BUSI 2505E - FINAL EXAM PRACTICE QUESTIONS

CHAPTER 11 - PROJECT ANALYSIS AND EVALUATION

1. A firm is reviewing a project with labor cost of $8.80 per unit, raw materials cost of $21.21 a unit, and fixed costs of $9,000 a month. Sales are projected at 10,000 units over the 3-month life of the project. What are the total variable costs of the project?

2. You are considering a new project. The project has projected depreciation of $760, fixed costs of $5,000, and total sales of $11,760. The variable cost per unit is $5.00. What is the accounting break-even level of production?

3. Ann Marie has noted that every time the sales quantity increases by 4 percent for a particular project, the operating cash flow for the project increases by 9.88 percent. What is the degree of operating leverage for this project if the contribution margin is $3?

CHAPTER 14 - WACC

4. Martin Industries just paid an annual dividend of $1.20 a share. The market price of the stock is $27.70 and the growth rate is 4 percent. What is the firm's cost of equity?

5. Ben's Ice Cream just paid its annual dividend of $0.75 a share. The stock has a market price of $26 and a beta of 1. The return on Treasury bills is 5 percent and the market has a 15 percent rate of return. What is the cost of equity?

6. The Bet-r-Bilt Company has a 8-year bond outstanding with a 6.92 percent coupon. Coupons are paid semi-annually. The face amount of the bond is $1,000. This bond is currently selling for 98 percent of its face value. What is the company's pre-tax cost of debt?

7. Jensen's Travel Agency has a 6 percent preferred stock outstanding that is currently selling for $47 a share. The market rate of return is 9 percent and the firm's tax rate is 33 percent. What is Jensen's cost of preferred stock?

8. The Auto Group has 1,000 bonds outstanding that are selling for $920 each. The company also has 7,600 shares of preferred stock at a market price of $45 each. The common stock is priced at $35 a share and there are 29,000 shares outstanding. What is the weight of the preferred stock as it relates to the firm's weighted average cost of capital?

9. Jack's Construction Co. has 80,000 bonds outstanding that are selling at par value. Bonds with similar characteristics are yielding 8 percent. The company also has 3 million shares of common stock outstanding. The stock has a beta of 1.1 and sells for $30 a share. Treasury bills are yielding 3 percent and the market risk premium is 8 percent. Jack's tax rate is 35 percent. What is Jack's weighted average cost of capital?

10. Phil's Carvings, Inc. wants to have a weighted average cost of capital of 9 percent. The firm has an after-tax cost of debt of 6 percent and a cost of equity of 11 percent. What debt-equity ratio is needed for the firm to achieve its targeted weighted average cost of capital?

11. Antonio's is analyzing a project with an initial cost of $81,000 and cash inflows of $45,000 a year for 4 years. This project is an extension of the firm's current operations and thus is equally as risky as the firm. The firm uses only debt and common stock to finance its operations and maintains a debt-equity ratio of 0.5. The pre-tax cost of debt is 7 percent and the cost of equity is 11 percent. The tax rate is 35 percent. What is the projected net present value of this project?

12. The Gilbert Co. uses 60 percent common stock, 15 percent preferred stock, and 25 percent debt as its capital structure. The flotation costs are 3 percent for debt, 9 percent for preferred stock, and 7 percent for common stock. What is the weighted average flotation cost?

CHAPTER 15 - RAISING CAPITAL

13. Your firm is expanding and you need $9 million to help fund this growth. You estimate that you can sell new shares of stock for $20 a share. You also estimate that it will cost you $400,000 for legal, accounting, and other costs related to the stock issue. The underwriters have agreed to a 6 percent spread. How many shares of stock must you sell if you are going to have $9 million available for your expansion needs?

14. Lodge Enterprises plans on raising $20 million through a rights offering. The subscription price is set at $20. Currently, the company has 2.2 million shares outstanding with a current market price of $22.73 a share. Each shareholder will receive one right for each share of stock he or she currently owns. How many rights will be needed to purchase one new share of stock in this offering?

CHAPTER 16 - LEVERAGE AND CAPITAL STRUCTURE

15. Becker Industries is considering an all equity capital structure against one with both debt and equity. The all equity capital structure would consist of 28,000 shares of stock. The debt and equity option would consist of 18,000 shares of stock plus $228,000 of debt with an interest rate of 7.75 percent. What is the break-even level of earnings before interest and taxes between these two options? Ignore taxes.

16. Martin and Sons (M and S) currently is an all equity firm with 60,000 shares of stock outstanding at a market price of $25 a share. The company's earnings before interest and taxes are $60,000. M and S has decided to add leverage to its financial structure by issuing $550,000 of debt with an 8 percent interest rate. This $550,000 will be used to repurchase shares of stock. You own 1,000 shares of M and S stock. You also loan out funds at an 8 percent rate of interest. How many of your shares of stock in M and S must you sell to offset the leverage that the firm is assuming? Assume that you loan out all of the funds you receive from the sale of your stock.

17. The Winter Wear Company has expected earnings before interest and taxes of $1,900, an unlevered cost of capital of 11 percent and a tax rate of 34 percent. The company also has $2,600 of debt that carries an 8 percent coupon. The debt is selling at par value. What is the value of this firm?

18. Anderson's Furniture Outlet has an unlevered cost of capital of 11 percent, a tax rate of 33 percent, and expected earnings before interest and taxes of $1,900. The company has $3,600 in bonds outstanding that have an 8 percent coupon and pay interest annually. The bonds are selling at par value. What is the cost of equity?

19. Your firm has expected earnings before interest and taxes of $2,000. Your unlevered cost of capital is 14 percent and your tax rate is 33 percent. You have debt with both a book and a market value of $3,000. This debt has a 6 percent coupon and pays interest annually. What is your weighted average cost of capital?

CHAPTER 17 - DIVIDEND POLICY

20. You own 330 shares of Abco, Inc. stock. The company has stated that it plans on issuing a dividend of $0.45 a share at the end of this year and then issuing a final liquidating dividend of $2.20 a share at the end of next year. Your required rate of return is 7 percent. Ignoring taxes, what is the value of one share of this stock today?

21. Merlo, Inc. maintains a debt-equity ratio of 0.30 and follows a residual dividend policy. The company has after-tax earnings of $1,800 for the year and needs $1,300 for new investments. What is the total amount Merlo will pay out in dividends this year?

22. A firm has excess cash of $700 and other assets of $6,300. Equity is worth $7,000. The firm has 400 shares of stock outstanding and net income of $792. What will the new earnings per share be if the firm uses its excess cash to complete a stock repurchase?

23. A firm has excess cash of $1100 and other assets of $6,900. Equity is worth $8,000. The firm has 800 shares of stock outstanding and net income of $900. The firm has decided to spend all of its excess cash on a share repurchase program. How many shares of stock will be outstanding after the stock repurchase is completed?

24. A firm has excess cash of $3,600 and other assets of $16,400. Equity is worth $20,000. The firm has 400 shares of stock outstanding and net income of $1,300. What will the stock price per share be if the firm pays out its excess cash as a cash dividend?

CHAPTER 22 - LEASING

25. Saturn, Inc. is trying to decide whether to lease or buy some new equipment. The equipment costs $55,000, has a 5-year life and is worthless after the 5 years. The equipment belongs in a 30 percent CCA class. The pre-tax cost of borrowed funds is 7 percent and the tax rate is 35 percent. The equipment can be leased for $13,000 a year. What is the net advantage to leasing?

26. Big Top, Inc. is contemplating the acquisition of some new tents. The purchase price is $149,000. The tents have a 6-year life after which time they are worthless. The tents belong in a 20 percent CCA class. The tents can be leased for $31,800 a year. The firm can borrow money at 10 percent and has a 33 percent tax rate. The firm does not expect to pay any taxes for the next 6 years because of their accumulated net operating losses. What is the net advantage to leasing?

27. Your firm is considering either leasing or buying some new equipment. The lessor will charge $15,800 a year should you decide to lease. The purchase price is $55,000. The equipment has a 4-year life after which time it will be worthless. The equipment belongs in a 35 percent CCA class. Your firm can borrow money at 8 percent and faces a tax rate of 32 percent. Your firm has sufficient tax loss carryovers to offset any potential taxable income the firm might have over the next five years. What is the net advantage to leasing?

28. Your firm is considering either leasing or buying some new equipment. The lessor will charge $16,500 a year should you decide to lease. The purchase price is $57,000. The equipment has a 3-year life after which time it is expected to have a resale value of $13,500. The equipment belongs in a 40 percent CCA class. Your firm can borrow money at 7 percent and faces a tax rate of 32 percent. Your firm has sufficient tax loss carryovers to offset any potential taxable income the firm might have over the next five years. What is the net advantage to leasing?

29. Your firm is considering either leasing or buying some new equipment. The lease payments will be $15,700 a year. The purchase price is $50,000. The equipment has a 4-year life after which time it will be worthless. The equipment belongs in a 20 percent CCA class. Your firm borrows money at 8 percent and has a 35 percent tax rate. What is the net advantage to leasing?

30. Your firm is considering either leasing or buying some new equipment. The lease payments will be $8,290 a year. The purchase price is $45,000. The equipment has a 6-year life after which time it is expected to have a resale value of $5,100. The equipment belongs in a 35 percent CCA class. Your firm borrows money at 8 percent and has a 33 percent tax rate. What is the net advantage to leasing?

31. Jupiter Enterprises is considering the purchase of some new equipment costing $78,000. This equipment has a 7-year life after which time it will be worthless. The equipment belongs in a 25 percent CCA class. The firm borrows funds at a 10 percent rate of interest and faces a tax rate of 35 percent. The firm also has the option of leasing the equipment. What is the amount of the break-even lease payment?

32. Your firm is considering either leasing or buying some new equipment. The lease payments will be $8,320 a year. The purchase price is $27,000. The equipment has a 2-year life after which time it is expected to have a resale value of $14,000. The equipment belongs in a 40 percent CCA class. Your firm borrows money at 10 percent and has a 35 percent tax rate. What is the incremental cash flow for year 1 if the company decides to lease the equipment rather than purchase it?

33. Toytown Industries is contemplating the acquisition of some new equipment. The purchase price is $35,000. The equipment has a 5-year life. The company expects to sell the equipment at the end of year 5 for $9,400. The equipment belongs in a 30 percent CCA class. The equipment can be leased for $6,690 a year. The firm can borrow money at 8 percent and has a 33 percent tax rate. What is the incremental annual cash flow for year 4 if the company decides to lease the equipment rather than purchase it?

34. Toytown Industries is contemplating the acquisition of some new equipment. The purchase price is $30,000. The equipment has a 5-year life. The company expects to sell the equipment at the end of year 5 for $5,600. The equipment belongs in a 40 percent CCA class. The equipment can be leased for $6,090 a year. The firm can borrow money at 8 percent and has a 33 percent tax rate. What is the depreciation tax shield for year 3?

Answer Key

1. $300,100
2. 1,200 units
3. 2.47
4. 8.51 percent
5. 15.00 percent
6. 7.26 percent
7. 12.77 percent
8. 15.02 percent
9. 8.69 percent
10. 0.67
11. $65,268.69
12. 6.3 percent
13. 500,001 shares
14. 2.2 rights
15. $49,476.00
16. 367 shares
17. $12,284.00
18. 11.79 percent
19. 12.69 percent
20. $2.34
21. $800
22. $2.20
23. 690 shares
24. $41
25. $–80
26. $–3,347
27. $–1,518
28. $–352
29. $–1,438
30. $424
31. $15,012
32. $7,298
33. $5,925
34. $5,760