CERTIFIED PUBLIC ACCOUNTANT

FOUNDATION LEVEL 2 EXAMINATIONS

F2.1: MANAGEMENT ACCOUNTING

DATE: WEDNESDAY26, FEBRUARY 2025

MARKING GUIDE & MODEL ANSWERS

QUESTION ONE

MARKING GUIDE

Q/NO	CRITERIA OF AWARDING MARKS	MARKS
Q1(a)	For every correct reason stated award 1mark max 5mks	5
Q1b(i)	Correct output for each product award 0.5m max 1.5mks	1.5
	Correct sales revenue for each product award 0.5mk max 1.5mks	1.5
	Correct joint costs allocated to each product award 0.5mk max 1.5mks	1.5
	Correct resulting net profit for each product award 0.5mk max 1.5mks	1.5
		6
Q1b(ii)	Correct new sales revenue for product award 0.5mk max 1mk	1
	Correct joint cost allocated to each product award 0.5mk max 1mk	1
	Correct further processing cost of each product award 0.5mk max 1mk	1
	Correct resulting net profit of each product award 0.5mk max 1mk	1
	Professional opinion/advice correctly given award 1mk	1
		5
Q1b(iii)	Distinction between joint and by-product award 2mks	2
	Examples given in each case award 1mk max 2mks	2
		4
Total		**20 Marks**

MODEL ANSWERS

a. The reasons reaffirming that a budget has a great

- The budget ensures that resources are planned for in advance – this ensures equitable distribution of the scarce resources
- The budget controls and regulates spending – this ensures that money is only spent on the purpose intended and that spending is as per the vote heads
- The ensures more resources are directed to investments worthy undertaking
- The budget is used to measure performance – at the end of the period it can be ascertained whether there are variances whether favourable or otherwise and reasons sort as to why such variances emerged so that remedial actions can be taken.
- The budget helps to identify funding deficit and source of funding the deficit is identified.
- The budget identifies a surplus of resources are channelled to investments with greater returns.

b. i

RAW MATERIALS COST		600,000,000
RAW MATERIALS CONVERSION COST		650,000,000
SCRAP VALUE		(50,000,000)
TOTAL JOINT COSTS		**1,200,000,000**

	OUTPUT	S/PRICE	SALES REVENUE	JOINT COST	NET PROFIT
KILN	40,000	31,250	1,250,000,000	(625,000,000)	625,000,000
LIMA	30,000	25,000	750,000,000	(375,000,000)	375,000,000
LIN	20,000	20,000	400,000,000	(200,000,000)	200,000,000
N/Loss	10,000		**2,400,000,000**	**1,200,000,000**	**1,200,000,000**

ii.

PRODUCTS	OUTPUT	NEW S/PRICE	SALES REVENUE	JOINT COSTS	F/P COST	NET PROFIT
KILN	40,000	45,000	1,800,000,000	625,000,000	1,000,000,000	175,000,000
LIMA	30,000	35,000	1,050,000,000	375,000,000	540,000,000	135,000,000

The further processing cannot be undertaken because the company will make losses, the profit generated after further processing is way below that generated at split off point

iii.

- **Joint products** – these are products coming out of a manufacturing process both of which have a significant sales value. All of the are important for use
- Examples of joint products include when processing crude oil, the joint product are the very many petroleum products that come out like petrol, diesel and kerosene.
- **By-products** are emerging products during the process of manufacturing the main product. It has a sales value but it is not as high as that of the main product.
- Examples of by-products;
  - Timber extraction, the by-product is saw dust
  - Meat industry the by –products are animas hides and skin
  - Crude oil processing the by-product is the black substance called tar used for making tarmac roads.

QUESTION TWO

MARKING GUIDE

Q/NO	CRITERIA FOR AWARDING MARKS	MARKS
Q2a(i)	Special order price award 0.5mk Each variable cost award 0.5mk each max 1.5mks Contribution per unit award 0.5mk Special order quantity award 0.5mk Total contribution computed award 0.5mk Professional advice/opinion that is correct award 0.5mk	0.5 1.5 0.5 0.5 0.5 0.5 **4**
Q2a(ii)	Each correct factor identified award 1mk max 3mks	**3**
Q2b(i)	Description of each award 2mks max 4mks	**4**
Q2b(ii)	Each reason well justified award 1mk max 2mks	**2**
Q2c(i)	Fixed cost 0.5mk, variable cost 1mk, cost equation 0.5mk	**2**
Q2c(ii)	Fixed cost 0.5mk, variable cost 1mk, cost equation 0.5mk	**2**
Q2c(iii)	Fixed cost 0.5mk, cost equation award 0.5mk	**1**
Q2c(iv)	Each reason given validly award 1mk max 2mks	**2**
Total		**20 Marks**

MODEL ANSWERS

Q2a(i)

A special-order price is accepted if the offer price is able to absorb all variable production costs and the company makes a contribution margin.	
Details	**FRW**
Special order price	5,500
Direct material cost per unit	(1,500)
Direct labor cost per unit	(1,800)
Variable production cost per unit	(700)
Contribution per unit	1,500
units ordered for	5,000
Total contribution	**7,500,000**
Conclusion: The management should accept this special order because even though the offer price is less than the standard selling price, all the variable production costs will be absorbed and the company still make a contribution of FRW 7,500,000.	

Q2a(ii)

- **Spare capacity –**currently the company is operating at 80% producing 24,000 units. This means the spare plant capacity of 20% can produce 6,000 units and the special order requires only 5,000 units. This is achievable
- **Contribution margin –**The offer fully absorbs all the variable costs of production. This means that the company will make a contribution out of it.
- **Effect on other clients –**Accepting the special order will not dilute the other market where goods are sold at a standard selling.
- **Fixed cost –** when making decisions fixed cost remain unchanged. This means that they are irrelevant whenever a decision is made. Only incremental fixed costs are relevant

Q2b(i)

Activity based costing –it is a costing method of absorbing costs into units using cost drivers which are the activities that triggers a certain cost or overhead to be incurred. The method uses many cost drivers to allocate overheads.

Absorption costing – It is the traditional method of absorbing costs/overheads into units using just a single basis which either units of output, machine hours or labour hours.
There is no such circumstance under which more than one basis of absorption is used.

Q2b(ii)

- ABC takes into account cost drivers which are the main activities triggering a certain cost to be incurred unlike AC which disregards this reality.
- ABC doesn't burden department with cost activities are in other department like in the case of AC.
- ABC was invented to cure the challenges of traditional methods of absorption AC inclusive.
- ABC provides more the necessary cost details on the measures on cost than AC
- ABC provides a platform of analysis of cost per activity information can't be availed by AC.

Q2c(i)

High low method

	Details	80%	100%	Change in Y	Change in X	Slope/ gradient	Variable	Fixed	Total costs
X	Output	800,000	1,000,000	-	200,000	-	-	-	-
Y	Electricity and water	450,000,000	550,000,000	100,000,000	-	100M/200,000 500	500*1M 500M	50M	550 M
Y	Salaries and wages	350,000,000	400,000,000	50,000,000	-	50M/200,000 250	250*1M 250M	150 M	400 M
Y	Direct labour cost	640,000,000	800,000,000	160,000,000	-	160M/200,000 800	800 *1M	0	800 M

EQUATIONS

Electricity and water Y =50,000,000 + 500X

Salaries and wages Y =150,000,000 + 250X

Direct labour cost Y = 800X

2c(iv)

- The method ignores the other population since it takes into the highest and lowest. values. It therefore means it doesn't represent the entire population.
- There is no scientific proof that the method can accurately estimate the costs.
- The method is biased by virtue of not considering majority of the population. This means the result obtained are not reliable.
- It tends to assumes that the fixed costs remain unchanged and that even the variable cost per unit will remain unchanged.

QUESTION THREE

MARKING GUIDE

Q/NO	CRITERIA FOR AWARDING MARKS	MARKS
Q3a	For way of upholding integrity award 1mk max 5mks	5
Q3b(i)	Receipt amount 0.5mk, issue amount 0.5mk and balance amount 0.5mk	12
Q3b(ii)	For each correct point stated award 1mk max 3mks	3
Total		**20 Marks**

MODEL ANSWERS

Q3(a) Ways to uphold the fundamental principle of integrity as an accountant

- Avoid actual or apparent conflicts of interest and advise all appropriate parties of any potential conflict.
- Refrain from engaging in any activity that would prejudice their ability to carry out their duties ethically.

- Refuse any gift, favor, or hospitality that would influence or would appear to influence their actions.
- Refrain from either actively or passively subverting the attainment of the organization's legitimate and ethical objectives.
- Recognize and communicate professional limitations or other constraints that would preclude responsible judgment or successful performance of an activity
- Communicate unfavorable as well as favorable information and professional judgments or opinions
- Refrain from engaging in or supporting any activity that would discredit the profession.

Q3(b)i

STORES LEDGER CARD								
DATE	**RECEIPT/ISSUE**			**ISSUE/SALES**			**BALANCES**	
	Quantity	Price	Amount	Quantity	Price	Amount	QNTY	Amount
1-Dec							750	75,000
1-Dec	2,000	120	240,000				2,750	315,000
1-Dec				750	100	75,000	2,000	240,000
1-Dec				1,750	120	210,000	250	30,000
8-Dec	2,000	125	250,000				2,250	280,000
8-Dec				250	120	30,000	2,000	250,000
8-Dec				1,750	125	218,750	250	31,250
20-Dec	2,200	135	297,000				2,450	328,250
20-Dec				250	125	31,250	2,200	297,000
20-Dec				1,750	135	236,250	450	60,750
31-Dec	1,500	140	210,000				1,950	270,750
31-Dec				450	135	60,750	1,500	210,000
31-Dec				900	140	126,000	600	84,000

Q3(b) ii

- Stock items are valued at the purchase prices with which they came with unlike LIFO which ignores the old stock costs and instead considers latest stock prices.
- FIFO methods undertake to provide the most accurate analysis of the business inventory as opposed to LIFO method.
- It the method which is compatible with stock management software since ideally stock movement follows FIFO basis.
- It ensures that the profit reported is true since the costs used are for the stock items in store.

QUESTION FOUR
MARKING GUIDE

Q/NO	CRITERIA FOR AWARDING MARKS	Marks
Q4a(i)	Direct method:	
	Allocated overhead for assembly and machining award 0.5mk each	1
	Apportionment from maintenance to assembly, machining 0.5mk each	1
	Apportionment from stores to assembly, machining 0.5mk each	1
	Total overheads for assembly and machining 0.5mk each	1
	Stepwise/closed down method:	
	Allocated overhead for assembly and machining award 0.5mk each	1
	Apportionment from maintenance to assembly, machining 0.5mk each	1
	Apportionment from stores to assembly, machining 0.5mk each	1
	Total overheads for assembly and machining 0.5mk each	1
Q4a(ii)	Direct method	
	OAR in assembly department	1
	OAR in machining department	1
	Stepwise/closed down method:	
	OAR in assembly department	1
	OAR in machining department	1
Q4b(i)	Each point award 1mk, explanation 1mk max 2points	4
Q4b(ii)	Each shortcoming award 1mk max 4mks	4
Total marks		**20**

MODEL ANSWERSQ4a(i)

Details	Assembly	Machining	Stores	Maintenance
Direct method				
Overheads allocated	2,500,000	1,500,000	1,000,000	2,000,000
Direct allocation method				
From Maintenance	1,000,000	1,000,000	(1,000,000)	(2,000,000)
From Stores	625,000	375,000		
Total overheads	4,125,000	2,875,000	-	-
Step wise method				
Overheads allocated	2,500,000	1,500,000	1,000,000	2,000,000
Stepwise/closed down method				
From Maintenance	1,000,000	600,000	400,000	(2,000,000)
From stores	875,000	525,000	1,400,000	CLOSED
Total overheads	4,375,000	2,625,000	-	-

Q4a(ii)

Overhead absorption rates		
DIRECT METHOD	**Assembly**	**Machining**
TOTAL OVERHEADS	4,125,000,000	2,875,000,000
LABOUR HOURS	5,000,000	
MACHINE HOURS		4,000,000
Overhead absorption rates	825.00	718.75
STEPWISE METHOD		
TOTAL OVERHEADS	4,375,000,000	2,625,000,000
LABOUR HOURS	5,000,000	
MACHINE HOURS		4,000,000
Overhead absorption rates	875.00	656.25

Q4b(i)

- **Elimination of discrimination**: individual bonus scheme is meant to reward only specific individual but group bonus scheme ensures every staff member is rewarded.
- **Team building** –because the bonus belongs to the group, this will compel employees to work together as a team so as to be rewarded.
- **Uplifting of weak and less efficient members of staff**: through bonus incentives even the less efficient are encouraged and at the same time monitored by the efficient members of staff.
- **Morale booster**: the morale of those who previously not rewarded is boosted and this encourages them to work hard.

Q4b(ii)

- It discourages the efficient and hardworking employees who were previously rewarded individually.
- It is difficult to measure the individual employee performance
- Even the less efficient employees are rewarded
- It is not based on any merit criteria.
- It encourages the lazy employees to continue being lazy since hard work is not recognized.

QUESTION FIVE

MARKING GUIDE

Q/NO	CRITERIA FOR AWARDING MARKS	MARKS
Q5a(i)	Calculation of standard price (SP) and standard quantity (SQ) 1mk each	**2**
Q5a(ii)	Calculation of standard labour rate and standard labour hours 1mk each	**2**
Q5a(iii)	Calculation of variable absorption rate award 1mk	**1**
Q5a(iv)	Calculation of budgeted fixed costs award 1mk	**1**
Q5a(v)	Each cost element cost per unit award 0.5mk	**2**
Q5b(i)	Award surplus budget 1mk, deficit budget 1mk	**2**
Q5b(ii)	Each valid point raised award 1mk with 2mks maximum	**2**
Q5c(i)	Definition of each costing method 1mk, circumstance each applicable 1mk	**4**
Q5c(ii)	Selling price per batch 3mks, selling price per unit 1mk	**4**
Total		**20 Marks**

MODEL ANSWER

Q5a

Variance	Formula	computation
Material Price Variance (MPV)	MPV =AQ(SP-AP)	AP = $\frac{42,000,000}{60,000}$ 60,000(P-700) = (3,000,000) SP =650 Standard price per unit
Material Usage Variance (MUV)	MUV =SP(SQ-AQ)	650(Q-60,000) =3,900,000 SQ =66,000kgs SQ = unit requirement × actual output 66,000 =m × 22,000 M = $\frac{66,000}{22,000}$

		Material budgeted quantity per unit =3kgs
Labour Rate Variance (LRV)	LRV =ALH(SLR–ALH)	ALR =$\frac{36,000,000}{45,000}$ 45,000(R-800) = (1,350,000) SLR =770
Labour Efficiency Variance (LEV)	LEV = SLR(SLH-ALH)	770(H-45,000) = 3,465,000 SLH =49,500 SLH = unit requirement × actual output 49,500 = h × 22,000 H =$\frac{49,500}{22,000}$ Hours budgeted per unit 2.25hours
Variable overhead expenditure variance (VOEPV)	VOEPV=VOAR(ALH)-AE	VOAR (45,000)-31,500,000 = 2,250,000 VOAR =750 Variable overhead absorption rate
Fixed overhead expenditure variance (FOEPV)	FOEPV =Budgeted –Actual	Budgeted – 27,000,000 = 3,000,000 Budgeted expenditure =30,000,000 Fixed overhead cost per unit =$\frac{30,0000,000}{30,000}$ Fixed overhead cost per unit =1,000

Cost element	**Requirement per unit**	**Standard rate/price (FRW)**	**Unit cost**
Direct material	3kgs	650	1,950
Direct labour	2.25hrs	770	1,732.50
Variable overheads	2.25hrs	750	1,687.50
Fixed overheads	-	-	1,000
Total unit cost			**6,370.00**

Q5b(i)

Surplus budget

A budget normally has estimated/proposed expenditures and sources of funding the expenditures.

Surplus budget is the type of budget which has more funds than the proposed expenditures

The surplus is obtained as an excess of revenue/funds over the expenditures for the period.

Surplus =incomes-expenditures.

Deficit budget is a type of budget with more expenditures than the available funds the difference of which is a deficiency/deficit.

The deficit is obtained as a shortfall of funds over expenditures for the period.

Q5b(ii)

The production and sales department needs to work together when preparing the production and sales budgets because of the following reasons:

- To fulfil customer order or demands require careful planning during production. This is the first reason which requires the two departments to work together.
- Sometimes there can be delays on the delivery of materials, this means that the production department must have a way to mitigate this so as not to miss production schedules which in turn meets customer orders
- There are seasons when there are no clients or the number has reduced, the sales department will share this information with production department and adjustments are made.

- The sales department maybe having customer specification which needs to be incorporated in production. This information will be shared to the production department to help them when making production plans.

Q5c(i)

Job order costing – is a costing method that is applicable in circumstances where each undertaking whether a job or project requires costs to be accumulated separately and traced as such. It therefore means each job or project is distinct and should be treated as such.

Batch costing - is a costing method applicable when the products (goods or services) are produced in batches/groups and the costs must be accumulated together for the entire batch.

Q5c(ii)

COST ELEMENT	AMOUNT
Direct material cost	25,000,000
Direct labor cost	20,000,000
Production overheads	15,000,000
Total production cost	60,000,000
Non-production overheads	15,000,000
Profit mark up	25,000,000
Selling price of the batch	100,000,000
Selling price per unit	1,000
Selling price per batch	100,000,000
Units of output per batch	100,000

QUESTION SIX

MARKING GUIDE

Q/NO	CRITERIA OF AWARDING MARKS	MARKS
Q6a(i)	Required labour hours award 1mk, required materials award 1mk	**2**
Q6a(ii)	Contribution of limiting factor award 0.5mk for each product max 2	2
	Allocation of limited directed materials award 0.5mk for each product	2
	Optimal production award 0.5m for each product	2
		6
Q6b	Preparation of break-even chart table award marks as follows	
	Sales units' award 1mk	1
	Total sales revenue award 1mk	1
	Total variable cost award 1mk	1
	Total fixed costs award 1mk	1
	Total costs	1
	Drawing of the graph award marks as follows	
	Total cost curve award 1mk	1
	Sales revenue curve award 1mk	1
	Total fixed cost curve award 1mk	1
	Break-even point units 1mk	1
	Break-even point revenue/costs 1mk	1
	Margin of safety units and in value 2mk	2
		12
Total		**(20 Marks)**

MODEL ANSWERS

Q6a(i)

PRODUCTS	HOUR PER UNIT	DEMAND	TOTAL HOUR
WW	10	10,000	100,000
XX	12	12,000	144,000
YY	9	9,000	81,000
ZZ	8	8,000	64,000
Required hours			**389,000**
Available hours			**400,000**
Conclusion- This is not the scarce resource since available hours are enough to meet the production demands			
PRODUCTS	**KGS PER UNIT**	**DEMAND**	**TOTAL KGS**
WW	8	10,000	80,000
XX	9.6	12,000	115,200
YY	7.2	9,000	64,800
ZZ	6.4	8,000	51,200
Required number of kilograms			**311,200**
Available number of kilograms			**300,000**
Conclusion -This is a scarce resource is the available number of kilograms are not sufficient to meet the production demand			

Q6a(ii)

OPTIMAL PRODUCTION

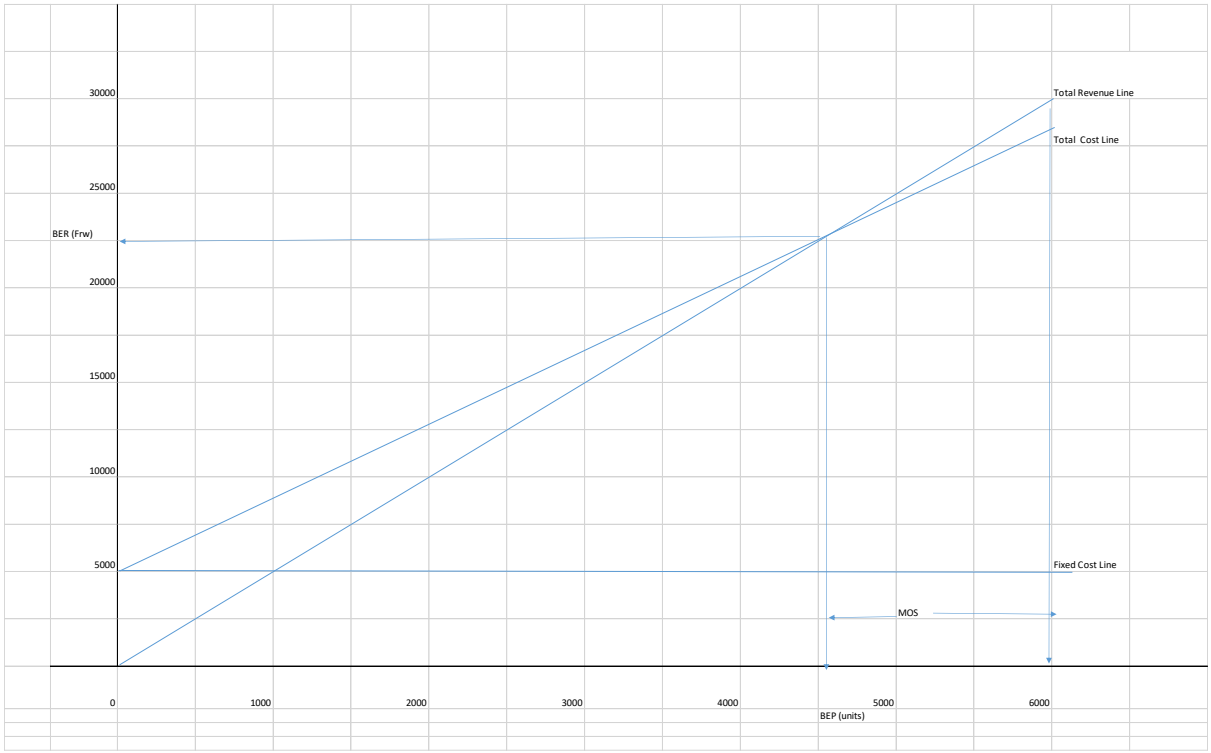
Products	Contribution	Limiting factor (direct materials)	Contribution per unit of limiting factor	Rank	Quantities demanded	Kgs per unit	Total number of kgs available
WW	700	8	87.5	3	10,000	8	80,000
XX	600	9.6	62.5	4	10,833.33	9.6	104,000
YY	650	7.2	90.27777778	2	9,000	7.2	64,800
ZZ	600	6.4	93.75	1	8,000	6.4	51,200
							300,000

Q6b

Sales units	Sales revenue	Variable costs	Fixed costs	Total costs
1,000	5,000,000	4,000,000	5,000,000	9,000,000
2,000	10,000,000	8,000,000	5,000,000	13,000,000
3,000	15,000,000	12,000,000	5,000,000	17,000,000
4,000	20,000,000	16,000,000	5,000,000	21,000,000
5,000	25,000,000	20,000,000	5,000,000	25,000,000
6,000	30,000,000	24,000,000	5,000,000	29,000,000
7,000	35,000,000	28,000,000	5,000,000	33,000,000
8,000	40,000,000	32,000,000	5,000,000	37,000,000
9,000	45,000,000	36,000,000	5,000,000	41,000,000
10,000	50,000,000	40,000,000	5,000,000	45,000,000

11,000	55,000,000	44,000,000	5,000,000	49,000,000
12,000	60,000,000	48,000,000	5,000,000	53,000,000
13,000	52,000,000	52,000,000	5,000,000	57,000,000
14,000	65,000,000	56,000,000	5,000,000	61,000,000
15,000	75,000,000	60,000,000	5,000,000	65,000,000
16,000	80,000,000	64,000,000	5,000,000	69,000,000

Break even chart



QUESTION SEVEN

MARKING GUIDE

Q/NO	CRITERIA OF AWARDING MARKS	MARKS
Q7a	Sales award 1mk	1
	Direct material cost award 1	1
	Direct labour cost award 1mk	1
	Variable production cost award 1	1
	Fixed production cost award 1mk	1
	Total cost of production award 1mk	1
	Gross profit award 1mk	1
	Variable selling award 1mk	1
	Fixed administration award one mark	1
	Net profit award 1mk	1
		10
Q7b	For category identification 0.5mk explanation 0.5mk	**4**
Q7c(i)	Description of purchase requisition 1mk, purchase order 1mk	**2**
Q7c(ii)	Description of quotation 1mk, invoice 1mk	**2**
Q7c(iii)	Description of RFQ 1mk, Goods Acknowledgement Note 1mk	**2**
Total		**20 Marks**

MODEL ANSWERS

Q7a

ABSORPTION COSTING INCOME STATEMENT

		FRW '000'	FRW '000'
Units produced and sold	200,000 ×90% / 80% = 225,000		
Sales revenue			1,800,000
Cost of production			
Direct material cost	=800,000× 225,000 / 200,000	900,000	
Direct labour cost	=400,000 × 225,000 / 200,000	450,000	
Variable production costs	=200,000 ×22500 / 200,000	225,000	
Fixed production costs		100,000	
Total cost of production			(1,675,000)
Gross profit			125,000
Non-manufacturing costs			
Variable selling	=20,000 × 225,000 / 200,000	22,500	
Fixed administration		30,000	
Total non-manufacturing costs			52,500
Net profit			72,500

Q7b. Under this classification, costs are classified according to the function they perform in an organization. Costs can functionally be classified as:

• **Production costs**: Are all the costs incurred in production of units during a time period e.g. raw material costs, direct labour costs and production overheads.

• **Administration costs:** These are all costs incurred in ensuring the smooth running of the organization so as to facilitate the production and sale of goods and services. These include: salaries for the managers, salaries for support employees (such as accountants, clerks and secretaries) etc

• **Selling and distribution costs:** These are costs that are incurred to enable the delivery of products and services to the actual markets and promote or complete a sale. These costs include: salesmen commission, saleswoman salaries, advertising costs, depreciation on motor vehicles used by salesmen; the cost of fuel used by vehicles used for distribution purposes etc.

• **Other functional classifications**

Q7c(i)

- **Purchase requisition** it is one of the documents used in procurement. It is prepared by the user department in an organization and the submitted to the procurement department for compiling. It contains the user requirements in terms of the specific items or services they want to procure and their specifications. It is an internal document.

- **Purchase order** it is a procurement document which is prepared by the procurement department containing the details of purchase. It is the document which sent to the suppliers detailing the goods and/or services that the company wants to be supplied with.

Q7b(ii)

- **Quotation** is a document used in procurement prepared by the suppliers and sent to their customers in response to request for quotation received from the suppliers. It details the items the company supplies, quantities, prices, mode of delivery after an order has been received.
- **Invoice** is a document used in procurement and is prepared either by the business and sent to the customers or received from suppliers for goods delivered. This document serves as a demand notice inviting customers to settle their accounts or the business to settle amount owed to suppliers.

Q7c(iii)

- **Request for quotation (RFQ)** it is a document used in procurement and it is prepared by the business and sent to suppliers inviting them to share the information to the business through a quotation. The information sort for by the company is to enable them prepare the purchase order.
- **Goods Acknowledgement receipt** it is a document used in procurement and it serves as an acknowledgement for the goods received by the company. It shows such details like the date of receipt, supplier/sender name, goods description, confirmation statement among other details.

End of marking guide and model answers