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MARKING GUIDE

ANSWER BOOKLET

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Option .....ACCOUNTANCY & CSM

Subject .....COST ACCOUNTING

Academic Year **2013**

INSTRUCTIONS

1. Write your answers on the 12 lined pages

2. Use the last non-lined pages as draft

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											

01 a) - A Cost might be an expense or it might be the price of an asset.
- An expense is a cost that has expired.

COST	EXPENSE
- A Cost is the resource sacrificed for the future product° benefit /1	- An expense is a Cost which is expired /1
- Cost is what is spent to produce goods or to provide service /1	- An expense is the Cost incurred without /1 expecting a future benefit /1
- Money incurred which brings future profit /1	- An expense is a cost which is incurred and disappear. /1
- A Cost is a productive spending	- Money spent without any future profit.
- A Cost is a profitable spending	- An expense is a non productive spending
- A Cost is an expenditure	- An expense is a charge
- A Cost is a set of expense	- An expense is an element of Cost.
	e.g: half mark.

(3/3)   (4/4)

b)
- Cost Control /1
- Decision making /1
- Planning
- Controlling
- inventory control
- price determinat°
- improving productivity

- Measure of efficiency /1
- Cost ascertainment /1
- setting selling prices /1
- preparat° of budget
- Evaluat° of alternativs
- Checking the accuracy of F.A
- Cost comparison with standard figure

(2/2)

02 Distinction (e) Cost accounting and F.A

COST	FIN. ACCOUNTING
→ Provids informat° to internal users	→ provids information to both internal and external uses

→ Cost A/c is Concerned with ascertainment of Costs /2	→ F.A is Concerned with analysis, interpretation and recording of transaction /2
→ Report are prepared frequently when required	→ Reports are prepared annually or half yearly
→ Information relate to both past & future events	→ Information relates to only past events.
→ Transactions are valued in both monetary & non monetary	→ Transaction are valued in monetary terms only.
→ Produces the special purpose statement and report	→ produces general purpose financial statement.
→ must conform to information needs of management	→ must conform to GAAP
→ practices mainly in manufacturing Concerns	→ practices in manufacturing & Commercial concern
→ It is not a legal requirements	→ It is a legal requirement
→ It is expensive	→ It is not expensive
→ It is an art	→ It is a science.
→ It provide Current data /2	→ It provide a post-mortem of past activities /1
→ It provide data for each every product, process or dpt.	→ It reveals only overall result of the business.
→ It removes the possibility of manipulation of F.A	→ F.A are manipulated so as to project better image
→ It exercises Control over resources	→ It has no Control over materials, labour & expenses
→ It provide adequate data for price fixation	→ It doesn't provide adequate data on the basis of which selling price is fixed.

4

(circled) **4/4**

If definition: /2.

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03 a) Limitation of Cost accounting.

→ It is expensive: benefit derived is less than investment.
→ It is not an exact science. /1
→ Does not include all items of expenses and income
→ It is dependent on management needs /1

(circled) 4/4

(circled) 2/2

→ It is Complex ; There are a large number of Conventions
→ It is expensive and Unnecessary for small buz.
→ It is based on estimates
→ It requires more training and skills / qualified workers
→ failure in many cases
→ The setting of cost system requires more time.
→ It is inapplicable

b) Difference between Cost ascertainment and Cost Control. ②/2

→ Cost ascertainment : Collection of costs attributable to cost centres and products /1

→ Cost Control : the practice of managing and/or reducing business expenses. /1

Alternatives.

→ Cost ascertainment is the determination and allocatᵒⁿ calculation of costs while allocatᵒ.

→ Cost Control refers to the action taken over Costs in order to avoid increase of cost beyond a given level.
or Cost Control make periodic Comparaism of actual costs with standard costs to measure performance.

04 A Cost unit refers to a unit of quantity of produce, service or time to which costs may be ascertained /1
For example : — a meter of cloth
              — a litre of milk
              — a patient bed //1
              — a Consulting hour
              — labour hour
              — wage rate /1
              — patient bed
              — kg of sugar
              — serving meal ----

③/3

05 Production Cost = Prime Cost + production o/H.
            /1 = P.C + factory exp. + office exp.
            /2 = Factory Cost + Admᵒ o/H

④/4

Prime Cost = Aggregate of all direct Costs
          = DM + DL + D. Exp. /2

06

☒ Historical Costing: or actual cost is that cost which is actually incurred on the $x^=$ of a commodity /2

while

(4/4) Standard Costing is a technique of cost accounting which compares the standard cost of each product or service with actual cost to determine the efficiency of operation. 2/2

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07 The major difficulty of using the total absorption costing approach is that a Cost unit is charged with costs which it has not caused and which would continue whether the unit is produced or not /2

Marginal Costing avoids this difficulty by separating fixed and variable costs of x° and charging to a cost unit only the direct costs of producing it. /2

or

Major difficult

- to know the Contribution 2
- the Computation of BEP is difficult.

(4/4) Solution

- separate V.C and F.C (by marginal Costing) 2

or

* The difficulty of using the total absorption costing approach is that under-absorption costing both fixed & variable costs are charged to the products, while under marginal costing only variable costs are charged to product to determine the Contribution. 2

* In absorption Costing the Closing stock is valued at total cost of production where as in the marginal Costing statements, it is valued at marginal costing only $\frac{1}{2}$

* ABS. CONT. $\Rightarrow$ Profit = Sales $\rightarrow$ Total Cost $\frac{1}{2}$
  Marg. Cost $\Rightarrow$ Contr = Sales $-$ V.C or
  Profit = Contr. $-$ Fixed Costs $\frac{1}{2}$

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08 a) <u>Contribution</u>: Amount left over after direct (variable) Costs are deducted from the sales revenue. It pays for indirect (fixed) Costs and Contributes to net income.

* Contribution is the difference between sales and Marginal Costs of production. $\frac{1}{2}$

$$C = S - VC \qquad | \qquad C = FC + Profit$$
$$C = S - MC \qquad | \qquad C = FC - loss$$

b) <u>Break even point</u> is the level of activity/output at which total revenue is equal to total costs.

* Break even point is the level of output at which profits are normal or profits = zero

$$BEP = \frac{TFC}{Contr. per unit} \qquad \frac{1}{2}$$
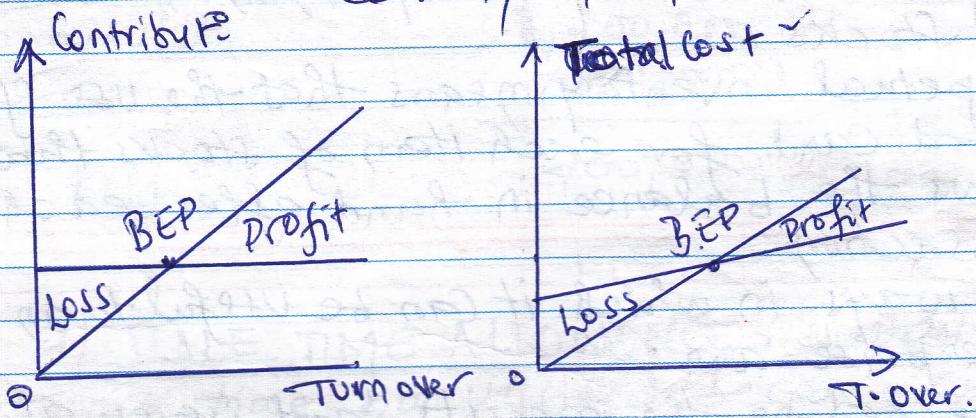
c) <u>Margin of safety</u>: is the amount of sales that can fall before to get a loss $\frac{1}{2}$

* Margin of safety: is the difference between potential sales and sales at break-even point.

Margin of safety $\longrightarrow$ (in Unit) = Units sold - BEP
$\longrightarrow$ (in Sales Value) = Sales V. - BEP.

09 The profit volume ratio shows the relationship between Contribution and sals and is expressed as a percentage of Contribut° to Sales. /2

$\frac{4}{4}$

* The Management can increase the profit volume ratio by reducing variable costs or by raising prices.

→ Reducing the cost of x° /1

→ Increase sals in quantity and value /1.

Sals	V.C	PVR
→	Constant	→
Constant	→	→
→	→	→

10 * The perpetual inventory system updates inventory accounts Continously after each purchase or sale. It provides up-to-date information on inventory balances and helps an enterprise to Control it stocks levels

* allows Comparison of theoretical ant /1 physical inventory and may uncover shrinkage and theft.

$\frac{3}{3}$

* Perpetual inventory is a permanent Control of stocks.

$\frac{3}{3}$

* Perpetual inventory means that the use of record card for each item of stocks that shows the balance in hand after each transaction.

* Two ways in which it can be useful to an enterprise are:

→ Recording the receipts and issues at a current price /1

→ Setting the running balance at the end of each transaction. /1

→ It helps to investigate discrepancies in time and take appropriate measures against corrupt and careless staff.

→ It helps in detection of fraud

→ It helps to prepare the interim fin. statements

11 a) $LRV = AH(SR - AR) = (AH \times SR) - (AH \times AR)$

$= 0.5(72 \, Rwf \times 9700) - 720\,800$ or

$= 698,400 \, Rwf - 720\,800$ $LRV = (SR - AR)AH$

$= 22,400 \, Rwf \, (A)$ $LRV = \left(72 - \dfrac{720\,800}{9700}\right)9700$
        0,r   0,r $LRV = 22,400 \, Rwf$

(4/4) b) $LEV = SR(SH - AH)/1$

$= 72(10,000 - 9700)$

$= 72 \times 300$

$= 21,600 \, Rwf \, (F)$
        0,5

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12 * Actual Sales $= \dfrac{4\,000\,000 \times 14,000}{20,000} = 2,800,000$

* Actual Variable Cost $= \dfrac{2,800,000 \times 14,000}{20,000} = 1,960,000 \, Rwf$

(4/4) * Profit $=$ Sales $- TC$

$= 2,800,000 - (1,960,000 + 500,000)$

$= 340,000 \, Rwf$ 2.   (4/4)

or

details	Fixed budget (20,000 units)
Sales	4,000,000
– VC	(2,800,000)
Contributᵒ	1,200,000 2
– FC	(500,000)
Net profit	700,000 2

13

a) <u>IDLE TIME ALLOWANCE</u> : is payment for work time not utilised because it is not possible for workers and machines to work Continuously /1

(4/4) b) A <u>FAVOURABLE LABOUR VARIANCE</u> is a positive difference between standard and actual Cost and time used on a product, indicating that work has been done at a lower Cost or in less time than expected. /1

c) A <u>FLEXIBLE BUDGET</u> responds to changes

in activity. It reflects expected costs as a function of business volume; when sales rise so do certain budgeted costs, and vice versa. **/1**

d) OVER-RECOVERY OF O/H: When the actual production o/H are lower than the standard overheads. **/1**

/14. Expected Selling price: $2100 \times 500 = 1,050,000$ Rfr.

Sales price variance $= 1,050,000 - 1000800 = 49,200$ Rfr

or

Sals variance $= AQ(SP - AP)$ **/1**

$= (AQ \times SP) - (AQ \times AP)$

$= (2100 \times 500 Rwf) - 1000800 Rwf$

$= 1,050,000 Rwf - 1,000,800 Rwf$ **/1**

$\Rightarrow 49,200$ (Adverse) $0,5$

(3/3)

or

Sals price variance $= \left(\text{Standard selling price} - \text{Actual selling price}/\text{units sold}\right)$ **/1**

$\Rightarrow \left(\dfrac{500 - 1,000,800}{2,100}\right) 2100$ **/1**

$\Rightarrow 49,200$ (A) $0,5$

(3/3)

SECTION II. CHOOSE AND ANSWER ANY THREE (3) QUESTIONS (45mks)

15 Five major limitations of financial a/c that are overcome by cost accounting.

FINANCIAL ACCOUNTING	COST ACCOUNTING
- Provids only past data **/3**	- Provids up to date infor°
- reveals only overall result of the business **/3**	- provide data for each every product, process---
- does not incorporate the changes that take place **/3**	- Dynamic, incorporate the changes as they take place
- Info° like profitability is Concerned owners & outsiders **/3**	- Info° for operational efficiency is Concerned the individual department
- dols not provide infor° for planning **/3**	- provids info° mgt for planning
- No infor° for Comparison	- facilitate comparison of costs in different periods

(15/15)

16. a) MARGINAL PROFIT/LOSS A/C STATEMENT

	A	B	C
Sales	60,000	38,000	33,000
Variable Costs			
Direct Material	(13,000)	(7,000)	(8,000)
Direct Labour	(23,000)	(13,000)	(9,000)
Variable O/H	(3,500)	(2,500)	(4,000)
Contribution	20,500 ^{2mk}	15,500 ^{2mk}	12,000 ^{2mk}
Fixed Costs	14,000	18,000	9,000
Profit Loss	6,500 ^{2mk}	(2,500) ^{2mk}	3,000 ^{2mk}

b) The effect of closing Profit centre B:

- Its Contribution would be lost (3marks)
- Fixed Costs would remain to be shared out by A & C (3mk)
- Profit of 7m (6,5 + 3 − 2,5) would turn to loss of 8,5m (6,5 + 3 − 18)
- Profit will be decreased (3marks)

17.

	KANEZA	KEZA	KAZUNGU
a) Time Allowed	$216 \times \frac{15}{60} = 54$ hrs	$200 \times \frac{15}{60} = 50$ hrs	$184 \times \frac{15}{60} = 46$ h
Time Taken	45 hrs	42 hrs	44 hrs
Time Saved	9 hrs	8 hrs	2 hrs
Over time (hrs worked − Hrs worked)	45 − 40 = 5 hrs	42 − 40 = 2 hrs	44 − 40 = 4 hrs
b) Basic Wage	40 × 4000 = 160 000	40 × 4000 = 160 000	40 × 4000 = 160 000
Overtime	5 × 6000 = 30,000	2 × 6000 = 12,000	4 × 6000 = 24,000
Bonus	9 × 6000 = 54,000	8 × 6000 = 48,000	2 × 6000 = 12,000
Labour Cost	244,000	220,000	196,000

Total Labour Cost of 3 workers = 240,000
+ 220,000
+ 196,000
_____
660,000 RwF /1

c/ Profit = Sales - Total Cost
Sale = 10,000 × 600 = 6000 000
Add Surcharge = 1 000 × 600 = 600,000   6,600,000 /1
_____
6,600,000

Less: D.M (5000 × 600) = 3,000,000 /1
D.L = 660,000
O/H [4000 (45+42+44) = 524,000 /1   4,184,000
_____

Profit _____→ 2,416,000 /2

ALTERNATIVES

① b/ The total labour cost:
Basic pay : 131 hrs × 4000 = 524 000   1,5
Overtime : 11 hrs × 2000 = 22 000   1,5
× bonus : 19 hrs × 6000 = 114,000   1,5
Labour Cost : _____→ 660,000   1

a/ Allowed time at 15 min per unit 150 hours;
⇒   ⇒ 600 × $\frac{15}{60}$ = 150 hrs
Actual time worked : 45+42+44   = 131 hrs
Time saved _____→ 19 hrs
overtime hours worked (5+2+4) = 11 hrs

② a/ T.A _____→ 150 hrs   1,5
TS = 9+8+2 _____→ 19 hrs   1,5 / 4,5
OT = 5+2+4 _____→ 11 hrs   1,5

b/ Overtime = (5+2+4) × 4,000 × 1,5 = 66,000   1,5
Bonus = (9+8+2) × 4000 × 1,5 = 114,000   1,5   5,5
Basic wage = (40+40+40) × 4000 × 1,5 = 480,000   1,5
Labour Cost = 660,000   1

c/ Sales 600 × 11 000 = 6,600,000   1
Less Costs

Material 600×500 = (3000 000) [1]   6,600,000

Labour   = (660,000)

Overheads 131×4000 = (524,000) [1] (4184 000)

Profit   ~~2,416,000~~ [2] 2,416,000 [2]

18

a/ Total number of stoves sold

$\Rightarrow \dfrac{\text{Total price}}{\text{Unit price}} = \dfrac{252,000}{1,400} = 180$ stoves   or   or

• number of stoves on hand Jan, 2013 is 70 stoves [1]

b/ Closing stock (2012) in quantity

$\Rightarrow$ 250 stoves − (40+30+80+30) = 70 stoves [1]

value : 70 stoves × 750 = 52,500 Rwf [1]

c/ Trading a/c using fifo (2012)

Stoves available for sales : 170,000 [1]	Sales 252,000 [1]
Cl. St. : (52,500) [1]	
Cost of sales : 117,500	
Gross profit : 134,500 [2]	
252,000	252,000

Alternative

Trading a/c 2012 (using fifo)

Op. St. 38,000	Sales 252,000 [1]
Add: Purchase	
27,000	
68,000 } 170,000 [1]	
75,000	
Less : Cl. St. (52,500) [1]	
Cost of stoves sold 155,500	
G.P 96,500 [2]	
252,000	252,000

d) Value of Closing Stock by WAP

40 Units	$\longrightarrow$	38,000
30 Units	$\longrightarrow$	27,000
80 Units	$\longrightarrow$	68,000
100 Units	$\longrightarrow$	75,000
250 Units	$\longrightarrow$	208,000

$$1 \text{ unit Cost} = \frac{208,000}{250} = 832$$

Closing Stock = $70 \text{ u} \times 832 = 58,240$ Rwf.

e) The gross profit using the WAP (dec 2012)

Trading a/c using WAP (2012)   Alternative

Trading a/c using WAP (2012)		Alternative	
St. av. for sale : 170,000	Sals 252,000	Op. st. 38,000	Sals 252,000
less. cl. st 58,240		Add Purch. 170,000	
Cost of Sale 117,760		less cl.st (58 240)	
Gross profit 140,240		Cost of Sales 149,760	
252,000	252,000	G.P. 102 240	
		252,000	252,000

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[19]

a)
$$BEP = \frac{TFC}{\text{Contr. per unit}}$$

$$TFC = 19800 + 7500 = 27300$$

Contr. per unit = SP unit − VC/unit

$$VC \text{ per unit} = \frac{(180\,000 + 21\,000)}{3000} = 67.$$

$$BEP = \frac{27300}{80-67} = \frac{27300}{13} = 2100 \text{ units}$$

b) Quantity for expected profit of 18 000 :

$$\Rightarrow \frac{TFC + \text{Expected profits}}{\text{Contribut}^o \text{ per unit}}$$

$$\Rightarrow 27\,300 + 18,000$$

$\Rightarrow \dfrac{45300}{13} = \underline{\underline{3485 \text{ units}}}$ /1

c) $BEP = \dfrac{TFC}{\text{Contribut}^o \text{ per unit}}$ /1

$= \dfrac{27300}{80 - (67 + 4)}$ /1

$= \dfrac{27300}{\cancel{9}} = \underline{\underline{3033 \text{ units}}}$ /1

d) Q^{ty} for expressed profit =

$\Rightarrow \dfrac{F.C + \text{expected profit}}{\text{Contribut}^o \text{ per unit}}$ /1

$\Rightarrow \dfrac{27300 + 18,000}{9}$ /1

$\Rightarrow \dfrac{45300}{9} = \underline{\underline{5033 \text{ units}}}$ /1

e) Profits = TR – TC.

$= (P \times Q) - (FC + VC)$

$= (80 \times 4000) - [27300 + (71 \times 400)]$

$= 320,000 - (27300 + 284000)$ /1

$= 320,000 - 311300$ /1

$= \underline{\underline{8700 \text{ Ruf}}}$ /1

Alternative (e)

Sales 4000 × 80 =	320,000 /1
Less ; marginal costs	
71 × 4000	284,000
Contribution	36,000 /1
Less: Fixed Costs	27,300
Profit	**8700** /1