NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF ACCOUNTING

FIRST SEMESTER EXAMINATION APRIL 2009

MANAGEMENT AND COST ACCOUNTING II CAC 2105

TIME ALLOWED: 3 HOURS

INSTRUCTIONS TO CANDIDATES

i. Answer all **four** questions
ii. Begin each question on a new page

QUESTION	TOPIC	MARKS
1	JOINT COSTING	25
2	ALLOCATION OF OVERHEADS	25
3	MARGINAL AND ABSORPTION COSTING	25
4	JOB COSTING	25

QUESTION 1 (25 marks)

A process costing $200 000 produces 3 products A,B.and C,output details are as follows

Product	A	12 000 litres
Product	B	20 000 litres
Product	C	40 000 litres

Each product can be sold at split off point

		sales value at splitt off point $
Product	A	10/litre
Product	B	4/per litre
Product	C	10/per litre

		additional processing costs	sales value after final process
Enhanced Product	A	$14/litre	$20/litre
Enhanced Product	B	$2/litre	$8/litre
Enhanced Product	C	$6/litre	$16/litre

REQUIRED

a) Allocate Joint costs between the products under each of the following methods:
(i). Sales value at split off point
(ii). Physical measure
(iii). Estimated Net Realisable value
b) Explain whether the initial process should be undertaken and which,if any of the enhanced products should be produced.
c) Explain the following terms:
i) normal process loss
ii) Joint product
iii) By- product
d) State the appropriate costing treatments for normal losses ,abnormal gains and by- products
e) Critically examine the purpose of apportioning process costs to joint products.

QUESTION 2 (25 MARKS)

National foods had the following data during its third quarter:

Batch	**A**	**B**	**C**	**D**
Output	250	60	200	120
cost per batch	$	$	$	$
Direct material	1650	750	2100	900
Direct labour	9200	1520	6880	2400
Labour hours per batch	1150	190	860	300

The total production overhead for the period has been analysed as follows:

Machine related costs	14600
Material handling and dispatch	6800
Stores	8250
Inspection /Quantity control	5850
set up	6200
Engineering	8300
Total	50000

Cost drivers have been identified for the cost pools as follows

Cost Pool	**Cost drivers**
Machine costs	Machine hours
Material handling	Material movements
Stores	Requisitions raised
Inspection	Number of inspections
Set up	Number of set ups
Engineering support	Engineering hours

The following cost driver volumes were recorded for batches

Batch	**A**	**B**	**C**	**D**	**Total**
Machine hours per batch	520	255	610	325	1710
Material movements	180	70	205	40	495
Requisitions	40	21	43	26	130
Inspections	18	8	16	8	50
set ups	12	7	16	8	43
Engineering hours	65	38	52	35	190

REQUIRED

a) Calculate the batch and unit costs using the traditional costing based on a labour overhead absorption rate **(4 marks)**

b) Calculate the batch and unit costs using ABC **(9 marks)**

c) Compare the costs in (a) and (b) **(4 marks)**
d) Comment on which method you think is better. **(4 marks)**
e) State two advantages and two disadvantages of ABC **(4 marks)**

QUESTION 3 (25 MARKS)

XYZ Ltd a company that manufactures and sells a single product, The standard production cost of which is as follows:

		$per unit
Direct materials cost	4 kilos at $7 per kg	28
Direct Labour	3 hours at $6 per hour	18
Production Overhead	Variable	3
	Fixed	20

The only variance is a fixed production overhead volume variance. There are no units in finished goods stock at 1 January 2008. The fixed overhead expenditure is spread evenly throughout the year.
The selling price per unit is $140. Normal output is 16000 units per annum and the figure is used for the production calculation. Budgeted selling and distribution costs are as follows:

Variable 20% of sales value
Fixed $180000 per annum

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For the two six monthly periods detailed below, the number of units to be produced and sold are budgeted as:

	Jan-Jun	**July-Dec**
Sales (units)	8500	7000
Production (units)	7000	8000

REQUIRED
a) To prepare profit statements for each of the period using
(i) Marginal costing method
(ii) Absorption costing method **(14 marks)**
b)To prepare a statement reconciling for each period the profit using marginal costing and absorption costing. **(6 marks**)
c)To state and explain briefly the benefits of using marginal costing as the basis of the management reporting (5 marks)

QUESTION 4 (25 marks)

a) Explain how the cost accountant distinguishes between scrap and Waste by definition and recording
b) A company manufacturing three different components has estimated the costs and selling prices as follows:

	Products		
	X	**Y**	**Z**
Direct Materials	$3	$4	$8
Direct Labour			
Dept 1($2/hr)	2	4	2
Dept 2 ($1.50/hr)	3	6	9
	8	14	19
Selling Price	15	25	40
Quantities (units)	10 000	20 000	5 000

It is anticipated that 5% of products are rejected by final inspection , and transferred to a small repair department. It takes 15 minutes to repair X, 6minutes each Y and 12minutes every Z.

Operatives are paid $2.40 per hour.

Overheads are budgeted as follows ,and are allocated on the basis of direct labour hours.

	Variable	**Fixed**
Dept 1	110 000	55 000
Dept 2	130 000	65 000
Repair Dept	350	2 750

Management is not satisfied with the projected profit margin and have negotiated with another company who will purchase all rejected units for $3 per item for all products. The repair Department would be closed saving $2 000 in Fixed costs and $500 in Variable costs

REQUIRED

(i) Calculate the total unit cost of each product excluding any repair costs. **(7½ marks)**
(ii) Calculate the total repair cost only per product for the year. **(5 marks)**
(iii) The profit projected from the information given utilising the repair dept. **(2½ marks)**
(iv) The profit projected if management's proposal is enforced. **(4 marks)**
(v) Your report on the comparision of the alternatives and recommendation. **(2 marks)**