國立高雄大學 101 學年度研究所碩士班招生考試試題

科目：財務管理　　系所：金融管理學系　　是否使用計算機：是
考試時間：100 分鐘　　本科原始成績：100 分

I. Multiple Choice Questions (2 points each, total 60 points)

Please write down the answers on the answer sheet with the following format. No points earned without following the format below.

1.		**6.**		**11.**		**16.**		**21.**		**26.**	
2.		**7.**		**12.**		**17.**		**22.**		**27.**	
3.		**8.**		**13.**		**18.**		**23.**		**28.**	
4.		**9.**		**14.**		**19.**		**24.**		**29.**	
5.		**10.**		**15.**		**20.**		**25.**		**30.**	

1. Which one of the following statements concerning net present value is correct?
   a. An investment should be accepted if, and only if, the NPV is exactly equal to zero.
   b. An investment should be accepted only if the NPV is equal to the initial cash flow.
   c. Any project that has positive cash flows for every time period after the initial investment should be accepted.
   d. An investment with greater cash inflows than cash outflows, regardless of when the cash flows occur, will always have a positive NPV and therefore should always be accepted.
   e. none of the above.

2. All else equal, the payback period for a project will decrease whenever the:
   a. initial cost increases.
   b. cash inflows are moved earlier in time.
   c. assigned discount rate decreases.
   d. required return for a project increases.
   e. none of the above.

3. Which of the following statement is true?
   a. Average accounting return is the ratio of total assets to total net income.
   b. One must know the discount rate to compute the IRR of a project but one can compute the NPV without referring to the discount rate.
   c. Payback accounts for time value of money.
   d. One must know the discount rate to compute the NPV of a project but one can compute the IRR without referring to the discount rate.
   e. none of the above.

4. Conducting scenario analysis helps managers see the:
   a. potential range of outcomes from a proposed project.
   b. impact of an individual variable on the outcome of a project.
   c. allocation distribution of funds for capital projects under conditions of hard rationing.
   d. possible range of market prices for their firm’s stock over the life of a project.
   e. none of the above.

5. Including the option to expand in your project analysis will tend to:
   a. extend the duration of a project but not affect the project’s net present value.
   b. increase the cash flows of a project but decrease the project’s net present value.
   c. have no effect on either a project’s cash flows or its net present value.
   d. decrease the net present value of a project.
   e. none of the above.

6. A firm with high operating leverage has:
   a. low fixed costs in its production process.
   b. high variable costs in its production process.
   c. low variable costs in its production process.
   d. high fixed costs in its production process.
   e. high price per unit.

7. An industry is likely to have a low beta if the:
   a. economy is in a boom.
   b. economy is in a recession.
   c. market for its goods is unaffected by the market cycle.
   d. Both A and C.
   e. Both B and C.

8. A key assumption of MM's Proposition I without taxes is:
   a. that individuals must be able to borrow on their own account at rates equal to the firm.
   b. that individuals can borrow on their own account at rates less than the firm.
   c. that individuals can borrow on their own account at rates higher than the firm.
   d. managers are acting to maximize the value of the firm.
   e. that financial leverage increases risk.

9. Financial leverage impacts the performance of the firm by:
   a. increasing the volatility of the firm's EBIT.
   b. decreasing the volatility of the firm's EBIT.
   c. decreasing the volatility of the firm's EPS.
   d. decreasing the volatility of the firm's return on equity.
   e. increasing the volatility of the firm's EPS.

10. A firm should select the capital structure which:
   a. produces the lowest cost of debt.
   b. has no debt.
   c. minimizes taxes.
   d. is fully unlevered.
   e. none of the above.

11. MM Proposition I with taxes is based on the concept that:
   a. the optimal capital structure is the one that is totally financed with equity.
   b. the capital structure of the firm does not matter.
   c. the firm is better off with debt based on the weighted average cost of capital.
   d. the cost of equity increases as the debt-equity ratio of a firm increases.
   e. the optimal capital structure is the one that is totally financed with debt.

12. The information content of a dividend increase generally signals that:
   a. the firm has a one-time surplus of cash.
   b. the firm has few, if any, net present value projects to pursue.
   c. the firm has more cash than it needs due to sales declines.
   d. management believes that the future earnings of the firm will be strong.
   e. none of the above.

13. From a tax-paying investor’s point of view, a stock repurchase:
   a. is more desirable than a cash dividend.
   b. is equivalent to a cash dividend.
   c. has the same tax effects as a cash dividend.
   d. is more highly taxed than a cash dividend.
   e. none of the above.

14. Managers are encouraged to act in shareholders’ interests by:
   a. shareholder election of a board of directors who select management.
   b. the threat of a takeover by another firm.
   c. compensation contracts that tie compensation to corporate success.
   d. All of the above.
   e. Both B and C.

15. Lengthening the credit period _____ the price paid by the customer. Generally, this acts to _____ sales.
   a. decreases; increase
   b. increases; decrease
   c. decreases; decrease
   d. increases; increase
   e. decrease; have no effect on

16. The asset allocation decision must involve a consideration of
   a. Cultural differences.
   b. The objectives stated in the investor's policy statement.
   c. The types of assets that are appropriate for the investor.
   d. The risk associated with different investments.
   e. All of the above.

17. Rank the following four investments in increasing order of historical risk.
   a. Art, T-bills, corporate bonds, and common stock
   b. T-bills, common stock, corporate bonds, art
   c. Corporate bonds, T-bills, common stock, art
   d. Common stock, corporate bonds, T-bills, art
   e. T-bills, corporate bonds, common stock, art

18. An exchange traded fund (ETF):
   a. Is priced once a day at the opening of trading.
   b. Is priced once a day at the close of trading.
   c. Is priced continuously during the trading day.
   d. Is priced at the open and close of trading.
   e. None of the above.

19. A Eurobond is an international bond
   a. Sold by an issuer within its own country in that country's currency.
   b. Denominated in a currency not native to where it is issued.
   c. Also known as a Yankee Bond.
   d. Is a bond denominated in U.S. dollars but issued by a foreign company.
   e. That is sold only to European investors.

20. In a value weighted index
    a. Exchange rate fluctuations have a large impact.
    b. Exchange rate fluctuations have a small impact.
    c. Large companies have a disproportionate influence on the index.
    d. Small companies have an exaggerated effect on the index.
    e. None of the above

21. The January anomaly refers to the phenomenon where stock prices
    a. Decline in December.
    b. Decline in January.
    c. Rise in January.
    d. Decline in December and rise in January.
    e. Rise in December and decline in January.

22. The objective of an event study is to
    a. Examine whether it is possible to predict stock prices.
    b. Examine how fast stock prices adjust to news.
    c. Examine the cross-sectional distributions of returns.
    d. Conduct a time series analysis of returns.
    e. Determine normal P/E ratios.

23. You are given a two asset portfolio with a fixed correlation coefficient. If the weights of the two assets are varied the expected portfolio return would be ____ and the expected portfolio standard deviation would be ____.
    a. Nonlinear, elliptical
    b. Nonlinear, circular
    c. Linear, elliptical
    d. Linear, circular
    e. Circular, elliptical

24. A portfolio manager is considering adding another security to his investment portfolio. The choices below are the correlations of the 5 alternatives available. Which security would enable the highest level of risk diversification?
    a. 0.0
    b. 0.35
    c. -0.35
    d. -0.70
    e. 0.70

25. A stock price is currently $65 per share. A stock call option with an exercise price $60 currently sells for $5.50. The call option is
    a. In-the-money.
    b. At-the-money.
    c. Out-of-the-money.
    d. At breakeven.
    e. None of the above.

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26. The measure of performance which divides the portfolio's risk premium by the portfolio's beta is the
    a. Fama measure.
    b. Sharpe measure.
    c. Jensen measure.
    d. APT measure.
    e. Treynor measure.

27. What would the equivalent taxable yield be on an investment that offers an 8 percent tax exempt yield? Assume a marginal tax rate of 20%.
    a. 10%
    b. 7.20%
    c. 6.48%
    d. 1.6%
    e. 16 %

28. Between 1980 and 2000, the standard deviation of the returns for the NIKKEI and the DJIA indexes were8%and 7%, respectively, and the covariance of these index returns was 0.09%. What was the correlation coefficient between the two market indicators?
    a. .00788
    b. .0788
    c. .01607
    d. .1607
    e. .001607

29. An investor wishes to construct a portfolio by borrowing 35% of his original wealth at risk free rate and investing all the money in a stock index. The return on the risk-free asset is 3.0% and the expected return on the stock index is 12%. Calculate the expected return on the portfolio.
    a. 15.15%
    b. 17.25%
    c. 8.85%
    d. 15.00%
    e. 11.15%

30. In the case of a portfolio of N-stocks, the formula for portfolio variance contains:
    a. N covariance terms
    b. N(N - 1)/2 covariance terms
    c. N(N - 1)/2 variance terms
    d. N^2 covariance terms
    e. N^2 variance terms

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II. Problem Solving and Essay Questions (total 40 points)

1. NUK Inc. uses machines to produce equipment for other firms. The initial cost of one customized machine is $850,000. This machine costs $10,000 a year to operate. Each machine has a life of 3 years before it is replaced. What is the equivalent annual cost of this machine if the required return is 9%? (Round your answer to whole dollars.) (5%)

2. What is its cost of equity for NUK Company if the corporate tax rate is 40%? The NUK Company has a debt-to-equity ratio of 1.5. If it had no debt, its cost of equity would be 16%. Its current cost of debt is 10%. (5%)

3. The Bach Co. has a beta of 1.5, a cost of debt of 11% and a debt to value ratio of .6. The current risk free rate is 9% and the market rate of return is 16.18%. What is the company's cost of equity capital? (5%)

4. You are scheduled to receive annual payments of $10,000 for each of the next 25 years. Your discount rate is 8.5%. What is the difference in the present value if you receive these payments at the beginning of each year rather than at the end of each year? (5%)

5. Briefly explain the difference between beta as a measure of risk and variance as a measure of risk. (10 points)

6. According to the positions of 5 assets located at the graph of Security Market Line (SML) below, please classified the assets which are fair-valued, undervalued, and overvalued respectively? (10 points)