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CERTIFIED PUBLIC ACCOUNTANT

ADVANCED LEVEL 2 EXAMINATION

A2.2: STRATEGIC PERFORMANCE MANAGEMENT

FRIDAY: 10 JUNE 2016

INSTRUCTIONS:

1. **Time Allowed: 3 hours 45 minutes** (15 minutes reading and 3 hours 30 minutes writing).
2. This examination has one case study
3. Show all your workings

CASE STUDY

Mr Nsaba George, a retired civil servant found life after formal employment in farming. He established Geo Orchard Ltd (GOL) in 2000, for growing mainly oranges, tangerines and passion fruits in Rubavu district. Five years later, he started Geo Juice Ltd (GJL), a juice processing plant to generate more profits from value addition. GJL produces only Cipassio juice made from oranges, tangerines and passion fruits. Establishment of GJL created another opportunity for Mr. Nsaba to invest in plastic recycling business. He created Geo Plastics Ltd (GPL) which recycles used plastic materials to produce plastic bottles. He opened up Geo Water Ltd (GWL) in 2010 after establishing water bottling as a profitable business basing on sales orders for plastic bottles from GPL's customers. He also established Geo Distributions Ltd (GDL) which is in charge of selling and distributing the Cipassio juice and Geo Water within the East African region.

All of the five companies were being managed by Mr. Nsaba until last year when he decided to create Geo Group of Companies (GGC) because of the expansion plans to open subsidiaries in Uganda and South Sudan. During management restructuring, a board of directors for GGC was appointed with Mr. Nsaba as its chairman and the other five companies were to be headed by General Managers. The General Managers were given autonomy in exercising duties except the financing function which was retained by GGC. The General Managers were given rights to apply controls that suit the nature of their business. GGC's reporting date is 31 May.

GGC took the 2015 award for corporate social responsibility through GPL and was the second largest tax payer this has made Mr. Nsaba to believe that one year of existence after management restructuring can form a basis of directly opening business in Uganda and South Sudan in order to benefit from the East African Community (EAC). He plans to make tax savings through this across border investment.

GGC's board still insists that there are issues to be resolved before investing across the borders. Group member companies are interdependent with a strict policy of neither selling nor buying outside the group for goods that are produced internally. However, some General Managers defy this policy. There are negative comments on the quality of Geo Water and Cipassio juice from customers. The General Manager of GDL commented on product late deliveries as caused by production inefficiencies within GWL and GJL. Generally, there are complaints within the group about quality, price and delivery time of materials from group member suppliers.

The board further indicated that restructuring is still going on despite successes attained after formation of GGC. Inter-group conflicts on quality and prices should be addressed as soon as possible. Total quality management and re-engineering business processes were identified as the immediate strategies to use in improving the quality of products. GGC plans to use the fast growing technology to engage in e-business to ease trading across borders other than physical trade as proposed by the group chairman.

General Managers are allowed to apply different internal control and reporting systems within their companies. However, these have to be harmonized at group level especially for reporting and decision making purposes. GGC analyses the performance of the five companies independently for proper decision making.

GOL had no formal budgetary control system until restructuring when it was put in place. The General Manager GOL evaluated the current budgetary control system and realized that it gave room for budgetary slacks and therefore made changes to it. He advised that all staff should participate in the budgeting process starting with attendance of the budget conference. The budget committee and budget manual should be put in place. The budget for the subsequent year should be approved within the last quarter of the current year. The budget monitoring should be done on a monthly basis where actual performance is compared with the flexible budget and then revise the next month's budget with help of forecasting techniques.

GOL's monthly sales budget for May and June 2016 are as follows:

		May 2016		**June 2016**
Item	**Price per kg**	**Budget**	**Actual**	**Budget**
	Frw	**Weight (kg)**	**Weight (kg)**	**Weight (kg)**
Oranges	300	150,000	152,500	120,000
Tangerines	525	100,000	105,000	90,000
Passion fruits	675	200,000	175,000	180,000

Information below relates to budgeted variable costs per kilogram and monthly fixed costs:

	Budget
Variable costs:	**Frw**
Organic fertilizers	52.5
Pesticides	75
Farm labour	112.5
Packaging	37.5
Fixed costs per month:	**Frw '000'**
Depreciation	3,150
Salaries	54,000
GGC attributable costs	8,250
Transport	7,125
Other fixed costs	3,750

The actual performance of April and May 2016 is as follows:

	April	**May**
Sales:	**Frw '000'**	**Frw '000'**
Oranges	46,800	48,037.5
Tangerines	54,375	53,550
Passion fruits	120,000	131,250
Sub total	**221,175**	**232,837.5**
Variable costs:		
Organic fertilizers	36,375	32,437.5
Pesticides	36,375	32,437.5
Farm labour	55,050	64,875
Packaging	10,950	12,975
Contribution	**82,425**	**90,112.5**
Fixed costs:		
Depreciation	3,150	3,150
Salaries	54,000	54,000
Transport	7,350	7,350
Group attributable costs	7,875	7,875
Other fixed costs	3,000	3,000
Profit	**7,050**	**14,737.5**

GOL sold 481,000 kilograms of oranges, tangerines and passion fruits in April 2016.

Both Geo Water Ltd (GWL) and Geo Juice Ltd (GJL) use a similar standard costing system as a measure of minimising costs to maximise profits. GWL and GJL operate at their full capacity levels and are restricted to sell all their output to Geo Distribution Ltd (GDL). Both companies use marginal costing plus a mark–up to set product prices. GJL should purchase oranges, tangerines and passion fruits from GOL. GJL's General Manager complains that GOL sells its products expensively and wants to buy from outside suppliers.

GWL and GJL have the following monthly standard mix for producing and packaging 1,500 litres of Geo Water and 2,500 litres of Cipassio juice.

	Geo Water (1,500 litres)			**Cipassio juice (2,500 litres)**		
	Quantity	**Rate (Frw)**	**Amount (Frw)**	**Quantity**	**Rate (Frw)**	**Amount(Frw)**
Water (litres)	1,500	0.94	1,410	1,500	0.94	1,410
Packaging bottles (cartons)	60	1,875	112,500	100	2,250	225,000
Orange juice (litres)				125	315	39,375
Tangerine juice (litres)				25.5	555	14,152.5
Passion fruit juice (litres)				875	720	630,000
Other ingredients (litres)	37.5	2,250	84,375	62.5	3,375	210,937.5
Total			**198,285**			**1,120,875**

Both companies expect a standard loss in input materials of 8%

The actual production output for May 2016 was 1,350,000 litres of Geo water and 1,800,000 litres of Cipassio juice. The actual production and packaging material for May 2016 was as follows:

	Geo Water			**Cipassio juice**		
	Quantity '000'	**Rate (Frw)**	**Amount (Frw '000')**	**Quantity '000'**	**Rate (Frw)**	**Amount (Frw'000')**
Water (litres)	1,350	0.94	1,269	1,150	0.94	1,081
Packaging bottles (Cartons)	54	1,837.5	99,225	72	2,343.75	168,750
Orange juice (litres)				102.5	300	30,750
Tangerine juice (litres)				40	585	23,400
Passion fruit juice (litres)				625	675	421,875
Other ingredients (litres)	35	2,250	78,750	50	3,562.5	178,125
Total			**179,244**			**823,981**

Geo Distribution Ltd (GDL) buys, distributes and sells both Geo water and Cipassio juice within Rwanda and other EAC markets. GDL faces high transport costs during distribution and is considering outsourcing the distribution services for Cipassio juice from Inyanza Transporters Ltd (ITL) at a cost of Frw 400,000,000 per annum. ITL can distribute 1,200,000 cartons per annum and available additional transporters may be hired at Frw 160,000,000 per annum. Each hired additional transporter increases distribution capacity to 400,000 cartons per annum. The available customers' storage space cannot hold increases in distribution capacity beyond 1,800,000 cartons. Outsourcing period is limited to one year and the variable costs are estimated to be Frw 120 per carton transported within Rwanda and Frw 300 per carton transported to outside Rwanda.

GDL incurs the following fixed costs per annum:

	Rwanda	Other EAC markets
Fixed costs	**Frw '000'**	**Frw '000'**
Administration and salaries	400,000	900,000
Advertising	500,000	400,000
Stationery	350,000	200,000
Training	120,000	350,000

The Demand Planner (DP) has estimated the maximum selling prices for a range of sales from 1,000,000 cartons to 1,800,000 cartons to both Rwanda and EAC member countries of which two thirds are made in Rwanda only. The estimates are as follow:

Cartons distributed/sold ('000')	1,200	1,600	1,800	1,800
Selling Price per carton in Rwanda (Frw)	9,000	8,700	8,500	8,000
Selling Price per carton in other EAC members (Frw)	13,500	13,050	12,750	12,000

GDL has to charge different selling prices to attain the maximum sales volume of 1,800,000 cartons.

GDL buys a carton of Geo water and Cipassio juice from GWL and GJL at Frw 3,500 and Frw 4,600 respectively.

GDL has just received a special order to supply 40,000 cartons of Cipassio juice. This customer has offered Frw 5,000 per carton of juice and transport costs to be incurred by the seller up to the customer's warehouse. Distribution is estimated to cost a total of Frw 9,000,000.

GDL market is becoming extremely volatile and competitive and achieving adequate product profitability is extremely important. GDL uses overhead absorption system, annual budgets and monthly variance reports and the balanced scorecard for performance measurement. However it's General Manager thinks application of target costing and life cycle costing systems will improve GDL's profitability levels.

Geo Plastics Ltd (GPL) collects and recycles used plastic material to produce plastic bottles for both GWL and GJL. GPL had the worst performance within GGC group for the last financial year that ended 31 May 2016. The General Manager attributed this poor performance to the policy that restricts them from selling outside the group unless there is excess. GPL usually operates below capacity because of this policy and has no funding to generate market outside the group. Since GWL and GJL use marginal costing plus a mark–up to price their products forced GPL to use the same. The General Manager criticizes this pricing method that 25% mark–up added is not adequate to cover all the fixed costs. He proposes use of dual pricing method because negotiated prices failed as some General Managers use group chairman to influence pricing process. Information below relates to extracts from the GPL's May 2016 financial records:

	Geo water	Cipassio juice
Output (cartons)	60,000	80,000
Direct costs per carton	Frw	Frw
Direct material	787.5	1,125
Direct labour	562.5	562.5
Other variable costs	120	187.5

GPL's monthly fixed costs are Frw 65,625,000.

REQUIRED:

Basing on the activities at GGC and acting as the Finance Director:

(a) Prepare both fixed and flexible budget variances for May 2016 to evaluate GOL's new budgetary control system. **(16 Marks)**

(b) (i) Use high – low method to estimate GOL's profit for June 2016, if 495,500 kilograms of oranges, tangerines and passion fruits are to be sold. **(3 Marks)**

(ii) Analyse GOL's monthly profit trend and give a reason to justify your answer **(2 Marks)**

(c) Compute and interpret the following variances for both GWL and GJL:

(i) Materials mix variance

(ii) Materials yield variance **(13 Marks)**

(d) (i) Calculate GDL's distribution quantity and price that will maximise the short-term profits. **(20 Marks)**

(ii) With reasons, advise GDL on the bestselling prices for their products in Rwanda and other EAC countries. **(3 Marks)**

(iii) Explain any two pricing strategies that may be applied in differential pricing of the 1,800,000 cartons. **(4 Marks)**

(e) (i) Advise GDL whether it should accept the special order of 40,000 cartons of Cipaccio juice.**(4 Marks)**

(ii) State the number of cartons that should be sold under the special order so as to break even.

(2 Marks)

(f) Advise GDL on the distribution areas to be downsized since demand for Cipassio juice is exceeding the distribution capacity. **(6 Marks)**

(g) By computing GPL's total profits for May 2016, evaluate the pricing method. **(6 Marks)**

(h) Explain how GGC will use across border investments to save taxes. **(2 Marks)**

(i) Discuss how negotiated and dual transfer prices can help to solve inter-group conflicts within GGC **(3 Marks)**

(k) Explain how target costing and life cycle costing can help GDL to improve profitability. **(4 Marks)**

(j) Identify any two ethical issues from this case. **(2 Marks)**

(l) Write a report to the board discussing how the implementation of a good costing system would improve efficiency. **(10 Marks)**

(Total 100 Marks)

End of question paper

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