

Name: Solution Key Version B

MGT 3000 Spring 2014 Exam 3
April 8, 2014
Dr. J. Turner

Instructions – Please read before you begin the exam.

1. This is a closed-book and closed-notes quiz. You must do your own work without assistance from anyone. Giving or receiving assistance from anyone during the exam will result in a grade of zero and reporting to the Office of Student Integrity. To attest to your compliance with this instruction and the Georgia Tech honor system, please sign the honor pledge below before turning in your exam. There is an 8 point penalty if you fail to sign the honor pledge.
2. To treat all students equally, I do not answer questions during an exam. Answer each question based on the information given. If you think an assumption is necessary to answer a question, please clearly state your assumption in the margin, and it will be considered in grading. Please let me know if you think there is a typo in the exam.
3. You may use only a calculator supplied by me. You may not use your cell phone or personal computer during the exam. All cell phones must be turned off and placed on the top of your desk in plain view at all times during the exam. Use of your cell phone during the exam is considered cheating and a violation of the Honor Code.
4. Each multiple-choice question has only one best answer. If you choose more than one answer, it will be considered an incorrect answer. **Enter your answer to the multiple choice questions on the Scantron sheet provided.** What you enter on the Scantron sheet is your answer for grading purposes. Please totally erase changes on the Scantron or get a clean Scantron form and re-enter your answers. Failure to complete the Scantron will result in a 4 point penalty.
5. Point allocation:

Terminology matching – 13 @ 2 points each	26
Multiple choice – 14 @ 3 points each	42
Problems (2)	<u>23</u>
Total	<u>91</u>

Grades will be expressed as a percentage of total available points.

Honor Pledge:

On my honor, I pledge that I have neither given nor received any unauthorized help on this exam.

(Signed)

Matching (2 points each) Match the term with the phrase that best defines or describes it.
Terms may be used only once.

A	Bond discount
B	Bond premium
C	Carrying value
D	Collateral
E	Conservatism
F	Contingent liability
G	Earnings per share
H	Effective interest rate

I	Historical Cost
J	Installment note
K	Liquidity
L	Par value
M	Pro rata
N	Profitability
O	Solvency
P	Trend analysis

- B 1 The difference when the amount borrowed by a bond issuer is more than the face value of bonds issued
- P 2 Studying the behavior of individual financial statement items over several accounting periods
- K 3 Indicates a company's ability to pay short-term debts and obligations
- C 4 The face value of a bond adjusted for any unamortized discount or premium
- J 5 Loans that require payment of principal and interest in regular intervals
- D 6 Assets pledged by borrowers as security for the repayment of the debt
- L 7 The amount of money due on the maturity date of a bond
- O 8 Indicates a company's long-term debt-paying ability and its financing structure
- M 9 In proportion, according to a certain rate or driver
- F 10 A potential obligation arising from a past event; the amount or existence of the obligation depends on some future event
- A 11 The difference when the amount borrowed by a bond issuer is less than the face value of bonds issued
- E 12 An accounting principle providing that in uncertain circumstances, accounting should delay revenue recognition and accelerate expense recognition
- N 13 Indicates a company's ability to generate earnings (net income)

- B 1. In accounting for a contingent liability, if the likelihood of the obligation is probable and the amount can be estimated, a company must
- A. Not recognize the liability until it is certain and the exact amount is known.
 - B. Report the liability on the balance sheet.
 - C. Provide disclosure in the footnotes to the financial statements.
 - D. Do nothing.

- A 2. In accounting for a contingent liability, if the likelihood of the obligation is possible and can be reasonably estimated, a company must
- A. Provide disclosure in the footnotes to the financial statements.
 - B. Recognize the liability and report it on the balance sheet.
 - C. Not recognize or disclose the liability until it is certain and the exact amount is known.
 - D. Do nothing.

- C 3. On January 1, 2012, Fleming Company borrowed \$160,000 cash from the First Trust Bank by issuing a five-year 8 % term note. The principal and interest are repaid by making annual payments beginning on December 31, 2012. The annual payment on the loan was \$40,074. What is the amount of principal repayment included in the December 31, 2012 payment?

- A. \$37,329
- B. \$40,575
- C. \$27,274
- D. \$27,615
- E. None of the above.

Principal	160,000
int rate	8%
Int x P yr 1	12,800
Payment	40,074
Am't applied to principal	<u>27,274</u>

- E 4. On December 31, 2010, Malcolm Corporation accrued interest on a \$10,000 note payable that it had issued on March 1, 2010. The note was a 1-year note with interest at 6%. How did the year-end accrual of interest affect Malcolm's financial statements?

- A. Assets and liabilities decreased by \$600
- B. Expense and liabilities increased by \$600
- C. Expense increased and liabilities decreased by \$500
- D. Expense increased and assets decreased by \$500
- E. None of the above.

Face / Prin. Amount	10,000
Annual rate	6%
Annual int x P	600
accrued @ 12/31	X 10/12
	<u>500</u>

The accrual should increase expense (reduce equity) and increase liab by \$500

- D 5. Referring to the Fleming Company facts in the previous questions, how does the amortization of the principal balance affect the amount of interest expense recorded each succeeding year?

- A. The effect depends on the interest rate.
- B. Has no effect on interest expense each succeeding year
- C. Increases the amount of interest expense each succeeding year
- D. Reduces the amount of interest expense each succeeding year

Am't of interest accrual decreases as the outstanding principal balance is reduced.

- B 6. Bonds payable are usually classified on the balance sheet of the issuer as:
- A. Investments and funds.
 - B. Long-term liabilities.
 - C. Current liabilities.
 - D. Other assets.

- A 7. On January 1, 2012, Luna Company issued bonds with a face value of \$300,000 at 95. The bonds will mature in 5 years. Interest at 9% was payable in cash on December 31 of each year. The discount will be amortized using the straight-line method. Based on this information, the amount of interest expense shown on the 2012 income statement and the cash flow from operating activities shown on the 2012 statement of cash flows would be:

	Interest Expense	Cash Outflow
<u>A</u>	\$30,000	\$27,000
B	\$30,000	\$30,000
C	\$25,650	\$27,000
D	\$27,000	\$27,000

Face amt \$300,000
 price 95
 proceeds 285,000
 discount 15,000
 term $\div 5$
 Annual amort. 3,000
 Annual payment 27,000
 $300,000 \times 9\%$
 Int XP 30,000

- D 8. On January 1, 2012, Sol Company issued bonds with a face value of \$100,000 at 105. The bonds will mature in 5 years. Interest at 10% was payable in cash on December 31 of each year. The premium will be amortized using the straight-line method. Based on this information, the amount of interest expense shown on the 2012 income statement and the cash flow from operating activities shown on the 2012 statement of cash flows would be:

	Interest Expense	Cash Outflow
A	\$11,000	\$10,000
B	\$10,000	\$10,000
C	\$9,000	\$9,000
<u>D</u>	\$9,000	\$10,000

Face \$100,000
 price 105
 proceeds 105,000
 Premium 5,000
 term $\div 5$
 Annual amort. 1,000
 Annual payment 10,000
 $100,000 \times 10\%$
 Int expense 9,000

- B 9. Which of the following statements is correct?
- A. The amortization of the discount reduces the bond interest expense.
 - B. A premium results when the bond's issue price is greater than its face value.
 - C. A discount results when the bond's issue price is greater than its face value.
 - D. The amortization of the premium increases the bond interest expense.

- B 10. Current liabilities as of December 31, 2012 are the
- A. Obligations that were incurred during 2012 in the normal course of operating the business.
 - B. Debts on December 31, 2012 that are expected to be paid using current assets during 2013.
 - C. Debts on the balance sheet that must be repaid or refinanced in 2013.
 - D. Debts related only to operating activities of the company.

- B 11. On a classified balance sheet, the financial statement user will be able to distinguish between:
- A. Product and period costs. *I/S*
 - B. Current and non-current assets. *B/S*
 - C. Cash flow from operations and cash flow from investing activities. *SCF*
 - D. None of these

- A 12. You are considering an investment in Baker Corporation common stock and wish to assess the firm's ability to generate earnings. All of the following ratios are used to assess profitability and managerial effectiveness except:
- A. Average number of days to collect receivables. *LIQUIDITY MEASURE*
 - B. Net margin.
 - C. Asset turnover.
 - D. Return on investment.
- } PROFIT MEASURES*

- D 13. You are considering making a loan to a corporation and wish to assess the firm's short-term debt-paying ability. All of the following ratios will help you assess the company's short-term debt-paying ability except:
- A. Inventory turnover.
 - B. Quick ratio.
 - C. Accounts receivable turnover.
 - D. Debt to equity ratio.
- LIQUIDITY MEASURES*
- SOLVENCY MEASURE*

- B 14. Select the incorrect statement regarding net margin.
- A. Net margin refers to the average amount of each sales dollar remaining after all expenses are subtracted.
 - B. The smaller the net margin the better. *REVERSE IS TRUE*
 - C. Net margin may be calculated in several ways.
 - D. The amount of net margin is affected by a company's choices of accounting principles.

Bonus Question (2 points): Recently a large jumbo jet with 239 passengers and crew vanished mid-flight. Name the Airline or Flight number of the missing flight:

Malaysian Air Flt MH 370

Problem 1 (5 points) – You must show your work to receive full credit. Even if your answers are correct, you will not receive full credit without showing your work.

Turner Company borrowed \$85,000 from its bank to finance the acquisition of a new piece of equipment. The company signed a 5-year installment note to the bank that provided for annual interest of 7%, and five equal payments of \$20,731. Assuming a 12-month interval between borrowing and first payment, complete the amortization table below for the first two years of the debt. What is the carrying value of the debt on Turner Company's balance sheet after the second payment has been made?

7%.

Year	Beginning Principal Balance	Accrued Interest	Payment Amount	Payment Applied to Principal	Ending Principal Balance
1	85,000	5950	20,731	14,781	70,219
2	70,219	4915.33	20,731	15,815.67	54,403.33

Carrying value of installment note after second payment: 54,403.33

Problem 2 (18 points) – You must show your work to receive full credit. Even if your answers are correct, you will not receive full credit without showing your work.

Compute the requested ratios for 2013 from the financial statements of the Test Company on the following page. Please show your work to receive full credit for your answers. The summary of ratio formulas is attached. All ratios should be computed in accordance with standard financial analysis procedures, not your own personal interpretation of the ratio or its terms.

Earnings per share = \$3.03

$$\frac{\text{Net income}}{\text{Avg shs o/s}} = \frac{\$4535}{1.499} = \underline{\underline{\$3.025}}$$

Net margin = 6.1%

$$\frac{\text{Net income}}{\text{Net Sales}} = \frac{\$4535}{\$74,754} = \underline{\underline{.061}}$$

Return on assets = 11.1%

$$\frac{\text{Net Income}}{\text{Avg total assets}} = \frac{\$4535}{\left(\frac{41,084 + 40,518}{2}\right)} = \frac{4535}{40,801} = \underline{\underline{.111}}$$

Accounts receivable turnover = 56.6

$$\frac{\text{Net Sales}}{\text{Avg A/R}} = \frac{\$74,754}{\left(\frac{1395 + 1245}{2}\right)} = \frac{74,754}{1320} = \underline{\underline{56.63}}$$

Average number of days to sell inventory = 78.5

$$\frac{\text{Cost of Goods Sold}}{\text{Avg Inventory}} = \frac{48,912}{\left(\frac{10,710 + 10,325}{2}\right)} = \frac{48,912}{10,517.5} = \underline{\underline{4.65}}$$

$$365 \div 4.65 = \underline{\underline{78.49}}$$

Acid test (quick ratio) = .347

$$\frac{\text{Quick assets}}{\text{Current liab}} = \frac{\$2494 + 85 + 1395}{11,462} = \underline{\underline{.347}}$$

Test Company Income Statement - All amounts are in millions

	Year End December 31,	
	2013	2012
Net sales	\$74,754	\$70,395
Cost of sales	<u>48,912</u>	<u>46,133</u>
Gross margin	25,842	24,262
Operating expenses	<u>18,076</u>	<u>17,601</u>
Net operating income	7,766	6,661
Interest expense	632	606
Other (income) expense	<u>(87)</u>	<u>(13)</u>
Income before provision for income taxes	7,221	6,068
Provision for income taxes	<u>2,686</u>	<u>2,185</u>
Net income	<u>\$4,535</u>	<u>\$3,883</u>

Test Company Balance Sheet

	At December 31,	
	2013	2012
Current assets		
Cash	\$2,494	\$1,987
Marketable securities	85	79
Accounts receivable	1,395	1,245
Inventories	10,710	10,325
Prepaid expenses & other current assets	<u>773</u>	<u>963</u>
Total current assets	15,457	14,599
Property & equipment, net	24,069	24,448
Other non-current assets	<u>1,558</u>	<u>1,471</u>
Total assets	<u>\$41,084</u>	<u>\$40,518</u>
Liabilities		
Accounts payable & accrued expenses	\$7,262	\$6,622
Other current liabilities	<u>4,200</u>	<u>2,754</u>
Total current liabilities	11,462	9,376
Long-term debt	9,475	10,758
Other liabilities	<u>2,370</u>	<u>2,486</u>
Total liabilities	<u>23,307</u>	<u>22,620</u>
Stockholders Equity		
Common stock	88	87
Paid-In capital in excess of par	7,948	6,966
Retained earnings	20,038	17,246
Accumulated other comprehensive income	<u>(10,297)</u>	<u>(6,401)</u>
Total stockholders' equity	<u>17,777</u>	<u>17,898</u>
Total liabilities and equity	<u>\$41,084</u>	<u>\$40,518</u>
Average number of common shares outstanding	<u>1,499</u>	<u>1,562</u>