



Corporate Finance

In Session Detail Review Material

Disclaimer:

These questions are designed to provide the student with a general review of areas covered on the CMA Entrance Examination. While the topic coverage and the number of response stems is consistent with that on the Entrance Examination, the level of difficulty of questions on the Entrance Exam tends to be a notch higher for the following reasons -- the length of question (entrance exam questions tend to be longer requiring more time to read); the types of distracters (the entrance examination tends to use distracters such as none of the above, all of the above and both x and y to a larger degree than other examinations); and the direction of the calculation (the entrance examination will often have you work back to front, middle to either front to back and so on).

Use of the Material

These questions will be covered in depth in the review session. The pace will be quick (frantic?) so students are advised to at least have read them (and at best have worked through them under exam conditions).

Capital Budgeting

Comprehensive Review

1. Consider the following questions concerning Lance Sterling International Ltd (LSI)
 - (a) LSI is considering the purchase of a \$50,000 machine that would save labor costs of \$25,000 in each of years 1 and 2; \$30,000 in each of years 3 and 4 and an additional \$25,000 in year 5. The machine is not expected to have a salvage value at the end of the fifth year. Ignoring the benefits of CCA, calculate the IRR of the project. LSI's cost of capital is 16 percent and its marginal tax rate is 40%.
 - (b) Assume now that the machine in (a) above qualifies as manufacturing & processing equipment and falls into Class 43 (30% declining balance). Further, it is determined that this machine will have a salvage value of \$15,000 at the end of five years. Calculate the revised net present value of the project.
 - (c) Lance (err Mr. Sterling) rushes into your office. "You neglected to ask me if this machine was new or a replacement. The new machine will replace an existing machine that originally cost \$75,000 five years ago. It is $\frac{1}{2}$ depreciated has a fair value of \$19,000 today and will have a salvage value of \$7,000 if we were to use it for the rest of its useful life. In future, please ensure that I mention all relevant details before rushing off to generate solutions." How does this effect calculations made in (b) above?

This information pertains to the following questions.

Yipann Corporation is reviewing an investment proposal. The initial cost as well as other related data for each year are presented in the schedule below. All cash flows are assumed to take place at the end of the year. The salvage value of the investment at the end of each year is equal to its net book value and there will be no salvage value at the end of the investment's life. Data regarding the investment proposal are as follows:

Year	Initial Cost	Net After-Tax Cash Flows	Net Income
0	\$105,000		
1		\$50,000	\$15,000
2		45,000	17,000
3		40,000	19,000
4		35,000	21,000
5		30,000	23,000

Yipann's effective tax rate is 40% and it uses a 24% after-tax target rate of return for new investment proposals.

2. The traditional payback period for the investment proposal is
 - a) 0.88 years.
 - b) 1.94 years.
 - c) 2.25 years.
 - d) 1.60 years.

3. The net present value for the investment proposal (rounded to the nearest hundred dollars) is
 - a) \$49,800.
 - b) \$10,500.
 - c) \$(55,200).
 - d) \$115,500.

4. (+) Now assume that the initial investment is for machinery that is expected to have a salvage value of \$10,000 at the end of five years. The machinery would be in the same CCA class as other assets owned by the company (CCA rate of 30%) and would be amortized on a straight-line basis. By what amount would this increase the net present value for the investment proposal (rounded to the nearest hundred dollars)?
- a) \$26,000
 - b) \$22,500
 - c) \$23,700
 - d) \$20,300

This information pertains to the following questions.

Company D is considering an investment in a new more efficient machine to replace an existing machine to produce Product Q. Product Q is in the mature stage of its life cycle and Company D expects to produce and sell it for only five more years. Data pertaining to the two machines are as follows:

	New Machine	Existing Machine
Current cost	\$60,000	NA
Current disposal value	\$60,000	\$30,000
Disposal value in five years	\$25,000	\$10,000
Annual amortization	\$7,000	\$4,000
Annual cash operating costs	\$8,000	\$15,000
Other cash costs to produce Product Q	\$82 per unit	\$85 per unit

The company expects to produce and sell 2,500 units of Product Q per year for the next five years. Its required rate of return is 12%. For tax purposes, the two machines are considered to be in the same asset class, together with many other of the company's assets.

5. (+) Ignoring income taxes, what is the incremental net present value of the investment in the new machine, rounded to the nearest '000?
- a) \$31,000
 - b) \$22,000
 - c) \$36,000
 - d) \$4,000

6. Assume that neither the existing machine nor the new machine will have any disposal value at the end of five years. Ignoring income taxes, what is the payback period for the potential investment in the new machine?
- a) 4.2 years
 - b) 10 years
 - c) 2.1 years
 - d) 3.8 years
7. Assume that Company D has an effective income tax rate of 40%, that neither the existing nor new machine will have any disposal value at the end of five years, that both machines have a capital cost allowance (CCA) rate of 20%, and that the current undepreciated capital cost of the old machine is \$25,000. What would be the incremental CCA tax shield if the investment were made in the new machine?
- a) \$7,500
 - b) \$4,368
 - c) \$6,696
 - d) \$7,098
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HGML Co. produces one product using a single machine that has a capacity of 100,000 units per year. Last year, the company produced and sold 80,000 units. It is considering replacing the machine with a new, automated machine that would eliminate all direct labour costs, but would require a higher grade of direct materials and a licensing fee of \$1 per unit. The production costs using the new versus the old machine at two production activity levels are as follows:

	80,000 units		100,000 units	
	Old Machine	New Machine	Old Machine	New Machine
Direct materials	\$120,000	\$152,000	\$150,000	\$190,000
Direct labour	80,000	-	100,000	-
Amortization	50,000	70,000	50,000	70,000
Licensing fee	-	80,000	-	100,000
Other overhead	<u>350,000</u>	<u>280,000</u>	<u>380,000</u>	<u>310,000</u>
Total	<u>\$600,000</u>	<u>\$582,000</u>	<u>\$680,000</u>	<u>\$670,000</u>

The selling price of the product is \$10 per unit. All selling and administration costs are fixed at \$300,000 per year, which would not change if the new machine is acquired. The company has a 40% tax rate and an after-tax cost of capital of 10%. The new machine would have a life of 3 years, which is the same as the remaining useful life of the old machine. Neither machine would have a material disposal value at the end of 3 years. Other data pertaining to the two machines are as follows:

	Old Machine	New Machine
Original capital cost	\$250,000	\$210,000
Current market value	\$120,000	\$210,000
Current book value	\$180,000	
Undepreciated capital cost	\$195,500	
Capital cost allowance rate	30%	30%

8. Assuming the company continues to use the old machine, what is the contribution margin per unit of the product?
- a) \$7.50
 - b) \$4.00
 - c) \$6.925
 - d) \$6.00

9. (+) What is the incremental CCA tax shield if the new machine is purchased as opposed to keeping the old machine?
- a) \$25,773
 - b) \$27,000
 - c) \$8,591
 - d) \$4,152
10. (+) Assume HGML Co. expects to sell 100,000 units per year for the next three years. What is the present value of the annual incremental cash flows (rounded to the nearest \$100) if the company replaces the old machine with the new one (ignore the CCA tax shield)?
- a) \$29,800
 - b) \$74,600
 - c) \$90,000
 - d) \$44,800

Twoquest Inc. is considering a new investment. The following table sets out information regarding the firm and the potential project.

Annual revenues for the project	\$1,200,000
Annual expenses for the project	\$740,000
Initial investment	\$1,000,000
Weighted average cost of capital	12%
Corporate tax rate	40%
Market value debt/equity ratio	1
Cost of debt	12%

The project has an expected life of five years. There will be no salvage value at that time. Annual revenues and expenses occur at the end of each year for the five years. Assume that the initial investment can be neither amortized nor expensed for tax purposes.

11. (+) What is the net present value of the project?

- a) \$994,980
- b) \$658,300
- c) \$380,000
- d) (5,020)

12. (+) What is Twoquest's cost of equity?

- a) 12.0%
- b) 14.4%
- c) 12.5%
- d) 16.8%

Finance Theory

13. Determining the appropriate level of working capital for a firm requires
- a) evaluating the risks associated with various levels of capital assets and the types of debt used to finance these assets.
 - b) changing the capital structure and dividend policy for the firm.
 - c) maintaining short-term debt at the lowest possible level because it is generally more expensive than long-term debt.
 - d) offsetting the profitability of current assets and current liabilities against the probability of technical insolvency.
14. Suppose a firm currently offers credit terms of 2/10, net 30. Assume that the firm's annual cost of debt is 10% and that all customers can borrow at the same rate as the firm. If customers forego the discount, what is the net present value of the cost to the customer of a \$100 purchase?
- a) \$102.45
 - b) \$100.00
 - c) \$97.23
 - d) \$99.18
15. (-) Which of the following is NOT generally a right of common shareholders of a corporation?
- a) The right to vote for members of the board of directors.
 - b) In bankruptcy, the right to residual assets of the firm.
 - c) The right to receive a regular dividend from the firm.
 - d) The right to limit claims on their personal wealth by the corporation's creditors to the amount of money invested in the company's shares.
16. The explicit cost of debt financing is the interest expense. The implicit cost of debt financing is the
- a) increase in the cost of debt as the debt-to-equity ratio increases.
 - b) increase in the costs of debt and equity as the debt-to-equity ratio increases.
 - c) decrease in the cost of equity as the debt-to-equity ratio increases.
 - d) increase in the cost of equity as the debt-to-equity ratio decreases.

17. Which of the following is NOT a potential factor in the dividend payment decision, assuming a rational investor?
- a) The level of interest rates.
 - b) The comparative tax rate on dividends versus capital gains.
 - c) The desire of shareholders to limit the amount of available cash in the organization for management to spend on negative NPV projects.
 - d) The transaction costs associated with investors creating their own dividends, in comparison to the transaction costs associated with the firm issuing dividends.
18. (-) XYZ Inc. is a Canadian publicly-traded corporation with a controller and a treasurer reporting to the vice-president of finance. Which of the following is the LEAST LIKELY to be a responsibility of the treasurer?
- a) Investing in and managing long-term assets.
 - b) Distributing funds through a cash dividend policy.
 - c) Securing and servicing short-term financing.
 - d) Preparing financial statements.
19. (-) Which of the following suggests that the stock market is efficient?
- a) Last year, your stock index mutual fund achieved the percentage return that you expected it would make.
 - b) XYZ Company reported lower than expected earnings for the 3rd quarter of the year. Within minutes of the announcement, the stock price fell by over 10%.
 - c) The share price of ABC Corporation dropped by 8% last year, which matched the overall drop in the market.
 - d) A firm's announcement of a large new diamond find in the Northwest Territories was greeted by a 20% increase in share price. The share price increase occurred gradually over a four-day period following the announcement. No other new information was released during this time.

20. (-) An initial public offering of shares by a company would be made in a
- a) money market.
 - b) secondary market.
 - c) primary market.
 - d) stock exchange.
21. (-) According to finance theory, which of the following best states what should be the primary goal of a large public company's vice-president of finance?
- a) Minimize the risks taken by the company.
 - b) Maximize the current value per share of the company's existing stock.
 - c) Maximize the company's current accounting profit.
 - d) Maximize the company's current earnings per share.
22. The efficient markets hypothesis of finance has many important implications for both investors and managers. Which of the following would be an implication of the efficient markets hypothesis (for semi-strong or strong forms)?
- a) On average, expected rates of return are usually less than those returns that are actually realized.
 - b) Security prices react quickly to new information.
 - c) Without private (unique or inside) information, increased expected returns require increased exposure to risk.
 - d) Both b) and c) above.
23. Short-term, unsecured promissory notes issued by large firms are known as
- a) agency securities.
 - b) bankers' acceptances.
 - c) commercial paper.
 - d) repurchase agreements.

24. Acme Limited offers credit terms of a 2% discount if paid within 10 days or the full balance is due within 30 days (2/10, net 30). If 20% of Acme's customers pay cash on delivery, 60% pay on day 10, and 20% pay on day 30, the average collection period is
- a) 20 days.
 - b) 12 days.
 - c) average receivables divided by average daily sales.
 - d) annual credit sales divided by average receivables.
25. From the viewpoint of the investor, which of the following securities provides the LEAST risk?
- a) Mortgage bonds.
 - b) Subordinated debentures.
 - c) Income bonds.
 - d) Debentures.
26. Obtaining suitable financing is a singularly difficult problem for owner-managers of small businesses. What is the most common source of start-up funds for a small business?
- a) Personal funds.
 - b) Loans provided by chartered banks.
 - c) Government programs.
 - d) Public offerings.
27. A company issued rights as part of a recent financing. It takes two (2) rights plus \$10 to purchase one new share. Shares currently trade at \$12 each and the rights are about to expire. The minimum value of a right is
- a) \$4.00.
 - b) \$1.33.
 - c) \$1.00.
 - d) \$0.

28. Which of the following best explains the shape of the yield curve (term structure of interest rates)?
- a) A downward slope can be explained by the expectations theory, as investors expect short-term interest rates to decrease, thereby reducing the inflation premium.
 - b) A downward slope can be explained by the expectations theory, as investors expect long-term interest rates to increase, thereby increasing the inflation premium.
 - c) An upward sloping curve can be explained by the liquidity preference theory, whereby investors demand a liquidity premium.
 - d) Both a) and c) above.
29. What is the effect of a stock dividend?
- a) Decreases the debt to equity ratio of a firm.
 - b) Decreases the size of the firm.
 - c) Increases the shareholder's wealth.
 - d) None of the above.
30. (-) According to finance theory, which of the following best states what should be the primary goal of a large public company's vice-president of finance?
- a) Maximize the current value per share of the company's existing stock.
 - b) Maximize the asset value of the entire company.
 - c) Maximize the company's current accounting profit.
 - d) Maximize the company's current earnings per share.

31. The security most often held as a substitute for cash is

- a) treasury bills.
- b) common shares.
- c) gold.
- d) corporate bonds.

32. (+) An individual has the following portfolio of investments:

	Amount	Rate of Return
Investment 1	\$20,000	8%
Investment 2	\$40,000	6%
Investment 3	\$70,000	3%
Investment 4	\$10,000	10%

What is the expected rate of return for the entire portfolio?

- a) 3.00%
- b) 5.07%
- c) 6.75%
- d) 27.00%

33. Methods of accelerating cash collections include all of the following except

- a) decentralized collections.
- b) electronic funds transfer.
- c) centralized banking.
- d) compensating balances.

34. Which of the following is a spontaneous source of financing?

- a) Notes payable.
- b) Long-term debt.
- c) Prepaid interest.
- d) Trade credit.

35. Marston Supply Company has credit sales of \$2 million/year. Collections average \$8,000/day with 250 working days per year. Marston is going to reduce its internal collection processing time by 1 day. What would be its annual savings assuming a 14% cost of funds?
- a) \$1,120
 - b) \$1,000
 - c) \$1,550
 - d) \$8,000
36. Serial bonds are attractive to investors because
- a) all bonds in the issue mature on the same date.
 - b) the yield to maturity is the same for all bonds in the issue.
 - c) investors can choose the maturity that suits their financial needs.
 - d) the coupon rate on these bonds is adjusted to the maturity date.
37. (-) Normally, the issuance of a stock dividend of one share of stock for every ten shares currently held will
- a) increase shareholders' equity.
 - b) decrease future earnings per share.
 - c) cause the market price of the shares to fall.
 - d) do both b) and c) above.

Risk & Beta

38. (-) In the financial management literature, diversifiable risk includes risk related to
- a) government monetary policies.
 - b) government fiscal policies.
 - c) company product development.
 - d) inflation.
39. The measurement of the systematic risk associated with Avery Inc. shares in relation to average assets results in a value of 3. The market risk premium is 12% and the current return on short-term government bonds is 5.5%. Avery Inc.'s rate of return on equity is
- a) 41.5%.
 - b) 17.5%
 - c) 36.0%.
 - d) 25.0%.
40. (+) A company borrows \$100,000 for one year. The lenders perceive a 2% chance of default in which case the lenders receive nothing. To provide an expected yield of 8%, what is the default premium for the company loan?
- a) 0.16%
 - b) 2%
 - c) 2.2%
 - d) 8%
41. In analyzing the annual average return on share capital for an industry, it was noted that Firm A's stock has a beta factor of 1.2 and that the rate of return on the industry's market portfolio is 2% lower than the risk free rate. The risk free rate is expected to increase by one percentage point next year. Assuming the rate of return on the industry's market portfolio remains constant, one would predict that Firm A's expected rate of return would
- a) be lower than the risk free rate.
 - b) be higher than the risk free rate.
 - c) remain constant.
 - d) decrease.

Cost of Capital

42. Preferred shares with a par value of \$50 have a dividend rate of 7% payable at the end of each year. The risk-free rate on long-term debt is 11% at the beginning of the year and 13% at the end of the year. If investors expect a return on these and similar shares of 12%, the expected market price of these preferred shares is
- a) \$26.92.
 - b) \$29.17.
 - c) \$31.82.
 - d) \$50.00.
43. An issue of common stock has just paid a dividend of \$2.50. Its growth rate is 8%. What is its price if the market's rate of return is 16%?
- a) \$15.63
 - b) \$16.67
 - c) \$31.25
 - d) \$33.75
44. An issue of common stock is selling for \$35.75. The year-end dividend on common stocks is expected to be \$1.45 assuming a constant growth rate of 6%. The year-end dividend on preferred shares is currently \$.90. Preferred shares are trading at \$24.75. What is the required rate of return on the common shares?
- a) 9.6%
 - b) 10.3%
 - c) 10.1%
 - d) 3.6%
45. An issue of common stock is expected to pay a dividend of \$4 at the end of the year. Its growth rate is equal to 8%. If the required rate of return is 13%, what is its current price?
- a) \$86.40
 - b) \$30.77
 - c) \$80.00
 - d) \$65.00

46. If expected dividends grow at 8% and the appropriate discount rate is 12%, what is the value of a stock with an expected dividend of \$1.37?
- a) \$36.99
 - b) \$11.42
 - c) \$17.13
 - d) \$34.25
47. The current market price of the common shares of Largeco Inc. is \$4.00 per share. Largeco just paid a dividend of \$0.25. Historically, dividends have grown at an average rate of 2%, and investment analysts have indicated that this growth rate can be maintained indefinitely. The analysts have also indicated that the risk-free rate of return is 3% and the expected return on the market is 9%. What is the beta of Largeco common shares?
- a) 0.5625
 - b) 0.5972
 - c) 0.8750
 - d) 0.8958
48. The common shares of Jonco Corp. are currently priced to provide investors with a return of 14%. Jonco just paid a dividend of \$2.50. Historically, dividends have grown at an average rate of 8% and investment analysts have indicated that this growth rate can be maintained indefinitely. What should the current price of Jonco's shares be?
- a) \$17.86
 - b) \$41.67
 - c) \$45.00
 - d) \$47.50
49. An investment with a face value of \$100 and an original maturity of 6 years were issued 3 years ago at a price of \$99, but are currently priced to offer a yield of 3%. What is the current price of this investment?
- a) \$ 83.94
 - b) \$ 91.51
 - c) \$ 108.17
 - d) \$ 118.21

50. Stewart Inc. currently has 5 million preferred shares outstanding. The shares have a par value of \$5 per share and a stated dividend rate of \$0.40 per share, and are currently trading at a price of \$3.64 per share. What is the component cost of the preferred shares if Stewart's tax rate is 35% and flotation costs on a new issue of preferred shares are 4% after tax?
- a) 7.44%
 - b) 8.33%
 - c) 10.98%
 - d) 11.45%
51. Shuben Corp.'s long-term debt (8-year maturity) is currently priced to offer a yield to maturity of 9.8%. The debt carries a coupon rate of 4.5% with interest paid semi-annually. Flotation costs on new debt are 5% before tax and Shuben's tax rate is 42%. What is Shuben's component cost of debt?
- a) 4.68%
 - b) 5.85%
 - c) 5.98%
 - d) 10.32%
52. The beta on Ferny Inc.'s common shares is 0.65, the risk-free rate of interest is 4%, and the market price of risk is 6%. Flotation costs on new equity are 4% before tax, Ferny's tax rate is 34%, and Ferny intends to issue new common shares. What is Ferny's component cost of equity?
- a) 3.44%
 - b) 7.90%
 - c) 8.11%
 - d) 8.23%
53. Trail Ltd. has 25 million common shares outstanding, which have a current market price of \$23 per share. The shares just paid a dividend of \$1.10 per share, and investment analysts expect the dividends to grow at an average annual rate of 2% for the foreseeable future. Flotation costs on new common shares are expected to be 3% after tax, Trail's tax rate is 35%, and Trail intends to finance new projects using retained earnings. What is the component cost of Trail's common shares?
- a) 6.78%
 - b) 6.88%
 - c) 7.03%
 - d) 7.09%

Weighted Average Cost of Capital

This information pertains to the following questions

YG Inc. is determining its cost of capital for future investment decisions. Management believes that the company's current market value capital structure is optimal and intends to maintain this structure into the future. Current debt has an interest rate of 10%, but any new debt will only require an interest rate of 7%. Preferred shares have a par value of \$50 and pay a dividend of \$4 per year. These preferred shares are currently trading in the market at a price of \$33 per share. The current price of YG Inc.'s common stock is \$40 per share and the company just paid the annual cash dividend of \$3 per share. YG Inc. expects to increase its dividend by 10% each year into the foreseeable future. The current market value of the company's debt and equity are as follows:

Debt	\$3,000,000
Preferred shares	\$1,000,000
Common equity	\$6,000,000

The company's marginal tax rate is 40%.

54. What are YG Inc.'s after-tax cost of debt and preferred shares for purposes of determining the weighted average cost of capital (rounded to the nearest tenth of a percent)?
- | | |
|------------------------|----------------------------------|
| a) Cost of debt = 4.2% | Cost of preferred shares = 7.3% |
| b) Cost of debt = 6.0% | Cost of preferred shares = 7.3% |
| c) Cost of debt = 6.0% | Cost of preferred shares = 12.1% |
| d) Cost of debt = 4.2% | Cost of preferred shares = 12.1% |
55. (+) Assume that, for purposes of determining the weighted average cost of capital, the appropriate after-tax cost of debt is 4.8% and the appropriate cost of preferred shares is 13.3%. What is YG Inc.'s weighted average cost of capital (rounded to the nearest tenth of a percent)?
- | |
|----------|
| a) 7.7% |
| b) 11.7% |
| c) 13.7% |
| d) 13.3% |

This information pertains to the following questions

The following information pertains to Company W for Year 10 (in millions of dollars):

<u>Market Value Balance Sheet</u>		<u>Income Statement</u>	
Current assets	\$150	Revenue	<u>\$1,000</u>
Other assets	<u>300</u>	Cost of goods sold	575
	<u>\$450</u>	Amortization	40
Current liabilities	\$100	Interest	15
Long-term debt (10% interest)	150	Other expenses	300
Common equity	<u>200</u>	Income taxes (40%)	<u>28</u>
	<u>\$450</u>		<u>958</u>
		Net income	<u>\$ 42</u>

Company W has 10 million shares outstanding and paid a dividend of \$1.10 per share in Year 10. It is expected that the amount of the dividend will be increased at a rate of 5% per year into perpetuity.

56. (+) What is the after-tax weighted average cost of capital of Company W?
- a) 10.4%
 - b) 5.4%
 - c) 8.1%
 - d) 8.7%
57. (+) Assume that Company W's weighted average cost of capital is 15% and that companies in its industry typically use operating cash flows in calculating economic value added. What is the economic value added for Company W (in millions of dollars)?
- a) \$67.0
 - b) \$22.5
 - c) \$(10.5)
 - d) \$32.5

58. (+) Given the following information, what is the after-tax weighted average cost of capital (WACC) of the firm?

Market Value Balance Sheet ('000s)

Cash	\$ 100	Long-term debt	\$ 400
Other	900	Preferred equity	100
		Common equity	500
	<u>\$1,000</u>		<u>\$1,000</u>

Interest on the debt	8%
Cost of preferred equity)	9%
Corporate tax rate	40%
Beta	1.2
Expected annual return for the market	14%
Market premium over the risk-free rate	6%

- a) 10.42%.
- b) 10.44%.
- c) 15.20%.
- d) 11.70%.

Time Value of Money

59. An all equity firm is expected to have a net income (NI) of \$5,000,000 per year for each of the next five years. Its NI in year six is expected to be 60% higher than its NI in year five. Its annual NI after year six, and into perpetuity, is expected to be equal to its NI in year six. The firm's discount rate is 10%. Assuming NI approximated net cash flows, what is the total value of the firm today?
- a) \$25,000,000
 - b) \$68,635,000
 - c) \$18,955,000
 - d) \$98,955,000
60. Which of the following will decrease the present value of ten equal annual annuity payments, all else remaining equal?
- a) Increasing the number of payments.
 - b) Increasing the amount of each payment.
 - c) Making the annuity payments at the start of each period instead of at the end of the period.
 - d) None of the above.
61. (+) A \$100,000 par, 10 percent coupon rate bond, with a remaining life of 8 years, pays interest semi-annually. Assume that the bond's yield to maturity is 12 percent. The market price of the bond, calculated using the tables provided with the examination, should be
- a) \$89,930.
 - b) \$90,080.
 - c) \$110,720.
 - d) \$110,828.

62. (+) A bond was issued on June 1, Year 1, and it matures on June 1, Year 20. The present date is June 1, Year 8, and the June 1, Year 8, coupon payment has just been paid. The bond has a face value of \$50,000, a coupon rate of 6% compounded semiannually, and a current yield of 8% compounded semiannually. Ignoring taxes, what is the current dollar price of the bond (to the nearest hundred dollars)?
- a) \$40,200.
 - b) \$42,500.
 - c) \$58,500.
 - d) \$42,400.

Leases

63. A long-term, non-cancellable contract between a lessor, who owns the asset, and a lessee, who is responsible for insurance and maintenance associated with the asset, is known as
- a) a financial (or finance) lease.
 - b) an operating lease.
 - c) a service lease.
 - d) a term lease.

Leverage

64. The revenues, expenses and capital structure of a company are as follows:

Sales	\$400,000
Variable costs (45% of sales)	\$180,000
Fixed costs (excluding interest and taxes)	\$90,000
Debt (at 10% annual interest)	\$900,000
Equity (100,000 shares)	\$1,000,000

Given the information provided above, what is the degree of operating leverage for this company (rounded)?

- a) 1.4
- b) 1.7
- c) 3.1
- d) 3.3

65. The revenues, expenses and capital structure of a company are as follows:

Sales	\$400,000
Variable costs (45% of sales)	\$180,000
Fixed costs (excluding interest and taxes)	\$90,000
Debt (at 10% annual interest)	\$900,000
Equity (100,000 shares)	\$1,000,000

Given the information provided above, what is the degree of financial leverage for this company (rounded)?

- a) 1.4
- b) 1.7
- c) 3.1
- d) 3.3

66. Financial leverage results from the use of a source of funds for which the firm

- a) pays a fixed percentage of revenue.
- b) pays a fixed percentage of income.
- c) earns a higher rate of return from its use than its cost.
- d) pays a variable return on each dollar amount raised.

Valuation

67. GEF Inc. believes that if it acquires HIP Ltd., the resulting combined company will experience synergistic annual operating savings of \$1,000,000 before taxes. Currently, HIP Ltd. generates annual after-tax cash flows of \$4,000,000. Both the current annual cash flows and the synergistic savings are expected to continue indefinitely. Assuming an income tax rate of 40% and a required rate of return of 16%, what would be the maximum amount that GEF Inc. should be willing to pay for HIP Ltd?
- a) \$21,250,000
 - b) \$31,250,000
 - c) \$18,750,000
 - d) \$28,750,000