

KABARAK



UNIVERSITY

EXAMINATIONS

2008/2009 ACADEMIC YEAR

**FOR THE DEGREE OF BACHELOR OF BUSINESS
MANAGEMENT AND INFORMATION TECHNOLOGY**

COURSE CODE: BMIT 312

COURSE TITLE: MANAGEMENT ACCOUNTING

STREAM: Y3S1 & Y3S2

DAY: MONDAY

TIME: 2.00 – 5.00 P.M.

DATE: 8/12/2008

INSTRUCTIONS:

Answer question ONE and any other FOUR.
Marks are allocated at the end of each question.
Show your workings.
State any reasonable assumption made.

PLEASE TURN OVER

QUESTION ONE

- a) What do you understand by the term (i) production department (ii) service department? Using your own figures, illustrate how the expenses of the service departments are re-apportioned over the production departments. Consider at least 3 service departments and 4 production departments and name them specifically. **(10 Marks)**
- b) A company has three production departments A, B & C and two service departments X & Y. The following are particulars are available for January concerning the organization.

	Shs
Rent	15,000
Municipal taxes	5,000
Electricity	2,400
Indirect wages	6,000
Power	6,000
Depreciation on machinery	40,000
Canteen expenses	30,000
Other labour related costs	10,000

Following details are available:

Particulars	Total	A	B	C	X	Y
		Shs	Shs	Shs	Shs	Shs
Floor space (Sq ft)	5,000	1,000	1,250	1,500	1,000	250
Light points	240	40	60	80	40	20
Direct wages (Shs)	40,000	12,000	8,000	12,000	6,000	2,000
Horse power of machines (nos)	150	60	30	50	10	-
Cost of machines (Shs)	200,000	48,000	64,000	80,000	4,000	4,000
Working hours		2,335	1,510	1,525		

The expenses of service departments are to be allocated in the following manner:

	A	B	C	X	Y
X	20%	30%	40%	-	10%
Y	40%	20%	30%	10%	-

You are required to calculate the overhead absorption rate in respect of the following three production departments. **(10 Marks)**

c) The estimated sales & expenses of Metro Co. Ltd are as follows:

	Nov	Dec	Jan	Feb	Mar	Apr	May	June
	Shs.	Shs.	Shs.	Shs.	Shs.	Shs.	Shs.	Shs.
Sales	200,000	220,000	120,000	100,000	150,000	240,000	200,000	200,000
Wages & Salaries	30,000	30,000	24,000	24,000	24,000	30,000	27,000	27,000
Misc expenses	27,000	27,000	21,000	30,000	24,000	27,000	27,000	27,000

- i) 20% of the sales are on cash and the balance are on credit
- ii) The firm has a gross margin of 25% on sales
- iii) 50% of credit sales are collected in the month following the sales, 30% in the second month and 20% in the third month.
- iv) Material for the sales of each month is purchased one month in advance on credit for two months.
- v) The time lag in the payment of wages and salaries is one-third of a month and of miscellaneous expenses one month.
- vi) The firm maintains a minimum cash balance of Shs. 40,000 funds can be borrowed @ 12% p.a. in the multiples of Shs. 1,000 the interest being payable on monthly basis.
- vii) Cash balance at the end of December is Shs. 60,000.

Prepare a cash budget for three months April, May and June

(10 Marks)

QUESTION TWO

- a) A firms can purchase a spare part from an outside source @ Shs 11 per unit. There is a proposal that the spare part be produced in factory itself. For the purpose a machine costing Shs. 100,000 with annual capacity of 20,000 units and a life of 10 years will be required. A foreman with a monthly salary of Shs. 500 will be engaged. Material required will be Shs 4.00 per unit and wages Shs. 2.00 per unit. Variable overheads are 150% of direct labour. The firm can easily raise funds @ 10%. Advise the firm whether the proposal should be accepted. **(10 Marks)**

- b) Indicate whether the following statements are true or false

- i) $p/v \text{ ratio} = \text{sales} - \text{variable cost} / \text{sales}$
- ii) $\text{variable cost} + \text{profit} = \text{sales}$
- iii) marginal costing and direct costing are the same
- iv) $\text{margin of safety} = \text{contribution} / p/v \text{ Ratio}$
- v) in marginal costing, problem of under and over absorption of fixed overheads do not arise.
- vi) profit volume graph is an improvement over break-even chart because it shows the relationship of profit to volume of sales.
- vii) in marginal costing, stock of finished goods is valued at cost of production
- viii) $\text{Profit} = p/v \text{ Ratio} * \text{margin of safety}$ **(4 marks)**

- c) Explain: key factor, P/V Ratio and margin of safety **(6 marks)**

QUESTION THREE

- a) What do you understand by normal and abnormal waste of material during a process of manufacture? Stat briefly how each should be treated in cost accounts. **(8 marks)**
- b) Product X is obtained after it passes through three distinct processes. You are required to prepare process accounts from the following information:

	Process			
	Total	I	II	III
	Shs.	Shs.	Shs.	Shs.
Material	15,084	5,200	3,960	5,924
Direct Wages	18,000	4,000	6,000	8,000
Products	18,000			
Overheads				

1,000 units @ Shs. 6 per unit were introduced in process I production overheads are to be distributed as 100% on direct wages.

Actual output	Unit	Normal Loss	Value of scrap per unit Shs.
Process I	950	5%	4
Process II	840	10%	8
Process III	750	15%	10

(12 Marks)

QUESTION FOUR

- a) The standard of a chemical mixture is as under:
 4 tonnes of material X at Shs. 22.50 per tonne
 6 tonnes of material Y at Shs. 30 per tonne
 Standard yield is 90% of input
 Actual cost for the period is as under:
 4.5 tonnes of material X at Shs. 15 per tonne
 5.5 tonnes of material Y at Shs. 34 per tonne
 Actual yield is 9.1 tonnes.

Compute

- (a) Material cost variance (b) material price variance (c) material usage variance
 (d) Material mix variance (e) material yield variance **(8 Marks)**
- b) The following data are available in a manufacturing company for a year by period:

Fixed Expenses	Shs (00,000)
Wages and salaries	9.5
Rent, rates & taxes	6.6
Depreciation	7.4
Sundry administrative expenses	6.5
Semi-variable expenses (50% capacity)	
Maintenance & repairs	3.5
Indirect labour	7.9
Sales department expenses	3.8
Sundry administrative expenses	2.8
Variable expenses (at 50% of capacity)	
Materials	21.7
Labour	20.4
Other expenses	7.9
Total	98.0

Assume that fixed expenses remain constant for all levels of production; semi variable expenses remain constant between 45% and 65% of capacity and increasing by 10% between 65% and 80% capacity and by 20% between 80% and 100% capacity. Sales at various levels are:

	(Shs. 00,000)
50% capacity	100
60% capacity	120
75% capacity	150
90% capacity	180
100% capacity	200

Prepare a flexible budget for the year and forecast the profits at 60%, 75%, 90% and 100% of capacity. **(12 marks)**

QUESTION FIVE

- a) The following yearly charges are incurred in respect of a machine in a shop, where manual labour is almost nil, and where work is done by means of 5, machines of exactly similar type and specification:

	Shs
1. Rent and rates	4,800
2. Depreciation on each machine	500
3. Repairs and maintenance for 5 machines	1,000
4. Power consumed as per meter @ sh 1 per unit	60,000
5. Electric charges for the shop	450
6. Attendants: 2 persons for 5 machines is paid Shs. 600 p.m.	
7. Supervisor looking after 5 machines is paid Shs. 2,500 p.m.	
8. Sundries supply for the shop	450
9. Hire purchase instalment for the machine, including interest	1,200

Shs. 300

The machine uses 10 units of power per hour.

Calculate machine hour rate

(10 marks)

Hint: Hours worked based on power consumed.

- b) A factory uses job costing. The following cost data is obtained from its books for the year ended 31st December 2007.

	Shs.
Direct materials	30,000
Direct wages	25,000
Factory overheads	15,000
Administration overhead	14,000
Selling and distribution overheads	17,500
Profit	25,375

In 2007 the company receives an order for a number of jobs. It is estimated that material required will be Shs. 80,000 and wages amounting to Shs. 50,000 will be spent on jobs. What should be the price of these jobs if the factory intends to earn the same rate of profit on sales assuming that the selling and distribution overhead goes up by 10%. The factory recovers factory overheads as a percentage of direct wages and administration, selling and distribution overheads as a percentage of works cost.

(10 marks)

QUESTION SIX

Write a brief note on the following:

- | | |
|-------------------------------------|------------------|
| i) Activity based costing | (4 marks) |
| ii) Strategic management accounting | (4 marks) |
| iii) Value added accounting | (4 marks) |
| iv) Joint product | (4 marks) |
| v) By product. | (4 marks) |

QUESTION SEVEN

- a) Mr. Oirere runs a Matatu service in the town and has two vehicles. He furnishes you with the following data and wants you to compute the cost per running mile.

	Vehicle A (Shs)	Vehicle B (Shs)
Cost of vehicle	25,000	15,000
Road license per year	750	750
Supervision and salary (yearly)	800	1,200
Driver's wages per hour	4	4

Cost of fuel per litre	1.50	1.50
Repairs and maintenance per mile	1.50	2.00
Tyre cost per mile	1.00	0.80
Garage rent per year	1,600	550
Insurance premium yearly	850	500
Miles run per year	6	5
Mileage run during the year	15,000	6,000
Estimated life of vehicle	100,000 miles	75,000 miles

Charge interest at 10% p.a on the cost of vehicle. The vehicle runs 20 mile per hour on an average. **(10 marks)**

b) Distinguish between budgetary control and standard costing. **(10 marks)**