NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF ACCOUNTING

FIRST SEMESTER EXAMINATION 2010

MANAGEMENT AND COST ACCOUNTING CAC 4105

TIME ALLOWED: 3 HOURS

INSTRUCTIONS TO CANDIDATES

ANSWER ALL THREE QUESTIONS

QUESTION I **(40 Marks)**

The Standard Mercantile Corporation is a wholesaler and ends its fiscal year on December 31. You have been requested in early January 2010 to assist in the preparation of cash forecast. The following information is available regarding the company's operations:

1) Management believes that the 2009 sales pattern is a reasonable estimate of 2010 sales. Sales in 2009 were as follows :

January	$ 360 000	July	$ 350 000
February	420 000	August	550 000
March	600 000	September	500 000
April	540 000	October	400 000
May	480 000	November	600 000
June	400 000	December	800 000
		Total	$ 6000 000

2) The accounts receivable at December 31 total $ 380 000. Sales collections are generally made as follows:

During month of sale	60%
In first subsequent month	30%
In second subsequent month	9%
Uncollectible	1%

3) The purchase cost of goods averages 60% of selling price. The cost of the inventory on hand at December 31 is $840 000 of which $ 30 000 is obsolete. Arrangements have been made to sell the obsolete inventory in January at half of the normal selling price on a C.O.D basis. The Company wishes to maintain the inventory as of the 1st of each month at a level of three months sales as determined by the sales forecast for the next three months. All purchases are paid for on the 10th of the following month. Accounts payable for purchases at December 31 total $370 000.

4) Recurring fixed expenses amount to $ 120 000 per month including depreciation of $20 000. For accounting purposes the company apportions the recurring fixed expenses to the various months in the same proportion as that month's estimated sales bears to the estimated total annual sales. Variable expenses amount to 10% of the sales. Payments for expenses are made as follows;

	During Month Incurred	Following Month
Fixed Expenses	55%	45%
Variable expenses	70%	30%

5) Annual property taxes amount to $50 000 and are paid in equal instalments on December 31 and March 31. The property taxes are in addition to the expenses in item (4) above.

6) It is anticipated that cash dividends of $20 000 will be paid each quarter on the 15th day of the 3rd month of the quarter.

7) During the winter unusual advertising costs will be incurred which will require cash payments of $10 000 in February and $ 15 000 in March. The advertising costs are in addition to the expenses in item (4) above.

8) Equipment replacements are made at the rate of $3 000 per month. The equipment has an average estimated life of six years.

9) The company's income tax for 2009 is $230 000. A declaration of Estimated Income Tax was fixed for 2009 and payments totalling $110 000 have been made. The balance of the tax due will be paid in two equal instalments, the first instalment due on March 15, 2010.

10) At 31 December 2009 the company had a bank loan with an unpaid balance of $ 280 000. The loan requires a principal payment of $ 20 000 on the last day of each month plus interest at ½ % per month on the unpaid balance at the first of the month. The entire balance is due on March 31, 2010.

11) The cash balance at December 31, 2010 is $ 100 000.

REQUIRED:

Prepare a cash forecast statement by months for the first three months of 2010 for the Standard Mercantile Corporation. The statement should show the amount of the cash on hand (or deficiency of cash) at the end of the month. All computations and supporting schedules should be prepared and presented in good form. **(40 marks)**

QUESTION 2 (30 marks)

An income statement prepared by the controller of Zvamaida Company covering operations for the past fiscal year is given below:

Zvamaida Company
Income Statement
Year ended December 31 2009

Sales revenue – 200 000 units at @ $ 25 $5000 000

Cost and expenses:

	Nonvariable	Variable	
Direct Material	$ -	$ 900 000	
Direct Labour	-	1000 000	
Indirect manufacturing costs	700 000	300 000	
Operating expenses	1100 000	400 000	$ 4400 000
	$ 1 800 000	$ 2 600 000	
Net income			$ 600 000

Maximum capacity of the company is 240 000 units per year.
You have been invited to attend a management meeting of the company for the purpose of assisting management in solving some of the company's current operating planning problems. Because the ratio of non variable costs to total cost is high, volume is a very important factor in the profit structure. When asked to submit plans for increasing sales, the sales manager came up with the following two proposals:

1) Reduce the selling price by 8%, If this is done, he thinks he can sell 240 000 units thereby utilising 100% of the company's capacity;
2) Intensify the advertising campaign; if the company would authorise a 50% increase in the advertising budget, which was $300 000 for the past year, he thinks he could increase sales 10% above their present level without dropping the selling price.

The president of the company has pointed out that the industry is highly competitive and that competitors would probably reduce their selling price as soon as the company announced a new price. He thinks that any price advantage the company might gain would be of short duration.

REQUIRED:

a) Prepare charts and cost and profit data that would be useful in this decision

(18 marks)

b) Write up your evaluation of the two proposals made by the sales manager

(12 marks)

QUESTION 3 **(30 marks)**

a) What are the basic principles that are common to both standard Costing and Budgetary control?
What are the objectives and uses of budgetary Control?
How far is Budgetary Control possible where production is erratic in nature?

(12 marks)

b) Despite the increase in the selling price of its sole product to the extent of 20%, a company finds that it has incurred a loss during the year 2009 to the extent of $4000 000 as against the profit of $5 000 000 made in 2008. The adverse situation is attributed mainly to the increase in price of materials and overhead, the increase over the previous year being an average, 15% and 10% respectively.

The following figures are extracted from the books of the company;

	31/3/08	31/3/09
Sales	12 000 000	12 960 000
Cost of sales:		
Material	8 000 000	9 110 000
Variable Overhead	2 000 000	2 400 000
Fixed Overhead	1 500 000	1 850 000

REQUIRED:

Analyse the variances over the year in order to bring out the reasons for the fall in profit. **(18 marks)**