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**CERTIFIED PUBLIC ACCOUNTANT  
FOUNDATION LEVEL 2 EXAMINATIONS**

**F2.1: MANAGEMENT ACCOUNTING**

**DATE: WEDNESDAY 23, AUGUST 2023**

**INSTRUCTIONS:**

- 1. Time Allowed: 3 hours 15 minutes (15 minutes reading and 3 hours writing).**
- 2. This examination has seven questions and only five questions should be attempted.**
- 3. Marks allocated to each question are shown at the end of the question.**
- 4. Show all your workings where necessary.**
- 5. The question paper should not be taken out of the examination room.**

**QUESTION ONE**

(a) Costs can be classified according to function, time or behavior by an organization during planning stage.

**Required:**

**Citing examples, explain each of the following cost classification**

- (i) Classification according to function (2 Marks)**
- (ii) Classification according to behavior (2 Marks)**
- (iii) Classification according to time (2 Marks)**

(b) Overheads can be absorbed to production units using traditional method which only uses one basis of absorption; however, the method is not suitable since it doesn't take into account cost drivers. Activity based costing approach is the most suitable basis of absorbing overheads to production units. Provided below is the data for ABC Ltd for the financial year ended 31<sup>st</sup> December 2022.

Traditionally overheads were absorbed to production units using labour hours

i. The following details were provided.

Particulars	Product A	Product B	Product C
Units produced	40,000	35,000	25,000
Labour hours required per unit	6hours	8hours	10hours
Labour rate per hour (FRW)	10	10	10
Total prime cost (FRW)	1,000,000	800,000	600,000

ii. Overhead costs are split into; set up cost, stores and scheduling on the ratio of 5:3:2 respectively.

iii. Overheads are apportioned to production units using cost drivers as set out below.

Overhead	Cost driver	Product A	Product B	Product C	Total
Set up cost	Number of set ups	1,600	1,200	1,050	3,850
Stores cost	Materials purchased	1000	800	510	2,310
Scheduling cost	Number of production runs	700	500	340	1,540

**Required:**

- (i) Explain cost driver as used in activity-based costing. (1 Mark)**
- (ii) Compute the total overheads for the year ended 31<sup>st</sup> December 2022. (4 Marks)**
- (iii) Compute the proportion of overheads costs attributable to set up, stores and scheduling using the proportions provided and distribute them to products A, B and C. (6 Marks)**
- (iv) Compute the total production costs for products A, B and C respectively. (3 Marks)**

**(Total: 20 Marks)**

**QUESTION TWO**

(a) Distinguish between job costing and batch costing methods. (4 Marks)

(b) Mugabo Ltd is a company that manufactures products in batches. Each batch produced has 10,000 units. For the year ended 31<sup>st</sup> December 2022 the following details were availed.

Direct material cost per batch was FRW 10,000,000

Direct labor cost per batch was FRW 6,000,000

**Production overheads**

Department A Labor hours 1,000 @ FRW 1,000

Department B Labor hours 2,000 @ FRW 500

Department C Labor hours 3,000 @ FRW 300

Selling and administrative costs is FRW 1,100,000.

Mugabo Ltd charges a profit of 20% on sales

**Required:**

- (i) Production cost per batch (2 Marks)
- (ii) Cost of sales per batch (2 Marks)
- (iii) Selling price per batch (2 Marks)
- (iv) Selling price per unit (1 Mark)

(c) JPG Ltd completes assignments as per the job order. The job pricing is arrived at after considering the job costs then a profit is added to the costs of a job. JPG was awarded job JJJ for the year ended 31<sup>st</sup> December 2022 whose specifications were as set out below.

- Direct material cost was FRW 20,000 per unit of the assignment.
- Direct labour cost was FRW 25,000 per unit of the assignment.
- Production overheads are absorbed on the basis of 20% of total prime cost.
- Non-manufacturing overheads accounts for 25% of the total production cost.
- To complete this job, 10,000 units had to be completed.
- To arrive at the job order price a profit of 20% on the selling price is added.

**Required:**

**Compute the following for job JJJ:**

- (i) Total prime cost. (2 Marks)
- (ii) Total production cost. (2 Marks)
- (iii) Total non-manufacturing overhead. (1 Mark)
- (iv) Total sales revenue. (2 Marks)
- (v) Total profit realized. (2 Marks)

**(Total: 20 Marks)**

**QUESTION THREE**

**(a) Explain service costing as used in management accounting. (2 Marks)**

**(b) Service costing being one of the costing methods has its merits and demerits.**

**Required:**

**In connection with the statement above, explain the 2 merits and 2 demerits of service costing as a costing method. (8 Marks)**

**(c) DN Ltd is a company operating in the transport sector and it offers delivery of goods and services to clients across the republic of Rwanda. For the year ended 31<sup>st</sup> December 2022, the following details were availed in relation to service delivery.**

- The company had a 10 tyres vehicle
- Tires replacement was after covering 100,000 kms at a cost of FRW 80,000 per tire
- Fueling was 20 litres per 100 kms covered at a cost of FRW 2000 per liter
- Annual operating license was FRW 200,000
- Depreciation was at the rate of 25% per annum with zero residual value
- The cost of the vehicle was FRW 150,000,000 with a useful life of 10 years and FRW 25 million salvage value.
- Servicing is done at a cost of FRW 50,000 after covering every 20,000kms
- Number of kilometers covered during the year was 100,000
- Driver and his assistant remuneration was FRW 200,000 each per month.

**Required:**

**Compute for the year ended 31<sup>st</sup> December 2022:**

- (i) Total cost of tires replacement (2 Marks)**
- (ii) Total fueling cost (2 Marks)**
- (iii) Annual depreciation charges (2 Marks)**
- (iv) Total servicing cost (2 Marks)**
- (v) Total annual operating cost (2 Marks)**

**(Total: 20 Marks)**

**QUESTION FOUR**

- (a) ABC Ltd procures stock items for re-sale. During the year ended 31<sup>st</sup> December 2022 the following details were availed
- Stock as at 1<sup>st</sup> December 2022 was 20,000 units @ FRW 200 each.
  - On 6<sup>th</sup> December purchased 5000 units @ FRW 300 each.
  - On 15<sup>th</sup> December purchased 15,000 units @ FRW 400 each.
  - On 29<sup>th</sup> December sold 35,000 units @ FRW 800 each.

**Required:**

**Compute the value of closing stock using;**

- (i) **First in first out (FIFO) method.** (2 Marks)
- (ii) **Last in first out (LIFO) method.** (2 Marks)
- (iii) **Weighted Average price method.** (2 Marks)

(b) **Explain the following as used in management accounting**

- (i) **Economic Order Quantity (EOQ) model.** (2 Marks)
- (ii) **Just In Time (JIT) technique.** (2 Marks)

(c) The following details relate to production of product EXE for the period ended 31<sup>st</sup> December 2022

Product EXE standard cost card.

Particulars	FRW
Direct material cost per unit	250
Direct labour cost per unit	150
Variable production overhead cost per unit	200
Fixed production overhead cost per unit	100

The following details were also availed

- Stock as at 1<sup>st</sup> January 2022 was 3000 units
- Production units were 27,000
- Sales units were 25,000
- Profit margin was 20%

**Required:**

- (i) **Gross contribution margin using marginal costing approach.** (5 Marks)
  - (ii) **Gross profit margin using absorption costing approach.** (5 Marks)
- (Total: 20 Marks)**

**QUESTION FIVE**

(a) XYZ Ltd is a company that manufactures products and delivers them directly to clients without using selling agents. However, since its inception in the year 2019 it has been struggling to break even. Provided below are details of manufacture.

Cost direct materials was 25000kgs @ FRW 1000 per kg

Cost of direct labour was: Skilled 50,000hrs @ FRW 500 per hour.

Semi-skilled 30,000 @ FRW 300 per hour.

Variable production overheads was 22,000hrs @ FRW 500 per hour.

Fixed overhead cost was FRW 8,000,000.

Selling price per unit was FRW 8,000 and 10,000 units were produced and sold.

**Required:**

- (i) Compute total contribution margin. (2 Marks)
- (ii) Compute break-even point in units and in value. (3 Marks)
- (iii) Compute margin of safety in units and in value. (3 Marks)
- (iv) Compute sales level required to achieve a profit of FRW 5,000,000. (2 Marks)

(b) To make decisions at whichever level of management requires an impact assessment as to whether it will affect operations, customer satisfaction, staff morale among other issues of concern.

**Required:**

**Explain the factors considered when making the following managerial non-routine decisions.**

- (i) Make or buy decision. (3 Marks)
- (ii) Accept or reject a special-order price. (3 Marks)
- (iii) Optimal production mix. (2 Marks)
- (iv) Drop or retain decisions. (2 Marks)

**(Total: 20 Marks)**

**QUESTION SIX**

(a) A budget is one of the tools for planning used by organizations for efficient and effective resource management.

**Required:**

**Explain 3 purposes of preparing a budget to an organization. (6 Marks)**

(b) GNC Ltd has provided you with the following budget information for the year ended 31<sup>st</sup> December 2022 for analysis.

Particulars	Budgeted performance	Actual performance
Direct material cost per unit	20kgs@FRW20 each	25kgs@FRW 15 each
Direct labour cost per unit	10hrs@FRW40 each	8hrs@FRW 50 each
Variable production overheads	5hrs@FRW40 each	6hrs@FRW45 each
Fixed production overheads	FRW 6,000,000	FRW 6,000,000
Production and sales units	20,000 units	25,000 units
Selling price per unit	FRW 1,500	FRW 1,200
Selling and distribution cost	FRW 2,000,000	FRW 2,000,000

**Required:**

**Prepare:**

(i) Fixed budget P&L for the year ended 31<sup>st</sup> December 2022. (5 Marks)

(ii) Flexible budget P&L for the year ended 31<sup>st</sup> December 2022 (5 Marks)

(c) Assuming that there are two scenarios. Scenario 1 is where the above details are used to prepare the 2023 budget proposal while making some adjustments and scenario 2 is where is a budget proposal for 2023 is prepared while disregarding the above provided details.

**Required:**

**Which of the above scenarios perfectly explains**

(i) Incremental budget (justify your answer). (2 Marks)

(ii) Zero based budget (justify your answer). (2 Marks)

**(Total: 20 Marks)**

**QUESTION SEVEN**

(a) Explain variance analysis as used in management accounting (2 Marks)

(b) The following details relates to PQR Ltd for the year ended 31<sup>st</sup> December 2022.

Budgeted performance	Actual performance
Budgeted production 50,000 units	Production 55,000 units
Budgeted sales 50,000 units @ FRW 2000 each	Sales 55,000 units @ FRW1,800 each
Direct material A 45,000 kgs @ FRW 200 per kg	Direct material A 40,000 kgs for FRW 10,000,000
Direct material B 40,000 kgs @ FRW 250 per kg	Direct material B 42,000 kgs for FRW 11,550,000
Direct labour 40,000 hrs. @ FRW 400 per hour	Direct labour 35,000 hrs. for FRW 17,500,000

**Required:**

- (i) Sales volume variance (2 Marks)
- (ii) Material A & B price variance (4 Marks)
- (iii) Material A & B usage variance (4 Marks)
- (iv) Labour efficiency variance (2 Marks)
- (v) State 3 contributing factors to material cost variances (3 Marks)
- (vi) State 3 causes of labour cost variances (3 Marks)

**(Total: 20 Marks)**

**End of question paper**