# National University of Science and Technology 

## FACULTY OF COMMERCE

## DEPARTMENT OF ACCOUNTING

FIRST SEMESTER EXAMINATION: 2013
DATE: JANUARY 2013
SUBJECT: ACCOUNTING 2A: CAC 2106
TIME ALLOWED: THREE (3) HOURS
MARKS:
100

## INSTRUCTIONS TO CANDIDATES

1. Answer all questions
2. Begin each Full question on a new page

## INFORMATION FOR CANDIDATES

1. All workings should be shown
2. All answers should be presented in good style

## Question 1 [25 marks]

Westgate Ltd supplies makes 4 components, data collected for the next year is as follows:

## Component

|  | A | B | C | D |
| :--- | :---: | :---: | :---: | :---: |
| Production (units) | 15000 | 30000 | 60000 | 45000 |
| Variable costs (per unit) | $\$$ |  |  |  |
| Material | 60 | $\$$ | $\$$ | $\$$ |
| Labour | 120 | 135 | 30 | 60 |
| Overhead | 30 | 45 | 60 | 90 |
|  |  |  | 15 | 30 |

## Additional information

i. Fixed costs arising directly from manufacturing component are:

| Component | $\$$ |
| :--- | ---: |
| A | 15000 |
| B | 75000 |
| C | 90000 |
| D | 120000 |

ii. General fixed costs of manufacture will be $\$ 450000$.
iii. A reliable subcontractor has submitted an offer to manufacture the components at the following prices:
Component \$

A 180
B 315
C 150
D 210

## Required

(a) Calculate the cost of manufacturing the components and indicate the components to be manufactured and those which should be subcontracted.
(b) Highlight the extra cost or savings that would arise from subcontracting.
(c) State the qualitative factors that would influence the decision as to whether to make or buy?
(d) The term "relevant" is important in decision making .Explain what "Relevant costs" are:

## Question 2 [25 marks]

(a) The following cost classification are used in costing
i. Period costs
ii. Product costs
iii. Variable costs
iv. Opportunity costs

## Required:

Elaborate on each of these classifications and support them with examples of the types of costs that may be included.
(b) The following transactions were recorded during the month of May by the Stores Company.

|  |  | Quantity |  |
| ---: | :--- | :---: | :---: |
|  |  | Units | Unit cost |
| 1 | May | Opening balance | 100 |
| 3 | May | Receipts | 400 |
| 4 | May | Issues | 200 |
| 9 | May | Receipts | 300 |
| 11 | May | Issues | 400 |
| May | Receipts | 100 | 2.10 |
| 20 May | Issues | 100 | 2.40 |
| 31 May | Closing balance | 200 |  |

## Required

Calculate the cost of goods issued to production and the value of closing stock for the month of May using the following methods:
(i) First in first out (FIFO)
(ii) Last in last out (LIFO)
(iii) Average cost

## Question 3 [25 marks]

Dot Com Industries PLC operates a factory with four Departments. Two of the departments $A$ and $B$ are production departments, whereas maintenance and power house provide service. For the coming year the budgeted costs are as follows:

|  | A | B | Maintenance | Power House | Total |
| :--- | :---: | :---: | ---: | ---: | ---: |
|  | $\$$ | $\$$ | $\$$ | $\$$ | $\$$ |
|  |  |  |  |  |  |
| Indirect costs |  | 2414 | 665 | 760 | 5330 |
| Indirect materials | 1491 | 4581 | 11410 | 3365 | 22890 |
| Indirect labour | 3534 | 4 |  | 7130 |  |
| Rent and rates |  |  |  | 3300 |  |
| Supervision |  |  | $\underline{8250}$ |  |  |
| Plant depreciation |  |  | $\underline{46900}$ |  |  |

You ascertain the following information:

|  | A | B | Maintenance | Power house |
| :--- | ---: | ---: | ---: | ---: |
| No. of employees | 20 | 40 | 10 | 5 |
| Area (sq. metres) | 1500 | 2500 | 500 | 100 |
| Plant valuation (\$000) | 6500 | 2500 | 1200 | 800 |
| Direct labour hours | 1600 | 2400 |  |  |
| Machine hours | 5540 | 1160 |  |  |
| Maintenance hours | 900 | 300 | - | - |
| Units of power used | 2100 | 600 | 300 | - |

## Required

(a) Analyse the above indirect costs between the four departments showing the basis of apportionment you have used.
(b) Re-apportion the costs of the Service Department over the two Production Departments using the appropriate basis.
(c) Calculate an overhead absorption rate for department A based on machine hours and an overhead absorption rate for department $B$ based on direct labour hours.
(d) Explain the meaning of the term 'overhead absorption

## Question 4 [25 marks]

a) As the manager for Nice Food restaurant with a take away service, you have been asked to prepare a budget for next year. To help you with this you need to know the fixed and the variable cost elements of delivery cost to customers' homes. The following information is available from the monthly accounts

| Month | No of deliveries | Total delivery cost <br>  <br>  <br> July |
| :--- | :---: | :---: |
| August | 403 | 662.70 |
| September | 291 | 561.90 |
| October | 348 | 613.20 |
| November | 364 | 627.60 |
| December | 521 | 768.90 |
|  | 387 | 648.30 |

## Required

(i) Calculate the fixed and the variable cost elements using the high low method
(ii) Describe the advantages and disadvantages of finding the fixed and variable costs using the high-low method
b) A company produces a single product with the following budget:

Selling price
Direct materials
Direct wages
Variable production overheads
Fixed production overheads
Budgeted production 5,000 units per month
Required:
Show the operating statement for the month when 4,800 units were produced and sold using:
(a) Absorption costing
[8]
(b) Marginal costing

Assume that all costs were as budget.

## END OF EXAMINATION PAPER

