UNIVERSITY OF SWAZILAND

DEPARTMENT OF ACCOUNTING

MAIN EXAMINATION PAPER , MAY 2007

DEGREE/DIPLOMA AND YEAR OF STUDY	:	B.COM IV
TITLE OF PAPER	:	MANAGEMENT ACCOUNTING I
COURSE CODE	:	AC 402
TIME ALLOWED	:	THREE HOURS

INSTRUCTIONS:

1. THE TOTAL NUMBER OF QUESTIONS ON THIS PAPER ARE FOUR (4)
2. ANSWER QUESTION ONE AND ANY OTHER THREE QUESTION.
3. THE MARKS AWARDED FOR A QUESTION / PART ARE INDICATED AT THE END OF EACH QUESTION / PART OF QUESTION.
4. WHERE APPLICABLE, SUBMIT ALL WORKINGS AND CALCULATIONS.

NOTE: YOU ARE REMINDED THAT IN ASSESSING YOUR WORK, ACCOUNT WILL BE TAKEN OF ACCURACY OF THE LANGUAGE AND THE GENERAL QUALITY OF EXPRESSION, TOGETHER WITH THE LAYOUT AND PRESENTATION OF YOUR FINAL ANSWER.

SPECIAL REQUIREMENTS: GRAPH PAPER

THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.

QUESTION ONE

A. Thatchery Ltd builds thatched roofs for houses. The budget for 2006 was as follows:

	E	E	
Number of houses to be thatched			70
The standard cost per roof			
Revenue		3,000	
Direct materials:			
Thatch: 2 tons @ E200 per ton	400		
Other materials	150		
Direct labour 300 hours @ E2. 5	750		
Variable production overhead			
300 hours at E0. 5	150		
Fixed production overhead			
300 hours @ E3. 5	1,050		
Standard cost		2,500	
Standard profit		500	

a) The budgeted fixed production overhead was E73, 500, from which the standard absorption rate of

$$\frac{\text{E73,500}}{\text{(70 x 300 hours)}} = \text{E3. 50 per standard hour was derived}$$

b) Since one thatched roof equals 300 standard hours of output, the fixed overhead cost per roof = 300 standard hours = E1, 050.

c) There is additional budgeted overhead for selling and administration of E15, 000. This expenditure is regarded as a fixed cost.

B. Actual results in 2006 were as follows:

Number of roofs thatched	75
Revenue	E216,000
Thatch:	
Purchased 180 tons, cost	E 33,300
Used 170 tons	
Other direct materials, cost	E 12,000
Direct labour:	
Hours paid for	26,000 hours
Hours worked (active time)	22,000 hours
Hours of idle time	4,000 hours
Cost of hours paid for	E72,000
Variable production overhead	E11,500
Fixed production overhead	E 76,000
Sales and administration overhead	E16,000

REQUIRED:

Prepare an operating statement reconciling the budgeted profit with the actual profit. All closing stocks are valued at standard cost.

Total (25 Marks)

QUESTION TWO

(a) What are the most important features which distinguish marginal costing from absorption costing? (5 Marks)

(b) To help decision-making during budget preparation, Costain Baddley Ltd has prepared the following estimates of sales revenue and cost behaviour for a one year period, relating to a product item called Allergic.

Activity	60%	100%
Sales and production (thousands of units)	36	60
	E'000	**E'000**
Sales	432	720
Production costs:		
Variable and fixed .	366	510
Sales, distribution and administration costs:		
Variable and fixed	126	150

The normal level of activity for the current year is 60, 000 units, and fixed costs are incurred evenly throughout the year.

There were no stocks of Allergic at the start of the quarter in which 16, 500 units were made and 13, 500 units were sold. Actual fixed costs were the same as budgeted.

REQUIRED:

If absorption costing is used, what would be:

(i) the amount of fixed production costs absorbed by Allergic; (5 Marks)

(ii) the over / (under) absorption of fixed product costs; (5 Marks)

(iii) the profit for the quarter? (5 Marks)

iv) If marginal costing is used, what would be the net profit or loss for the quarter ? (5 Marks)

Total (25 Marks)

You may assume that sales revenue and variable costs per unit are as budgeted.

QUESTION THREE

A company producing two products with joint facilities is considering dropping Product B since it is being sold at a loss according to a profitability analysis prepared under the full-cost approach for a typical year:

	Product A	Product B	Total
Number of units sold	20,000	10,000	30,000
Sales revenue	E200,000	E120,000	E320,000
Direct material	E 28,000	E 40,000	E 68,000
Variable directed labour	60,000	50,000	110,000
Factory overhead	30,000	25,000	55,000
Selling and Admin expenses	60,000	20,000	80,000
	E178,000	E135,000	E313,000
Net income (loss)	E 22,000	(E15,000)	E 7,000

Factory overhead is applied on a direct labour cost basis. The fixed component is E33,000 per year. The present fixed costs will be reduced by E5,000 per year if Product B is discontinued.

Except for commissions of 10 percent on sales, the selling and administrative expenses are nonvariable with volume. No change in the non variable component is expected if Product B is eliminated.

REQUIRED:

a) Does it appear advisable to drop Product B? Support your answer with quantitative data (15 Marks)

b) Without regard to your answer to (a), assume that it is necessary to keep Product B in the line. Further assume that the sales of Product B will remain at the present level of 10,000 units.

How many additional units of Product A will have to be sold if the present net income of E7,000 is to be increased to E10,000? (10 Marks)

Total (25 Marks)

QUESTION FOUR

Sobeit Corporation produces a single product, which sells for E100 per unit. Standards have been set for the manufacturing costs and the company uses absorption costing. Variances from standard costs are closed to the income account at the end of each year.

Fixed costs and expenses were budgeted as follows in the profit plan for the year 2006: Manufacturing, E100,000; Selling and administrative, E50,000. The fixed manufacturing costs are applied on a standard capacity of 10,000 units per year.

A cost- volume profit analysis prepared from the 2006 profit plan showed that the break-even point of the firm was 50 per cent of standard capacity.

REQUIRED

a) Calculate the variable cost per unit (8 Marks)

b) According to the cost-volume profit analysis, what net income will be reported for 2006 if sales have been budgeted at 8,000 units? (8 Marks)

c) Assuming that 8,000 units were sold in 2006 and that an unfavourable indirect manufacturing costs volume variance of E10,000 was reported on the income statement, determine:

(1) the number of units manufactured in 2006

(2) the net income reported for 2006 under absorption costing, assuming no variances other than volume and no change in the selling price of the product, given that selling and administrative expenses are all fixed.

(9 Marks)

Total (25 Marks)

QUESTION FIVE

A. Woza Ltd manufactures and sells two grades, A and B, of a single wood product. Each grade is processed through two phases, cutting and finishing. The following unit information is given:

	Grode A	Grade B
Selling price	E15.00	E10.00
Direct materials	2.00	1.00
Variable labor	6.00	5.00
Variable overhead	1.20	1.00
Fixed overhead applied	.72	.60
Labour requirements in hours:		
Cutting	½	½
Finishing	2/5	1/5

The Cutting Department has 200 hours available each week. The Finishing Department has 120 hours available each week. Sales constraints are: Grade A, 400 units per week; Grade B, 300 units per week.

REQUIRED:

a) Using a graphic approach, determine the product mix that maximizes profits (10 Marks)

b) Determine the maximum marginal contribution. (3 Marks)

B. The Willing Company manufactures two types of coils, a Pip and a Pop. Marginal contributions are: E4 on a Pip and E5 on a Pop. Production involves two processes: molding and winding. Willing must produce at least 20 Pips a day, and can make any additional combination of coils subject to the following production constraints;

	Hours required		**Total hours available**
Process	**Pip**	**Pop**	**per day**
Molding	1	2	900
Winding	2	3	1,500

REQUIRED: Using a graphic approach,

a) determine the production mix that maximizes daily profit, (9 Marks)

b) what is that maximum profit? (3 Marks)

Total (25 Marks)