UGANDA MARYRS UNIVERSITY

FACULTY OF BUSINESS ADMINISTRATION AND MANAGEMENT

POST GRADUATE SCHOOL

COURSE UNIT: MANAGEMENT ACCOUNTING

2021 - 2022

MBA PT II

DATE: 10th DECEMBER 2022

TIME: 3:00 PM TO 6:00 PM

Instructions:

a) **Answer ANY FOUR Questions.**

b) **All Questions Carry Equal Marks**

Question One:

The following data is extracted from the cost accounts of Steel Mills ltd for the month of October 2021: **Amounts in thousands.**

Departments:	**A**	**B**	**C**	**D**	**E**
Indirect materials	190	240	40	300	80
Indirect wages	180	220	60	200	130

Other overheads.

Details	**Total**
Power and lighting	1,200
Rent	560
Insurance on machinery	200
Canteen charges	600
Depreciation costs	400

The following bases have also been provided:

Particulars	**A**	**B**	**C**	**D**	**E**
Floor area in sq m	4,000	4,000	3,000	2,000	1,000
Value of machinery in Shs	10,000,000	12,000,000	8,000,000	6,000,000	4,000,000
Kilowatt hours	4,000	4,400	1,600	1,500	500
No of employees	90	120	30	40	20

Department A, B and C are the Production departments while D and E are the service centers. Technical estimates reveal the following.

Department:	**A**	**B**	**C**	**D**	**E**
D	20%	40%	10%	-	30%
E	30%	25%	25%	20%	-

Required.

a) Prepare a primary overhead distribution sheet for Steel Mills Limited. ***[10 marks]***

b) Prepare a secondary overhead distribution sheet. ***[10 marks]***

c) Give reasons why its important for management to do overhead analysis. ***[5 marks]***

Question Two:

Mat Limited are dealers in timber products, they received an order from Team Limited for 2,000 benches of the standard size. Mat limited estimated that the following costs would be incurred if the order is to be met.

Materials:

- Timber, 400 meters @ 20,000/=

- Nails 200kgs @ 4,000/=
- Vanish 10 liters @ 25,000/=

Labour Costs: Workers to be got from two departments i.e A and B
Dept. A, 100 labour hours @ 5,000/=
Dept. B, 30 men working for 10 days at the rate of 2,000/= per day per man.

Variable Overheads:
Dept. A, are absorbed on the basis of direct labour hours at the rate of 3,000/= @
Dept, B. are absorbed at 20% of prime costs required for the order.

Fixed Manufacturing Overheads: These are 400/= per bench

Required:

a) Determine the unit cost of each bench using the given data. ***[15 marks]***
b) What price would be charged to Team Limited per bench if Mat Limited targets gross profit of 25% on cost. ***[2 marks]***
c) What price would be charged to Team Limited per bench if Mat targets gross profit of 25% on sales. ***[3 marks]***
d) State five factors considered by management when choosing a costing method. ***[5 marks]***

Question three:

a) A certain company targets a profit of 500,000/= In the month of December 2017, it has established that the following data is available.
- Unit selling price 5,000/=
- Unit variable cost 1,000/=
- Fixed cost 1,200,000/=

Required;

i) Determine the company's Margin of safety in Units and Shillings ***[4 marks]***
ii) Determine the relative margin of safety in percentage terms. ***[5 marks]***

b) A company expects to sale 10,000 units. The variable cost per unit is 1,000/= and annual fixed costs of 20,000,000/=

i) What price would be charged in order to break-even at a given level of activity? ***[3 marks]***
iii) Using the price calculated in (i), determine the amount of units that should be sold in order to yield a desired profit of UGX 1,000,000. ***[3 marks]***
iv) What is the profit that will result from 10% reduction in variable cost per unit and UGX 5,000,000 decrease in fixed costs assuming that current sales in (i) above will be maintained? ***[5 marks]***

c) With the help of a graph' explain the relationship between cost, volume of production and profitability of the organizations according to the economist, clearly showing the break-even-points. ***[5 marks]***

Question Four:

a) Mugume intends to sell his Mitusbishi Pajero which he bought in 2012 at 7,000,000/= and has so far got offers from two customers. First customer is offering to pay UGX 2,500,000 at that state. If he accepts that offer Mugume will only pay commission of UGX 100,000 to the brokers. However, the second customer is advising Mugume to Panel-beat the vehicle before he sells it and is willing to pay UGX 3,500,000 cash.

Mugume has realized that if the panel-beating is to be done the following costs will be incurred;

Spraying the vehicle	120,000/=
Labour costs	160,000/=
Spares	380,000/=
Tyres	600,000/=

Mugume will not pay commission to the brokers since the vehicle will not be parked in their yard.

Required: Between the first and Second offer, which one should Mugume Accept and why? ***[10 marks]***

b) The standard cost sheet reveals that standard price of materials are sh. 5,000/= per unit and standard material quantity is 1,000 units. During the period, 1,500 units of materials were purchased and used at a cost of 6,000/= per unit.

Required:

i) Compute material cost variance ***[2 marks]***

ii) Compute material price variance ***[2 marks]***

iii) Compute material usage variance ***[1 marks]***

c) Standard cost sheet of trend Ltd shows that the production of each unit requires 1 hour at shs. 2,000/= each. During the period, 2,500 units were produced in 2,100 hours with a total cost of shs.3,570,000/=. Out of the 2,100 hours, 100 hours were spent waiting for materials and tools by employees.

Required: Determine;

i) Labour cost variance ***[2 marks]***

ii) Labour rate variance ***[1 marks]***

iii) Labour efficiency variance ***[2 marks]***

d) Give reasons why an organization would experience Favorable Material price Variance and Adverse Material Usage Variance. ***[5 marks]***

Question five:

a) Budgeting is an essential control tool in all organizations and its key in Measuring the performance of Managers'. Explain all the pre-requisites for successful budgeting. ***[5 marks]***

b) What would you consider as the five main Advantages of Budgeting? ***[5 marks]***

c) What problems are associated with budgeting? ***[3 marks]***

d) The following data have been extracted from the records of Mukama Ltd representing budgeted data for six months.

The units to be sold for different months are as follows:

July 2019	1,100
August	1,100
September	1,700
October	1,900
November	2,500
December	2,300
January 2020	2,000

There will be no work-in-progress at the end of any month. Finished units equal to half the sales for the next month will be in stock at the end of each month (including June 2019). Selling price per unit is expected to be sh. 120 through out the six months.

Budgeted production and production cost for the year ending 31st December 2019 are as follows:

Production (units)	22,000
Direct material per unit	10.0/=
Direct wages per unit	4.0/=
Total factory overhead apportioned per unit	4.0/=

Required: Prepare the following functional budgets for the next six months ending 31st December 2019.

i) Sales budget ***[4 marks]***

ii) Production budget in Units ***[5 marks]***

iii) Production cost budget ***[3 marks]***

Question Six:

a) M/S Tubes are manufacturers of tubes. The following are the details of their operations during 2020.

Ordering costs	100/= per order
Inventory carrying costs	2% per cost of the tube [covers per annum]
Cost of the tube	500/= per tube

Normal usage	100 tubes per week
Minimum usage	50 tubes per week
Maximum usage	200 tubes per week
Lead time	6-8 weeks

Assume a year of 52 weeks.

Required: Compute the following from the above data:

i) Economic Order Quantity [EQO] ***[2 marks]***

ii) Re-order level ***[2marks]***

iii) Minimum stock level ***[2marks]***

iv) Maximum stock level ***[2 marks]***

v) Number of orders to be made in a year ***[2 marks]***

vi) Total cost of managing stock ***[2 marks]***

b) ABC Ltd budgets to make 25,000 standard units of product in four (4) hours each during the budget period of 100,000 hours. The actual out put during the period was 27,000 units which took 120,000 hours to make and finish.

Required:

i) Calculate the efficiency ratio, ***[1 marks]***

ii) Capacity ratio, ***[1 marks]***

iii) Production volume ratio. ***[1 marks]***

c) A company produces three products and is reviewing the production and sales budgets for the next accounting period. The following information is available for the three products:

	Oranges	**Passion fruits**	**Apples**
Unit selling price	200	150	800
Variable cost per unit	140	70	600
Fertilizers per unit (in kgs)	¼	½	2
Estimated sales demand	500 units	1,000 units	600 units

Amount of fertilizers is limited to 1,700 kilograms for the period and is insufficient to meet total sales demand.

Required:

a) Determine the product mix a company can produce and sell in order to maximize returns during the period. ***[6 marks]***

b) Compute total contribution to be gained and lost because of the optimum mix selected. ***[4 marks]***

End of exam Paper