THE INSTITUTE OF CHARTERED ACCOUNTANTS (GHANA)

INTEGRITY

NOVEMBER 2005 EXAMINATIONS
(PROFESSIONAL)

COST ACCOUNTING
(Special Paper)

Attempt ALL Questions

TIME ALLOWED: 3 HOURS

QUESTION 1

Karifi Limited produces a product called 'Karifi Bitters'. The Product passes through three processes, namely; Process 1, Process 2, and Process 3; to reach completion.

In Process 3 a by-product called "Karifi Nsu" is obtained and transferred to Process 4 for completion.

Below are the details relating to these processes for the month of September 2005.

Process	1	2	3	4
Direct material input:				
- units	15,000			
- cost	¢3,000,000			
Output units:				
'Karifi Bitters'	14,400	12,750	10,925	-
'Karifi Nsu'	-	-	1,275	1,125
Expected loss of input	5%	10%	5%	10%
	¢	¢	¢	¢
Other direct material cost incurred in product	1,250,000	2,250,000	1,000,000	55,000
Direct wages	1,000,000	1,500,000	500,000	50,000
Production overheads	206,250	404,400	540,000	32,250
Sales value of scrap per unit	150	200	400	200
Estimated sales price of Karifi Nsu	-	-	800	-

Required:

(a) Prepare accounts for processes 1,2,3 and 4.
(b) Prepare abnormal loss account and abnormal gain account.

(Total: 20 marks)

QUESTION 2

Clay Products Limited manufactures and sells a variety of clay products. Management of the company is proposing to introduce an incentive scheme into its factory but is undecided on what kind of scheme to introduce.

Below is an extract of payroll information with respect to four of the company's employees for July 2005.

Name of Employee	**Michael**	**Gerald**	**Cynthia**	**William**
Actual hours worked	152 hours	144 hours	160 hours	136 hours
Wage rate per hour	¢45,000	¢30,000	¢37,500	¢54 ,000
Output produced – units:				
Product A	168	480	-	480
Product B	288	304	-	1,080
Product C	368	-	200	-

The standard time per unit of each product is

Product	**Minutes Allowed**
A	6
B	9
C	15

Each minute earned is valued at ¢750 for piece work calculations.

Required:

a. calculate the earnings of each employee using the following methods:

i. guaranteed hourly rates (basic pay)
ii. piecework, but earnings guaranteed at 75% of basic pay.
iii. Premium bonus in which the employee receives (2/3) two thirds of time saved in addition to hourly pay.

(14 marks)

b. State three (3) advantages and three (3) disadvantages of individual incentive schemes. (6 marks)

(Total: 20 marks)

QUESTION 3

a. Explain the term "interlocking accounting system". (3 marks)

b. Kukwasa Kukwasa Company Limited operates a system of interlocking accounting. Below is the Manufacturing, and Trading Account prepared by the financial accountant for the half year ended 30th June 2005.

Kukwasa Kukwasa Company Limited Manufacturing Account for the half year ended 30th June, 2005

	¢ 000	¢ 000	¢ 000
Raw materials:			
Opening Stock	36,600		
Add purchases	81,000	117,600	
Less closing stock		39,000	
Raw materials consumed			78,600
Direct wages			30,150
Production overhead			45,675
Production cost incurred			154,425
Work-in-progress:			
Opening stock		48,000	
Closing stock		(43,500)	4,500
Cost of goods produced transferred to Trading account			158,925

Kukwasa Kukwasa Company Limited Trading Account for the half Year Ended 30th June, 2005

	¢'000	¢'000	¢'000
Sales			330,000
Cost of sales – finished goods:			
Opening stock	90,000		
Add cost of goods produced b/d	158,925	248,925	
Less closing stock		91,425	
Cost of goods sold			157,500
Gross profit			172,500

The following information has also been extracted from the cost accounts:

1 **Control Account Balances as at 1/1/2005**

	¢ 000
Raw materials stores control accounts	37,125
Work-in-progress control accounts	45,075
Finished goods stores control accounts	86,550

2 **Transactions for the half year were:**

	¢ 000
Raw materials issued for production	78,600
Cost of goods produced	166,875
Cost of goods sold	159,075
Loss of materials damaged by fire (insurance claim pending)	1,800

3 **A notional rent of ¢3,000,000 per month has been charged in the cost accounts.**

4 **Production overhead was absorbed at 150% of direct wages.**

You are required to prepare the following Control Accounts in the Cost Ledger:

i. Raw materials Store Control Account

ii. Work-in-progress Control Account

iii. Finished Goods Store Control Account

iv. Production Overhead Control Account

(12 marks)

c. Prepare a statement to reconcile the gross profit as per the Cost Accounts and the Financial Accounts. (7 marks)

(Total:22 marks)

QUESTION 4

a. Outline the factors that should be considered when deciding whether or not to investigate variances revealed in a standard costing and budgetary control system. (5 marks)

b. Pass Company Limited operates a standard marginal costing system. The company produces a standardised product called "success" using a single raw material called material papa.

During the month of August 2005, 5000 units of "success" were produced. The following data relates to actual performance of Pass Company Limited during the month of August 2005:

i. The company purchased 50,000kg of material papa at a cost of ¢144,000,000.

ii. Stock levels of material papa were as follows:

1/8/2005 - 20,000 kg
31/8/2005 - 15,000 kg

iii. The company paid workers for 26,000 hours at a total wages cost of ¢48,360,000.

iv. The company incurred ¢16,800,000 for variable production overheads.

The standard cost card below is given

Cost Per Unit	¢
Direct material cost 12kg @ ¢3000 per kg	36,000
Direct labour cost 5 hours @ ¢1800 per hour	9,000
Prime cost	45,000
Variable production overhead cost 5 hours @ ¢600	3,000
Variable production cost	48,000

Required:

Calculate the following cost variances:

i. Direct material cost variance (analysed into price and wage variances)
ii. Direct wages cost variance (analysed into rate and efficiency variances)
iii. Variable production overhead cost variance. (analysed into expenditure and efficiency variances)

(15 marks)

(Total: 20 marks)

QUESTION 5

Anuapa Limited produces two brands of soft drinks. Below is his budget for the year ending 31/12/2006.

Product	**Pinojuice**	**Ahondinsuo**
Budgeted sales units		
- crates	150,000	50,000
	¢	¢
Cost per unit:		
Direct material cost	900	2,000
Direct wages	600	1,100
Variable overheads	500	900
Selling price per unit	2,400	4,800

The company's budgeted fixed cost is ¢30,000,000 and is to be apportioned to products by reference to sales units.

Required:

i. Calculate the break-even points for each product and the company as a whole and comment on your findings. (12 marks)

ii. State and explain three assumptions made in breakeven analysis. (3 marks)

iii. Explain the term Margin of Safety as used in Break-even analysis. (3 marks)

(Total: 18 marks)