UNIVERSITY OF SWAZILAND
DEPARTMENT OF ACCOUNTING
SUPPLEMENTARY EXAMINATION PAPER

DEGREE/DIPLOMA AND YEAR OF STUDY	:	B.COM V
TITLE OF PAPER	:	MANAGEMENT ACCOUNTING II
TIME ALLOWED	:	TWO (2) HOURS
INSTRUCTIONS	:	1. TOTAL NUMBER OF QUESTIONS ON THIS PAPER : 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. ALL WORKING NOTES AND CALCULATIONS MUST BE SHOWN ON THE ANSWER SHEET.

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: P.V. TABLES

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

QUESTION ONE

A. Likusasa Ltd purchased a special machine one year ago at a cost of E12,500. At that time, the machine was established to have a useful life of six years and a E500 disposal value. The annual cash operating cost is approximately E20,000. A new machine that has just come on the market will do the same job but with an annual cash operation cost of only E17,000. This new machine cost E16,000 and has an estimated life of five years with a E1,000 disposal value. The old machine could be used as a trade-in at an allowance of E5,000. Straight-line depreciation is used and the company's income tax rate is 50 percent.

Required:
Compute the internal rate of return on the new investment. (20 Marks).

B. Jolima Ltd has a payback goal of 3 years on new capital 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 (scrap) is anticipated. Jolima is subject to a 40% income tax rate.

Required:
To meet the company's payback goal (3 years), how much should the sorter generate in reductions in annual cash operating costs? (10 Marks)

C. Kangaroo Ltd is planning a E200,000 equipment which has an estimated 5-year life with no estimated salvage value. The company has projected the following annual cash flows for the investment.

Year	Projected Cash Inflow	Present value of E1
1	E120,000	0.91
2	60,000	0.71
3	40,000	0.63
4	40,000	0.53
5	40,000	0.44
Totals	E300,000	3.27

Required:

i) assuming that the estimated cash inflows occur evenely during each year, what would be the pay back period? (5 Marks)

ii) what is the net present value of the investment? (5 Marks)

(Total : 40 Marks)

QUESTION TWO

A. Two investment centres of Mbabane Household Technology Company are the Home Security Division and the Appliances Division. The Home Security Division Manufacturers an electronic heat sensor that can be sold externally and is also used by the Appliances Division in making microwave ovens. The following information is available about the heat sensor:

Total production annually – 200,000 units;
Internal requirements are 150,000 units; all others are sold externally
Normal selling price = E25,60
Variable production costs =E12
Fixed overhead = E300,000; allocated on the basis of production
Variable selling costs = E3; includes E1 per unit in advertising cost.
Fixed selling costs E400,000

Required: Determine the transfer price under each of the following methods:

i) total variable cost per unit (3 Marks)
ii) Full production cost per unit (3 Marks)
iii) total variable production cost plus necessary selling costs per unit (3 Marks)
iv) market price (3Marks)

B. Yizo Ltd has two divisions, which are operated as investment centres. Information about these divisions is shown below.

	Division A	**Division B**
Sales	E2,400,000	E4,200,000
Total variable costs	600,000	2,870,000
Total fixed costs	1,400,000	500,000
Average assets invested	2,200,000	6,100,000

Required:

i) what is the residual income of each division if the "charge" on invested assets is 10% which division is doing better (5 Marks)
ii) if the only change next year is that sales increase by 15%, what will be the residual income of each division? Which division would be doing a better job? (5 Marks).

C. Langa and Associates, a legal firm has a target rate of return of 12% for its Law Division. For year 2004 the Law Division generated gross fees of E4,000,000 on average assets of E2,000,000. The Law Division's variable costs were 35% of sales and fixed costs were E1,500,000.

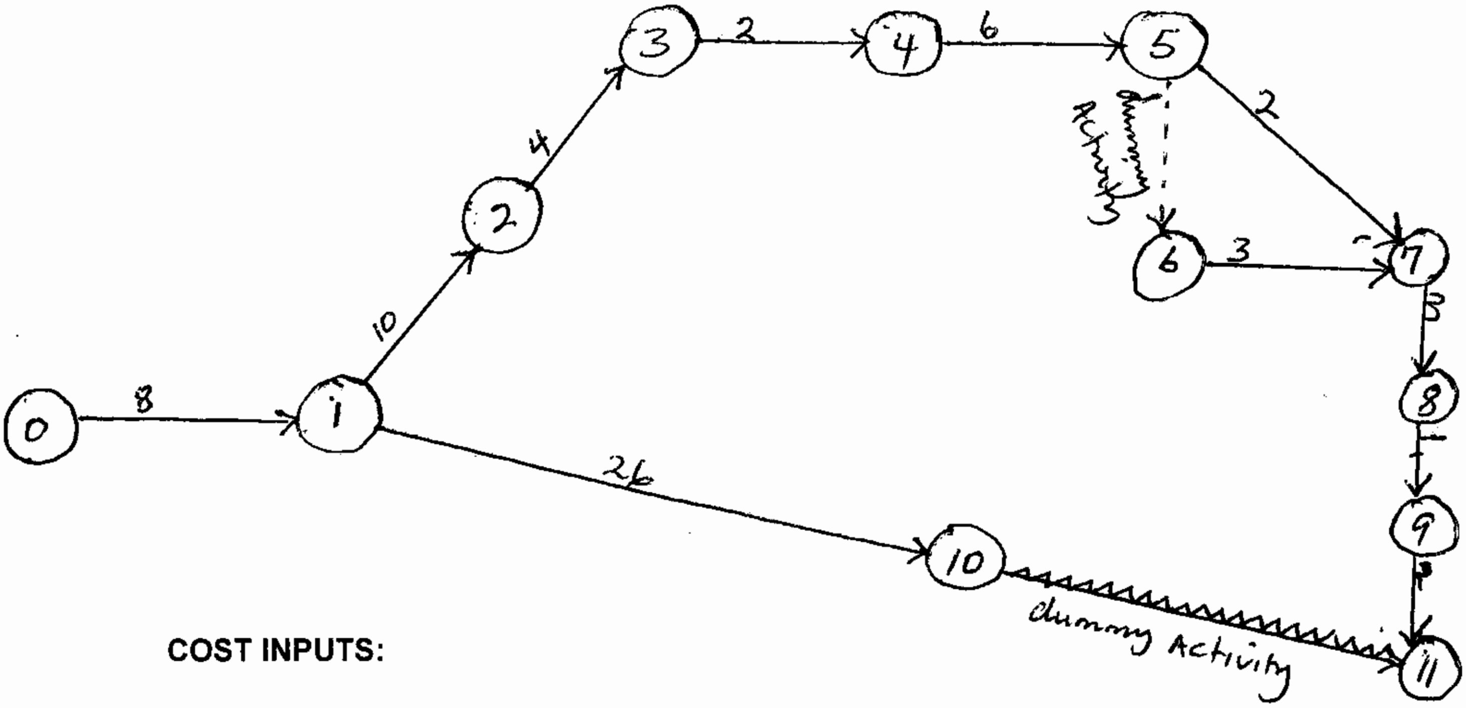
Required: for year 2004 compute the division's

i) ROI (2 Marks)
ii) Residual income (2 Marks)
iii) Profit margin (2 Marks)
iv) Asset turnover (2 Marks)

(Total:30 Marks)

QUESTION THREE

Given below is a network and activity times before and after crashing. Also shown are estimated costs before and after crashing,



COST INPUTS:

Estimated times (Weeks)			Estimated Costs	
Activity	**Normal**	**Crash**	**Normal** E	**Crash** E
0.1	8	6	12,000	16,200
1-2	10	5	12,000	20,400
1-10	26	24	61,980	68,660
2-3	4	3	5,800	7,830
2-6	2	2	1,320	1,320
3-4	2	1	1,200	2,040
4-5	6	2	8,400	16,240
5-6	0	0	0	0
5-7	2	1	2,400	4,080
6-7	3	1	1,500	2,900
7-8	3	2	4,140	6,070
8-9	1	1	1,140	1,140
9-11	2	2	3,120	3,120
10-11	0	0	0	0
			E115,000	E150,000

Required:

a) compute the incremental crash costs of all activities that can be crash.
(6 Marks)

b) Obtain the minimum crash time of the project at the minimum cost.
(24 Marks)

(Total: 30 Marks)

QUESTION FOUR

A. Sondelani Ltd pays its representatives monthly salaries plus a commission based on sales revenue. Salaries and commissions budgeted for a month at two different volumes are as follows:

Sales Revenue	Salaries and Commissions
E100.000	E10.000
E80,000	£8,400

Required:

i) to determine the percentage of commission on sales [6 Marks]
ii) to determine the budget allowance for salaries and commissions for a month in which sales revenue is E72,400 [6 Marks]

B. The indirect manufacturing costs of Zamazama Ltd has been budgeted as follows for a normal year:

Standard Total

Period	Hours	Cost	Nonvariable	Variable	Semi-variable
Jan -Feb.	2200	E3,695	£1,125	EI,760	E810
Mar - Apr.	2100	3,485	1,025	1,680	780
May - June	2000	3,200	850	1,600	750
July - Aug.	1800	2,980	850	1,440	690
Sept - Oct.	2000	3,400	1,050	1.600	750
Nov - Dec.	1900	3.340	1.100	1.520	720
	12,000	E20,100	E6.,000	E9.600	E4,500

Required:

i) separate the semi-variable costs into non-variable and variable components by the method of least squares. (6 Marks)

ii) determine nonvariable and variable rates by which the indirect manufacturing costs can be applied. (9 Marks)

iii) what is the most likely cause of the differences in the bimonthly amounts budgeted for the non variable costs?. (3 Marks)

(Total:30 Marks)