

# Key

**Exam 3 Spring 2008 FINC 4532 Your Name \_\_\_\_\_**  
**YOU HAVE 100 MINUTES TO COMPLETE BOTH PARTS OF THIS EXAM**

**Instructions:**

- 1) The part of the exam is closed book and closed notes. No scrap paper is allowed; use the back of the exam if necessary.
- 2) Partial points are based on readily observable evidence that you know at least part of the solution concept. The more evidence presented (and the clearer the evidence), the better the chance for partial points. In other words, **SHOW ALL WORK!**
- 3) True/False questions are worth 3 points. Multiple-choice questions are worth 4 points. Short answer questions usually take less than three sentences and are worth 5 points.

1. Define Net Working Capital?

Current Assets - Current Liabilities

2. List the 5 C's of credit?

- 1. Character
- 2. Collateral
- 3. Capacity
- 4. Conditions
- 5. Capital

3. Electronic data interchange (EDI) allows the exchange of information electronically from one computer to another thereby \_\_\_\_\_.

A  
A

- a. saving personnel costs
- b. increasing material costs
- c. completely eliminating errors
- d. saving personnel costs & completely eliminating errors
- e. all of the above

4. In the maturity-matching approach, the firm hedges its risk by matching the maturities of its assets and liabilities.

- A. True
- B. False

5. \_\_\_\_\_ is essentially the margin of safety required to meet unexpected needs.

A

- a. The precautionary demand
- b. The transactions demand
- c. The speculative demand
- d. The accounting demand
- e. None of the above

6. Which of the following statements is true?

A

- a. Trade credit is credit extended by one firm to another.
- b. Businesses do not routinely grant trade credit on the sales of their goods and services.
- c. When trade credit is extended, the buyer specifies the period of time allowed for payment.
- d. The terms "2/10, net 30" mean the buyer can take a 2% cash discount if payment is made within 30 days (the discount period).
- e. All of the above are true.

7. How does a credit scoring model relate to your class group project?

① stats model to reach a conclusion  
② project uses multiple regression predictive model to predict dependent variable

8. Credit-policy decisions involve all aspects of receivables management. The decision does not include which of the following?

- a. setting evaluation methods and credit standards
- b. the choice of credit terms
- c. monitoring receivables and avoiding actions for slow payment
- d. controlling and administering the firm's credit functions

C

9. Letters of credit frequently are used in \_\_\_\_\_.

- a. international trade
- b. domestic trade
- c. credit trade
- d. none of these

A

10. A more liberal credit policy should decrease the cost of goods sold and increase the gross profit, bad debt expenses, the cost of carrying additional receivables, and administrative costs.

- a. True
- b. False

B

11. Which of the following statements is false?

- a. Credit scoring models are constructed by using sophisticated statistical methods to analyze the payment records of all future customers.
- b. Credit scoring models enable the creditor to accept the clearly good customers and reject the clearly bad customers very quickly.
- c. Credit scoring models allow different loan processors to apply consistent standards across all credit applicants.
- d. Credit scoring models work best when applied to large populations of loan applicants.

A

12. Which of the following statements is true?

- A) ABC system of inventory control looks at the percentages of sales collected during various months.
- B) A simple and useful inventory management model is the economic order quantity (EOQ) model.
- C) The collection process can be viewed as a capital budgeting process wherein the firm wants to use the collection procedures that generate the highest safety stock.
- D) Businesses follow a number of specific steps in the JIT process, depending on how long overdue the account is, the size of the debt, and other factors.

B

13. Financial planning has three phases including \_\_\_\_\_.

- a. formulating the plan
- b. implementing the plan
- c. evaluating performance
- d. all of these

D

14. Pro forma financial statements show the effects of the firm's decisions on its past financial statements.

- a. True
- b. False

B

15. A financial plan provides a benchmark against which to identify reasons for the similarities between outcomes and forecasts.

- a. True
- b. False

A

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**Exam 3 Spring 2008 FINC 4532 Your Name \_\_\_\_\_**  
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Instructions:

The part of the exam is open book and open notes.

Point values are listed with the question.

- 3) Look over the entire exam before starting. The best strategy is generally to "cherry pick". In other words, solve the easiest (and/or most familiar) problems first. This will save time (and energy) that can be expended on the more difficult problems.
- 4) Partial points are based on readily observable evidence that you know at least part of the solution concept. The more evidence presented (and the clearer the evidence), the better the chance for partial points. In other words, **SHOW ALL WORK!**
- 5) If you have additional time remaining, give your work one last check.

1. (4 points) A firm's cash collection cycle is 40 days, its inventory conversion period is 35 days, its receivables collection period is 17 days. How long is the firm's payables deferral period?

$$35 + 17 - X = 40 \Rightarrow X = 12$$

2. (12 points) Your company has \$0 in its checking account. Your company needs to borrow money for one year, such that it has a \$130,000 remaining balance at the end of one year. You are offered the following loans, all with a quoted 14.4% annual interest rate. Two question for each loan. 1) What amount must you borrow today in order to have \$130,000 at the end of one year? What is the effective annual interest rate for each loan?

Interest in Arrears

Initial Loan Amount = 130,000 Effective Interest Rate = 14.4

Discount Loan

Initial Loan Amount = 151,869 Effective Interest Rate = 16.82

Interest in Arrears with a 5% Compensating Balance

Initial Loan Amount = 136,892 Effective Interest Rate = 15.16

Discount Interest with a 5% compensating balance

Initial Loan Amount = 159,862 Effective Interest Rate = 17.7

3. (12 points) For the following trade credit terms, what are the effective and nominal rates.

1.5/10, net 30	Nominal Rate <u>27.79</u>	Effective Rate <del>31.69</del> <u>31.76</u>
1/30, net 45	Nominal Rate <u>24.58</u>	Effective Rate <u>27.7</u>
1.5/25, net 45	Nominal Rate <u>27.79</u>	Effective Rate <del>31.69</del> <u>31.76</u>
2/15, net 45	Nominal Rate <u>24.83</u>	Effective Rate <u>27.9</u>

4. (16 points) Semini Beverage has the following historical financial statements:

	2006	2007
Sales	\$1600	\$1728
Oper. Expenses	\$968	<u>1045.44</u>
Depreciation	\$200	\$198
EBIT	\$332	<u>484.56</u>
Interest Expense	\$66	<u>79.92</u>
EBT	\$266	<u>404.64</u>
Taxes	\$90.44	<u>137.58</u>
Net Income	\$175.56	<u>267.06</u>

Balance Sheet	2006	2007	2006	2007
Cash	\$185	<u>\$192.50</u>	Accounts payable	\$210 <u>226.80</u>
Accounts receivable	\$470	<u>507.60</u>	Notes payable	\$83 <u>-154.22</u>
Inventory	<u>\$632</u>	<u>682.56</u>	Accruals	<u>\$348</u> <u>375.84</u>
Total current assets	\$1287	<u>1382.66</u>	Current liabilities	\$641 <u>448.42</u>
Net plant & equip.	\$1740	<u>1920</u>	Long-term bonds	\$711 <u>861</u>
Accum. Depreciation	\$1084	<u>1282</u>	Common stock	\$285 <u>285</u>
Net plant & equip.	\$656	<u>638</u>	Retained earnings	<u>\$306</u> <u>426.18</u>
Total assets	<u>\$1,943</u>	<u>2020.60</u>	Total liab. & equity	<u>\$1,943</u> <u>2020.60</u>

Next year Gemini's sales are forecast to change from \$1600 to \$1728. Operating expenses are a constant percent of sales. Depreciation is as listed for next year. Interest expense varies directly with Long-term bonds. Notes payable are discount bonds and accrue no interest. The firm's tax rate will be unchanged next year. Several balance sheet items vary directly with sales; Accounts Receivable, Inventory, Accounts payable, and Accruals. The firm plans to purchase/increase long term assets by \$180. They plan to sell \$150 of long term debt. The new long term debt has a 5% compensating balance. Cash will remain at \$185, unless adjustments are needed for compensating balances. The firm has no plans to issue equity. The firm pays out 55% of net income as dividends. Write out the new income statement and balance sheet, use the Notes Payable account as a plug account to make your balance sheet balance. It is OK if the Notes Payable is negative on your pro forma statement.

Peer Grading for Group Project, can affect individual group grades by up to 20 points. You are to grade your peers in the group project. To do this, list the members of your group excluding your name. Allocate a total of 100 points (whole numbers only) among the group members. Do not give less than 0 or more than 100 points to any member. If you wish to allocate points equally, write "same" in the point's allocated area. For your allocation to count, you must correctly list all of your group member's names, excluding your name, and you must allocate exactly 100 points. It is your choice as to how you allocate points, but it is expected that you will give higher points to those who made the larger contributions to the projects. If everyone made similar contributions, use "same" to equally allocate points. Note, while this is a zero sum game, increased points (grade) for one group member reduces the grade for other group members, your scoring of other students will not affect your grade on the project. You are to write the names (first/preferred and last) of all the group members, even if you give them 0 points. In the event, you do not write the names (first/preferred and last) of all of the group members, your point allocation will be credited as "same."

Name	Points Allocated
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
	Total Points = 100