FI 3300 - CORPORATION FINANCE
Take-Home Problem Set Two (THPS-2)
Fall 2015

Directions: This problem set covers chapters 1, 3 and 4 in the textbook. Determine or compute an answer for each question/problem. After you have computed an answer for every question, enter your answers online via the “quiz” function entitled “**THPS-2 ANSWER SUBMISSION FORM**.” See the course calendar for when the answer submission form will open and close. I will post a detailed solution key to the problem set right after the Answer Submission Form closes. See the course calendar for the day(s) on which I will answer questions about these problems in the chat room.

This is a take-home, open book, open notes financial statement analysis problem set. **Work on this Assignment is to be yours alone - any discussion of either the questions on the assignment or your answers with anyone other than your instructor will be considered as cheating and, thus, as a violation of the GSU honor code.**

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1. The primary goal of the management of a publicly traded corporation should be to _______________.
   a. create jobs
   b. promote social good
   c. maximize profits
   d. maximize shareholder wealth
   e. minimize risk

2. In conducting a common-size analysis, every balance sheet item is divided by ___________ and every income statement item is divided by ___________.
   a. its corresponding base year balance sheet item; its corresponding base year income statement item.
   b. its corresponding base year income statement item; its corresponding base year balance sheet item.
   c. net sales or revenues; total assets.
   d. total assets; total liabilities and equity.
   e. total assets; net sales or revenues.

3. ___________ is an accounting statement that lists a company’s assets, liabilities and equity. The statement is a stock measure that displays these account values at a specific point in time.

   a. The balance sheet
   b. The statement of cash flows
   c. The sources and uses statement
   d. The income statement
   e. None of the above

4. Finance is divided into three separate subject areas. Two of the subject areas of finance are Financial Markets and Institutions and Investments. The third subject area of finance is:

   a. International Cash Flow Management
   b. Banking
   c. Corporate Financial Management
   d. Accounting
   e. None of the above

5. Which of the following are items/accounts that typically appear on a balance sheet?

a. net sales, cost of goods sold, retained earnings
b. net sales, inventories, notes payable
c. net sales, depreciation expense, advertising expense
d. cash, depreciation expense, taxes
e. cash, accounts receivable, inventories

6. Which of the following would directly affect (either increase or decrease) net cash flow from **operating activities** (assuming all else remains constant)? Note: there more be more than one answer for this questions – record the letter of all that apply (this is an all or nothing answer).

   a. An increase in dividends paid.
   b. A decrease in accounts receivable.
   c. A decrease in notes payable (i.e., bank loans).
   d. An increase in inventory.
   e. An increase in accounts payable.
   f. An increase in retained earnings.
   g. A decrease in cash.
   h. An increase in accruals.
   i. A decrease in gross plant and equipment.

7. If a firm decreases its total assets but its debt ratio, net profit margin and net sales (i.e., revenue) remain the same as they were before total assets decreased, the firm's:

   a. ROE would not change.
   b. ROE could either increase or decrease depending on the interaction between the equity multiplier and the days payable ratio.
   c. ROE would increase.
   d. ROE would decrease.
   e. There is insufficient information to determine the effect on ROE.

8. Which of the following steps is most likely to **decrease** a company's cash conversion cycle (assume that none of the following actions has any impact on sales or COGS)? Note: there more be more than one answer for this question – record the letter of all that apply (this is an all or nothing answer).

   a. Change its receivables policy from net 45 to net 30 (note that this action will decrease the firm's average collection period from 45 days to 30 days).
   b. Change its payables policy to pay bills in 40 days instead of in 30 days.
   c. Decrease the inventory conversion period from 50 days to 40 days.
   d. Reduce the firm's notes payable (i.e., bank loan) balance by 20%.
   e. None of the actions listed above will decrease the firm's cash conversion cycle.

9. Which of the following actions would decrease the current ratio (assuming an initial current ratio of 1.8, and current liabilities equal to $1,000,000)?

   a. Borrow $100,000 in short term debt and deposit this money (i.e., $100,000) into the firm's cash account.
   b. Borrow $200,000 in long-term debt to buy $200,000 worth of additional inventory.
   c. Borrow $50,000 of short-term debt and use the proceeds to pay all operating expenses sooner, thus lowering accruals (i.e., accrued expenses) by $50,000.
   d. Sell $250,000 of fixed assets to pay off an equal amount of long-term debt.
   e. None of the above – that is, none of the actions listed about will decrease the current ratio.

10. RedCap Manufacturing, Inc. is planning to increase its average inventory balance by taking out a short term loan (i.e., increase notes payable) and buying additional inventory. RedCap believes that this event will have no affect on either sales or costs, and therefore no affect on net income.

    All else constant, this new policy should cause the firm's **quick ratio** (assuming an initial quick ratio of 1.2) to:

    a. Increase
    b. Decrease
    c. No Change
    d. Not enough information is provided to answer this question.

11. BlueHat, Inc. is planning to use excess cash that the company has in its checking account (i.e., reduce cash) to pay off a long term loan balance. (i.e., decrease long-term debt). BlueHat believes that this event will have no affect on either sales or costs, and therefore no affect on net income.

    All else constant, this new policy should cause the firm's **debt ratio** (assuming an initial debt ratio of 45%) to:

    a. Increase
    b. Decrease
    c. No Change
    d. Not enough information is provided to answer this question.

12. GreenChapeau, Inc. is planning to relax its credit terms. This will increase the company's accounts receivable balance. To finance this increase, GreenChapeau will increase its short-term loans (i.e., increase notes payable). GreenChapeau believes that this event will have no affect on either sales or costs, and therefore no affect on net income.

    All else constant, this new policy should cause the firm's **current ratio** (assuming a current ratio of 0.7) to:

    a. Increase
    b. Decrease
    c. No Change
    d. Not enough information is provided to answer this question.

All of the following questions are open-ended problems. You must compute an answer for every problem. For percentage answers, calculate your answer as a percent rounded to 2 decimal places. For example, you would record ROA = .1263974 as 12.64% (note that on D2L you will enter 12.64 without the percent sign). For dollar answers, round to the nearest dollar. For example, you would record $12,345.83943 as $12,346 (note that on D2L you will enter 12346 without a comma and without the dollar sign).

13. Felton Farm Supplies, Inc. has an ROA (return on assets) of 12 percent, total assets of $500,000 and a net profit margin of 5.5 percent. What are Felton Farm Supplies annual sales?

14. Krisle and Kringle's debt-to-total assets ratio is 0.645 (i.e., debt ratio = 64.5%). What is the company's debt-to-equity ratio? (Enter answer as a ratio – that is, do not convert to a percent).

15. Philips, Inc has a debt ratio of 75% and ROE = 10%. What is Phillips' ROA? (Enter answer as a percent).

16. A firm has an ROA of 18% and a debt/equity ratio of 0.35. The firm's ROE is _________. (Enter answer as a percent).

17. Assume that XYZ, Inc. has:

- Debt ratio = 60%
- Net profit margin = 12.5%
- Return on assets (ROA) = 25%

Find XYZ's Total Asset Turnover ratio. (Enter answer as a ratio – that is, do not convert to a percent).

18. Assume that your firm has ROA of 17.5%, ROE of 28% and Total Asset Turnover ratio of 3.75. Calculate the debt ratio for the firm. (Enter answer as a percent).

USE THE DATA IN THE TABLE BELOW TO ANSWER QUESTIONS 19 – 24

(Assume all account figures are in dollars)

Lemark Productions	2010	2011
Accounts payable	320	380
Accounts receivable, net	1,660	1,610
Accruals	165	300
Cash	75	180
Common stock	1,660	1,350
Cost of goods sold	4,200	4,700
Depreciation expenses	400	560
Interest expenses	280	300
Inventory	4,390	4,050
Long-term debt	4,500	4,150
Net fixed assets	6,920	7,180
Net sales	7,920	8,980
Notes payable	600	740
Operating expenses (excl. de	2,130	2,210
Retained earnings	5,800	6,100
Taxes	390	410

19. Gross Profit for 2010 is $________.

20. The times interest earned ratio for 2010 is ____X.

21. ROE for 2010 is _____%.

22. Cash flow from operating activities in 2011 is $ _______.

23. Cash flow from investing activities in 2011 is $ _________.

24. Cash flow from financing activities in 2011 is $ _________.

USE THE INFORMATION BELOW TO ANSWER THE FOLLOWING 3 QUESTIONS

Mellon Company			
Balance Sheet			
For the Years Ending December 31, 2010 and 2011			
(All figures in dollars)			
	2010		**2011**
Cash	1,500		1,820
Account receivable	3,740		3,980
Inventory	10,120		8,470
Total current assets	15,360		14,270
Gross fixed assets	56,100		63,840
(Accumulated depreciation)	(9,590)		(11,000)
Net fixed assets	46,510		52,840
Total assets	61,870		67,110
Notes payable	1,000		1,000
Accounts payable	2,260		4,150
Accruals	1,570		1,640
Current portion of LT debt	470		1,730
Total current liabilities	5,300		8,520
Lont-term debt	37,750		34,790
Common stock	1,000		1,500
Paid in capital	4,800		9,460
Retained earnings	13,020		12,840
Total liabilities and equity	61,870		67,110
Additional Data from 2011 Income Statement:			
Sales in 2011			238,000
Net income in 2011			9,940

25. Calculate the Cash flows from operating activities for 2011.
26. Calculate the Cash flows from investing activities for 2011.
27. Calculate the Cash flows from financing activities for 2011.

USE THE FOLLOWING INFORMATION TO CONSTRUCT A BALANCE SHEET TO ANSWER QUESTIONS 28 through 30

Sales	$ 2,000,000
Gross profit margin	20%
Inventory turnover ratio (Cost of goods sold/Inventory)	25
Net profit margin	4%
Average collection period	45
Return on equity	25%
Accumulated depreciation	$ 75,000
Return on assets	12.5%
Accounts payable days	18
Notes payable	$ 18,000
Gross fixed assets	$ 400,000
Percent of sales on credit (remainder are cash sales)	80%
NOTE: Assume a 360 day year for all ratios, etc.	

Assume that the only accounts on the balance sheet are those listed below. Fill in this chart with the data provided and then answer questions 28, 29 and 30.

Cash	____________	Notes payable	____________
Accounts receivable	____________	Accounts payable	____________
Inventory	____________	Long-term debt	____________
Gross fixed assets	____________	Equity	____________
(Accumulated depreciation)	____________	Total liab & equity	____________
Net fixed assets	____________		
Total assets	____________		

28. Cash = ____________.

29. Long-term debt = ____________.

30. Total assets =____________.

USE THE FOLLOWING INFORMATION TO FILL IN THE BALANCE SHEET BELOW TO ANSWER QUESTIONS 31 through 34

Number of shares outstanding	15,000	Average collection period (days)	60
Sales	$200,000	Accounts payable days	90
Gross profit margin	20%	Retained earnings (2010)	$23,700
Inventory turnover ratio	4	Dividend payout ratio	80%
Notes payable	$ 8,000	Accruals	$ 4,000
Net profit margin	15%	Current ratio	1.5
Return on assets	8%	Debt ratio	40%

Note: Of total sales, 60 percent are on credit and the remainder are cash sales. Assume a 360-day year. All data in the table above, unless otherwise stated, is for the year 2011.

Hodun, Inc.
Balance Sheet for the Year Ending December 31, 2011

Cash	___________	Notes payable	___________
Accounts receivable	___________	Accounts payable	___________
Inventory	___________	Accruals	___________
Net fixed assets	___________	Long-term debt	___________
Total assets	___________	Common stock ($2 par value)	___________
		Capital surplus	___________
		Retained earnings	___________
		Total liab. & equity	___________

31. Cash = _____________.

32. Long-term debt = _____________.

33. Total assets =_____________.

34. Capital surplus = ___________.