INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS OF RWANDA

Driving Sustainable Performance

Associate of IFAC

CERTIFIED ACCOUNTING TECHNICIAN

LEVEL 2 EXAMINATIONS

L2.3: MANAGEMENT ACCOUNTING

TUESDAY: 29 NOVEMBER 2016

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 are to be attempted.
3. Marks allocated to each question are shown at the end of the question.
4. Show all your workings.
5. All iCPAR Examination rules and regulations apply

Attempt any five questions

QUESTION ONE

RBT Ltd deals in the production and sale of soft drinks in Huye. The company uses material RT in the production of all its brands. Material RT is purchased in bulk so as to take advantage of bulk purchase discounts.

During the month of November, 2016 material issues and receipts were as follows:

Date	Details	Quantity (Kg)	Unit cost (Frw)
1	Balance b/ f	2,000	3,000
3	Receipt	5,000	2,800
5	Issues	2,700	
	Receipt	1,500	2,750
11	Issue	4,000	
15	Receipt	4,500	3,200
17	Receipt	2,300	3,150
22	Issue	2,900	
27	Issue	800	
29	Issue	950	
30	Receipt	2,500	3,300

REQUIRED:

(a) Using first in first out (FIFO) method, determine the value of:

(i) Materials issued during the month of November, 2016. **(13 Marks)**

(ii) The closing inventory of materials. **(5 Marks)**

(b) Explain any **two** costs incurred in obtaining inventory. **(2 Marks)**

(Total 20 Marks)

QUESTION TWO

MSL Ltd deals in the manufacture of furniture for schools in Rulindo. It has had a good performance since its start early this year. It is currently reviewing its performance so as to ascertain its costs for the month of December, 2016 for planning purposes. Total costs and output for the last 7 months were as follows:

Month	Output (units)	Total cost Frw 'million'
May	75,000	3,750
June	85,000	4,475
July	95,000	4,825
August	50,000	3,150
September	55,000	3,260
October	60,000	3,540
November	65,000	3,850

REQUIRED:

(a) Using the high-low technique, obtain the total expected costs for December, 2016 for the estimated production of 90,000 units. **(10 Marks)**

(b) Using illustrations distinguish between variable costs and semi-variable costs. **(4 Marks)**

(c) Define the following with examples:

(i) Marginal costs. **(2 Marks)**

(ii) Irrelevant costs. **(2 Marks)**

(iii) Replacement costs. **(2 Marks)**

(Total 20 Marks)

QUESTION THREE

ZML Ltd deals in the manufacture of animal feeds in Ngoma district. The company is a monopoly in the production and sale of poultry and cattle Feeds in the area. Management have provided the following data on standard material and labour costs and usage.

	Poultry Feeds	Cattle Feeds	Cost per unit
Material type			Frw
A	12 Kg	10 Kg	1,800
B	6 Kg	11 Kg	4,000
Direct labour (Frw 500 per hour)	2 hours	4 hours	

The Feeds are parked in small batches of 5 Kg each.

Additional information:

	Poultry Feeds	**Cattle Feeds**
Raw materials (Kg):		
Opening inventory	80,000	8,000
Closing inventory	9,000	7,500
Finished products (batches):		
Budgeted sales	80,000	20,000
Closing inventory	15,000	3,000
Opening inventory	8,000	4,000
Selling price per batch (Frw)	10,000	12,000

REQUIRED:

Prepare the following functional budgets:

(i) Sales. **(4 Marks)**

(ii) Production. **(5 Marks)**

(iii) Direct material usage. **(6 Marks)**

(iv) Direct labour. **(5 Marks)**

(Total 20 Marks)

QUESTION FOUR

(a) FMN Ltd is a newly established firm in Nyagatare that deals in the production and sale of school bags. During the previous financial year 80,000 bags were sold at Frw 15,000 per bag.

Closing inventory of finished goods during the period was 10,000 bags and there was no opening inventory. Production, distribution and administrative costs incurred during the period included the following:

Production costs:	**Frw**
Direct materials per unit	1,000
Direct labour per unit (Frw 500 per hour)	1,000
Variable overheads per unit	2,300
Fixed overheads	100,000,000
Administration costs:	
Variable (per unit)	1,200
Fixed	300,000,000
Distribution costs:	
Variable (per unit)	1,500
Fixed	110,000,000

All administration and distribution costs were incurred only on sales.

REQUIRED:

Using absorption costing, determine the firm's profit/ (loss) during the period. **(8 Marks)**

(b) LM Ltd based in Gakenke specialises in the production of party cakes of standard size. The company has just bought a new machine to boost its production capacity.

The new machine has capacity of producing 200,000 cakes per month and each cake is sold at Frw 35,000. For the month of December, 2016 LM Ltd has planned to produce 180,000 cakes to satisfy the estimated demand during the month.

The following are budgeted unit costs for the month of December, 2016.

Particulars	**Frw**
Direct labour (5 hours each at Frw 1,000)	5,000
Direct materials (3 kg each at Frw 3,000)	9,000
Variable overheads	9,000
Fixed overheads	150,000,000

The company has just received a request from a trader in Muhanga to supply 20,000 cakes at a price of Frw 25,000 per cake. Management does not expect any other business during the month.

REQUIRED:

(i) Using relevant calculations, advise the company on whether to accept or reject the order. **(6 Marks)**

(ii) Explain the importance of contribution in decision making in an organisation. **(4 Marks)**

(c) Distinguish between marginal costing and absorption costing. **(2 Marks)**

(Total 20 Marks)

QUESTION FIVE

(a) Explain any **four** uses of standard costing in an organisation. **(4 Marks)**

(b) AM Ltd is a crafts company in Burera and is in the process of preparing its budget for the financial year ending December, 2017.

One of its products, a special type of art piece popular among tourists, is planned to be sold for Frw 25,000 per piece basing on market trends. The production of each piece is expected to require the following inputs:

Raw materials	2 Kg
Labour	1 ½ hours
Variable overheads	1 ½ hours
Fixed overheads	1 ½ hours

Raw materials are expected to be purchased at Frw 5,000 per Kg; planned labour rate is Frw 500 per hour. Variable overheads are to be absorbed on the basis of labour hours at the rate of Frw 1,500 per hour, while fixed overheads are to be absorbed at the rate of Frw 2,500 per hour.

REQUIRED:

Prepare a standard cost card for AM Ltd clearly showing the standard cost of production and standard profit. **(4 Marks)**

(c) Explain the procedures for setting standards for:

(i) Direct materials **(3 Marks)**

(ii) Direct labour **(3 Marks)**

(d) The management of XM Ltd is considering the elimination of standard costing from its intended activities due to its limitations.

REQUIRED:

Explain any four limitations of standard costing in an organization. **(4 Marks)**

(e) Explain any two differences between standards and budgets. **(2 Marks)**

(Total 20 Marks)

QUESTION SIX

(a) Distinguish between blanket overhead rates and departmental overhead rates. **(2 Marks)**

(b) Explain any **three** roles of a management accountant in the modern business environment. **(3 Marks)**

(c) AF Ltd manufactures phone accessories for multiple users in Huye. The manufacture of these accessories is carried out through 3 departments namely the machine department, assembly department and the service department.

Overhead costs have been allocated to the departments as follows.

Department	Machine	Assembly	Service
Overheads (Frw 'million')	90	180	350

Machine department overheads are absorbed basing on machine hours while assembly and service department overheads are absorbed on the basis of labour hours. 90,000 machine hours, 720,000 labour hours and 10,000 labour hours have been allocated to the machine department, assembly department and service department respectively.

Variable costs per unit include:

	Frw
Direct labour	7,000
Direct materials	8,000
Variable overheads	3,400

REQUIRED:

(i) Determine the overhead absorption rate for the 3 departments. **(6 Marks)**

(ii) The production department has advised that each phone accessory spends 11 hours in the machine department, 7 hours in the assembly department and 3 hours in the service department.

REQUIRED:

Calculate the overheads to be allocated to each phone accessory. **(4 Marks)**

(d) Briefly describe the decision making process in a manufacturing organisation where there is one limiting factor to attain required production. **(5 Marks)**

(Total 20 Marks)

QUESTION SEVEN

(a) FFM Ltd is the sole distributor of mattresses in Western Gichumbi. The company sells mattresses of various sizes. A 6 x 6ft mattress is sold for Frw 100,000 only. For the month of January, 2017 the company expects to sell 80,000 6 x 6ft mattresses. Planned variable costs on each 6 x 6ft mattress are Frw 60,000 while budgeted fixed costs amount to Frw 2,000 million.

REQUIRED:

(i) Prepare a breakeven chart for FFM Ltd clearly showing the:

- Breakeven point in units and revenue and
- Margin of safety in units and revenue. **(13 Marks)**

(ii) Explain any **three** limitations of cost-volume-profit analysis **(3 Marks)**

(b) GMN Ltd a distiller in Musanze district has received a one off order that will require 2,000 direct labour hours and other variable costs of Frw 3 million. Labour is currently in short supply and acceptance of the order will call for reduced production of its main product Namaqua wine.

Details relating to a unit production of Namaqua wine have been provided as below:

	Frw	Frw
Selling price		50,000
Direct labour (5hours each at Frw 5, 000)	25,000	
Other variable costs	15,000	(40,000)
Contribution		10,000

REQUIRED:

Calculate the minimum revenue that GMN Ltd should accept for the order. **(4 Marks)**

(Total 20 Marks)

End of question paper

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