University of Swaziland
Department of Accounting
SUPPLEMENTARY Exam Paper

Degree/Diploma and Year of Study	:	B.Com V
Title of Paper	:	Management Accounting II
Course Code	:	AC 502
Time Allowed	:	**2 Hours.**

Instructions: **1. The total number of questions on this paper are THREE (3).**

2. Answer ALL the questions.

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.

This paper is not to be opened until permission has been granted by the invigilator.

QUESTION ONE

Strong Enterprises Limited is a manufacturer of high quality running shoes. Ms. Dazlling, the President, is considering computerizing the company's ordering, inventory and billing procedures. She estimates that the annual savings from computerization include a reduction of ten clerical employees with annual salaries of E15,000 each, E8,000 from reduced production delays caused by raw materials inventory problems, E 12,000 from lost sales due to inventory stock outs and E 3,000 associated with timely billing procedures. The purchase price of the system is E 200,000 and installation costs are E 50,000.

These outlays will be capitalized (depreciated) on a straight line basis to a zero book salvage value which is also its market value at the end of five years. Operation of the new system requires two computer specialists with annual salaries of E40,000 per person. Also annual maintenance and operating (cash) expenses of E12,000 are estimated to be required.

The company's tax rate is 40% and its required rate of return (cost of capital) from this project is 12%.

Required:

a) Find the project's initial net cash outlay. (8 marks)

b) Find the project's operating and terminal value cash flows over its 5-year life. (8 marks)

c) Evaluate the project using NPV method. (8 marks)

d) Find the project's cash flows and NPV [parts (a) through (c)] assuming that the system can be sold for E.25,000 at the end of five years even though the book salvage value will be zero. (8 marks)

e) Find the project's cash flows and NPV [parts (a) through (c)] assuming that the book value for depreciation purposes is E20,000 even though the machine is worthless in terms of its resale value. (8 marks)

Total (40 marks)

Note: 1. Present value of annuity of E 1 at 12% rate of discount for 5 years is 3.605.

2. Present value of E1 at 12% rate of discount received at the end of 5 years is 0.567.

QUESTION TWO

The Nkambule Manufacturers has the following total operating results for the current year:

Sales revenue	E 5,600,000
Less variable costs	3,720,000
Contribution	1,880,000
Less Fixed Costs	1,000,000
Net income	880,000

The following additional information concerning the performance of each of the firm's three operating departments has been provided:

	Departments		
	A	B	C
Sales revenue	E 2,400,000	E 2,000,000	E1,200,000
Variable costs	1,680,000	1,200,000	840,000
Direct fixed costs	320,000	280,000	200,000

Required:

a) Rank the three departments on the basis of their proportionate measure of relative profitability (15 marks)

b) A proposal to increase advertising expenses by E 123,200 is expected to generate a 10% increase in sales in all three departments. Analyse the effect of this proposal on the firm as a whole and on each department. Assume that the cost of advertising will be allocated to divisions according to each division's percentage to sales and is to be considered as an attributable fixed cost of each department. (15 marks)

Total (30 marks)

QUESTION THREE

One of Goodrich Company's products go through an etching process. The company has observed etching costs as follows over the last 6 quarters.

Quarter	Units	Total Etching Cost in (E)
1	4	18
2	3	17
3	8	25
4	6	20
5	7	24
6	2	16

For planning purposes, Goodrich Company's management would like to know the amount of variable etching cost per unit and the total etching cost per quarter.

Required:

a) Using the Least Squares Method, determine the variable and fixed elements of etching cost as desired by management. (20 marks)
b) Express the cost data in (a) above in the form of $Y = a + bX$. (5 marks)
c) If the company processes 5 units next quarter, what would be the expected total etching cost? (5 marks)

Total (30 marks)

END OF THE QUESTION PAPER