École de gestion TELFER School of Management — LIÉE au LINKED with LEADERSHIP

Midterm Exam
ADM2341 Managerial Accounting Fall 2012

Your Professor: Check one √ Adjaoud □ Ding □ Eden □

150 minutes

STUDENT NAME: ....

STUDENT NUMBER: ....

You may separate the pages but ensure that you put them back together and staple before handing in.

1. Please limit your answer to the space provided. Please indicate if you use the back of a page.
2. The use of standard abbreviations (O/H for Overhead and CM% for Contribution Margin Percentage) is quite acceptable.
3. Budget your time wisely**.**
4. Please do not ask the invigilators questions. Make reasonable assumptions where necessary.
5. Language dictionaries and calculators are allowed.
6. **You must show calculations.**

Questions	**Max Grade**
Q.1	**20**
Q.2	**20**
Q.3	**20**
Q.4	**20**
Q.5	**20**
Total	**100**

You must sign the following Statement of Academic Integrity

The School of Management does not condone academic fraud, an act by a student that may result in a false academic evaluation of that student or of another student. Without limiting the generality of this definition, academic fraud occurs when a student commits any of the following offences: plagiarism or cheating of any kind, use of books, notes, mathematical tables, dictionaries or other study aid unless an explicit written note to the contrary appears on the exam, to have in his/her possession cameras, radios (radios with headsets), tape recorders, pagers, cell phones, or any other communication device which has not been previously authorized in writing.

Statement to be signed by the student:

I have read the text on academic integrity and I pledge not to have committed or attempted to commit academic fraud in this examination.

Signed:______________________________________

Note: an examination without this signed statement will not be graded and will receive an exam grade of zero.

QUESTION 1 (20 points)

For each of the following questions, circle the best answer and report your choice on the Scan Sheet

1. The following data are provided by the Woods Corporation for the month of September, 2012:

Cost of goods sold	$70
Direct labor	$20
Direct materials	$25
Finished goods, beginning	$0
Cost of goods manufactured	$80
Work-in-process, ending	$10
Finished goods, ending	$15
Manufacturing overhead	$30

Which of the following represents the beginning work-in-process inventory?
A. $20
B. $15
C. $55
D. $25

2. During the month of May, Sushi Manufacturing Company purchases $43,000 of raw materials. The manufacturing overhead totals $27,000 and the total manufacturing costs are $106,000. Assuming a beginning inventory of raw materials of $8,000 and an ending inventory of raw materials of $6,000, what must be the total for direct labour?
A. $34,000.
B. $38,000.
C. $36,000.
D. $45,000.

3. During the month of June, Adm2341 Company incurs $17,000 of direct labour and $8,500 of manufacturing overhead, and purchases $15,000 of raw materials. Between the beginning and the end of the month, the raw-materials inventory increases by $2,000, the finished goods inventory increases by $1,500, and the work-in-process inventory decreases by $3,000. What is the cost of goods manufactured?
A. $38,500.
B. $40,500.
C. $41,500.
D. $43,500.

4. Selected information about Golftown Corporation's operations at high and at low levels of activity follows:

Number of units produced	25,000	30,000
Total manufacturing overhead	$575,000	$680,000
Direct material cost per unit	$5	$5
Direct labor cost per unit	$6	$6

Using the high-low method, what is the manufacturing total variable cost per unit of product?
A. $11.05.
B. $21.00.
C. $32.00.
D. $35.00.

5. A company increased the selling price for its product from $1.00 to $1.10 a unit when total fixed expenses increased from $400,000 to $480,000 and the variable expense per unit remained unchanged at $0.50. How would these changes affect the break-even point?
A. The break-even point in units would increase.
B. The break-even point in units would decrease.
C. The break-even point in units would remain unchanged.

D. The effect cannot be determined from the information given.

6. A company has provided the following data:

Sales in units	3,000 units
Sales price	$70 per unit
Variable cost	$50 per unit
Fixed cost	$25,000

If the dollar contribution margin per unit is increased by 10%, total fixed cost is decreased by 20%, and all other factors remain the same, what will the outcome be for operating income?

A. Increase by $61,000.
B. Increase by $20,000.
C. Increase by $3,500.
D. Increase by $11,000.

7. Couscous Company's sales are 30% in cash and 70% on credit. 60% of the credit sales are collected in the month of sale, 25% in the month following sale, and 12% in the second month following sale. The remainder is uncollectible. The following are budgeted sales data:

	January	February	March	April
Total Sales	$60,000	$70,000	$50,000	$30,000

What would be the budgeted total cash receipts in April?

A. $27,230.
B. $36,230.
C. $38,900.
D. $47,900.

8. Operating leverage reflects the

A. relationship of a company's variable and fixed expenses.
B. degree of increase in earnings per share created by borrowing at favorable interest rates.
C. sales mix of a company's products.
D. responsiveness of profits to changes in funds devoted to marketing efforts.

9. Once the break-even point is reached, which of the following statements is true?

A. The total contribution margin changes from negative to positive.
B. Operating income will increase by the unit contribution margin for each additional item sold.
C. Variable expenses will remain constant in total.
D. The contribution margin ratio begins to decrease.

10. The following costs appear in Telfer Company's flexible budget at an activity level of 15,000 machine-hours:

Indirect materials	$7,800
Factory rent	$18,000

What would be the flexible budget amounts at an activity level of 12,000 machine hours if indirect material is a variable cost and factory rent a fixed cost?

	Indirect materials	Factory rent
A.	$7,800	$14,400
B.	$7,800	$18,000
C.	$6,240	$14,400
D.	$6,240	$18,000

QUESTION 2 (20 POINTS)

Obama Metal Shops produces metal window frames. The company's income statements for the last three years are presented below:

Year	**2009**	**2010**	**2011**
Units sold	25,000	30,000	35,000
Sales $	$400,000	480,000	$560,000
COGS	275,000	315,000	355,000
Gross Margin	125,000	165,000	205,000
Selling Expenses	75,000	90,000	105,000
Admin Expenses	20,000	22,500	25,000
Income	$30,000	52,500	$75,000

The company has no beginning or ending inventories.

REQUIRED:

1. Use the high-low method to compute the variable and fixed components of the cost of goods sold, selling expenses and admin expenses. Write the equation formula for each item.

2. Give two examples of likely components of the above **selling expenses** for this producer of metal window frames.

3. Prepare an income statement in the contribution margin format for **2012**, assuming the cost structure remains the same and sales in 2012 are 40,000 units.

QUESTION 3 (20 POINTS)

The managerial accountants at Maradona Manufacturing Company were in the process of preparing the statement of cost of goods manufactured and sold for the year ended December 31, 2011, when an explosion and fire destroyed a lot of the information relating to the inventory accounts. Fortunately, the following information was retrieved from the embers:

• Purchases of direct materials in 2011	$300,000
• Sales in 2011	2,000,000
• Mortgage Outstanding	95,000
• Total manufacturing costs incurred during 2011	1,300,000
• Gross margin in 2011	600,000
• Direct materials inventory, January 1, 2011	40,000
• Work in process inventory, January 1, 2011	90,000
• Operating expenses	220,000
• Finished goods inventory, January 1, 2011	250,000
• Work in process inventory, December 31, 2011	110,000

- Manufacturing overhead amounted to 60 percent of the total manufacturing costs incurred.
- Manufacturing overhead was 200 percent of the direct labor costs.

REQUIRED:

1. Prepare a schedule of Cost of Goods Manufactured. Compute the ending inventories for direct materials, and cost of finished goods for 2011.

2. Prepare an income statement for 2011

QUESTION 4 (20 POINTS)

Party Time Favours Ltd. is a wholesaler (distributor) of novelties operating nine months of each year from July 1 until March 31 of the following year. From the period April 1 to June 30, the company is idle. The company has $75,000 in cash on July 1 from earnings which it made last year. During the period of operations, Party Time Ltd. has access to funds from the bank at 12% interest per year. Interest is paid at the end of each month. Borrowing is at the beginning of the month that funds are needed.

The management of Party Time Favours Ltd. wants to develop cash budgets for the coming season (July 1 - March 31). The sales forecast for the coming season is as follows:

July	$ 6,000
August	50,000
September	400,000
October	600,000
November	500,000
December	200,000
January	6,000

10% of sales are cash, the rest is on credit of which 40% are collected in the month after sale, and 48% are collected two months after the sale. The remaining 2% of sales represent bad debts and are never collected.

Gross margin is 20% of sales. The desired ending inventory is 10% of the cost of sales of the next month. The beginning inventory on July 1 is $480.

Thirty percent of purchases are paid for in the month of purchase and the remainder in the following month. Accounts payable for merchandise purchases is $336 at the beginning of July.

Selling and administrative expenses are $10,000 per month plus 1% of monthly sales. Other expenses (including a depreciation of $5,000) are $30,000 in July. All expenses are paid in cash during the month.

Party Time Favours Ltd. feels that it is necessary to maintain a minimum monthly cash balance of $25,000 during the selling season. The bank allows the company to borrow and repay in increments of $1,000 at the beginning of the month.

REQUIRED:

(a) Prepare a budget of sales collections for July and August

(b) Prepare a budget of purchases for July and August.

(c) Prepare a budget of disbursements for purchases for July and August.

(d) Prepare a monthly cash budget covering **the two month period** from July 1 to August 31.

QUESTION 5 (20 POINTS)

Wong Corp., a wholesale supply company, uses independent sales agents to market the company's products. These agents currently receive a commission of 20% of sales, but are demanding an increase to 25% of sales. Wong had already prepared its budget for next year before learning of the sales agents' demand for an increase in commissions. That budgeted income statement appears
below:

Wong Corp.
Budgeted Income Statement

Sales		$10,000,000
Cost of Sales		6,000,000
Gross Margin		4,000,000
Selling and Administrative Expenses:		
Commissions	$2,000,000	
All Other Expenses [Fixed]	100,000	2,100,000
Operating Income		$1,900,000

Wong is considering the possibility of employing its own salespersons. Three individuals would be required, at a salary of $30,000 each, plus commissions of 5% of sales. In addition, a sales manager would be employed at a fixed annual salary of $160,000.

REQUIRED: *[Round to the nearest dollar]*

a) Compute Wong's break-even point in sales dollars based upon the company's budgeted income statement, assuming that the company continues to use independent sales agents and that they are paid the old commission rate of 20% of sales.

b) Compute Wong's break-even point in sales dollars, assuming that the company employs its own salespersons.

c) Compute the sales dollars required to attain the target profit of $1,900,000, assuming that the company continues to use independent sales agents and the company agrees to their demand for a 25% sales commission.

d) Compute the sales dollars that would be required to generate the target profit of $1,900,000, assuming that the company employs its own salespersons.