QUESTION 1

Dolow produces computer component A for sale at GH47 per unit to a Manufacturer of computers. The company currently produces 15,000 units of the component per annum.

Total cost of production and unit cost are as follows:

	Production Cost GHC	Unit Cost GHC
Direct materials	210,000	14
Direct labour	180,000	12
Variable production cost	30,000	2
Fixed manufacturing overhead	150,000	10
Share of non-production overhead	105,000	7
	675,000	45

A supplier has offered to supply 15,000 units of the components per annum at a price of GHC39 per unit over a four-year period without any change in price.

If Dolow accepts the offer, the following are the effects on current operation.

(1) Direct labour will be redundant but at a redundancy cost of GHC5,000.

(2) Direct materials and variable production cost will be avoidable

(3) Fixed manufacturing cost will be reduced by GHC18,750 per annum

(4) Share of non-production overhead cost will stay as it is.

Assuming further that, the extra capacity for accepting the contract offer from the supplier can be used to produce and sell 15,000 units of component Z at a price of GHC43 per unit with the following assumptions:

(1) All of the labour force required to manufacture component A will be used to make component Z.

(2) Variable manufacturing overhead will remain same.

(3) The fixed manufacturing overhead will remain same.

(4) Non-manufacturing overhead will be the same.

(5) The materials for component A will not be needed but additional materials at a cost of GHC15 per unit will be required for production.

Required:

(a) Should Dolow make or buy component A?

(***10 marks***)

(b) Should Dolow accept the offer and use the available space to manufacture component Z?

(***10 marks***)

(**Total: 20 marks**)

QUESTION 2

Osei Bamfo has been working for a textile manufacturing company for the past 25 years. At his present age of 50, he decided to go into the business of buying and selling as the future looks bleak for him. He provides you with the following information:

1. His savings over the 25 years was shares in a listed company at a cost of GHC5,000 whose present market value is GHC4,200. This has to be realised for the purpose of his intended business.
2. Osei was promised sales orders amounting to GHC54,000 and GHC90,000 respectively for the first two quarters of 2013. From July onwards, sales are expected to be steady at the rate of GHC150,000 per quarter.
3. He will maintain inventory of goods costing GHC40,000 which have to be delivered in December 2012 if the business is to start in January 2013.
4. The goods will be sold, on average, at a gross profit margin of 20%.
5. A delivery van will be purchased and paid for in January 2013 for GH12,000. It is expected to last for 5 years and be worth about GHC4,000 at the end of that period.
6. Osei will arrange for monthly supplies of goods sufficient to replace items sold. The supplier will allow two months credit for all supplies, including the initial stocks to be delivered in December 2012. **He will offer similar credit period to his customers**.
7. He will conduct most of his business from home but will rent a warehouse to store the goods. He will pay 2 years rent of GHC5,400 payable half yearly in equal amounts for the two years commencing January 2013.
8. One Sales Executive will be employed on an annual salary of GHC3,600 payable monthly.
9. Telephone bill which is at present GHC150 per quarter which he will continue to pay privately will rise to GHC400 per quarter as a result of running the business from home. Other incidental expenses are estimated at GHC250 per quarter payable in cash.
10. Osei will require his bank to meet all his other cash needs if the business is undertaken.

Required:

Prepare (a) a cash budget for each of the four quarters of 2013. (***10 marks***)

(b) a budgeted income statement for the year 2013. (***5 marks***)

(c) a reconciliation of the forecast change in the cash position over the 12 months with the estimated profit figure. (***5 marks***)

(**Total: 20 marks**)

QUESTION 3

Oboshie Ltd produces a single product, Tort Bitters. The data for cost per unit and selling price of the product are as follows:

	Tort Bitters (GHC)
Direct materials	30
Direct labour	30
Variable manufacturing overhead	20
Fixed manufacturing overhead	120
Factory cost	200
Profit mark up (50%)	100
Selling price	300

These figures were used for the calculation of finished goods stocks.

Oboshie prepares Income Statement for the first and second half of the year separately as follows:

	Jan to June GHC	July to Dec GHC
Sales	3,000,000	3,750,000
Cost: Direct materials	390,000	225,000
Direct labour	390,000	225,000
Variable manufacturing overhead	260,000	150,000
Fixed manufacturing overhead	1,320,000	1,320,000
Factory cost of production	2,360,000	1,920,000
Add operating stock	600,000	1,200,000
	2,960,000	3,120,000
Less closing stock	1,200,000	200,000
	1,760,000	2,920,000
Selling & Distribution cost	300,000	300,000
	2,060,000	3,220,000
Profit	940,000	530,000

Even though, the company's sales increased from GHC3 million to GHC3.75 million, profit declined from GHC940,000 to GHC530,000 in the second half.

As a Cost Accountant, you are required to

(a) Analysis and explain why there is a decline in Profit in the second half of the year. (*6 marks*)

(b) Redraft the Income statement for the two periods using the marginal costing principles. (*8 marks*)

(c) State and explain **three (3)** arguments in favour of marginal costing and **three (3)** in favour of absorption costing. (*6 marks*)

(**Total: 20 marks**)

QUESTION 4

(a) Explain the term 'limiting factor' in a production strategy and give **four (4)** examples. (***2 marks***)

(b) Xexe Ltd produces 4 products and is planning its production mix for the next period. Estimated cost, sales and production data are shown below:

	A	B	C	D
Selling price/unit GHC	50	70	80	100
Materials @ GHC4/kg	12	36	20	24
Direct labour @ GHC2/hr	6	4	14	10
Maximum demand (Units)	3,000	3,000	3,000	3,000

Required:

(i) Assuming labour hours is a limiting factor in the period, advise management on the most appropriate mix if labour hours is limited to 45,000 hours. (***5 marks***)

(ii) Assuming, materials is a limiting factor in the period, advise management on the most appropriate mix if materials is limited to 55,000 kgs in the period. (***7 marks***)

(c) State and explain **four (4)** factors which should be considered when designing incentive schemes. (***6 marks***)

(**Total: 20 marks**)

QUESTION 5

(a) Explain **five (5)** differences between **process costing** and **job costing**. (***5 marks***)

(b) A company uses 50,0000 units of a component. The cost is GHC2.5 per component. The ordering cost per order is GHC160 while holding cost is GHC12 per unit.

The normal quantity that is ordered is 8,000 per order but the Managing Director thinks too much money is locked up in stocks.

Required:

Compute the EOQ of the company from the information provided. (***5 marks***)

(c) i. Explain the term "Transfer Pricing" (***2 marks***)

ii. Mention **three (3)** methods that can be used to set transfer price and explain the conditions under which each method can be used. (***6 marks***)

(d) Distinguish between Standard Costing and Budgetary Control. (***2 marks***)

(**Total: 20 marks**)