※ 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

Section A: Multiple Choice Questions (80 marks, 4 points each)

1. Which two of the following are the primary reasons why firms have cash surpluses?

   I. cyclical activities
   II. desire to invest funds
   III. excessive short-term financing
   IV. financing of planned expenditures

   A. I and III only
   B. II and IV only
   C. I and II only
   D. III and IV only
   E. I and IV only

2. Which of the following statements is most correct?

   A. If a company wants to issue new shares of common stock and also wants to implement a dividend reinvestment plan, then it should implement a new-stock dividend reinvestment plan, rather than an open-market purchase plan.
   B. If a company undertakes a 3-for-1 stock split, then the number of shares outstanding should fall, and the stock price should rise.
   C. If a company wants to reduce its debt ratio, then it should repurchase some of its common stock.
   D. Answers a and c are correct.
   E. Answers b and c are correct.

3. Currently, 1 British pound equals 1.62 U.S. dollars and 1 U.S. dollar equals 1.62 Swiss francs. What is the cross exchange rate between the pound and the franc?

   A. 1 British pound equals 3.2400 Swiss francs
   B. 1 British pound equals 2.6244 Swiss francs
   C. 1 British pound equals 1.8588 Swiss francs
   D. 1 British pound equals 1.0000 Swiss francs
   E. 1 British pound equals 0.3810 Swiss francs

※ 考生請注意：本試題 ☑可 □不可 使用計算機

4. Today, you turn 23. Your birthday wish is that you will be a millionaire by your 40th birthday. In an attempt to reach this goal, you decide to save $50 a day, every day until you turn 40. You open an investment account and deposit your first $50 today. What rate of return must you earn to achieve your goal?

A. 9.67 percent
B. 10.75 percent
C. 11.80 percent
D. 13.06 percent
E. 13.54 percent

5. Given the following returns on Stock Q and "the market" during the last three years, what is the difference in the calculated beta coefficient of Stock Q when Year 1 and Year 2 data are used as compared to Year 2 and Year 3 data?

Year	Stock Q	Market
1	6.30%	6.10%
2	-3.70	12.90
3	21.71	16.20

A. 9.17
B. 1.06
C. 6.23
D. 0.81
E. 0.56

6. Company A can issue floating rate debt at LIBOR + 1 percent and can issue fixed rate debt at 9 percent. Company B can issue floating rate debt at LIBOR + 1.4 percent and can issue fixed rate debt at 9.4 percent. Suppose A issues floating rate debt and B issues fixed rate debt. They engage in the following swap: A will make a fixed 7.95 percent payment to B, and B will make a floating rate payment equal to LIBOR to A. What are the resulting *net* payments of A and B?

A. A pays a fixed rate of 9 percent, B pays LIBOR + 1.5 percent.
B. A pays a fixed rate of 8.95 percent, B pays LIBOR + 1.45 percent.
C. A pays LIBOR plus 1 percent, B pays a fixed rate of 9.4 percent.
D. A pays a fixed rate of 7.95 percent, B pays LIBOR.
E. None of the answers above is correct.

※ 考生請注意：本試題 ☑可 ☐不可 使用計算機

7. Which of the following statements concerning capital structure theory is *false*?

A. The major contribution of Miller's theory is that it demonstrates that personal taxes decrease the value of corporate debt.
B. Under MM with zero taxes, financial leverage has no effect on firm value.
C. Under MM with corporate taxes, the value of the levered firm exceeds the value of the unlevered firm by the product of the tax rate times the market value dollar amount of debt.
D. Under MM with corporate taxes, r_s increases with leverage, and this increase is just sufficient to offset the tax benefits of debt financing.
E. Under MM with corporate taxes, the effect of business risk is automatically incorporated because r_{sL} is a function of r_{sU}.

8. Shearson PLC's stock sells for $42 per share. The company wants to sell some 20-year, annual interest, $1,000 par value bonds. Each bond will have attached 75 warrants, each exercisable into one share of stock at an exercise price of $47. Shearson's straight bonds yield 10 percent. The warrants will have a market value of $2 each when the stock sells for $42. What coupon interest rate must the company set on the bonds-with-warrants if the bonds are to sell at par?

A. 6.00%
B. 7.13%
C. 8.24%
D. 9.25%
E. 10.00%

9. Bonner Metals wants to issue new 18-year bonds for some much-needed expansion projects. The company currently has 11 percent bonds on the market that sell for $1,459.51, make semiannual payments, and mature in 18 years. What should the coupon rate be on the new bonds if the firm wants to sell them at par?

A. 5.75 percent
B. 6.23 percent
C. 6.41 percent
D. 6.60 percent
E. 6.79 percent

※ 考生請注意：本試題 ☑可 ☐不可 使用計算機

10. You want to have $1.04 million in real dollars in an account when you retire in 46 years. The nominal return on your investment is 8 percent and the inflation rate is 3.5 percent. What is the real amount you must deposit each year to achieve your goal?

A. $6,667.67
B. $6,878.49
C. $7,433.02
D. $7,615.09
E. $7,744.12

11. 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. it decreases the risk that a firm will default on its debt.

12. Bruno's Lunch Counter is expanding and expects operating cash flows of $26,000 a year for 4 years as a result. This expansion requires $39,000 in new fixed assets. These assets will be worthless at the end of the project. In addition, the project requires $3,000 of net working capital throughout the life of the project. What is the net present value of this expansion project at a required rate of return of 16 percent?

A. $18,477.29
B. $21,033.33
C. $28,288.70
D. $29,416.08
E. $32,409.57

※ 考生請注意：本試題 ☑可 ☐不可 使用計算機

13. For every positive net present value project that a firm undertakes, the equity in the firm will increase the most if the delta of the call option on the firm's assets is:
A. equal to one.
B. between zero and one.
C. equal to zero.
D. between zero and minus one.
E. equal to minus one.

14. Mesmer Analytic, a biotechnology firm, floated an initial public offering of 2,000,000 shares at a price of $5.00 per share. The firm's owner/managers held 60 percent of the company's $1.00 par value authorized and issued stock following the public offering. One month after the IPO, the firm's board of directors declared a one-time dividend of $0.50 per share payable to all stockholders, meaning that the owner/managers would receive an immediate dividend, in part out of the pockets of the new public stockholders. What was the book value per share of the firm before and after the special dividend was paid?

A. $2.60; $2.10
B. $2.60; $2.60
C. $2.60; $2.30
D. $1.60; $1.10
E. $1.60; $1.00

15. Western Wear is considering a project that requires an initial investment of $274,000. The firm maintains a debt-equity ratio of 0.40 and has a flotation cost of debt of 7 percent and a flotation cost of equity of 10.5 percent. The firm has sufficient internally generated equity to cover the equity portion of this project. What is the initial cost of the project including the flotation costs?
A. $279,592
B. $281,406
C. $288,005
D. $297,747
E. $302,762

16. Which of the following are examples of diversifiable risks?
I. the inflation rate spikes suddenly
II. terrorists strike the United States
III. the price of corn increases due to a nationwide drought
IV. taxes are increased on hotel room rentals
A. I and III only
B. II and IV only
C. I and II only
D. III and IV only
E. I, II, and IV only

※ 考生請注意：本試題 ☑可 □不可 使用計算機

17. Stock in Country Road Industries has a beta of 0.97. The market risk premium is 10 percent while T-bills are currently yielding 5.5 percent. Country Road's most recent dividend was $1.70 per share, and dividends are expected to grow at a 7 percent annual rate indefinitely. The stock sells for $32 a share. What is the estimated cost of equity using the average of the CAPM approach and the dividend discount approach?

A. 13.94 percent
B. 14.06 percent
C. 14.21 percent
D. 14.38 percent
E. 14.50 percent

18. The sale of stock in a wholly owned subsidiary via an initial public offering is referred to as a(n):

A. split-up.
B. equity carve-out.
C. countertender offer.
D. white knight transaction.
E. lockup transaction.

19. Firm M is a mature firm in a mature industry. Its annual net income and net cash flow are both consistently high and very stable. The company's growth prospects are quite limited; therefore, the company's capital budget is small relative to its net income. Firm N is a relatively new firm in a new industry. Its annual operating income fluctuates considerably, but the company has substantial growth opportunities. Its capital budget is expected to be large relative to its net income for the foreseeable future. Which of the following statements is most correct?

A. Firm M probably has smaller cash balances than Firm N.
B. Firm M probably has a higher dividend payout ratio than Firm N.
C. If the corporate tax rate increases, the debt ratio of both firms is likely to fall.
D. Statements a and b are correct.
E. Statements b and c are correct.

※ 考生請注意：本試題 ☑可 ☐不可 使用計算機

20. Which one of the following categories of securities tends to have the highest average return?
   A. U.S. Treasury bills
   B. large company stocks
   C. small company stocks
   D. long-term corporate bonds
   E. long-term government bonds

Section B: Essay Questions (20 marks)

1. What are the basic similarities and basic differences between warrants and call options? **(10 pts)**

2. Suppose your boss comes to you and asks you to re-evaluate a capital budgeting project. The first evaluation was in error, he explains, because it ignored flotation costs. To correct for this, he asks you to evaluate the project using a higher cost of capital which incorporates these costs. Is your boss' approach correct? Why or why not? Additionally, please list possible flotation costs for equity financing. **(10 pts)**