※ 考生請注意：本試題可使用計算機。　請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

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

1. When comparing levered vs. unlevered capital structures, leverage works to increase EPS for high levels of EBIT because
   A) interest payments on the debt vary with EBIT levels.
   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) interest payments on the debt stay fixed, leaving more income to be distributed over more shares.

2. 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 net income.
   D) increasing the volatility of the firm's net income
   E) None of the above.

3. One of the indirect costs to bankruptcy is the incentive toward under investment. Following this strategy may result in
   A) the firm always choosing projects with the positive NPVs.
   B) the firm turning down positive NPV projects.
   C) stockholders contributing the full amount of the investment, but both stockholders and bondholders sharing in the benefits of the project.
   D) Both A and C.
   E) Both B and C.

4. In order to value a project which is not scale enhancing you need to
   A) typically calculate the equity cost of capital using the risk adjusted beta of another firm in the industry before calculating the WACC.
   B) typically increase the beta of another firm in the same line of business and then calculate the discount rate using the SML.
   C) typically you can simply apply your current cost of capital.

D) discount at the market rate of return since the project will diversify the firm to the market.
E) typically calculate the equity cost of capital using the risk adjusted beta of another firm in another industry before calculating the WACC.

5. A leveraged buyout (LBO) is when a firm is acquired by
A) a small group of management with equity financing.
B) a small group of equity investors financing the majority of the price by debt.
C) any group of equity investors when the majority is financed with preferred stock.
D) any group of investors for the assets of the corporation.
E) None of the above.

6. Your company has announced a dividend of $2.50 per share. You and the rest of the marginal investors are in the 35% tax bracket. What should happen to the stock price?
A) The price of stock should decrease by $1.625 on the date of record.
B) The price of stock should decrease by $1.625 on the ex-dividend date.
C) The price of stock should decrease by $3.85 on the date of record.
D) The price of stock should decrease by $3.85 on the ex-dividend date.
E) Both B and C.

7. The six components that make up the total costs of a new issues are:
A) the spread; other direct expenses such as filing fees; indirect expenses such as management time; economies of scale; abnormal returns and the Green Shoe option.
B) the discount; other direct expenses such as filing fees; indirect expenses such as management time; due diligence costs; abnormal returns and the Green Shoe option.
C) the spread; other direct expenses such as filing fees; indirect expenses such as management time; abnormal returns; underpricing and the Green Shoe option.
D) the spread; other direct expenses such as filing fees; economies of scale; due diligence costs; abnormal returns and underpricing.
E) None of the above.

8. Chevalier Manufacturing issued a callable bond with a 2010 maturity date. The bond was sold at par and the call premium was set equal to the coupon rate of 20%. A declining call premium was also in place so that the premium declined evenly over the last ten years of premium to zero. What would be the call premium if the bond was called in 2001?
   A) $ 18
   B) $ 20
   C) $180
   D) $200
   E) cannot calculate without market price

9. Which of the following would not be a characteristic of a financial lease?
   A) They are not usually fully amortized.
   B) They usually require the lessor to maintain and insure the leased assets.
   C) They usually do not include a cancellation option.
   D) The lessee usually has the right to renew the lease at expiration.
   E) All of the above are characteristics of financial leases.

10. The lowest value a call option can have is
   A) zero, because it is a limited liability instrument.
   B) S_T, because the basis of value is the stock price.
   C) $S_T - 0$, because it is a limited liability instrument.
   D) $X - S_T$, because the exercise price is the hurdle.
   E) None of the above.

11. Which of the following is not part of the Black Scholes model?
   A) Standard deviation
   B) Time to maturity
   C) Exercise price
   D) Par value of the company's stock
   E) Interest rate

12. You have taken a short position in a futures contract on corn at $2.60 per bushel. Over the next 5 days the contract settled at 2.52, 2.57, 2.62, 2.68, 2.70. Before you can reverse your position in the futures market on the fifth day you are notified to accept delivery. What will you receive on delivery and what is the net amount you receive in total?
 A) $2.60; $-0.10
 B) $2.60; $0.10
 C) $2.60; $2.70
 D) $2.70; $-0.10
 E) $2.70; $2.60

13. Nelson Company had equity accounts in 2000 as follows:

Common Stock ($1 Par Value)	$120,000
Retained Earnings	32,000
Total Shareholder's Equity	$152,000

Projected income is $150,000 and the dividend per share to be paid immediately is 40%. What will the ending retained earnings account be?
 A) $ 90,000.
 B) $ 92,000.
 C) $122,000.
 D) $210,000.
 E) $242,000.

14. Studies on the timing of corporate issues of new equities suggest that corporations tend to offer
 A) new issues after stock price increases. This behavior is consistent with the weak form of the efficient market hypothesis.
 B) new issues after stock price increases. This behavior is inconsistent with the weak form of the efficient market hypothesis.
 C) new issues randomly with regard to stock price changes. This behavior is consistent with the weak form of the efficient market hypothesis.
 D) new issues randomly with regard to stock price changes. This behavior is inconsistent with the weak form of the efficient market hypothesis.
 E) None of the above.

15. Slippery Slope Roof Contracting has an equity beta of 1.2, capital structure with 2/3 debt, and a zero tax rate. What is their asset beta?
    A) 0.40
    B) 0.72
    C) 1.20
    D) 1.80
    E) None of the above

16. The variance of Stock A is .004, the variance of the market is .007 and the covariance between the two is .0026. What is the correlation coefficient?
    A) .9285
    B) .8542
    C) .5010
    D) .4913
    E) .3510

17. The prices for IMB over the last 3 years are given below. Assuming no dividends were paid, what was the 3-year holding period return? Given the following information: Year 1 return = 10%, Year 2 return = 15%, Year 3 return = 12%.
    A) 12.3%
    B) 13.9%
    C) 15.8%
    D) 41.7%
    E) 46.5%

18. You have been asked to evaluate two pollution control devices. The wet scrub costs $100 to set up and $50 per year to operate. It must be completely replaced every 3 years, and it has no salvage value. The dry scrub device costs $200 to set up and $30 per year to operate. It lasts for 5 years and has no salvage value. Assuming pollution control equipment is replaced as it wears out, which

method do you recommend if the cost of capital is 10%?

A) Dry scrub, the EAC is $ 11.00.
B) Wet scrub, the EAC is $ 90.21.
C) Dry scrub, the EAC is $ 82.76.
D) Wet scrub, the EAC is $ 9.79.
E) Dry scrub, the EAC is $124.34.

19. Which of the following amounts is closest to the value of a bond described in *The Wall Street Journal* as 9s 2012? It is January 1, 2004 and the appropriate interest rate is 11%. Assume that the bond matures in the same month as when the quote is given, that interest payments are made twice a year, and that an interest payment has just been made.

A) $ 718.28
B) $ 874.17
C) $ 895.38
D) $ 922.20
E) $1,000.00

20. Which of the following values is closest to the amount that should be paid for a stock that will pay a dividend of $10 in one year and $11 in two years? The stock will be sold in 2 years for an estimated price of $120. The appropriate discount rate is 9%.

A) $114
B) $119
C) $124
D) $129
E) $138

Section B: Essay Questions (20 marks, 10 points each)

1. Explain what is meant by *business risk* and *financial risk*. Do the two risks exert any influence on cost of equity capital in a different manner? Why? Explain in English ONLY.

2. What are the potential causes of the financial crisis of 2008? Explain your answer in English ONLY.