UNIVERSITY OF SWAZILAND

DEPARTMENT OF ACCOUNTING

MAIN EXAMINATION PAPER , MAY 2006

DEGREE/DIPLOMA AND YEAR OF STUDY	:	B.COM V
TITLE OF PAPER	:	MANAGEMENT ACCOUNTING II
COURSE CODE	:	AC 502
TIME ALLOWED	:	TWO HOURS

INSTRUCTIONS:

1. THE TOTAL NUMBER OF QUESTIONS ON THIS PAPER ARE FOUR (4)
2. ANSWER QUESTION ONE AND ANY OTHER TWO 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.

SPECIAL REQUIREMENTS: NONE

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

QUESTION 1

Solani Ltd has two operating divisions A and B. The income statements of March 2006 for each division and for the company as a whole are:

	Division A	**Division B**	**Total**
Sales	E100,000	E50,000	E150,000
Cost of goods sold:			
Prime cost	E20,000	E15,000	E35,000
Variable factory overhead	E15,000	12,000	E27,000
Fixed factory overhead	E10,000	8,000	18,000
Total	E45,000	E35,000	E80,000
Gross profit	E55,000	E15,000	E70,000
Other expenses:			
Sales commissions	E10,000	E5,000	E15,000
Packing and shipping	9,000	7,000	16,000
Advertising	12,000	8,000	20,000
Administrative	6,000	3,000	9,000
Total	37,000	23,000	60,000
Net profit (loss)	E18,000	(E8,000)	E10,000

The company creditors recently informed management that the company must attain more profitable operations before further credit will be extended. One possible move that would aid this situation would be to sell Division B. One prospective buyer would buy this division for E50,000; the money for this sale could be invested at 10% interest.

One effect of the sale of Division B would be that all manufacturing costs could be eliminated. Another effect would be that current space now allotted to this division could be rented to an outside firm for E5000 per year, but none of the fixed factory overhead expenses would be avoided. The sales commissions and packing and shipping expenses are completely variable.

The advertising expenses for the company as a whole would be E15,000 after the elimination of Division B. Finally, half of the administrative expenses charged to Division B would be eliminated if the division were sold.

REQUIRED:

A revised income statement for the company as a whole if Division B is eliminated to improve its credit rating.

Total (40 Marks)

QUESTION 2

a) What, in brief, is the difference between a PERT - Time and PERT Cost network? (5 Marks)

(b) What does it mean to crash an activity? (5 Marks)

c) What is meant by the incremental crash cost of an activity (5 Marks)

d) What is meant by the term slack in a PERT network (5 Marks)

e) Best constructors is experiencing difficulties in constructing fort on the Black Mbuluzi River. Musa, a management accountant proposes that a PERT network be used to organise the construction activities for the fort. Each activity, together with its immediate predecessor activity and completion time for the activity is given below:

Activity	Type of Activity	Predecessor Activity	Completion Time (Duration) (In Weeks)
1	Clear trees	0	8
2	sort trees by size	Clear trees	4
3	Strip trees into logs	clear trees	6
4	Construct gate	strip trees into logs	8
5	construct walls	strip trees into logs	2
6	Build small tower	sort trees by size	4
7	Build captain's house	strip trees into logs	5
8	Build officer's houses	construct walls	6
9	Build enlisted personnel's barracks	Build officer's houses	4
10	hold completion ceremony	all others	1

REQUIRED:
Construct a PERT network to represent the above activities. Show the completion time above each path. Identify the critical path. (10 Marks)

Total (30 Marks)

QUESTION 3

(a) Koko Industries is considering replacing a grinder bought 5 years ago for E15, 000 with a new one costing E25,000 cash. The original grinder is being depreciated at a straight line basis over 15 years to a zero salvage value; Koko Ltd will sell this old equipment to a third party for E6000 cash. The new equipment will be depreciated on a straight line basis over 10 years to a zero salvage value.

REQUIRED:
Assuming a 40% tax rate, what would be Koko's net cash investment if the old grinder is sold and the new one purchased?

(10 Mark)

(b) ABC Ltd, is considering a 10 year capital investment project with forecasted revenues of E40,000 per year and forecasted cash operating expenses of E29,000 per year. The initial cost of the equipment for the project is E23,000, and ABC Ltd expects to sell the equipment for E9000 at the end of the tenth year. The equipment will be depreciated over 7 years. The project requires a working capital investment of E7000 at its inception and another E5000 at the end of year 5.

REQUIRED:

Assuming a 40% tax rate, what would be the expected net cash flow from the project in the tenth year? (10 Marks)

(c) Nqabeni Ltd has a payback goal of 3 years on new equipment acquisitions. A new sorter is being evaluated that costs E450,000 and has a 5 year life. Straight line depreciation will be used, no salvage is expected. Nqabeni Ltd is subject to a 40% income tax rate.

REQUIRED:

To meet the company's payback goal, how much reductions in annual cash operating costs must the sorter generate? (10 Marks)

Total (30 Marks)

QUESTION 4

a) Khanyisile sets its selling prices on the basis of normal volume predictions. The following data are available for the current year:

	Department A	Department B
Normal volume (units)	800,000	600,000
Investment	E700 million	E165 million
Target ROI	25%	15%
Variable manufacturing and Marketing costs per unit	E3000	E4000
Total fixed costs	E245 million	E500 million

REQUIRED:

For each department compute the following: (ignore income taxes)

i) selling price per unit (10 Marks)

ii) ROI if production and sales are 1,000,000 units per year using the selling prices you had computed in a (i) above (10 Marks)

b) Mbabane Industries is considering the introduction of a new product that will be manufactured in an existing plant; however, new equipment costing E150,000 with a useful life of five years (zero terminal disposal value) will be necessary. The space in the existing plant to be used for the new product is currently used for warehousing. When the new product takes over the warehouse space, on which the actual depreciation is E20,000, Mbabane Industries will rent warehouse' space at an annual cost of E25,000. An accounting study produced the following estimates of incremental revenue and costs on an average annual basis:

Sales	E500,000
Cost of merchandise sold (excluding depreciation)	385,000
Depreciation on equipment (straight-line)	30,000
Marketing costs	10,000

The company requires projects to earn a rate of return of 11% (after income taxes) **on average investment. The effective income tax rate is 46%.**

REQUIRED:

Compute the estimated annual residual income resulting from introduction of the new product (10 Marks)

Total (30 Marks)