QUESTION 1

(a) Akuaba Ltd produces **four (4)** different types of kitchen cabinets. The Production Manager is preparing its production mix for the year and has presented the following

Type of Cabinet:	J	F	C	P
Selling Price/Unit (GH₵)	420	360	300	240
Material Price/kg GH₵10				
Labour Hour Rate GH₵5/hour				
Materials (kg)	10	8	10	12
Labour Hours	8	10	6	4
Maximum Demand (units)	15,000	12,000	20,000	20,000

Assume that (a) materials are limited to 596,000 kgs; (b) Labour Hours are limited to 480,000 Hours

Required:

(i) Advise the management on the most profitable mix of production. **(8 marks)**

(ii) Compute the total contribution the company would earn from the production mix determined in (a) above. **(4 marks)**

b) The market price of both fowls and guinea fowls have dropped as a result of low demand to GH₵15 and GH₵10 respectively.

AB Farms located at Kasoa produces 60% of fowls and 40% of guinea fowls on her farms incurring GH₵9 and GH₵8 as variable cost per bird respectively.

The following fixed costs are incurred annually:

	GH₵
Staff Cost	48,000
Rent	12,000
Electricity	6,000
Depreciation	8,000
Other Overheads	2,000

Required:

(i) Calculate the number of fowls and guinea fowls to be produced to break-even. **(5 marks)**

(ii) If the profit target is GH₵25,000, how many birds should be produced to meet this target? **(3 marks)**

(Total: 20 marks)

QUESTION 2

(a) SNA Limited produces cement which can be used both locally and abroad. The company is currently operating at 80% capacity for the local market. Results under the capacity (80%) are as follows:

	GH₵
Sales	6,400,000
Direct materials	2,000,000
Direct labour	800,000
Variable overheads	400,000
Fixed overheads	2,600,000

A company from Benin has placed an order that would utilize 50% of the capacity of the factory.

The order when taken will attract 15% below the normal local price and cannot be split but should be taken in full.

Management of SNA Company has the following available options:
Either to;

(i) Reject the order and continue with the local sales only or;
(ii) Accept the order and split capacity between overseas and local sales and reject excess local demand; or
(iii) Increase capacity to accept the export order and still maintain the local sales by;

(a) Acquiring an equipment that will increase capacity by 10% which will result in an increase of GH₵200,000 in fixed costs, and
(b) Start working overtime to meet balance of required capacity. Labour will then be paid at one and a half the normal wage rate.

Required:
Prepare a Statement of profitability for each of the **three (3)** options columnally and recommend the best option.

(16 marks)

(NB: Show working)

b) State **four (4)** qualitative factors that you will consider in accepting the foreign order.

(4 marks)

(Total: 20 marks)

QUESTION 3

(a) Batosa Ltd, a car repair company, has been invited to tender for a big job which is outside its regular activities, and since there is surplus capacity, the executives are keen to quote as low price as possible. A low price will not have any negative impact on Batosa Ltd's regular work.

The underlisted cost estimate has been prepared on the basis of a study made by the Estimating Department.

	GH₵
Direct material and components:	
4000 units of Alfa at GH₵25 per unit	100,000
400 units of Beta at GH₵10 per unit	4,000
Other material and components to be bought	25,000
	129,000
Direct labour:	
1400 hours of skilled labour at GH₵ 3.50 per hour	4,900
1700 hours of unskilled labour at GH₵ 2 per hour	3,400
	8,300
Overhead:	
Department A (250 hours at GH₵25 per hour)	6,250
Department B (450 hours at GH₵20 per hour)	9,000
	15,250
	152,550

The following information is obtained:

(i) **Material Alfa**: This is a regular stock item. The stock holding is more than sufficient for this job. The material currently held has an average cost of GH₵25 per unit but the current replacement cost is GH₵20 per unit.

(ii) **Material Beta**: A stock of 4,000 units of Beta is currently held in the stores. This material is slow-moving and the stock is the residue of a batch bought ten years ago at a cost of GH₵10 per unit. Beta currently costs GH₵24 per unit but the resale value is only GH₵18 per unit. A foreman has pointed out that Beta could be used as a substitute for another type of regularly used raw material which costs GH₵20 per unit.

(iii) **Direct labour**: The work force is paid on a time basis. Skilled workers are frequently moved to jobs which do not make proper use of their skills. The wages included in the cost estimate are for the mix of labour which the job ideally requires. It seems likely if the job is obtained, most of the 4400 hours of direct labour will be performed by skilled staff receiving GH₵3.50 per hour.

(iv) **Overhead – Department Alfa**: Department Alfa is the one department of Batosa Ltd that is working at full capacity. The department is treated as a profit centre and it uses a transfer price of GH₵25 per hour for charging out its processing time to other departments. This charge is computed as follows:

	GH₵
Estimated variable cost per machine hour	10
Fixed departmental overhead	8
Department profit	7
	25

Department Alfa's facilities are frequently hired out to other firms and a charge of GH₵30 per hour is made. There is a steady demand from outside customers for the use of these facilities.

(v) **Overhead: Department Beta**: Department Beta uses a transfer price of GH₵20 for charging out machine processing time to other departments. This charge is calculated as follows:

	GH₵
Estimated variable cost per machine hour	8
Fixed department overhead	9
Department profit	3
	20

Required:

a) Compute the relevant costs of the job and briefly justify each of the figures you state. State any assumptions. **(15 marks)**

(b) Define relevant costs in the context of decision-making and give examples to explain the concept. **(5 marks)**

(Total: 20 marks)

QUESTION 4

The underlisted data relate to actual output, costs and variances for the monthly accounting period of a company that makes only one product. Opening and closing work in progress were the same.

Variances:	GH₵
Direct materials price	30000 F
Direct materials usage	18000 A
Direct labour rate	16000 A
Direct labour efficiency	32000 F
Variable production overhead expenditure	12000 A
Variable production overhead efficiency	8000 F

Variable production overhead varies with labour hours worked.

A standard marginal costing system is operated.

Actual production of product BM	36,000 units

Actual costs incurred:	
Direct materials purchased and used (300,000 kg)	GH₵420,000
Direct wages for 64000 hours	GH₵272,000
Variable production overhead	GH₵76,000

Required:

(a) (i) Calculate the standard cost of materials and standard rate per labour hour.

(ii) Prepare a standard product cost sheet for one unit of product BM.

(12 marks)

(b) Explain the possible causes of the following variances:

(i) Material price variance
(ii) Material usage variance
(iii) Wage rate variance
(iv) Labour efficiency variance **(8 marks)**

(Total: 20 marks)

QUESTION 5

Nii Limited manufactures three products called SI, MI, and LAR. The information given below relates to the month of October, 2011.

	Product	Quantity (Units)	Price/Unit (GH₵)
Sales:	SI	1200	80
	MI	2400	96
	LAR	1800	112

Materials used in the company's Products:

Material	MA	MB	MC
Unit cost	GH₵ 3	GH₵ 5	GH₵ 8

Quantity used in:	MA (Units)	MB (Units)	MC (Units)
Product SI	5	3	1
Product MI	4	4	3
Product LAR	3	2	2

Finished stocks:	Product (SI) (Units)	Product (MI) (Units)	Product (LAR) (Units)
Quantities:			
1st October	1200	1800	600
31st October	1320	1980	660

Material stocks:	MA	MB	MC
	(Units)	(Units)	(Units)
1st October	31,200	24,000	14,400
31st October	37,440	28,800	17,280

Required:

(a) Prepare the following functional budgets for the month of October 2012 for

(i) Sales in quantity and value, including total value
(ii) Production quantities
(iii) Material usage in quantities
(iv) Material purchases in quantities and value, including total value. **(15 marks)**

(b) Explain the term 'Principal budget factor' as used in budgeting control and give **three (3)** examples from a financial institution. **(5 marks)**

(Total: 20 marks)