

國立高雄大學 103 學年度研究所碩士班招生考試試題

科目：財務管理
考試時間：100 分鐘

系所：金融管理學系
本科原始成績：100 分

是否使用計算機：是

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

Please write down the answers by following the format on the provided answer sheet. No points earned without following the format.

1. For an investor with a time horizon of 6 to 10 years and lower risk tolerance, an appropriate asset allocation strategy would be
 - a) 100% bonds
 - b) 100% stocks
 - c) 100% cash
 - d) 10% cash, 30% bonds, and 60% stocks
 - e) 30% cash, 50% bonds, and 20% stocks

2. A statistic that measures how two variables tend to move together is the
 - a) Mean
 - b) Coefficient of variation
 - c) Correlation coefficient
 - d) Standard deviation
 - e) Variance

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

4. According to the weak-form efficient market hypothesis, which of the following type of information is is not fully reflected in stock prices?
 - a) Dividend and earnings announcements.
 - b) Rates of return.
 - c) Trading volume.
 - d) History of the firm.
 - e) Block trade.

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5. The slope of the efficient frontier is calculated as follows
- a) $E(R_{\text{portfolio}})/E(\beta_{\text{portfolio}})$
 - b) $E(R_{\text{portfolio}})/E(\sigma_{\text{portfolio}})$
 - c) $\Delta E(R_{\text{portfolio}})/\Delta E(\sigma_{\text{portfolio}})$
 - d) $\Delta E(\sigma_{\text{portfolio}})/\Delta E(R_{\text{portfolio}})$
 - e) $\Delta E(R_{\text{portfolio}})/\Delta E(\beta_{\text{portfolio}})$
6. Between 2012 and 2013, the standard deviation of the returns for the S&P500 Index and the Taiwan Stock Exchange Weighted Index (TWSE) were 0.11 and 0.19, respectively, and the covariance of these index returns was 0.006. What was the correlation coefficient between the two market indicators?
- a) 4.6
 - b) 0.2871
 - c) 0.1042
 - d) 1.0166
 - e) 0.3821
7. Theoretically, the correlation coefficient between a completely diversified portfolio and the market portfolio should be
- a) +1.0.
 - b) -1.0.
 - c) 0.0.
 - d) + 0.5.
 - e) - 0.5.
8. Which of the following is not a component of return on equity (ROE)?
- a) Net income/sales
 - b) Total assets/equity
 - c) Sales/total assets
 - d) Equity/sales
 - e) Net Profit Margin

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9. Which securities can be valued by dividing the annual dividend by the required rate of return?
- a) Low coupon bonds
 - b) Junk bonds
 - c) Common stocks
 - d) Preferred stocks
 - e) Constant growth common stocks
10. The theory of relative purchasing power parity states that, between two nations, the
- a) inflation rates are unrelated
 - b) exchange rate differential reflects the interest rate differential
 - c) exchange rate differential reflects the inflation rate differential
 - d) inflation rate is smaller in weaker currencies
 - e) the interest rate is greater than the inflation rate during depreciations
11. When monetary authorities have not insulated their domestic money supplies from the foreign exchange transactions, it is known as _____ intervention.
- a) securitized
 - b) subsidized
 - c) foreign market
 - d) sterilized
 - e) unsterilized
12. Going-private transactions in which a large percentage of the money used to buy the outstanding stock is borrowed is called a:
- a) tender offer.
 - b) proxy contest.
 - c) merger.
 - d) leveraged buyout.
 - e) consolidation.

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13. Suppose that the one-year forward rate on Euros is \$1.35/€. Given no arbitrage opportunities, this implies that traders expect:
- the spot rate to be \$1.35/€ in one year.
 - the spot rate to be greater than \$1.35/€ in one year.
 - the spot rate to be less than \$1.35/€ in one year.
 - the spot rate to be greater than or equal to \$1.35/€ in one year.
 - the spot rate to be less than or equal to \$1.35/€ in one year.
14. On a common-size balance sheet, all _____ accounts are shown as a percentage of _____.
- income; total assets
 - liability; net income
 - liability; total assets
 - asset; sales
 - equity; sales
15. An agreement giving the bond issuer the option to repurchase the bond at a specified price prior to maturity is the _____ provision.
- sinking fund
 - call
 - seniority
 - collateral
 - trustee
16. The mixture of debt and equity used by a firm to finance its operations is called:
- working capital management.
 - break-even analysis.
 - real options.
 - capital budgeting.
 - none of the above.

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17. The profitability index is closely related to:

- a) payback period.
- b) internal rate of return.
- c) average accounting return.
- d) net present value.
- e) none of the above.

18. When the present value of the cash inflows exceeds the initial cost of a project, then the project should be:

- a) accepted because the internal rate of return is positive.
- b) accepted because the profitability index is greater than 0.
- c) accepted because the profitability index is negative.
- d) rejected because the internal rate of return is negative.
- e) none of the above.

19. Which of the following should be included in the analysis of a project?

- I. sunk costs
 - II. opportunity costs
 - III. erosion costs
 - IV. incremental costs
- a) I and II only
 - b) III and IV only
 - c) II and IV only
 - d) II, III, and IV only
 - e) none of the above.

20. Which one of the following will decrease net working capital of a firm?

- a) a decrease in accounts payable
- b) an increase in inventory
- c) a decrease in accounts receivable
- d) a decrease in fixed assets
- e) none of the above.

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21. Conducting scenario analysis helps managers see the:
- a) impact of an individual variable on the outcome of a project.
 - b) potential range of outcomes from a proposed project.
 - c) changes in long-term debt over the course of a proposed project.
 - d) possible range of market prices for their firm's stock over the life of a project.
 - e) none of the above.
22. 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.
23. The best fit line of a pairwise plot of the returns of the security against the market index returns is called the:
- a) Security Market Line.
 - b) Capital Market Line.
 - c) market risk line.
 - d) characteristic line.
 - e) None of the above.
24. Using the CAPM to calculate the cost of capital for a risky project assumes that:
- a) using the firm's beta is the same measure of risk as the project.
 - b) the firm is all-equity financed.
 - c) the financial risk is equal to business risk.
 - d) Both A and B.
 - e) None of the above.

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25. The Modigliani-Miller Proposition I without taxes states:

- a) a firm can change the total value of its outstanding securities by changing its capital structure proportions.
- b) when new projects are added to the firm the firm value is the sum of the old value plus the new.
- c) managers can make correct corporate decisions that will satisfy all shareholders if they select projects that maximize value.
- d) the determination of value must consider the timing and risk of the cash flows.
- e) None of the above.

26. When comparing levered vs. unlevered capital structures, leverage works to increase EPS for high levels of EBIT because:

- a) interest payments on the debt stay fixed, leaving more income to be distributed over more shares.
- b) interest payments on the debt stay fixed, leaving less income to be distributed over less shares.
- c) interest payments on the debt stay fixed, leaving more income to be distributed over less shares.
- d) interest payments on the debt stay fixed, leaving less income to be distributed over more shares.
- e) None of the above.

27. 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) I and IV only
 - c) I, III, and IV only
 - d) II, III, and IV only
 - e) none of the above.

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28. All else equal, the market value of a stock will tend to decrease by roughly the amount of the dividend on the:

- a) dividend declaration date.
- b) date of payment.
- c) date of record.
- d) ex-dividend date.
- e) none of the above.

29. 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) future dividends will be lower.
- d) the firm has more cash than it needs due to sales declines.
- e) none of the above.

30. Shareholders in a leveraged firm might wish to accept a negative net present value project if:

- a) it increases the standard deviation of the returns on the firm's assets.
- b) it lowers the variance of the returns on the firm's assets.
- c) it lowers the risk level of the firm.
- d) it diversifies the cash flows of the firm.
- e) none of the above.

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

1. Given the opportunity to invest in one of the three bonds listed below, which would you purchase? Assume an interest rate of 5%. Explain the rationale or show the calculation. (10 points)

Bond	Face Value	Annual Coupon Rate	Maturity	Price
A	\$1,000	4%	6 year	\$990
B	\$1,000	6%	10 years	\$990
C	\$1,000	8%	5 years	\$990

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2. Based on the following investment instruments, fill in the blank with the appropriate categories, money market instruments, capital market instruments, or derivatives. (10 points)

	Types of Investment Instruments	Money Market Instruments, Capital Market Instruments, and Derivatives
1	Call options	
2	Corporate Bonds	
3	Convertible Bonds	
4	Futures	
5	American Depository Receipts	
6	Bankers' Acceptances	
7	Preferred Stocks	
8	Commercial Papers	
9	Negotiable Certificates of Deposit	
10	Repurchase Agreements	

3. You own a house that you rent for \$1,200 a month. The maintenance expenses on the house average \$300 a month. The house cost \$89,000 when you purchased it several years ago. A recent appraisal on the house valued it at \$210,000. The annual property taxes are \$5,000. If you sell the house you will incur \$30,000 in expenses. You are deciding whether to sell the house or convert it for your own use as a professional office. What value should you place on this house when analyzing the option of using it as a professional office? (5 points)
4. A firm is reviewing a project with a labor cost of \$8.50 per unit, raw materials cost of \$12.50 a unit, and fixed costs of \$18,000 a month. Sales are projected at 10,000 units over the three-month life of the project. What are the total variable costs of the project? (5 points)
5. The NUK Co. has a debt-equity ratio of .80. The firm's required return on assets is 12% and its cost of equity is 15.68%. What is the pre-tax cost of debt based on MM Proposition II with no taxes? (5 points)
6. The NUK Co. has expected earnings before interest and taxes of \$10,000, an unlevered cost of capital of 11%, and debt with both a book and face value of \$12,000. The debt has an annual 8% coupon. The tax rate is 34%. What is the value of the firm? (5 points)