CERTIFIED PUBLIC ACCOUNTANT

FOUNDATION LEVEL 2 EXAMINATIONS

F2.1: MANAGEMENT ACCOUNTING

DATE: WEDNESDAY, 01 DECEMBER 2021

MODEL ANSWER AND MARKING GUIDE

MARKING SCHEME

Question ONE:	Marks
a) **Three stages of absorption costing**	
Allocation	1
Apportionment	1
Absorption	1
Marks	**3**
b) Absorption costing vs marginal costing	
Include fixed production overheads	1
No fixed production overheads	1
Marks	**2**
c) Overhead totals	
Production – canteen overheads reapportionment	1
Finance - canteen overheads reapportionment	1
Assembly - canteen overheads reapportionment	1
Production - maintenance overheads reapportionment	1
Finance - maintenance overheads reapportionment	1
Maximum marks	**5**
d) Profit statement	
i) Marginal costing	
Sales	1
Closing inventory	1
Contribution	1
Profit	1
Maximum marks	**4**
ii) Absorption costing	
Sales	0.5
Closing inventory	0.5
Gross Profit	1
Over/under absorption	0.5
Total cost	0.5
Profit	1
Maximum marks	**4**
iii) Over/ under absorption	
Overhead absorbed (year 1 and 2)	0.5
Actual overheads (year 1 and 2)	0.5
Over/ Under absorption (year 1 and 2)	1
Maximum marks	**2**
Total marks	**20**

Detailed Answer

(a) Question 1: The three stages of absorption costing are:

- ✓ **Allocation** - This is the process by which whole discrete identifiable cost items are charged directly to cost units or cost centres.

- ✓ **Apportionment -** "The division of costs among two or more cost centres in proportion to the estimated benefit received, using a proxy, e.g. square feet."

- ✓ **Absorption -** Overhead absorption is the allotment of overhead to cost units by means of rates separately calculated for each cost centre

(b) The profit for an accounting period calculated with marginal costing is different from the profit calculated with absorption costing. The difference in profits is entirely due to the differences in inventory valuation.

The main difference between absorption costing and marginal costing is that:

In absorption costing, Inventory cost includes a share of fixed production overhead costs. Where as,

In marginal costing, Inventory cost contains no fixed production overhead costs.

(c)

Details	**Production FRW'000'**	**Finance FRW'000'**	**Assembly FRW'000'**	**Machin repair FRW'000'**	**Canteen FRW'000'**	**Total FRW'000'**	**Basis of apportionment**
Total Overheads	44,727	45,223	26,999	33,177	18,552	168,678	
Reapportion W1	4,240	3,286	5,301	-	(18,552)	-	Direct labour
Reapportion W2	7,910	5,493	-	(33,177)	-	-	Machine usage
Totals	**56,877**	**54,002**	**32,300**	**-**	**-**	**168,678**	

Reapportionment Working 1

Canteen overheads

Total direct labour hours = 35,000

Production = $\frac{8,000}{35,000} * \text{FRW } 18,552 = 4,240$

Finance = $\frac{6,200}{35,000} * \text{FRW } 18,552 = 3,286$

Assembly = $\frac{10,000}{35,000} * \text{FRW } 18,552 = 5,301$

Reapportionment Working 2

Maintenance overhead

Total machine hours = 30,200

Production = $\frac{7,200}{30,200} * \text{FRW } 33,177 = 7,910$

Finance = $\frac{5,000}{30,000} * \text{FRW } 33,177 = 5,493$

(d)

Hygiene Ltd

Profit/loss statement under marginal costing

	Year 1		**Year 2**	
	FRW	**FRW**	**FRW**	**FRW**
Sales		3,250,000		3,125,000
Opening inventory	-		200,000	
Production	2,800,000		2,300,000	
Closing inventory	(200,000)	(2.600,000)	-	(2,500,000)
Gross profit (A)		**650,000**		**625,000**
Variable selling and distribution (B)		(6,500)		(6,250)
Contribution (C=A+B)		**643,500**		**618,750**
Fixed production overheads	11,000		11,000	
Actual fixed selling cost	5,000		5,000	
Total fixed cost (D)		(16,000)		(16,000)

Profit (E=C+D)		**627,500**		**602,750**

Hygiene Ltd

Profit/loss statement under absorption cost

Fixed production overhead absorption = $\frac{Fixed\ overheads}{\text{Budgeted pproduction}} = \frac{11{,}000}{12{,}000} = 0.92$

	Year 1		**Year 2**	
	FRW	**FRW**	**FRW**	**FRW**
Sales		3,250,000		3,125,000
Opening inventory	0		200,920	
Production	2,812,880		2,310,580	
Closing inventory	-200,920	2,611,960		2,511,500
Gross profit (A)		**638,040**		**613,500**
Over/under absorption of overheads (B)		1,880		-420
Variable selling and distribution (C)		-6,500		-6,250
Fixed selling costs (D)		-5,000		-5,000
Total costs (E=C+D)		**-9,620**	**0**	**-11,670**
Profit (F=A+B+E)		**628,420**	**0**	**601,830**

Over/(Under absorption of overhead)	**Year 1**	**Year 2**
Overhead absorbed (0.92*14,000) and (0.92*11,500) **(A)**	12,880	10,580
Actual overheads **(B)**	11,000	11,000
Over/(Under absorption) (C=A-B)	**1,880**	**(420)**

QUESTION TWO: IHANGA LTD.	**Marks**
Determine output and losses	
Quarter 1	2
Quarter 2	2
Maximum marks	**4**
Cost per unit of output and losses	
Expected output	1
Cost per unit	2
Maximum marks	**3**
Total cost of output and losses	
Quarter 1	2
Quarter 2	2
Maximum marks	**4**
Complete accounts	
Process account – Quarter 1	3
Process account – Quarter 2	3
Maximum marks	**6**
Abnormal loss or Gain Account	
Quarter 1	1.5
Quarter 2	1.5
Maximum marks	**3**
Total marks	**20**

Detailed Answer

Step 1

Determine output and losses

Quarter one	**Units**
Actual output	8,500
Normal loss (10%*10,000)	1,000
Abnormal loss	500
Input	10,000

Quarter two	**Units**
Actual output	9,500
Normal loss (10%*10,000)	1,000

Abnormal gain	(500)
Input	10,000

Step 2

Calculate cost per unit of output and losses

For each period the cost per unit is based on expected output
Expected output = 10,000 - (10%*10,000) = 10,000 – 1000 = 9,000 units

$$\frac{\text{Cost of input}}{Expected\ units\ of\ output} = \frac{\text{Frw } 290{,}700}{9{,}000\ Units} = Frw\ 32.30/unit$$

Step 3

Calculate total cost of output and losses

Quarter one	**FRW**
Cost of output (8,500*FRW 32.20)	274,550
Normal loss	0
Abnormal loss (500*FRW 32.30)	16,150
	290,700

Quarter two	**FRW**
Cost of output (9,500*FRW 32,30)	306,850
Normal loss	0
Abnormal gain (500*FRW 32.30)	(16,150)
	290,700

Step 4

Complete accounts

Process account

Quarter 1	**Units**	**FRW**		**Units**	**FRW**
Cost of input	10,000	290,700	Normal loss	1,000	0
			Finished goods a/c (8,500*FRW 32.30)	8,500	274,550
			Abnormal loss a/c	500	16,150

			(500*FRW 32.30)		
	10,000	290,700		10,000	290,700

Quarter two

Cost of input	10,000	290,700	Normal loss	1,000	0
Abnormal gain	500	16,150	Finished goods a/c	9,500	306,850
			(9,500*FRW 32.30)		
	10,000	306,850		10,000	306,850

Abnormal loss or Gain Account

Quarter one	**FRW**	**Quarter two**	**FRW**
Abnormal loss in process a/s	16,150	Abnormal gain in process a/c	16,150

A nil balance in this account will be carried forward into Quarter three

Question 3:

a) Free inventory

Definition	1
How it is calculated	0.5
Maximum marks	**1.5**

b) Obsolete inventory

Definition	1
Written off	0.5
Maximum marks	**1.5**

c) Inventory valuation using FIFO

01/12/2020	0.5
14/12/2020	1.5
17/12/2020	1.5
22/12/2020	1.5
25/12/2020	1.5
30/12/2020	1.5

30/12/2020	1.5
31/12/2020	1.5
Maximum marks	**11**

d) EOQ calculations	
Stating the formula	1
Determining annual demand	1
Holding cost	0.5
Ordering cost	0.5
Final calculation	3
Maximum marks	**6**
Total marks	**20**

Question 3(a) Free inventory

This refers to an inventory that is readily available for future use, and it is calculated as (Materials in inventory + Materials on order from suppliers – Materials requisitioned, not yet issued)

(b) Obsolete inventory

Are those items, which have become out of date and are no longer required. Obsolete items are written off and disposed off.

(c)Table showing inventory valuation using the FIFO method.

		Receipt			**Issues**			**Inventory**		
Date		**Quantity**	**Price per Unit**	**Amount (FRW)**	**Quantity**	**Price per Unit**	**Amount (FRW)**	**Quantity**	**Price per Unit**	**Amount (FRW)**
01/12/2020								10,000	5,000	50,000,000
10/12/2020					4,000	5,000	20,000,000	6,000	5,000	30,000,000
14/12/2020		7,000	5,500	38,500,000				7,000	5,500	38,500,000
								13,000		**68,500,000**
17/12/2020		10,000	6,000	60,000,000				10,000	6,000	60,000,000
								23,000		**128,500,000**
22/12/					6,000	5,000	30,000,00	-	5,000	-

2020							0			
					5,000	5,500	27,500,000	2,000	5,500	11,000,000
					11,000		**57,500,000**	10,000	6,000	60,000,000
								12,000		**71,000,000**
25/12/2020					2,000	5,500	11,000,000	-	5,500	-
					1,000	6,000	6,000,000	9,000	6,000	54,000,000
					3,000		**17,000,000**			**54,000,000**
30/12/2020		4,000	5,300	21,200,000				9,000	6,000	54,000,000
								4,000	5,300	21,200,000
								13,000		**75,200,000**
30/12/2020					5,600	6,000	33,600,000	3,400	6,000	20,400,000
								4,000	5,300	21,200,000
								7,400		**41,600,000**
										-
31/12/2020					2,770	6,000	16,620,000	630	6,000	3,780,000
								4,000	5,300	21,200,000
								4,630		**24,980,000**

(d)

The cost which will help Nice Ltd to keep inventory at minimum cost, is calculated using Economic Order Quantity, which is calculated using the following formula:

$$EOQ = \sqrt{\frac{2(Annual\ Demand * Cost\ per\ Order)}{Annual\ holding\ cost\ per\ unit}}$$

Annual demand (25,000*12)	300,000 units
Holding cost per unit	FRW 84

Ordering cost FRW 102

EOQ = $[(2*300{,}000*102)/(84)]^{1/2}$ = **854 units** *(This is inventory that Nice Ltd will keep at minimum cost)*

Question 4: Amarange Ltd

a) Variance calculations

Material price variance	1
Material usage variance	1
Labour rate variance	1
Labour efficiency variance	1
Idle time variance	1
Variable overhead expenditure variance	1
Labour efficiency variance	1
Fixed overhead expenditure variance	1
Fixed overhead volume efficiency variance	1
Fixed overhead volume capacity variance	1
Selling price variance	1
Sales volume profit variance	1
Marks	**9**

b) Operating statement

Budgeted profit	0.5
Standard profit from actual sales	0.5
Sales price	0.5
Material price	0.5
Material usage	0.5
Labour rate	0.5
Labour efficiency	0.5
Labour idle time	0.5
Variable overhead expenditure	0.5
Variable overhead efficiency	0.5
Fixed overhead expenditure	0.5
Fixed overhead volume efficiency	0.5
Fixed overhead volume capacity	0.5
Total overall variances	0.5
Counter check	1
Maximum marks	**8**
Total marks	**20**

Question 4 (a) Various variances are calculated as follows:

Details	**FRW**
1. Material price variance	
(2,300 kgs*FRW 4)	9,200
It actually cost	9,800
Variance	**600 (A)**
2. Material usage variance	
(4,850 units*FRW 0.5 per kg)	2,425 Kgs
Actual usage	2,300 Kgs
Material usage variance in Kg	**125 Kgs (F)**
	*****
Multiplying with the standard cost	FRW 4
Material usage variance in FRW	**500 (F)**
3. Labour rate variance	
(8,500 labour hours *FRW 2)	17,000
It actually costed	16,800
Labour rate variance	**200 (F)**
4. Labour efficiency variance	
(4,850 units * 2 hours)	9,700
It actually took	8,000
Labour efficiency variance in hours	**1,700 hrs (F)**
	*****
Standard cost per hour	FRW 2
Labour efficiency variance in FRW	**3,400 (F)**
5. Idle time variance	
Hours paid for	8,500 hrs
Hours worked	8,000 hrs
Idle time	**500 hrs (A)**
	*
Standard rate per hour	FRW 2
Idle time variance	**1,000 (A)**

6. Variable overhead expenditure variance

(8,000 hours*Variable o/hd expenditure of FRW 0.3)	2,400
It actually costed	2,600
Variable overhead expenditure variance	**200 (A)**

7. Variable overhead efficiency variance in hours is the same as the labour efficiency variance (1,700 hours*FRW 0.3) **510 (F)**

8. Fixed overhead expenditure variance

Budgeted fixed overhead (5,100 units*2 hours*FRW 3.7)	37,740
Actual fixed overheads	42,300
Fixed overhead expenditure variance	**4,560 (A)**

9. Fixed overhead volume efficiency variance

(4,850 units*2 hours)	9,700 hrs
It actually took	8,000 hrs
Fixed overhead volume efficiency variance in hours	**1,700 hrs (F)**
	*
Standard fixed overhead absorption rate per hour	FRW 3.7
Fixed overhead volume efficiency variance in FRW	**6,290 (F)**

10. Fixed overhead volume capacity variance

Budgeted hour of work	10,200 hrs
Actual hours of work	8,000 hrs
Fixed overhead volume capacity variance in hours	**2,200 (A)**
	*
Standard fixed overhead absorption rate per hour	FRW 3.7
Fixed overhead volume capacity variance in FRW	**8,140 (A)**

11. Selling price variance

Revenue from 4,850 units should be	97,000
Actually was	95,600
Selling price variance	**1,400 (A)**

12. Sales volume profit variance

Budgeted sales volume	5,100 units
Actual sales volume	4,850 units
Sales volume profit variance in units	**250 units (A)**
	*
Standard profit per unit	FRW 6
Sales volume profit variance in FRW	**1,500 (A)**

(b) Operating statement of Amarange Ltd for March 2020

Details	**FRW**	**Adverse (A) or Favorable (F)**
Budgeted profit	30,600	
Sales volume profit variance	(1,500)	A
Standard profit from actual sales (A)	**29,100**	
Variances		
Sales price	(1,400)	A
Material price	(600)	A
Material usage	500	F
Labour rate	200	F
Labour efficiency	3,400	F
Labour idle time	(1,000)	A
Variable overhead expenditure	(200)	A
Variable overhead efficiency	510	F
Fixed overhead expenditure	(4,560)	A
Fixed overhead volume efficiency	6,290	F
Fixed overhead volume capacity	(8,140)	A
Total overall variances (B)	**(5,000)**	**A**
Actual profit (C=A+B)	**24,100**	

Countercheck	**FRW**	**FRW**
Sales (A)		95,600
Material	9,800	
Labour	16,800	
Variable overhead	2,600	
Fixed overhead	42,300	
Total costs (B)		71,500
Actual profit (C=A-B)		24,100

Question 5: Muhabura Ltd

a)	Limiting factor definition	1.5
	Example	0.5
	Marks	**2**
b)	**Determine limiting factor**	
	Mix A	2
	Mix B	2
	Maximise contribution	1
	Calculations for Babies, Adult, Elders	2
	Ranking	1
	Optimal production plan (Babies, Adult, Elders)	3
	Balancing figure	1
	Maximum marks	**12**
c)	**Recommended production plan**	
	Requirement not satisfied	1
	Adult	1
	Babies	2
	Elder	2
	Maximum marks	**6**
	Total marks	**20**

Question 5: Muhabura Ltd

(a) Limiting factor

(b) This refers to any factor that is in scarce supply and that prevents an organisation from expanding its activities further, for instance, it limits the organisation's activities such as production capacity. Usually the objective is to maximise total profits which depend on getting the highest contribution margin per unit of the constraining factor.

(b) The first step is to check whether the supply of each material is adequate or whether either or both of them represent a limiting factor.

Details	**Babies**	**Adult**	**Elders**	**Total**
Maximum sales demand (units)	120	160	110	
Mix A required per unit (Kg)	20	10	40	
Total Mix A required (Kg)	**2,400**	**1,600**	**4,400**	**8,400**
Mix B required per unit (Kg)	50	30	70	
Total Mix B required (Kg)	**6,000**	**4,800**	**7,700**	**18,500**

It is clear that for this, there will be sufficient **Mix A** to satisfy the maximum demand for the products but **Mix B** will be a limiting factor. Thus, we employ the decision rule of maximizing the contribution per unit of the limiting factor. Rank material B in this order and then allocate according to this ranking.

Details	**Babies**	**Adult**	**Elders**
Contribution per unit sold	150	120	175
Mix B per unit (Kg)	50	30	70
Contribution per kg of Mix B	3.00	4.00	2.50
Ranking	**2nd**	**1st**	**3rd**

Therefore, Muhabura Ltd should produce as much of Adult product as possible. Then, when maximum demand for Babies product has been met, any Mix leftover by B, should be used to produce the Elder product.

The optimal production plan for the next period will be:

Product	**Recommended production**	**Mix B utilized**	**Total contribution**
Adult	160	4,800	19,200
Babies	120	6,000	18,000
		10,800	**37,200**
Elder	20*	1,400 (Balance)	3,500
		18,500	40,700

After satisfying the demand for Babies and Adults, 1,400 kg of Mix B will be available for the production of the Elders product. Since Elders product requires 70 kg of B per unit, a maximum 20 units of Elders products can be produced.

(C) The recommended production plan in part (b) does not include sufficient Elder product to satisfy the requirements of 50 units for the valued customer. Some of the material allocated to product Babies product (second in the ranking) must be allocated to Elders product. The recommended production plan will now be as follows:

Product	**Recommended production**	**Mix B utilized**	**Total contribution**
Adult	160	4,800	19,200
Babies	78*	3,900	11,700

		3,900	**30,900**
Elder	50**	3,500	8,750
		12,200	39,650

*If 6,000 kgs of Mix B satisfy 120 units of sales demand; 3,900 units will satisfy (3,900*120)/6000 = **78**

****If 20 units of sales demand required 1,400 Kgs of Mix B; 50 units of sales demand will require (50*1,400)/20 = 3,500

QUESTION SIX

a) Ways budgetary system help management to perform their duties

(2 Marks per each valid point maximum 6) 6

b)

i)	**Gross production budget (units)**	2
ii)	**Materials purchases budget (litres)**	3
iii)	**Materials purchases budget (FRW million)**	3
iv)	**Labour budget (hours)**	3
v)	**Labour budget (FRW million)**	3
	Total marks	**20**

a) A budgetary control system can help management to perform their duties in two main areas.

One of the roles of management is in terms of planning for the business – both long term strategic plans and short-term operational plans. Budgets are formal, numerical plans which can help to ensure that all areas of the business are aiming at the same goals.

For example, once the sales and manufacturing budgets are set, management can then ensure that the budgets for other areas of the business such as the canteen and the sales department are in line with these budgets. So, for example, if it is budgeted that there will be 200 factory workers each day then the canteen should not be budgeting to buy food for 400. Or if sales are expected to be 60,000 units in the period it is important that the sales department budgets in order to be able to deal with this level.

A further important role of management is that of control of operations and of costs. A budgetary system can assist in this area as the eventual actual results can be compared to the

budgeted figures and any variances can be calculated and investigated. Where necessary management can then take corrective action to deal with these variances from planned costs.

b)

(i) Gross production budget (units)	20,400	22,400	23,800	23,000
(ii) Materials purchases budget (litres)	61,500	68,250	70,800	
(iii) Materials purchases budget (RWF million)	492	546	566.4	
(iv) Labour budget (hours)	10,200	11,200	11,900	
(v) Labour budget (RWF million)	67.2	67.2	73.5	

Gross production budget	*Period 1* *Units*		*Period 2* *Units*		*Period 3* *Units*		*Period 4* *Units*	
Sales		19,400		21,340		23,280		22,310
Closing inventory (W1)	4,268		4,656		4,462		4,462	
Opening inventory	3,880		4,268		4,656		4,462	
Increase/(decrease) in inventory		388		388		-194		0
Good production		19,788		21,728		23,086		22,310
Faulty production (W2)		612		672		714		690
Gross production		20,400		22,400		23,800		23,000

Workings

1. There are 20 days in each period.

Closing inventory = 4 days' sales in the next period = 4/20 of next period's sales

Closing inventory in period 1 = 4/20 * 21,340 = 4,268
Closing inventory in period 2 = 4/20 *23,280= 4,656

Closing inventory in period 3 = 4/20 * 22,310= 4,462

Closing inventory in period 4 = 4/20 * 22,310= 4,462

2. 3% of gross production is scrapped. Good production therefore represents 97% (or 97/100) of gross production. Faulty production is 3% (or 3/100) of gross production and hence 3/97 of good production.

Faulty production is 3/97 u good production.

(ii)	**Materials purchases budget**					
	Period 1			*Period 2*		*Period 3*
	Litres			*Litres*		*Litres*
Material used in production (W1)		61,200		67,200		71,400
Closing inventory (W2)	16,800		17,850		17,250	
Opening inventory	16,500		16,800		17,850	
Increase/(decrease) in inventory		300		1,050		-600
Purchases (litres)	**61,500**			**68,250**		**70,800**

Each unit requires three litres of material.
Material used in production = 3 * gross production (calculated in (i) above)
Material used in production, period 1 = 3 *20,400 = 61,200
Material used in production, period 2 = 3 *22,400 = 67,200
Material used in production, period 3 = 3 * 23,800 = 71,400

There are 20 days in each period.
Closing inventory must equal five days' gross production in the next period.
Each unit requires three litres of material.
Closing inventory in period 1 = 5/20 * 22,400 (from (i) above) * 3 = 16,800
Closing inventory in period 2 = 5/20 * 23,800 * 3 = 17,850
Closing inventory in period 3 = 5/20 * 23,000 * 3 = 17,250

(iii) **Cost of material purchases**	*Period 1*	Period 2	Period 3
Material to be purchased (from (ii)) Litres	61,500	68,250	70,800
Cost per litre FRW	8,000	8,000	8,000
Cost of material purchases Rwf '000000"	492	546	566
(iv) Labour budget	*Period 1*	Period 2	Period 3
Gross production (units) (from (i))	20,400	22,400	23,800
Labour hrs required per unit	0.5	0.5	0.5
Labour hrs required	10,200	11,200	11,900

(v) Cost of labour budget			
Labour hrs required	10,200	11,200	11,900
Basic labour hrs available *	11,200	11,200	11,200
Surplus hrs/(overtime hrs)	1,000	0	-700
*70 Workers *40 Hours per week *4 weeks			
	Period 1	Period 2	Period 3
Labour cost per period (guaranteed) *	67.2 Million	67.2 Million	67.2 Million
Cost of overtime (700 * RWF9,000)			6.3 Million
Cost of labour	67.2 Million	67.2 Million	73.5 Million
* 70 Workers *FRW 240,000 *4 weeks			

QUESTION SEVEN: Mulindi Company Ltd **Marks**

a) Gross pay

Bonus due – Masabo	1
Bonus due – Mungeri	1
Total gross – Masabo	3
Total gross – Mungeri	3
Marks	**8**

b) Labour turnover

Formula	1
Calculation	1
Marks	**2**

c) Performance appraisal

Staff employed	
Male	1
Female	1
Reward for males	2
Reward for females	4
Total rewards	2
Marks	**8**

Total marks	**20**

Detailed answer

Details	Masabo	Mungeri
Expected units	400	640
Expected time	80	96
Amount payable	30,000	45,000
Actual hours	54	50
Time saved	26	46

Bonus due

Masabo = 26*FRW 30,000*60% = FRW 468,000

Mungeri = 46*FRW 45,000*60% = FRW 1,242,000

Total gross pay

Masabo = FRW 468,000 + (45 hours*FRW 30,000) + (9 hours*FRW 50,000) = **FRW 2,268,000**

Mungeri = FRW 1,242,000 + (45 hours*FRW 45,000) + (5 hours*FRW 75,000) = **FRW 3,642,000**

Refers to the table below for details:

Gross pay	Bonus (FRW)	Payment to normal hours (FRW)	Overpayment to extra hours (FRW)	Total (FRW)
Masaabo	468,000	1,350,000	450,000.00	2,268,000
Mungeri	1,242,000	2,025,000	375,000	3,642,000
Total	**1,710,000**	**3,375,000**	**825,000**	**5,910,000**

(b) **Labour turnover** = $\frac{\text{Replacement}}{Average\ number\ of\ employees\ in\ the\ period} * 100 = \frac{119}{700} * 100 = 17\%$

(C)

Staff employed	Male	Female	Total
Employed during the year 2018	210	490	700
Staff who left in the year 2018	21	98	119
Staff remaining and who worked in 2019	189	392	581

Marks obtained	Male	Reward rate for Male	Reward for Males	Female	Reward rate for Female	Reward for Females	Total staffs rewarded	Total reward given in FRW
	A	B	C=A*B	D	E	F=D*E+E*1%*D	G=A+D	H=C+F
>80%	3	500,000	1,500,000	2	500,000	1,010,000	5	2,510,000
>70%<80%	156	250,000	39,000,000	96	250,000	24,240,000	252	63,240,000
>50%<70%	200	-	-	70	-	-	270	-
<50%	33	-	-	21	-	-	54	-
Total	**392**	**750,000**	**40,500,000**	**189**		**25,250,000**	**581**	**65,750,000**