**WORKFORCE DEVELOPMENT AUTHORITY**

WDA

*Empowering people with employable skills and entrepreneurship capacity*

**P.O. Box 2707, Kigali, Rwanda**
**Tel: (+250) 25113365**
**E-mail: info@wda.gov.rw**
**Website: www.wda.gov.rw**

**Name:** KIBUKILA B. ERIC

**Code:** 0783030133

# ANSWER BOOKLET

Option: CTO

Subject: FINANCIAL & COST ACC

Academic Year **2017**

***Read carefully the instructions on the back***

**FOR EXAMINER'S USE ONLY**

| **QUESTIONS** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | **Total** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Marks** | | | | | | | | | | | |
| **QUESTIONS** | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | **Total** |
| **Marks** | | | | | | | | | | | |
| **QUESTIONS** | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | **Total** |
| **Marks** | | | | | | | | | | | |
| **QUESTIONS** | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | **Total** |
| **Marks** | | | | | | | | | | | |

# PART I : FINANCIAL ACCOUNTING

Do not write in this margin

## SECTION A

(01) Accounting is an information system that identifies, records, and communicates the economic events of an organization to interested users.
1mk

The major users of information need are as follows:
4 marks

5/5

* Management uses accounting informat° in planning, controlling, and evaluating business operations.
or

* Investors (owners) decide whether to buy, hold or sell their financial interests on basis of accounting data.
or

* Creditors (suppliers & bankers) evaluate the risk of granting credit or lending money on the basis of accounting info.

* Employees: for assessing company's profitability and its consequence on their future remuneration and job security.

* Tax authorities for determining the credibility of the tax returns filed on behalf of the company.

* Customers: for assessing the financial position of its suppliers which is necessary for them to maintain a stable source of supply in the long-term.

* Regulatory Authorities; for ensuring that the Company's disclosure of accounting information is in accordance with the roles and regulations set in order to protect the interests of the stakeholders who rely on such information in forming their decisions. (1mk x4) a good user.

Do not write in this margin

(02) The correct accounting equation;

CAPITAL = ASSETS − LIABILITIES. 3mks

(03)

| Date | Transactions | EFFECTS | | |
|---|---|---|---|---|
| | | Assets | Liabilities | Capital |
| June 1st | Starting a buz putting 5,000$ into a buz bank account. | Increase bank a/c 0,1 | None 0,1 | Increase Cap. a/c. 0,1 |
| June 3rd | Bought works machinery on credit from unique machines | Increase Machinery a/c 0,1 | Increase Unique machine a/c 0,1 | None 0,1 |
| June 4th | Withdrew 500$ Cash from the bank and placed it in the Cash box | None 0,1 | None 0,1 | None 0,1 |
| June 10th | Returned some of the machinery Value 300$ to unique machines. | Decrease (Machinery a/c) 0,1 | Decrease Unique machine a/c 0,1 | None. 0,1 |

6/6

(04) Bank reconciliation is the process of bringing into agreement the balance as per cashbook (bank column) and the balance as per bank statement.

Importance of bank reconciliation

Do not write in this margin

1. Bank reconciliation strengthens an organization's internal control system through detection and preventio of fraud.

2. Bank reconciliation leads to accuracy in records.

Reasons of discrepancy between Cashbook and bank statement are;

* payments made by the bank on behalf of the firm or charges levied by the bank have not been recorded in the firm's cashbook.

* Amounts received directly by the bank have not been recorded in the firm's cashbook.

* Cheques received from debtors and paid into the bank, have subsequently been dishonored and not yet entered in the firm's cashbook.

* Cheques drawn by the firm in favour of suppliers or other creditors have been correctly credited in the cashbook but not yet been presented for payment at firm's bank.

* Cheques or cash paid into the bank by the firm and Recorded as such in the firm's cashbook have not yet been recorded by the bank.

* An Error made by the bank on the bank statement. In practice this is rare occurrence, except in examination questions.

Do not write in this margin

(5) In Accounting, Depreciation of a fixed asset is defined as the allocation of the cost of the asset to the years in w/c benefit is expected to flow from its use.

Methods for Computing depreciation; (any four of the following): 2mks.

1. Straight line method
2. Reducing balance method
3. Unit of output method
4. Hourly rate method
5. Revaluation method

Or, Dpn: Refers to the lose in value of fixed assets in a specific period of time.

Methods in additional the ones of examiner:
6. Sum of year digit
7. Double declining balance method.

(6) Computation of the Cost of sales for the month of july 2015.

| Particulars | Amount in FRS. |
|---|---|
| Stock at 1 july | 1,300 |
| Purchase during july | 6,400 |
| Carriage inwards on purchase | 200 |
| Stock at 31 july | (900) |
| Cost of sals for july | 7000 |

Do not write in this margin

7 Micro Computer acquisition Cost.

| | |
|---|---|
| Basic Cost | 4,000 |
| Installation & testing | 340 |
| | 4,340 1mk |
| Less Discount | (217) 1mk |
| | 4,123 1mk |
| Special wiring | 110 |
| Modifications | 199 = 4432 |
| Staff training | ~~448~~ |
| | 4481 2mks |

5/5

2nd alternative

## SECTION B

8 1. The current ratio could increase, but the working capital would remain the same. 5mks

2. The firm inventory turnover for the year is 4 times 5mks

10/10

9 Inventory turnover $= \frac{CGS}{AV.\ inventory}$

a. Since profit margin is 20%, the cost of goods sold should be 80% of sales.

$CGS = \frac{80}{100} \times 6,400,000 = 5,120,000$ (4mks)

Thus, $\frac{5,120,000}{AV.\ Inventory} = 5$

10/10

$AV.\ Inventory = \frac{5,120,000}{5} = 1,024,000$ 2mks

b. Average Collection period $= \frac{360}{6,96}$ 2mks

Average Collection period = 51,72 days. 2mks

Do not write in this margin

Workings

Current Liability = 960 000. inventory = 480,000
Cash = 160,000. Current ratio = 2,5.
Opening balance debtors = 80,000
Current ratio = $\frac{CA}{CL} = \frac{CA}{960000} = 2.5$

CA = 960,000 x 2.5 = 2,400,000
Closing balance debtors =
=> 2 400 000 − (480,000 + 160 000) = 1760 000
Average debtors = $\frac{(1760000 + 80000)}{2}$ =
= 920,000

Debtors turnover = $\frac{\text{Credit sals}}{\text{AV. Debtors}} = \frac{6400000}{920000}$
= 6,96 times.

(10) RWINYANA COMPANY BALANCE SHEET
DEC. 31, 2014 (in $)

| | | | |
|---|---|---|---|
| Cash | 205,000 or | Current liabilitis | 470,000 or |
| Account receivable (net of allowance for uncollectible a/c) | 500,000 or | 8% Bonds payable | 250,000 or |
| | | Common stocks | 800,000 or |
| | | Retained earning | 280,000 or |
| Inventory | 430,000 or | | |
| Equipment net | 665,000 or | | |
| Total assets | 1,800,000 or | Total liabilitis | 1,800,000 or |

RWINYANA COMPANY INCOME STATEMENT
DEC, 31, 2014 (in $)

| | |
|---|---|
| Net Sals | 3,600,000 |
| Cost of Goods Sold | 2,520,000 |
| Gross profit | 1,080,000 |
| Operating Expresses | (760,000) |
| operating income | 320,000 |
| Bond interest expenses | (20,000) |
| Income ~~tax~~ before ~~inc taxes~~ | ~~[illegible]~~ |
| Income taxes | 300,000 |
| Income tax expense (30% | 90 000 |
| Net income | 210 000 |

## Workings

1. Net profit $= X - 0,3X - 210,000 = 0,7X$

$$= \frac{210,000}{0,7} = 300,000$$

$$tax = 300,000 \times \frac{30}{100} = 90,000$$

2. Return on Sals = (Net Profit/Sals) x 100

$$5,833\% = \frac{210,000}{Sals} \quad Sals = \frac{210,000}{5,8333\%}$$

$$Sals = 3,600,000$$

3. Gross Profit = Sals x 0,3

$$= 3600000 \times 0,3 = 1,080,000$$

4. Cost of goods Sold = Sals − Gross profit

$\Rightarrow 3600000 - 1080000$

$\Rightarrow 2,520,000$

5. Proprietary ratio (Equity ratio)

$$\Rightarrow \frac{\text{Shareholders fund}}{\text{Total Assets}} \times 100$$

$$\Rightarrow \frac{\text{Shareholders fund}}{1,800,000} \times 100 = 60\%.$$

Do not write in this margin

Shareholders fund = $1\,800\,000 \times \frac{60}{100} = 1080\,000$

Common Stock = $1080\,000 - 280\,000$ (Retained earnings)

$= \underline{800,000}$

6. Inventory turnover = $\frac{\text{Cost of Goods Sold}}{\text{Average inventory}}$

$\Rightarrow \frac{2,500,000}{\text{Average inventory}} = 6$

Average inventory = $\frac{(\text{op. Stock} + \text{cl. stock})}{2}$

$420,000 = \frac{(410,000 + \text{cl. st})}{2}$

$840,000 - 410\,000$ = closing Stock

Therefore, Closing stock = $430,000$

7. Rate of return on assets = $\frac{\text{operating income}}{\text{Average total assets}}$

Average total asset = $\frac{1,800,000 + 1\,400\,000}{2}$

$= 1,600,000$

operating profit = 20%

operating profit = $1600\,000 \times 0,2$

$= 320,000$

8. Bond interest Expenses = $320,000 - 300\,000$

$= 20,000.$

9. operating expenses = Gross profit − oper. profit

$\Rightarrow 1080,000 - 320,000 = 760,000$

10. 8% bond interests = 20,000

Bonds = $\frac{20,000}{0,08} = 250,000$

11. Current liabilities =

$\Rightarrow 1,800,000 - (250,000 + 800\,000 + 280\,000)$

$\Rightarrow 470,000$

12. Average Collection period = $\frac{365}{\text{Debtors turnover}}$



Do not write in this margin

or $\frac{\text{Average debtors}}{\text{Credit sals per day}}$

Credit sals per day $= \frac{\text{Credit sals}}{365}$.

Thus, credit sals $= \frac{3600000}{365} = 9,863$

$51,71 = \frac{\text{AV. debtors}}{9,863}$

Average debtors $= 51,71 \times 9,863$.

$= 510,000$

Since there is no info about op. balance of debtors, we consider Average debtors to be equal to closing balance of debtors.

The a/c receivable (net of allowance for uncollectible a/c) $= 510,000 - 10,000$

$= 500,000$

13. Quick ratio $= \frac{\text{Current Asset} - \text{inventory}}{\text{Current liabilitis}}$.

$1.5 = \frac{(\text{Cash} + 500,000)}{470,000}$

$705000 = \text{cash} + 500,000$

Cash $= 705000 - 500000$

$= 205000$.

11 INCOME STATEMENT FOR KCC for the Year ended 31/12/2016 (in ₣.)

| | | |
|---|---|---|
| Sals (less Return) | | 1.440000 |
| Less: CGS: | | |
| op. stock | 228,700 01 | |
| purchass | 966,750 01 | |
| | 1195,000 01 | |
| Less: Cl. stock | (295,500) 01 | 900,000 |
| Gross profit | | 540,000 |

No

| | | |
|---|---|---|
| Gross profit | | 540,000 |
| Operating expenses | | |
| - Selling & distr. exp. | | |
| * Salaries | 45,900 | |
| * Advertising | 14,100 | |
| * Travelling | 6,000 | (66,000) |
| - Administrative expenses | | |
| * Salaries | 81,000 | |
| * Rent | 8,100 | |
| * Stationery | 7,500 | |
| * other charges | 49,500 | |
| * Depreciation | 27,900 | |
| * Provision for ~~depr~~ taxation | 120,000 | (294,000) |
| Operating net profit | | 180,000 |

Do not write in this margin

# PART II : COST ACCOUNTING

## SECTION A

| 12) | COST. MGT A/C | FINANCIAL A/C |
|---|---|---|
| Users | Provides data for internal uses by management | Provides data for external uses |
| Nature | Futuristic | Historical |
| Details | Looks at segment of the organizat° | looks at the org° as a whole |
| Legality | Not Mandatory | Mandatory |

| | | |
|---|---|---|
| Format | Not governed by any principles. | Follows the GAAPs. |

1 each correct matching.

Do not write in this margin

Q13: PAYE to be submitted to RRA: 1mk
- His total Contribution to SSF to RSSB: 27,600 Rwf. 1mk 1mk

5/5
- His total Contribution of RAMA to RSSB: 45,000 Rwf 1mk.
- His net salary: 256,150 Rwf 2mk.

Q14: Cost accounting is utilized for a number of purposes some of w/c are briefly described in the following points;

a) Accounting for Costs

This may be seen as a record keeping or score keeping role. Information must be gathered and analyzed in a manner w/c helps in planning, Control and decision making. 1mk.

b) Planning and Budgeting

This involves the quantification of plans for the future operations of the enterprises, such plans may for the long or short term, for enterprise as a whole or for the individual aspects of the enterprise. 1mk.

c) The Control of the operations of the enterprise. 1mk

d) Decision making 1mk

Do not write in this margin

e/ Resource allocation decision 1mk
f/ Performance evaluation 1mk.

Q15 (5/5)

* Differed Costs: are unexpired Cost, Capitalized Cost, w/c provide benefits in future periods and known as assets and hence appear in the balance sheet (e.g prepayments, inventory, book value of non current asset such as plant and machinery, buildings, vehicles, etc. 2.5mks

* Expired Costs: Is an expired Cost a/c has benefited the org° and no longer has any service potential of providing more benefit to the organizat° 2,5mk

Q16. The elements of manufacturing Costs are:
a. Material Costs 1mk
b. Labour Costs 1mk
c. Overhead Costs 1mk (Factory O/H)

Q17.

6/6

| | | |
|---|---|---|
| Opening Stock of R.M | 14,000 | |
| Add: purchases | 20,000 | |
| - Carriage inwards | 800 | |
| | 34 800 | |
| - Closing Stock of R.M | (6,000) | |
| | 28 800 | |
| - Scrap | (200) | |
| Direct material | | 28 600 |
| Add: Direct labor | | 16 000 |
| Prime Cost | | 44,600 2mk |
| Add: Factory expenses | | |
| - Indirect wages | 2,000 | |
| - Overtime | 400 | |
| - Stores | 800 | |

Do not write in this margin

| | | |
|---|---|---|
| - loose tools | 200 | |
| - Depreciation | 600 | |
| - Insurance | 1,200 | |
| - Inspection fee | 400 | |
| - Manager's salary | 4,000 | |
| - Research expenses | 800 | |
| - clearing charges | 1,200 | 11,600 2mks |
| * COST OF PRODUCTION | | 56,200 2mk |
| Add: office & administrat. exp. | | |
| - postage | 1,600 | |
| - Collection charges | 800 | |
| - Advertisement | 1,200 | |
| - Discount | 200 | 3,800 |
| Total cost (cost of sales) | | 60,000 2mk. |

SECTION B:

Q18: Cost behavior refers to the change in costs (increase or decrease) as the output level changes, i.e, as we increase output, are the costs rising, dropping or remaining the same.

Cost behavior can be used to produce various classification of costs such as:

a. Variable costs (0,5mk) expl. 1mk

b. Semi variable costs (0,5mk) expl 1mk

c. Fixed costs: (0,5mk) expl. 1mk.

Note: The graphic is for 1mk like explanat°

d. Semi fixed costs: (0,5mk) exp - 1mk

Note: Stating (VC and FC) = 1MK each and semi-VC / FC = 2mks.
- Explanation or Illustration for each = 2marks X3 = 6 marks.

19. (i) 

| | | | |
|---|---|---|---|
| Sales volume (units) | 10,000 | 12,000 | 2000 |
| Cost components | | | |
| Direct materials | 30,000 | 36000 | 6000 |
| Direct labour | 28,000 | 33000 | 5000 |
| Total overheads | 20,000 | 24000 | 3,600 |
| Total Costs | 78,500 | 93100 | 14600 |

a. Cost of Additional 2000 units: 14,600
b. Variable costs of 10 000 units 73,000
c. Fixed elements of each component 5,500
d. Break even point 1038 (6mks)

(ii) High-low method

$$\frac{33\,000 - 28\,000}{12\,000 - 10\,000} = \frac{5000}{2000} = 2{,}5$$

$FC = 280\,000 - (2{,}5 \times 10\,000)$
$= 28\,000 - 25\,000 = 3000$

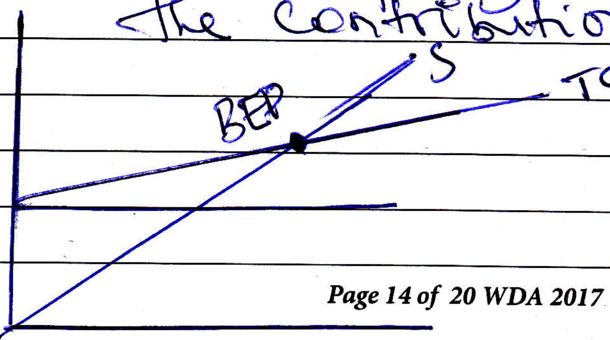
$$\frac{24100 - 20500}{12\,000 - 10\,000} = 1{,}8$$

$FC = 20500 - (1{,}8 \times 1000) = 2{,}500$

5500

$$BEP = \frac{5500}{12.6 - 7.3} = \frac{5500}{5.3} = 1037{,}7 =$$

Discuss - A Company BEP occurs where the contribution just.




i). C = S - VC
ii) C = FC + profit
iii) P = C - FC
iv) when Contributi[on]
equal to FC, then profit = 0



Do n[ot] writ[e] in th[e] mar[gin]

20) a) Current position

| | |
|---|---|
| Sals (20 Rwf x 400 000) | = 8 000 000 |
| Less: Variable Cost 5600000 - 1600000 | = 4 000 000 |
| Contribution | 4 000 000 |
| Less: Fixed cost | 1 600 000 |
| Profit | 2 400 000 |

b) If excess Capacity is sold at 13 Rwf per Can.

70% = 400,000 Cans
30% = 171,429 Cans.
Variable Cost per unit = 4000 000/400,000
= 10 Frw.

Excess Contribution

| | |
|---|---|
| Sales (13 x 171,429) = | 2,228,577 |
| Less Variable Cost (10 x 171,429) = | 1,714,290 |
| | 514,287 |

Conclusion
Company should accept the offer since it increases the Contribution (profit) by 514,287 Frw.
1 mark each Correct Answer

21) I) Definition of terms. 5mks.

a) Allocation
Allocation of overheads is the process by which the whole Cost items are charged directly to a cost unit or as a cost center. Examples of such costs include the salary of a service department manager.

b) Apportionment.
Apportionment of overheads (primary apportionment) occurs where the total value of an overhead item is shared between two or more Cost

Centers that use the overheads.

c/ Standard Costing

To effectively control the costs of a certain organization, we need a yardstick to measure the actual performance against. Standard cost is a yardstick that measures how well the organization has achieved its set objectives. The process of setting standard costs is referred to as standard costing.

d/ Break-Even Point

This is the level of activity at which the firms incur neither a profit nor a loss.

e/ CVP Analysis

The cost volume profit analysis, commonly referred to as CVP, is a planning process that management uses to predict the future volume of activity, costs incurred, sales made, and profits received.

f/ MPV

Material price variance measures the difference between the actual price (AP) paid for a given quantity of materials and the standard price (SP) that should have been paid for the same quantity of materials purchased (AQ). This variance arises in the purchasing department.

g/ MUV

Material usage variance measures the

difference between the Actual Quantity of materials used in production (AQ) and the Standard Quantity (SQ), which should have been used according to the standard set, all valued at the standard purchase price.

h/ LRV

Labour rate variance measures the deviation from the standard of the average wages paid to direct labour hours. It is calculated by comparing the standard price per hour with the actual price paid per hour and multiplying the difference with actual hours taken.

i) LEV

Labour efficiency variance measures the productivity of labour. It is equivalent to material usage variance. This variance is closely watched by management as increasing the productivity of labour is the vital key to minimizing unit cost of production.

j) Margin of safety

This is the excess of sals over the break-even volume in sals. It stakes the extent to which sals can drop before losses begin to be incurred in a firm.

1 mark each correct answer.

II| Let the number of units produced be x.

Summary of costs

| | Rfrw |
|---|---|
| Variable manufacturing costs per unit | 200 |
| Variable selling costs (2% x Rf500) | 10 |
| Variable costs per unit | 210 |
| Fixed manufacturing costs | 300,000 |
| Fixed selling costs | 100,000 |
| Total fixed costs | 400,000 |

(a) At break-even point profit is equal to zero

i.e Rfrw $(500-210)x - 400{,}000 = 0$

$290x - 400{,}000 = 0$

$290x = 400{,}000$

$x = \frac{400{,}000}{290}$ $x = \underline{\underline{1{,}379}}$ units

or

Sales (units) = fixed costs / CM

$= \frac{400{,}000}{(500-210)} = 1{,}379$ units.

Break-even point in sales is equal to BEP output x selling price =

$= 1{,}379$ units x 500 shs per unit = 689,500 shs

(b) To earn a net income of 200,000 shs.

Profit = Contribution − fixed costs

$200{,}000 = (500-210)x - 400{,}000$

$290x = 600{,}000$

$x = \frac{600{,}000}{290}$ $x = 2{,}069$ units.

Units to be sold shall be 2,069.

(c) In the 30% bracket, the number of units to be sold to earn the targeted income shall be:

DRAFT

Profit = Contribution - fixed Costs.

Gross up the amount of target profit in order to obtain the actual amount targeted before tax i.e. the desired amount of profits shall be 70% of the total amount of profits earned, P.

i.e $0.7P = 200,000$

$P = \frac{200\,000}{0.7} \Rightarrow$

* KIGALI LEADING TECHNICAL SECONDARY SCHOOL