> UNIVERSITY OF SWAZILAND DEPARTMENT OF ACCOUNTING
> MAIN EXAMINATION PAPER 2012

DEGREEIDIPLOMA AND YEAR OF STUDY: B.COM V

| TITLE OF PAPER | $:$ | MANAGEMENT ACCOUNTING II |
| :--- | :--- | :--- |
| TIME OF PAPER | $:$ | TWO (2) HOURS |

## INSTRUCTIONS:

1. TOTAL NUMBER OF QUESTIONS ON THIS PAPER : 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 THE QUESTION
4. ALL CALCULATIONS ARE TO BE MADE TO THE NEAREST LILANGENI
5. 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 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

You are given the following information:

|  | Dept A | Dept B | Dept C |
| :--- | :--- | :--- | :--- |
| Revenue | a | E450,000 | k |
| Expenses | E100,000 | $\mathbf{f}$ | I |
| Department's profit | b | g | E20,000 |
| Average total assets | E300,000 | h | m |
| Asset turnover | c | 4 | 2.5 |
| Profit margin | d | $8 \%$ | $\mathbf{n}$ |
| Achieved ROI | e | i | $12 \%$ |
| Residual income | E15,000 | E5,000 | $\mathbf{0}$ |
| Target ROI | $12 \%$ | j | $14 \%$ |

## Required:

Fill in the missing numbers in the three divisions (departments)

## Question 2

A. Division A normally purchases its parts form Division $B$ of the same company. Division $A$ has learned that Division $B$ is increasing its price to $E 110$ per unit. As a result, the Division A manager has decided to purchase the parts from an outside supplier at a unit cost of E100, which is E10 less than it would cost to purchase the same part from Division B. The Division B manager has explained that inflation is the cause of the price increase and the loss of parts normally transferred to Division A will hurt the Division as well as the company profits. The Division B manager feels that the company as a whole would benefit from the sale of parts to Division $A$. The following costs and units purchases represent the normal annual transaction:

Units purchased 1000
B's variable cost per unit E95
B's fixed cost per unit E10

## Required:

a) Will the company as a whole benefit if Division $A$ purchases the units from the outside supplier for E100 per unit? Assume that there are no alternative uses for B's facilities
(6 Marks)
b) What would be the effect if the outside selling price decreases by E8.00 per unit, assuming that Division $B$ remains idle?
c) If Division's B's facilities could be put into production for other sales at any annual cost savings of E14,500, should Division A still purchase from the outside?
(6 Marks)
B. Write short notes on any two possible transfer pricing methods (12 Marks)

## Question 3

A. In PERT network, how can we possibly reduce the normal project time?
(6 Marks)
B. The following schedule for Mbombela Ltd contains activities and variable time estimates necessary to produce a modest standard house.

| Activity | Activity <br> Representation | $\mathbf{a}$ | Weeks <br> $\mathbf{m}$ | $\mathbf{b}$ |
| :--- | :---: | :--- | :--- | :--- |
| A | $1-2$ | 4 | 6 | 7 |
| B | $1-3$ | 2 | 3 | 5 |
| C | $1-4$ | 5 | 6 | 7 |
| D | $3-4$ | 1 | 2 | 3 |
| E | $3-5$ | 1 | 2 | 4 |
| F | $2-5$ | 2 | 4 | 6 |
| G | $4-5$ | 1 | 3 | 6 |
| H | $2-6$ | 7 | 8 | 9 |
| I | $5-6$ | 1 | 2 | 3 |

Required: Using the above information:
i) Draw a presentation of the PERT network
ii) Compute the earliest completion time (te) of each activity
iii) Identify the critical path
iv) Compute the total slack in the net-work

## Question 4

Zamani Ltd is considering the purchase of a new machine for E6200. The machine has an installation cost of E800 and zero salvage value at the end of its expected life of five years. Depreciation is by the straight-line method with the half-year convention. The machine is considered a three-year property and therefore allowed a 6 percent investment tax credit. Expected cash savings before tax is E1800 per year over the five years. The firm is in the 40 percent tax bracket. The firm has determined the cost of capital (or minimum required rate of return) of 10 percent after taxes.

## Required:

Should the company purchase the machine? Use the NPV method.
Assume the machine is put into service in year 1.

