## NATI ONAL UNI VERSI TY OF SCI ENCE AND TECHNOLOGY

DEPARTMENT OF TEXTI LE TECHNOLOGY
END OF SEMESTER EXAMINATIONS APRIL 2009
MANAGEMENT ACCOUNTING TXT 4122
TIME: 3 HOURS

## INSTRUCTIONS

1. Answer ALL questions.
2. Show all workings.
3. Start each question on a new page.
4. 

a) Analyse the following costs between:
i) Direct materials
ii) Direct labour
iii) Factory indirect expenses
v) Selling and distribution expenses
iv) Administration expenses
vi) Finance charges
a) Raw materials
b) Factory storekeeper's wages
c) Depreciation of delivery motor vehicles
d) Wages of factory canteen staff
e) Advertising
f) Lubricants of factory machinery
g) Postal charges of parcels sent to customers
h) Carriage inwards on raw materials
i) Debt collection costs
j) Wages of crane drivers in the factory
k) Interest on overdraft
l) Royalty paid for each item manufactured
m) Company secretary salary
n) Discount allowed
o) Wages of factory cleaners
p) Chief accountantls salary
q) Wages of painters engaged in production
r) Hotels bills incurred by sales staff
s) Audit fees
t) Bank charges
(b) Costs have different behaviour patterns. Give an example of cost that suit the descriptions given below, and, for each description, draw a graph to show the behavior pattern of that cost.
(i) period costs,
(ii) local authority's water bills,
(iii) hiring charges of a lathe
(iv) bond paper in a photocopying company
(v) cost of raw materials where quantity discounts are offered
(iv) wages of quality control staff in a factory
(v) factory insurance costs
2.

Ndlovu (Pvt) Limited manufactures and sells a single product. During the next year it plans to produce 20000 units and sell them at $\$ 10000$ each. The budgeted income statement is as follows:

|  | $\mathbf{\$ 0 0 0}$ | $\mathbf{\$ 0 0 0}$ |
| :--- | :--- | :--- |
| Sales |  | 200000 |
| Less cost of sales: | 68000 |  |
| Direct materials | 52000 |  |
| Direct wages <br> Fixed Production overheads <br> Gross Profit | $\underline{24000}$ | $\underline{144000}$ |
| Less fixed selling and admin. costs <br> Next profit before tax |  | $\underline{\underline{30000}}$ |

## Required:

(a) Calculate the contribution per unit.
(b) Calculate the number of units to be produced and sold to 'break even'
(c) Calculate the expected profit if sales were to be doubled as a result of reducing the selling price by $15 \%$.
(d) Ndlovu (Pvt) Limited's marginal tax rate is $40 \%$ what sales value would the company have to make in order to earn an after-tax profit of $\$ 30 \mathrm{~m}$ ? (Use the budgeted figures).
(e) State 5 assumptions underlying the break even analysis.
3.

A company has to choose between two projects both of which involve an investment of $£ 20,000$. The current cost of capital is $10 \%$. The net cash flows of the projects are:

| Year | Project A | Project B |
| :--- | :---: | :---: |
|  | $\$$ | $\$$ |
| 1 | 1,000 | 14,000 |
| 2 | 2,000 | 4,000 |
| 3 | 2,000 | 4,000 |
| 4 | 7,000 | 2,000 |
| 5 | 20,000 | 8,000 |

## Required

a) For each Project calculate the following:
i) Payback Period.
ii) Net Present value (NPV)
iii) Profitability Index (P.I.)
iv) Internal Rate of Return (IRR)
b) State 3 advantages and 3 disadvantages of the Payback method
4.
(a) State and explain 3 advantages and 2 disadvantages of activity based costing.(10)
(b) Explain five differences between 'Financial Accounting' and Management Accounting.'

Match each item in Column A with its suitable description obtained from Column B. Write down only the numbers in column A and against them, the letter from Column B that represents your choice. (e.g. if your answer for 1.10 is (v) then you should write 1.10v).

| Column A | Column B |
| :---: | :---: |
| 1.1 Cost unit | a) A cost that has been incurred as a result of a past decision. |
| 1.2 Overhead allocation | b) A cost that does not change with changes in output. |
| 1.3 Management Accounting | c) May be caused by using a different grade of labour |
| 1.4 A relevant cost is | d) Contain both elements of fixed and variable. |
| 1.5 A sunk cost is | e) A unit of product or service in relation to which costs are |
| 1.6 Profit/Volume ratio | ascertained. |
| 1.7 Service Cost Centre | f) A costing technique whereby fixed costs are not absorbed |
| 1.8 Margin of safety | into product costs. |
| 1.9 Overhead Absorption | g) The charging of overheads to cost centers without |
| 1.10 Labour rate variance | apportioning them. |
| 1.11 Cost centre | h) Is concerned with identifying, presenting and interpreting |
| 1.12 Marginal Costing | information used for decision-making, planning and |
| 1.13 Fixed cost | controlling activities etc. |
| 1.14 Periodic Inventory System | i) The value of the best alternative foregone. |
| 1.15 Indirect material | j) Measures the relationship of contribution to sales. |
| 1.16 Opportunity cost | k) A band of activity in which a specific form of budgeted |
| 1.17 Relevant Range | sales and cost relationship will be valid. |
| 1.18 Cost Objective | l) A production or service location, function, activity or item |
| 1.19 First in, First out (FIFO) | of equipment whose costs may be attributed to cost units. |
| 1.20 Semi-variable costs | m) Is the excess of budgeted sales over the break even sales. |
| 1.21 Break even volume | n) Aims at producing high quality items, exactly at the right |
| 1.22 Budget | time they are required. |
| 1.23 Just In Time | o) The quantity of work achievable at standard performance in |
| 1.24 Flexible Budget | an hour. |
| 1.25 Standard Hour | p) Any activity for which a separate measurement of cost is desired. |
|  | q) A system of stocktaking after a specified period of time |
|  | r) A future cash flow arising as a direct consequence of the decision under review. |
|  | s) A department that gives support to other departments. <br> t) Is one that is designed to adjust for changes in volume. |
|  | u) The number of units at which total revenue equals total costs. |
|  | v) Values issues to production using the price of the oldest stock held in store |
|  | w) The application of overheads to units of production. |
|  | x) Is a quantitative expression of a plan of action prepared in advance of the period to which it relates. |
|  | y) Includes such items like stationery, consumable materials, maintenance materials, lubricating oil, spare parts for |
|  | machinery etc. |

