FIN303

**Review questions exam 1**

**Chapter 1**

1. Which of the following statements is most correct?

a. One advantage of forming a corporation is that you have limited liability. \*

b. Corporations face fewer regulations than sole proprietorships.

c. One disadvantage of being a sole proprietor is that you have to pay corporate taxes, even though you don’t realize the benefits of being a corporation.

d. Statements b and c are correct.

2. The primary goal of a publicly-owned firm interested in serving its stockholders should be to

a. Maximize expected total corporate profit.

b. Maximize expected EPS.

c. Minimize the chances of losses.

d. Maximize the stock price per share. \*

3. Which of the following actions are likely to reduce agency conflicts between stockholders and managers?

a. Paying managers a large fixed salary.

b. Increasing the threat of corporate takeover. \*

c. Placing restrictive covenants in debt agreements.

d. All of the statements above are correct.

4. Which of the following statements is most correct?

a. A good goal for a corporate manager is maximization of expected EPS.

b. Most business in the U.S. is conducted by corporations; corporations’ popularity results primarily from their favorable tax treatment.

c. A good example of an agency relationship is the one between stockholders and managers. \*

d. Corporations and partnerships have an advantage over proprietorships because a sole proprietor is subject to unlimited liability, but investors in the other types of businesses are not.

**Chapter 2**

5. Which of the following statements is most correct?

a. If an investor sells 100 shares of Microsoft to his brother-in-law, this is a primary market transaction.

b. Private securities are generally less liquid than publicly traded securities.

c. Money markets are where short-term, liquid securities are traded, whereas capital markets represent the markets for long-term debt and common stock.

d. Statements b and c are correct. \*

6. Which of the following statements is most correct?

a. While the distinctions are blurring, investment banks generally specialize in lending money, whereas commercial banks generally help companies raise capital from other parties.

b. Money market mutual funds usually invest their money in a well-diversified portfolio of liquid common stocks.

c. The NYSE operates as an auction market, whereas NASDAQ is an example of a dealer market. \*

d. Statements b and c are correct.

7. Which of the following is an example of a capital market instrument?

a. Commercial paper.

b. Preferred stock. \*

c. U.S. Treasury bills.

d. Banker’s acceptances.

8. Money markets are markets for

a. Foreign currency exchange.

b. Consumer automobile loans.

c. Corporate stocks.

d. Short-term debt securities. \*

9. Which of the following statements is CORRECT?

a. The term "IPO" stands for Introductory Price Offered, and it is the price at which shares of a new company are offered to the public.

b. IPO prices are generally established by the market, and buyers of the new stock must pay the price that prevails at the close of trading on the day the stock is offered to the public.

c. In a "Dutch auction," investors who want to buy shares in an IPO submit bids indicating how many shares they want to buy and the price they are willing to pay. The company determines how many shares it wants to sell. The highest price that enables the company to sell the desired number of shares is the price that all buyers must pay. \*

d. It is possible that the price set in an IPO is so high that investors will refuse to buy the number of shares that the company wants to sell. In this situation, the IPO is said to be oversubscribed.

10. Which of the following statements is NOT CORRECT?

a. When a corporation's shares are owned by a few individuals, we say that the firm is "closely, or privately, held."

b. "Going public" establishes a firm's true intrinsic value and ensures that a liquid market will always exist for the firm's shares. \*

c. The stock of publicly owned companies must generally be registered with and reported to a regulatory agency such as the SEC.

d. When stock in a closely held corporation is offered to the public for the first time, the transaction is called "going public, or an IPO," and the market for such stock is called the new issue or IPO market.

**Chapter 3**

You have just obtained financial information for the past 2 years for Sebring Corporation.

SEBRING CORPORATION: INCOME STATEMENTS FOR YEAR ENDING DECEMBER 31

(MILLIONS OF DOLLARS)

2013 2012

Sales $3,600.0 $3,000.0

Operating costs (excluding depreciation and amortization) 3,060.0 2,550.0

EBITDA $ 540.0 $ 450.0

Depreciation and amortization 90.0 0.0

Earnings before interest and taxes $ 450.0 $ 375.0

Interest 65.0 60.0

Earnings before taxes $ 385.0 $ 315.0

Taxes (40%) 154.0 126.0

Net income available to common stockholders $ 231.0 $ 189.0

Common dividends $ 181.0 $ 13.0

Shares outstanding 100m. 100m.

Stock price $32 $23

The finance staff has concluded that the firm’s after-tax percentage cost of capital (equity plus debt) is 10%.

SEBRING CORPORATION: BALANCE SHEETS FOR YEAR ENDING DECEMBER 31

(MILLIONS OF DOLLARS)

2013 2012

Assets:

Cash and marketable securities $ 36.0 $ 30.0

Accounts receivable 540.0 450.0

Inventories 540.0 600.0

Total current assets $1,116.0 $1,080.0

Gross fixed assets 990.0 825.0

Net fixed assets 900.0 825.0

Total assets $2,016.0 $1,830.0

Liabilities and equity:

Accounts payable $ 324.0 $ 270.0

Notes payable 201.0 155.0

Accruals 216.0 180.0

Total current liabilities $ 741.0 $ 605.0

Long-term bonds 450.0 450.0

Total debt $1,191.0 $1,055.0

Common stock 150.0 150.0

Retained earnings 675.0 625.0

Total common equity $ 825.0 $ 775.0

Total liabilities and equity $2,016.0 $1,830.0

11. What is Sebring’s net operating profit after taxes (NOPAT) for 2013?

a. $150,000,000

b. $225,000,000

c. $270,000,000 \*

d. $375,000,000

12. What is Sebring’s net operating working capital for 2013?

a. $ 540,000,000

b. $ 576,000,000 \*

c. $ 750,000,000

d. $ 985,000,000

13. What is Sebring’s amount of total operating capital for 2013?

**[ Not on the exam]**

a. $ 888,000,000

b. $ 900,000,000

c. $1,275,000,000

d. $1,476,000,000 \*

14. What is Sebring’s free cash flow for 2013?

a. $ 85,000,000

b. $146,000,000

c. $249,000,000 \*

d. $255,000,000

15. Which of the following statements is CORRECT?

a. The four most important financial statements provided in the annual report are the balance sheet, income statement, cash budget, and the statement of stockholders' equity.

b. The balance sheet gives us a picture of the firm’s financial position at a point in time. \*

c. The income statement gives us a picture of the firm’s financial position at a point in time.

d. The statement of cash flows tells us how much cash the firm must pay out in interest during the year.

16. Which of the following statements is CORRECT?

a. MVA stands for market value added, and it is defined as follows:

MVA = (Shares outstanding)(Stock price) + Book value of common equity.

b. The primary difference between EVA and accounting net income is that when net income is calculated, a deduction is made to account for the cost of common equity, whereas EVA represents net income before deducting the cost of the equity capital the firm uses.

c. MVA gives us an idea about how much value a firm’s management has added during the last year.

d. EVA stands for economic value added, and it is defined as follows:

EVA = NOPAT – (Investor-supplied oper. capital)(AT cost of capital %) \*

17. Which of the following statements is most correct?

a. Retained earnings, as reported on the balance sheet, represents the amount of cash a company has available to pay out as dividends to shareholders.

b. 70% of the interest received by corporations is excluded from taxable income.

c. 70% of the dividends received by corporations is excluded from taxable income. \*

d. Because taxes on long-term capital gains are not paid until the gain is realized, investors must pay the top individual tax rate on that gain.

e. The corporate tax system favors equity financing, as dividends paid are deductible from corporate taxes.

18. Prezas Company's balance sheet showed total current assets of $4,250, all of which were required in operations. Its current liabilities consisted of $975 of accounts payable, $600 of 6% short-term notes payable to the bank, and $250 of accrued wages and taxes. What was its net operating working capital?

a. $2,874

b. $3,025 \*

c. $3,176

d. $3,335

NOWC = Current assets – (Current liabilities – Notes payable)

NOWC = $4,250 – ($1,825 – $600)

NOWC = $3,025

19. Rao Construction recently reported $20.50 million of sales, $12.60 million of operating costs other than depreciation, and $3.00 million of depreciation. It had $8.50 million of bonds outstanding that carry a 7.0% interest rate, and its federal-plus-state income tax rate was 40%. What was Rao's operating income, or EBIT, in millions?

a. $3.21

b. $3.57

c. $3.97

d. $4.90 \*

Sales $20.50

Operating costs excluding depreciation 12.60

Depreciation 3.00

Operating income (EBIT) $ 4.90

Note that operating income is before interest and taxes.

20. Over the years, O'Brien Corporation's stockholders have provided $20,000,000 of capital, when they purchased new issues of stock and allowed management to retain some of the firm's earnings. The firm now has 1,000,000 shares of common stock outstanding, and it sells at a price of $38.50 per share. How much value has O'Brien's management added to stockholder wealth over the years, i.e., what is O'Brien's MVA?

a. $18,500,000 \*

b. $18,870,000

c. $19,247,400

d. $19,632,348

Total book value of equity $20,000,000

Stock price per share $38.50

Shares outstanding 1,000,000

Market value of equity = Stock price × Number of shares $38,500,000

MVA = Market value of equity – Book value of equity $18,500,000

21.

22. Your corporation has the following cash flows:

Operating income $250,000

Interest received $ 10,000

Interest paid $ 45,000

Dividends received $ 20,000

Dividends paid $ 50,000

If the applicable income tax rate is 40% (federal and state combined), and if 70% of dividends received are exempt from taxes, what is the corporation's tax liability?

a. $ 83,980

b. $ 88,400 \*

c. $ 92,820

d. $ 97,461

Operating income $250,000

Interest received $10,000

Interest paid $45,000

Dividends received $20,000

Dividend exclusion % 70%

Dividends paid $50,000

Tax rate (T) 40%

Taxable income = Oper. income + Interest received – Interest paid + Taxable dividends received

Taxable income = Oper. income + Interest received – Interest paid + Div. received(1 – Div. exclusion %)

Taxable income = $221,000

Taxes paid = Taxable income × Tax rate

Taxes paid = $88,400

23. Kwok Enterprises has the following income statement. How much after-tax operating income does the firm have?

Sales $2,250

Costs 1,400

Depreciation 250

EBIT $ 600

Interest expense 70

EBT $ 530

Taxes (40%) 212

Net income $ 318

a. $325

b. $342

c. $360 \*

d. $378

Sales $2,250

Costs 1,400

Depreciation 250

EBIT $ 600

Interest expense 70

EBT $ 530

Taxes: rate = 40% 212

Net income $ 318

EBIT $600.00

Tax rate 40%

EBIT(1 − T) = $360

**Chapter 4**

25. Stennett Corp.’s CFO has proposed that the company issue new debt and use the proceeds to buy back common stock. Which of the following are likely to occur if this proposal is adopted? (Assume that the proposal would have no effect on the company’s operating income.)

a. Return on assets (ROA) will decline.

b. The Depreciation will increase.

c. Taxes paid will decline.

d. Statements a and c are correct. \*

27. Company J and Company K each recently reported the same earnings per share (EPS). Company J’s stock, however, trades at a higher price. Which of the following statements is most correct?

a. Company J must have a higher P/E ratio. \*

b. Company J must have a higher market to book ratio.

c. Company J must be riskier.

d. Company J must have fewer growth opportunities.

28. As a short-term creditor concerned with a company’s ability to meet its financial obligation to you, which one of the following combinations of ratios would you most likely prefer?

Current Debt

ratio TIE ratio

a. 0.8 1.3 0.3

b. 1.2 1.2 0.8

c. 1.7 1.2 0.8

d. 2.0 1.3 0.55 \*

29. Russell Securities has $100 million in total assets and its corporate tax rate is 40 percent. The company recently reported that its basic earning power (BEP) ratio was 15 percent and its return on assets (ROA) was 9 percent. What was the company’s interest expense?

a. $ 0 \*

b. $ 2,000,000

c. $ 6,000,000

d. $15,000,000

30. You are given the following information: Stockholders’ equity = $1,250; price/earnings ratio = 5; shares outstanding = 25; and market/book ratio = 1.5. Calculate the market price of a share of the company’s stock.

a. $ 33.33

b. $ 75.00 \*

c. $ 10.00

d. $166.67

31. Culver Inc. has earnings before interest and taxes (EBIT )of $300. The company’s times interest earned ratio is 7.00. Calculate the company’s interest charges.

a. $42.86 \*

b. $50.00

c. $40.00

d. $60.00

## 32. The Wilson Corporation has the following relationships:

Sales/Total assets 2.0×

Return on assets (ROA) 4.0%

Return on equity (ROE) 6.0%

What is Wilson’s net profit margin and debt ratio?

a. 2%; 0.33 \*

b. 4%; 0.33

c. 4%; 0.67

d. 2%; 0.67

33. A fire has destroyed a large percentage of the financial records of the Carter Company. You have the task of piecing together information in order to release a financial report. You have found the return on equity to be 18 percent. If sales were $4 million, the debt ratio was 0.40, and total liabilities were $2 million, what would be the return on assets (ROA)?

a. 10.80% \*

b. 0.80%

c. 1.25%

d. 12.60%

34. A firm that has an equity multiplier of 4.0 will have a debt ratio of

a. 4.00

b. 3.00

c. 1.00

d. 0.75 \*

35. The Merriam Company has determined that its return on equity is 15 percent. Management is interested in the various components that went into this calculation. You are given the following information: total debt/total assets = 0.35 and total assets turnover = 2.8. What is the profit margin? Du Pont formula.

a. 3.48% \*

b. 5.42%

c. 6.96%

d. 2.45%

# USE THE FOLLOWING INFORMATION FOR THE NEXT TWO PROBLEMS

You are provided with the following information for a company.

|  |  |  |  |
| --- | --- | --- | --- |
| Sales | |  | 35000 |
| Receivables | |  | 750 |
| COGS |  |  | 20000 |
| Inventory | |  | 3000 |
| Payables | | | 1500 |

36. Calculate DSO (days sales outstanding) ratio

a) 7.83 \*

b) 8.4

c) 55.1

d) 36.7

37. Calculate the inventory turnover ratio

a) 27.23

b) 13.3

c) 55.43

d) 11.67 \*

You are provided with the following information about MaxCorp.

|  |  |  |  |
| --- | --- | --- | --- |
| Net sales |  |  | 5000 |
| Total Assets | |  | 3000 |
| Depreciation | |  | 260 |
| Net Income | |  | 600 |
| Long term Debt | |  | 2000 |
| Equity |  |  | 2160 |

38. Calculate the return on equity (ROE)

a) 20.4%

b) 17.8%

c) 22.4%

d) 27.8% \*

USE THE FOLLOWING INFORMATION FOR THE NEXT FIVE PROBLEMS

THE BRITISH PUB CORPORATION

INCOME STATEMENT

FISCAL YEAR ENDING 12/31/200X

(DOLLARS IN THOUSANDS)

--------------------------------------------------------------

Net sales $1025

Cost of goods sold 682

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EBITDA 343

Depreciation 31

Operating expense 103

Administrative expense 127

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EBIT 82

Interest Expense 27

-----

EBT 55

Taxes 17

-----

Net income 38

THE BRITISH PUB CORPORATION

BALANCE SHEET

FISCAL YEAR ENDING 12/31/200X

(DOLLARS IN THOUSANDS)

-----------------------------ASSETS LIABILITIES

Cash $ 61 Notes payable $223

Accounts receivable 286 Accounts payable 152

Inventory 354 Accruals 32

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Total current assets 701 Total current liab. 407

Net fixed assets 802 Long term debt 306

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Total Assets $1503 Common stock 102

Retained earnings 688

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Total liabilities and

stockholders' equity $1503

The company has 68,000 shares outstanding.

39. What was British Pub's current ratio for 200X?

a) 0.55

b) 1.73 \*

c) 1.02

d) 1.37

40. What was British Pub's return on total assets for 200X?

a) 2.53% \*

b) 3.47%

c) 4.81%

d) 6.73%

41. What was British Pub's return on owners' equity in 200X?

a) 4.81% \*

b) 5.93%

c) 6.75%

d) 8.37%

42. What was British Pub's book value per share at year-end 200X?

a) $ 7.74

b) $ 8.29

c) $11.62 \*

d) $11.90

43. Ames Motors and Culver Motors both have $50 million in total assets and a 10 percent return on assets (ROA). Each company has a 40 percent tax rate. Ames, however, has a higher debt ratio and higher interest expense. Which of the following statements is most correct?

a. Ames has a lower return on equity (ROE).

b. Culver has a lower return on equity (ROE). \*

c. Ames has a lower level of operating income (EBIT).

d. Statements a and c are correct.

44.Considered alone, which of the following would increase a company’s current ratio?

a. An increase in net fixed assets.

b. An increase in accrued liabilities.

c. An increase in notes payable.

d. An increase in accounts receivable.\*

45. A firm’s new president wants to strengthen the company’s financial position. Which of the following actions would make it financially stronger?

a. Increase accounts receivable while holding sales constant.

b. Increase EBIT while holding sales and assets constant. \*

c. Increase accounts payable while holding sales constant.

d. Increase notes payable while holding sales constant.

46. Which of the following would indicate an improvement in a company’s financial position, holding other things constant?

a. The inventory and total assets turnover ratios both decline.

b. The profit margin declines.

c. The times-interest-earned ratio declines.

d. The current and quick ratios both increase.\*

47. If a bank loan officer were considering a company’s loan request, which of the following statements would you consider to be CORRECT?

a. The lower the company’s inventory turnover ratio, other things held constant, the lower the interest rate the bank would charge the firm.

b. Other things held constant, the higher the days sales outstanding ratio, the lower the interest rate the bank would charge.

c. Other things held constant, the lower the debt ratio, the lower the interest rate the bank would charge. \*

d. The lower the company’s TIE ratio, other things held constant, the lower the interest rate the bank would charge.

48. Ryngard Corp's sales last year were $38,000, and its total assets were $16,000. What was its total assets turnover ratio (TATO)?

a. 2.04

b. 2.14

c. 2.26

d. 2.38 \*

Sales $38,000

Total assets $16,000

TATO = Sales/Total assets = 2.38

49. Beranek Corp has $720,000 of assets, and it uses no debt--it is financed only with common equity. The new CFO wants to employ enough debt to raise the debt/assets ratio to 40%, using the proceeds from borrowing to buy back common stock at its book value. How much must the firm borrow to achieve the target debt ratio?

a. $273,600

b. $288,000 \*

c. $302,400

d. $317,520

Target debt ratio 40%

Debt to achieve target ratio = Amount borrowed = Target % × Assets = $288,000

50. X-1 Corp's total assets at the end of last year were $405,000 and its EBIT was 52,500. What was its basic earning power (BEP) ratio?

a. 11.70%

b. 12.31%

c. 12.96% \*

d. 13.61%

51. Ajax Corp's sales last year were $435,000, its operating costs were $362,500, and its interest charges were $12,500. What was the firm's times-interest-earned (TIE) ratio?

a. 4.72

b. 4.97

c. 5.51

d. 5.80 \*

Sales $435,000

Operating costs $362,500

Operating income (EBIT) $72,500

Interest charges $12,500

TIE ratio = EBIT/Interest = 5.80

52. Hoagland Corp's stock price at the end of last year was $33.50, and its book value per share was $25.00. What was its market/book ratio?

a. 1.34 \*

b. 1.41

c. 1.48

d. 1.55

Stock price $33.50

Book value per share $25.00

M/B ratio = Stock price/Book value per share = 1.34

53. Precision Aviation had a profit margin of 6.25%, a total assets turnover of 1.5, and an equity multiplier of 1.8. What was the firm's ROE?

a. 15.23%

b. 16.03%

c. 16.88% \*

d. 17.72%

Profit margin 6.25%

TATO 1.50

Equity multiplier 1.80

ROE = PM × TATO × Eq. multiplier = 16.88%

54. Helmuth Inc's latest net income was $1,250,000, and it had 225,000 shares outstanding. The company wants to pay out 45% of its income. What dividend per share should it declare?

a. $2.14

b. $2.26

c. $2.38

d. $2.50 \*

Net income $1,250,000

Shares outstanding 225,000

Payout ratio 45%

EPS = NI/shares outstanding = $5.56

DPS = EPS × Payout % = $2.50

55. DuPont analysis

Last year Rennie Industries had sales of $305,000, assets of $175,000, a profit margin of 5.3%, and an equity multiplier of 1.2. The CFO believes that the company could reduce its assets by $51,000 without affecting either sales or costs. Had it reduced its assets by this amount, and had the debt/assets ratio, sales, and costs remained constant, how much would the ROE have changed?

a. 4.10%

b. 4.56% \*

c. 5.01%

d. 5.52%

Old New

Sales $305,000 $305,000

Original assets $175,000

Reduction in assets $51,000

New assets = Old assets − Reduction = $124,000

TATO = Sales/Assets = 1.74 2.46

Profit margin 5.30% 5.30%

Equity multiplier 1.20 1.20

ROE = PM × TATO × Eq. multiplier = 11.08% 15.64%

Change in ROE 4.56%