

UNIVERSITY OF SWAZILAND
FACULTY OF COMMERCE
DEPARTMENT OF BUSINESS ADMINISTRATION
MAIN EXAMINATION
MAY 2017

TITLE OF THE PAPER : INTERMEDIATE MANAGEMENT
ACCOUNTING 2

DEGREE : BACHELOR OF COMMERCE

COURSE : AC 324 / AC 414

TIME ALLOWED : THREE (3 HOURS)

Instructions:

1. THIS PAPER CONSIST OF SECTION A AND SECTION B)
2. SECTION A IS CASE STUDY AND IT IS COMPULSORY QUESTION
3. ANSWER ANY TWO QUESTIONS FROM SECTION B

Note: You are reminded that in assessing your work, account will be given of accuracy of language and the general quality of expression, together with layout and presentation of your final answer.

THIS PAPER MUST NOT BE OPENED UNTIL THE INVIGILATOR HAS GRANTED THE PERMISSION

SECTION A Compulsory Question

Question 1.

City Office machine manufactures and sells a photo copying machines. The company's contribution format income statement for the most recent year are given below:

	Total	Per unit	Percent	of
Sales				
Sales (20,000 Units).....	E1, 200,000	E60		
100%				
Less variable cost.....	<u>900,000</u>	<u>E45</u>		?
<hr/>				
Contribution margin	<u>300,000</u>	<u>E15</u>		?
Less fixed cost.....	<u>240,000</u>			
Net operating income	<u>E 60,000</u>			

Management is anxious to improve the company's profit performance and has asked for analysis of number of items:-

Required

1. Compute the company's CM ratio and variable expense ratio (4 marks)
2. Compute the breakeven point in units and sales dollars. Using equation method (4 marks)
3. Assume that sales increase by E400, 000 next year. If cost behavior patterns remain unchanged, how much will the company's net operating income increase? Use the CM ratio to determine the answer (4 Marks).

4. **Refer to the origin data.** Assume that the next year management wants the company to earn a minimum profit of E90, 000. How many unit will have to be sold to meet this target profit figure? (4 Marks)
5. Refer to original data. Compute the company's margin of safety in both Emalangeneni and percentage form.(5 marks)
6. thereafter compute the following:
 - a. Compute the company's degree of operating leverage at the present level of sales. (4 marks)
 - b. Assume that through a more intensive effort by the sales staff the company's sales increase by 8% next year. By what percentage would you expect net operating profit income to increase? Use the operating leverage concept to obtain your answer. (5 marks)
 - c. Verify your answer (b) by preparing a new income statement showing an 8% increase in sales (5 Marks)
7. In an effort to increase sales and profits, management is considering the use of higher quality speaker. The lighter – quality speaker would increase variable cost by E3 per unit, but management could eliminate one inspector who is paid a salary of E30, 000 per year. The sales Manager estimates that lighter quality speaker would increase annual sales by at least 20%.
 - a. Assume that changes are made as described above, prepare a projected income statement for the next year. Show data on total, per unit and percentage basis (6 Marks).
 - b. Compute the company's new break – even point in both units and dollars of sales. Use the contribution margin method (5 marks).
 - c. Would you recommend that the changes be made? (4 Marks)

Total marks 50

SECTION: ANSWER ANY TWO QUESTIONS IN THIS SECTION.

Question 2

Lindelwa Company manufactures and sell a single product. Cost data for the product follow:

Variable costs per unit:

Direct material	E6
Direct Labour	12
Variable factory overheads	4
Variable selling and administrative	3

Total variable costs per unit E25

Fixed overhead per month:

Fixed manufacturing overhead	E240,000
Fixed selling and administrative	<u>180,000</u>
Total fixed cost per month	<u>420,000</u>

The product sells for E40 per unit. The production and sales data for May and June, the first two months of operations, are as follows:

	Unit produced	unit sold
May	30,000	26,000
June	30,000	34,000

Income statements prepared by accounting department, using absorption costing are as follows:

	May	June
Sales	E1,040,000	1,360,000
Less cost of goods sold:		
Beginning Inventory	0	120,000
Add costs of goods manufactured	<u>900,000</u>	<u>900,000</u>
Goods available for sale	900,000	1,020,000

Less ending inventory	<u>120,000</u>	<u>0</u>
Cost of goods sold	<u>780,000</u>	<u>1,020,000</u>
Gross margin	260,000	340,000
Less selling and administrative expenses	<u>258,000</u>	<u>282,000</u>
<i>Net operating income</i>	<u><u>E 2,000</u></u>	<u><u>58,000</u></u>

Required

1. Determine the unit product cost under :
 - a. Absorption costing 2 ½ marks
 - b. Variable costing 2 ½ marks
2. Prepare income statements for May and June using the contribution approach with variable costing. 14 marks
3. Reconcile the variable costing and absorption costing net operating income figures. 6 marks

25 marks

Question 3

XYZ Sport Equipment manufactures round, rectangular and octagonal trampolines. Data on sales and expenses for the past month follow:

	Total (E)	Trampoline		
		Round	Rectangular	Octagonal
Sales	1,000,000	140,000	500,000	360,000
Less variable expenses	410,000	60,000	200,000	150,000
Contribution margin	590,000	80,000	300,000	210,000
Less fixed expenses:				
Advertising - traceable	216,000.00	41,000	110,000	65,000
Depreciation of special equipment	95,000.00	20,000	40,000	35,000
Line supervisors' salaries	19,000.00	6,000	7,000	6,000
General factory overhead*	200,000.00	28,000	100,000	72,000
Total fixed expenses	530,000.00	95,000	257,000	178,000
Net Operating Income (loss)	60,000.00	(15,000)	43,000	32,000

*A common fixed cost that is allocated on the basis of sales Emalangeneni.

Management is concerned about the continued losses shown by the round trampolines and wants to recommendation as to whether or not the line should be discontinued. The special equipment used to produce the trampolines has no sale value. If the round trampoline model is dropped, the two line supervisors assigned to the model would be discharged.

Required

1. Should production and sale of round trampolines be discontinued? You may assume that the company has no other use of capacity now being used to produce the round trampolines. Show calculations to support your answer. **7 marks**
2. Recast the above data in a format that would be more usable to management in assessing the long-run profitability of various product lines **7 marks**
3. Please define the following terms:
 - a. Incremental costs. 2 marks
 - b. Opportunity costs 2 marks
 - c. Sunk costs. 2 marks
4. What is a *relevant cost*? Are variable costs always relevant costs? Explain? 5 marks

Total 25 marks

Question 4

Matsapha Steel Company makes a single product – a fire resistance filing cabinet – that it sells to office furniture distributors. The company has a single ABC system that is used for internal decision making. The company has two overhead departments whose costs are listed below.

Manufacturing overhead..... E500, 000

Selling and administrative overhead..... E300, 000

The company's ABC system has the following activity cost pools and activity measures:

Activity Cost Pool	Activity measure
Assembling units.....	Number of units
Processing orders	Number of orders
Supporting customers.....	Number of customers
Other	Not applicable

Costs assigned to the "Other" activity measure: they consist of the costs of unused capacity and organization sustainability costs – neither of which are assigned to products, orders or customers.

Matsapha Steel Company distributes the costs of manufacturing overhead and of selling and administrative overhead to the activity cost pools based on employee interviews, the results of which are reported below:

Distribution of Resource Consumption across Activity Costs Pools

Activity	Assembling Units	Processing Orders	Supporting Customers	Others	Total

Manufacturing overhead	50%	35%	5%	10%	100%
Selling and administrative Overhead	10%	45%	25%	20%	100%
Total activity	1,000 units	250 orders	100 customers		

1. Perform the first –stage allocation of overhead costs to the activity cost pools **(8 marks)**.
2. Compute activity rates for the activity costs pool **(6 marks)**.
3. Office Smart is one of Matsapha Steel company's customers. Last year , Office Smart ordered filing cabinets four times. Office Smart ordered a total of 80 filing cabinets during the year. Construct a table showing the overhead costs of 80 units and four orders **(5 marks)**.
4. The selling price of filling cabinet is E595. The cost of direct materials is E180 per filing cabinet, and direct labour is E50 per filing cabinet. What is the product margin on the 80 filing cabinets ordered by Office Smart? How profitable is Office Smart as a customer. **(6 marks)**

Total marks 25