

朝陽科技大學 100 學年度碩士班招生考試試題

系(所)別：財務金融系

總分：100 分

組別：一般生

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科目：財務管理

一、選擇題(100%，每題 4 分，不倒扣)

- Von Bora Coporation (VBC) is expected to pay a \$2.00 dividend at the end of this year. If you expect VBC's dividend to grow by 5% per year forever and VBC's equity cost of capital is 13%, then the value of a share of VBC stock is closest to: (A) \$40.00 (B) \$15.40 (C) \$25.00 (D) \$11.10
- The effective annual rate (EAR) for a loan with a stated APR of 10% compounded quarterly is closest to: (A) 10.52% (B) 10.25% (C) 10.38% (D) 10.00%

- Iota Industries Market Value Balance Sheet (\$ Millions) and Cost of Capital:

Assets		Liabilities		Corporate Tax Rate = 35%
Cash	250	Debt	650	Debt Cost of Capital = 7%
Other Assets	1200	Equity	800	Equity Cost of Capital = 14%

Iota Industries New Project Free Cash Flows:

Year	0	1	2	3
Free Cash Flows	-\$250	\$75	\$150	\$100

- Assume that this new project is of average risk for Iota and that the firm wants to hold constant its debt to equity ratio. The NPV for Iota's new project is closest to: (A) \$9.00 (B) \$18.50 (C) \$25.25 (D) \$13.25
- Which of the following statements is false? (A) The variance of a portfolio depends only on the variance of the individual stocks. (B) When the covariance equals 0, the stocks have no tendency to move either together or in opposition of one another. (C) The closer the correlation is to -1, the more the returns tend to move in opposite directions. (D) A stock's return is perfectly positively correlated with itself.
 - The British government has a consol bond outstanding that pays £100 in interest each year. Assuming that the current interest rate in Great Britain is 5% and that you will receive your first interest payment one year from now, then the value of the consol bond is closest to: (A) £2000 (B) £1100 (C) £1000 (D) £2100
 - The beta for the risk free investment is closest to: (A) 1 (B) 0 (C) Unable to answer this question without knowing the risk free rate (D) Unable to answer this question without knowing the market volatility

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7. If a bond is currently trading below its par value, then it must be the case that (A) the bond's yield to maturity is less than its coupon rate. (B) the bond's yield to maturity is equal to its coupon rate. (C) the bond's yield to maturity is greater than its coupon rate. (D) the bond is a zero-coupon bond.

8. The Sisyphian Company is planning on investing in a new project. This will involve the purchase of some new machinery costing \$450,000. The Sisyphian Company expects cash inflows from this project as detailed below:

Year One	Year Two	Year Three	Year Four
\$200,000	\$225,000	\$275,000	\$200,000

The appropriate discount rate for this project is 16%. The NPV for this project is closest to:

(A) \$123,420 (B) \$176,270 (C) \$450,000 (D) \$179,590

9. The risk that arises because the value of the futures contract will not be perfectly correlated with the firm's exposure is called (A) speculation risk. (B) commodity price risk. (C) basis risk. (D) liquidity risk.

10. Which of the following statements is false? (A) Over any given period, the risk of holding a stock is that the dividends plus the final stock price will be higher or lower than expected, which makes the realized return risky. (B) The risk premium for diversifiable risk is zero, so investors are not compensated for holding firm-specific risk. (C) Because investors are risk averse, they will demand a risk premium to hold unsystematic risk. (D) Because investors can eliminate firm-specific risk "for free" by diversifying their portfolios, they will not require a reward or risk premium for holding it.

11. Which of the following statements is false? (A) Because investment in permanent working capital is required so long as the firm remains in business, it constitutes a long-term investment. (B) The matching principle states that short-term needs should be financed with short-term debt and long-term needs should be financed with long-term sources of funds. (C) Because temporary working capital represents a short-term need, the firm should finance this portion of its investment with short-term financing. (D) Temporary working capital is the difference between the lowest level of investment in short-term assets and the permanent working capital investment.

12. Consider a bond that pays \$1000 in one year. Suppose that the market interest rate for savings is 8%, but the interest rate for borrowing is 10%. The price range that this bond must trade in a normal market if no arbitrage opportunities exist is closest to: (A) \$909 to \$917 (B) \$917 to \$926 (C) \$909 to \$926 (D) \$909 to \$1000

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13. The idea that managers who perceive the firm's equity is under-priced will have a preference to fund investment using retained earnings, or debt, rather than equity is known as the (A) signaling theory of debt. (B) pecking order hypothesis. (C) credibility principle. (D) lemons principle.
14. The term 2/10 net 30 means? (A) If the invoice is paid within 10 days a 2% discount can be taken, otherwise the full invoice is due in 30 days. (B) If the invoice is paid within 10 days a 2% discount can be taken. If the invoice is paid between 11 and 29 days a 1% discount can be taken. After 30 days the full invoice is due. (C) If the invoice is paid within 2 days a 10% discount can be taken, otherwise the full invoice is due in 30 days. (D) If the invoice is paid within 2 days a 10% discount can be taken, otherwise a 2% discount can be taken if the invoice is paid in 30 days.
15. Money that has been or will be paid regardless of the decision whether or not to proceed with the project is (A) an opportunity cost. (B) cannibalization. (C) a sunk cost. (D) considered as part of the initial investment in the project.
16. Which of the following statements is false? (A) A portfolio costs nothing to construct is called a self-financing portfolio. (B) We can construct a self-financing portfolio by going long some stocks, and going short other stocks with equal market value. (C) The most obvious portfolio to use in a multifactor model is the market portfolio itself. (D) In general, a self-financing portfolio is any portfolio with portfolio weights that sum to one rather than zero.
17. Which of the following statements is false? (A) In bankruptcy, management is given the opportunity to reorganize the firm and renegotiate with debt holders. (B) As long as the corporation can satisfy the claims of the debt holders, ownership remains in the hands of the equity holders. (C) If the corporation fails to satisfy debt holders' claims, debt holders may lose control of the firm. (D) Because a corporation is a separate legal entity, when it fails to repay its debts, the people who lent to the firm, the debt holders are entitled to seize the assets of the corporation in compensation for the default.
18. Consider two firms, With and Without, that have identical assets that generate identical cash flows. Without is an all-equity firm, with 1 million shares outstanding that trade for a price of \$24 per share. With has 2 million shares outstanding and \$12 million dollars in debt at an interest rate of 5%. According to MM Proposition I, the stock price for With is closest to: (A) \$8.00 (B) \$6.00 (C) \$12.00 (D) \$24.00

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19. Which of the following statements is false? (A) It is common practice to estimate beta based on the historical correlation and volatilities. (B) Beta represents the amount by which risks that affect the overall market are amplified for a given stock or investment. (C) Beta measures the diversifiable risk of a security, as opposed to its market risk, and is the appropriate measure of the risk of a security for an investor holding the market portfolio. (D) Beta is the expected percent change in the excess return of the security for a 1% change in the excess return of the market portfolio.
20. The duration of a five-year bond with 8% annual coupons trading at par (\$100) is closest to:
(A) 5.0 Years (B) 3.8 Years (C) 4.3 Years (D) 6.2 Years
21. The JRN Corporation will pay a constant dividend of \$3 per share, per year, in perpetuity. Assume that all investors pay a 20% tax on dividends and that there is no capital gains tax. The cost of capital for investing in JRN stock is 12%. The price of a share of JRN's stock is closest to:
(A) \$24.00 (B) \$20.00 (C) \$18.00 (D) \$25.00
22. Which of the following statements is false? (A) A stock option gives the holder the option to buy or sell a share of stock on or before a given date for a given price. (B) A call option gives the owner the right to buy the underlying asset. (C) A put option gives the owner the right to sell the underlying asset. (D) A financial option contract gives the writer the right (but not the obligation) to purchase or sell an underlying asset at a fixed price at some future date.
23. What kind of corporate debt must be secured by real property?
(A) Debentures (B) Asset-backed bonds (C) Mortgage bonds (D) Notes
24. You are offered an investment opportunity in which you will receive \$23,750 today in exchange for paying \$25,000 in one year. Suppose the risk-free interest rate is 6% per year. Should you take this project? The NPV for this project is closest to:
(A) Yes; NPV = \$165 (B) No; NPV = \$165 (C) Yes; NPV = -\$165 (D) No; NPV = -\$165
25. KD Industries has 30 million shares outstanding with a market price of \$20 per share and no debt. KD has had consistently stable earnings, and pays a 35% tax rate. Management plans to borrow \$200 million on a permanent basis through a leveraged recapitalization in which they would use the borrowed funds to repurchase outstanding shares. After the recapitalization, the total value of KD as a levered firm is closest to:
(A) \$730 million (B) \$470 million (C) \$670 million (D) \$530 million