UGANDA MARTYRS UNIVERSITY, MBALE CAMPUS

FACULTY OF BUSINESS ADMINISTRATION AND MANAGEMENT

ACC 2205; COST ACCOUNTING TEST 2018 BAM 2

DATE 2018

TIME ALLOWED 3HRS

STARTING TIME

INSTRUCTIONS TO CANDIDATES

This paper contains six questions, you are must attempt any four questions

Read the following before answering the examination questions.

1] Read each question carefully before you answer

2] Apportion your time according to the marks allocated for each question

3] Answer the questions that you can obtain the most marks

4] Number the answers to the questions clearly before answering

5] Please write as neatly as possible

6] Do not write anything on this question paper

SOLUTIONS

The following shall be the recommended solutions plus any others solutions acceptable

QI a] Name and explains any three methods of labor remuneration 3marks

Solutions

- Time rate method- here the worker is paid the rate per hour, per day, per week etc and therefore his remuneration will be based on time worked
- Piece rate method, here a worker is paid a fixed amount per unit produced
- Labor incentives scheme- these is based on the principle of that commercial advantages arising out of the workers efficiency should be shared between employers and employees in an agreed proportions.

b] Explains any four limitation of cost accounting 4marks

- Costing accounting is not exact science therefore the figure got is based on human judgment unlike other sciencetific findings
-its base on assumptions and presumption thus it may vary
-at time there is no one cost centre suitable for cost allocations or the purpose
-the true cost of productions may not be got because of assumptions
-cost accounting information provides data for arriving at decisions but it does not provide solutions to the problems
- Its subjective to human judgment since two or more cost accountant may draw different conclusion from the same data

c] With maximum stock limit of 50,000kgs, minimum stock limit of 8,000kgs, reorder level of 25,000kgs, buffer stock of 2,000kgs, determine EOQ, when minimum anticipated usage is 8,000kgs, lead time 5 to 10 days 5marks

Solution

From the formula of Maximum stock level= ROL + EOQ - Minimum usage* minimum lead time you can get EOQ

50,000= 25,000 + EOQ – 8,000*5

50,000=25,000 + EOQ – 40,000

EOQ= 50,000+40,000-25,000

EOQ= 65,000 UNITS

d] With EOQ of 1,000 units, cost per order 15,000shs, total holding cost of 225,000shs, average inventory of 750units, determine Annual demand 7marks

Solution

EOQ= {2.A.O/C}^0.5

1,000={2.15,000.A/C}^0.5

FROM, Total holding costs=Average inventory *holding cost per unit per year[C]

Therefore 225,000=750*C

C=225,000/750 =300 SHS

1,000 =[{2*15000*A/300}^.5]

1,000= [{30,000A/300} ^.5]

1,000= [100A] ^.5

1000^2=100A

1,000,000=100A

A=1000, 000/100 = 10,000 UNITS

e] Describe the main stages of absorption costing. 6marks

SOLUTION

-Determine sales

-determine cost of sales

-determine gross profit

-determine net profit

-determine under/over absorption

Q 2 a] Explain any four differences between cost accounting and financial accounting. 4 marks

Solution

-Objectives-

-Analysis for the performances

-Data used

-period of reporting

-Nature of report

-legal requirement

b] Explain in details any six main objectives of cost accounting to Management 6 marks

Solution

-ascertainment of costs of products, unit etc

-determining of selling price

-cost control purpose

-matching costs and revenues

-special cost study and investigation

-preparation of financial statements

c] From the following information of AB Co, show the process accounts, scrap account and abnormal loss or gain account

Processes A, materials input was 10,000 units at a cost of shs 20,000,000, direct labor cost shs 26,000,000, actual output was 9455 units, Normal loss 5%, Overheads is absorbed on the basis of direct labor 80% at each process Scraps could cost 15,000shs each. 12 marks

Solution

ABC Co

Process A account

Details	units	amount	Details	units	CPU	amount
Materials	10,000	20,000,000	Normal	500	15,000	7,500,000
Direct labor		26,000,000	Abnormal loss	45	6242	280,895
Overheads		20,800,000	Process 2 a/c	9455	6242	59,019,105
Total		66,800,000	Total			66,800,000

Solution

Normal 5%*10,000= 500 units

Expected good units =10,000-500= 9500 units

Actual good units 9455 units

Abnormal loss 45units

Costs; cpu =[66,800,000-7500,000] /9500 =6242 shs/unit

Sketch Normal account and Abnormal account

d] Explains any three demerits of valuing inventory using LIFO method 3 marks

Solution

-Clerical errors may occurs

-closing stock value may not reflect the current market price

-It does not reflect the price fluctuations

-slow moving stock may expire in the stores

Q3a] Explains steps use in process costing 4 marks

Solution

Steps

-the factory is subdivided into a number of processes

-each process a/c is debited with all the input costs for their respective costs

-the output in each process is transferred to the next process

-the finished output is the last process

b] Explain any five limitation of Cost volume profit analysis 5marks

Solution

- Assumption that all costs can easily be separated into fixed and variable costs
- It assume total fixed cost will remains constant
- It assume that volume is the only factors that affects costs
- It assume that where a firm sell more than one products the sales mix will remain constant
- It assume that cost and sales can be predicted easily
- It assume that sales volume and production are the same
- It assume that cost and revenues linear functions and yet in practice it's not

c] In a period where opening inventory is 7,000 units and closing inventory of 3,000units, production of 4,000 units, cost of sales of 10,000,000shs and contribution of 15,000,000shs, determine the selling price 5marks

Solution

From sales in units = 7000+4000-3000=8000 units

Let the selling price be P, SO SALES = 8000*P

SALES	8000P
Less cost of sales	10,000,000
Contribution	15,000,000

From the above Contribution = sales- cost of sales

15,000,000=8000P-10,000,000

8000P=15,000,000+10,000,000

8000P=25,000,000

P=25,000,000/8000=3125 = selling price

d] ABC Ltd provided the following information, Budgeted sales was 8,000 units, actual sales were 7,500 units, budgeted production was 7,500units, actual production was 7000units, opening inventory was 3,000 units, closing inventory 2,500units, the following are cost per unit in shs; direct materials 25,000,direct labor 10,000, direct expenses8,000, variables production overheads 6,000. Selling price was 70,000 shs, fixed administration cost of 200,000shs, selling and distribution cost [fixed] was 400,000 shs, fixed production cost was 11,250,000hs.

Required; determine profit or loss using absorption costing technique. 11marks

Solution

Sales	7500*70,000	525,000,000
Cost of sales		
Opening stock 3000*49,000=	147,000,000	
Add production 7000*50500=	353,500,000	
Good available	500,500,000	
Closing stock 3000*50500=	{151,500,000}=	349,000,000
Gross profit		176,000,000
Less operating expenses		
Fixed adm	200,000	
Sales and distribution	400,000	600,000
Net profit		175,400,000

Under absorption 500*1500=750,000	[750.000]
Net profit	174,650,000

Q4 a] Gives three reasons as to why inventory records in cost account may not may not agree with the physical quantities of materials actually held in the stores 3marks

Solution

-theft

- Good sold but not taken out of stores

- Good bought but not yet received

b] What is budget 2marks?

Solution

Budget is a quantitative expression of planed actions prepare in advanced

c] KWATAKWATA [U] LTD, a tea manufacturing company produces three products namely, UGZ 1, UGZ 2 and UGZ 3, the following information were available in relation to the products.

Particulars	UGZ1	UGZ2	UGZ3
Direct labor per unit [shs]	500	550	600
Direct materials per unit [shs]	200	150	500
Actual production/sales [units]	500,000	150,000	300,000

Direct labor hour per unit	0.001	0.01	0.005
Direct machine hour per unit	0.01	0.04	0.02
Selling price per unit [shs]	1000	900	1100

Annual production overheads are distributed as follows

Particulars	shs
Machining costs	6,000,000
Components costs	16,000,000
Setup costs	25,000,000
Packing costs	30,000,000
Total production costs	77,000,000

The following cost drivers' data were also available

Particulars	UGZ1	UGZ2	UGZ3
Labor hours per unit	0.001	0.01	0.005
Machines hours per unit	0.01	0.04	0.02
Number of production setups	3000	10,000	26,000
Number of components	4,000	6,000	20,000
Number of customers orders	2,100	4,000	25,000

Required, using activity based costing, compute the net profit per units 15marks

Solution

Step 1

Calculate cost driver rates

Total machines hours UGZ1 500,000*.01=5000

UGZ2=150,000*.04=6000

UGZ3= 300,000*.02=6000

TOTAL 17,000 HOURS

Cost driver rates=budgeted total cost/budgeted total cost driver

Machines cost= 6,000,000/17000=353/unit

COMPONENTS = 16,000,000/30,000=533/unit

Setup costs=25,000,000/39000=641

Packing =30,000,000/31100=965

Step 2

Calculate total overhead

Particulars	UGZ1	UGZ2	UGZ3	TOTAL
UNITS PRODUCED	500,000	150,000	300,000	950,000
MACHINES COSTS	353*5000	353*6000	353*6000	
	=1,765,000	= 2,118,000	=2,118,000	

COMPONENTS COSTS	533*4000	533*6000	533*20000
	=2,132,000	3,198,000	10,660,000
SETUP COSTS	= 641*3000	641*10,000	641*26,000
	1,923,000	6,410,000	16,666,000
PACKING	965*2100	965*4000	965*25,000
	2,026,000	3,860,000	24,125,000
TOTAL	7,846,000	15,586,000	53,569,000
Variables cost per unit	16	104	179

From profit/unit =selling price –cost per unit

Sp	1000	900	1100
Less Cost per unit			
Direct labor cost	500	550	600
Direct materials	200	150	500
Production overheads	16	104	179
Profit =	284	96	(179)

d] Comment on the figures calculated above in[c] 5marks

SOLUTION

Products, UGZ1 and UGZ2 are making profit while UGZ3 is making losses, however in general the company makes a total profit=201shs/unit

Q 5 [a] Explain the difficulties associated with calculation of overheads 2marks

Solution

-Identifying cost centre to use

-Reapportionment of service department costs to production department

[b] Explains the major steps use in overheads distribution 4marks

Solution

-Classification and allocation of overheads

-Allocation and apportion of overheads to production departments

-apportionment of service department costs to production department

-Absorption of overheads of each production department to costs units

[c] Explains marginal costing in detail 2marks

Solution

- This is a technique/ system of costing which is based upon the preparation and use of marginal costing

[d] 1- Why is contribution concepts employed by management. 3marks

Solution

-Attention is made to controllable features which is good for decision

-Pricing can be done more intelligence to cover both fixed and variables cost

-fictitious profit is eliminated

2-In a period where opening inventory was 7,000 units, no production, closing inventory was 3,000 units, KK Ltd had a profit of shs 10,000,000 using absorption costing technique, the fixed overhead absorption rate was 1,500 shs per unit,

Required, determine the profit using marginal costing and what would happen if closing inventory increase and decrease 7marks

Solution

Sales in units 7000-3000= 4000

Under marginal costing fixed cost are charged in the period in which the happened so the sales of 4000*1500=6000, 000

Profit = 10,000,000-6,000,000=4,000,000

When closing stock increase profit reduce, when closing stock decrease profit increase

3-Determine the total contribution from the given information 7marks

Direct materials per unit 400, direct labor per unit 600, and variables cost per unit 700, fixed selling cost per unit 400, variable selling cost per unit 500, selling price 3000shs, units produced and sold 7,000 units

Solution

Contribution = sales – variables cost

Sales = 7000*3000=21,000,000

Variables cost=7000*[400+600+700+500] =15,400,000

Contribution =21,000.000-15,400,000=5,600,000

Q 6 [a] ABC LTD has two production department [Assembly and Finishing] and two service departments [Maintenance and Canteen].

The following budgeted costs are for the next quarter

Particulars	shs
Indirect materials	20,000,000
Rent	15,000,000
Electricity	10,000,000
Indirect labor	16,000,000
Direct labor	125,000,000

The following additional information were available

Particulars	assembly	finishing	maintenance	canteen
Area in [Sq meters]	3000	4000	1000	1000
KW hours consumed	3500	5000	2000	500
Indirect materials budget [shs]	5,000,000	10,000,000	3,000,000	2,000,000
Indirect labor budget [shs]	4,000,000	5,000,000	6,000,000	1,000,000
Direct labor hours	40,000	5,000	-	-

Required, complete an overhead analysis sheet clearly showing the workings 10 marks

Solution

Particulars	basis for Apport	total	departments			
			assembly	finishing	maintenance	canteen
		Shs000	shs 000	shs000	shs000	shs000’
Ind mat	budget	20,000	5,000	10,000	3,000	2,000
Rent	areas sq	15,000	5,000	6,666	1,667	1667
Electricity	KW	10,000	3182	4545	1818	455
Ind labor	budget	16,000	4,000	5000	6000	1000
D/ labor	labor hrs	125,000	111,111	13,889	-	-

[b] Give any four characteristics of a good wage system 4 marks

solution

-simple

-beneficial

-guaranteed minimum wage

-Incentive oriented

-certainty

-flexible

-any other good features

[c] From the following prepare a cost sheet of CKA Ltd clearly showing prime cost and factory cost 8marks

Direct Raw materials 150,000shs,direct wages 40,000shs, direct expenses 10,000shs, factory overheads= rent 20,000shs, power 5000shs, indirect wages 4000shs,depreciation of plant 6000shs, administration expenses 15,000shs and selling and distribution 17,000shs

Solution

CKA LTD

COST SHEET

PRIME COST	
Direct Raw materials	150,000
Direct wages	40,000
Direct expenses	10,000
Total prime cost	**200,000**
Add factory costs;	
Rent	20,000
Power	5000
Indirect wages	4000
Depreciation	6000
Administration	15,000

Total	**50,000**
Production costs	**250,000**

[d] Name any three main users of cost accounting information and explains how and why they use such information 3marks

Solution

Employees- salaries bargain

Management -control purpose

Share holders –profits

Government - taxes

GOOD LUCK