capital Asset Pricing Model:
(a) the expected return on a security is negatively and non-linearly related to the security's beta.
(b) the expected return on a security is negatively and linearly related to the security's beta.
(c) the expected return on a security is positively and linearly related to the security's variance.
(d) the expected return on a security is positively and non-linearly related to the security's beta.
(e) the expected return on a security is positively and linearly related to the security's beta.

13. 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 the above.

14. A typical investor is assumed to be:
(a) a fair gambler.

(b) a gambler.
(c) a single security holder.
(d) risk averse.
(e) risk neutral.

15. Which of the following statements is/are true?
(a) Both APT and CAPM argue that expected excess return must be proportional to the beta(s).
(b) APT and CAPM are the only approaches to measure expected returns in risky assets.
(c) Both CAPM and APT are risk-based models.
(d) Both (a) and (b).
(e) Both (a) and (c).

16. Which of the following are factors that favor a high dividend policy?
I. stockholders desire for current income
II. tendency for higher stock prices for high dividend paying firms
III. investor dislike of uncertainty
IV. high percentage of tax-exempt institutional stockholders
(a) I and III only
(b) II and IV only
(c) I, III, and IV only
(d) II, III, and IV only
(e) I, II, III, and IV

17. Which statement is **not** true regarding the Capital Market Line (CML)?
(a) The CML is the line from the risk-free rate through the market portfolio.
(b) The CML is the best attainable capital allocation line.
(c) The CML is also called the security market line.
(d) The CML always has a positive slope.
(e) The risk measure for the CML is standard deviation.

18. Your opinion is that CSCO has an expected rate of return of 0.13. It has a beta of 1.3. The risk-free rate is 0.04 and the market expected rate of return is 0.115. According to the Capital Asset Pricing Model, this security is
(a) underpriced.
(b) overpriced.
(c) fairly priced.
(d) cannot be determined from data provided.
(e) none of the above.

19. If the stock price decreases, the price of a put option on that stock ___________ and that of a call option ___________.
(a) decreases, increases
(b) decreases, decreases

(c) increases, decreases
(d) increases, increases
(e) does not change, does not change

20. You hold one long corn futures contract that expires in April. To close your position in corn futures before the delivery date you must
(a) buy one May corn futures contract.
(b) buy two April corn futures contract.
(c) sell one April corn futures contract.
(d) sell one May corn futures contract.
(e) none of the above.

計算題（第 1 題與第 2 題各 15 分，第 3 題 10 分，共計 40 分）

1. Use the following scenario analysis for Stocks X and Y to answer problems:

	Bear Market	Normal Market	Bull Market
Probability	0.2	0.5	0.3
Stock X	-20%	18%	50%
Stock Y	-15%	20%	10%

(a) What are the expected rates of return for Stocks X and Y?
(b) Assume that of your $10,000 portfolio, you invest $9,000 in Stock X and $ 1,000 in Stock Y. What is the expected return on your portfolio?

2. Fontaine has no debt but can borrow at 8%. The firm's WACC is currently 12%, and the tax rate is 35%.
(a) What is Fontaine's cost of equity?
(b) If the firm converts to 25% debt, what will its cost of equity be?

3. The yield to maturity on 1-year zero-coupon bonds is currently 7%; the YTM on 2-year zeros is 8%, The Treasury plans to issue a 2-year maturity coupon bond, paying coupons once per year with a coupon rate of 9%. The face value of the bond is $100. At what price will the bond sell?