MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2016/2017

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION WITH INFORMATION TECHNOLOGY

MAIN CAMPUS

ABA 416: MANAGEMENT ACCOUNTING II

Date: 1st August, 2017 Time: 3.30 - 6.30pm

INSTRUCTIONS:

- Answer Question ONE and any other THREE

QUESTION ONE

a) Ahron Company makes 8,000 units per year of a component it uses in the products it manufactures. The unit product cost of this part is computed as follows:

Direct Materials: Shs14.90
Direct Labor: Shs17.50
Variable Manufacturing Overhead: Shs1.90
Fixed Manufacturing Overhead: Shs21.10
Unit Product Cost: Shs55.40

An outside supplier has offered to sell the company all of the units it needs. If the company accepts this offer, the facilities now being used to make this part would be used to make more units of a product in high demand. The additional contribution margin on the other product would be Shs161, 600 per year. If the part were purchased from the outside supplier, Shs7.50 of the fixed manufacturing overhead cost being applied to the part would be eliminated. What is the maximum amount the company should be willing to pay an outside supplier for part if supplier commits to supplying all 8,000 units required for the year?

b) Explain FIVE practical difficulties, apart from technical costing problems which a cost accountant has to face in installing a costing system.

c) The Assembly Division of **SLOWCAR** Company has offered to purchase 90,000 batteries from the Electrical Division (**ED**) for Shs 104 per unit. At a normal volume of 250,000 batteries per year, production costs per battery are:

	Shs
Direct materials	40
Direct labor	20
Variable factory overhead	12
Fixed factory overhead	42
Total	**Shs114**

The Electrical Division has been selling 250,000 batteries per year to outside buyers for Shs136 each. Capacity of the plant is 350,000 batteries per annum. The Assembly Division has been buying batteries from outside suppliers for Shs130 each.

Required

i. Should the Electrical Division manager accept the offer?
ii. Will an internal transfer be of any benefit to the company?

QUESTION TWO

Johnbrown Company Limited is presented with the balance sheet and the statement of income and retained earnings shown as follows. Additional explanations related to preparation of the work sheet are also provided.

JB Company Limited Comparative Balance Sheets
December 31, 2016 and 2015

	2015	2016
Cash	59,000	66,000
Accounts receivable (net)	104,000	51,000
Inventories	493,000	341,000
Prepaid expenses	16,500	17,000
Investments in shares of Porter Co. (equity method)	18,500	15,000
Land	131,500	82,000
Equipment	187,000	142,000
Accumulated depreciation – equipment	(29,000)	(31,000)
Buildings	262,000	262,000
Accumulated depreciation – buildings	(74,100)	(71,000)
Goodwill	7,600	10,000
Total Assets	**1,176,000**	**884,000**
Liabilities		
Accounts payable	132,000	131,000
Accrued liabilities	43,000	39,000
Income taxes payable	3,000	16,000
Notes payable (long-term)	60,000	-
Bonds payable	100,000	100,000
Premium on bonds payable	7,000	8,000
Deferred income tax (long-term)	9,000	6,000
Total Liabilities	**354,000**	**300,000**
Shareholders' Equity		
Common shares	247,000	88,000
Retained earnings	592,000	496,000
Treasury shares	(17,000)	-
Total shareholders' equity	822,000	584,000
Total Liabilities and Shareholders' Equity	**1,176,000**	**884,000**

JB Company Limited Combined statement of income and retained earnings
For the Year Ended 2016

Net sales		524,500
Other revenue		3,500
Total revenues		528,000
Expenses:		
Cost of goods sold		310,000
Selling and administrative expense		47,000
Other expense and losses		12,000
Total expenses		369,000
Income before income tax and extraordinary item		159,000
Income tax:		

Current	47,000	
Deferred	3,000	50,000
Income before extraordinary item		109,000
Gain on expropriation of land (net of tax)		8,000
Net income		117,000
Retained earnings, January 1		496,000
Less:		
Cash dividends	6,000	
Stock dividends	15,000	21,000
Retained earnings, December 31		592,000
Per share:		
Income before extraordinary items		1.98
Extraordinary item		0.15
Net income		2.13

Additional Information

a. Other income of 3,500 represents Satellite's equity share in the net income of Porter Company, an equity investee. Satellite owns 22% of Porter Company.
b. Land in the amount of 60,000 was purchased through the issuance of a long-term note; in addition, certain parcels of land were expropriated, resulting in an 8,000 gain, net of 2,500 taxe.
c. An analysis of the equipment account and related accumulated depreciation indicates the following:

QUESTION THREE

A Company is engaged in the manufacture of edible oils. It has three divisions as specified:

A. Harvesting oilseeds and transferring thereof to the mill
B. Oil mill, which processes oil seeds into edible oils
C. Marketing Division which packs the edible oils into 2 Kg. containers for sale at Shs 150.00 each container.

The oil mill has a yield of 1,000 Kgs from 2,000 Kgs of oil seeds during a period. The Marketing Division has a yield of 500 cans of edible oil of 2 Kg each from every 1,000 Kgs of oil; the net weight of oil per can being 2 Kgs.

The cost data for each division are as given below:

A	Harvesting Division	
	Variable cost per Kg of Oilseeds	Shs. 2.50
	Fixed Cost per Kg of Oilseeds	Shs. 5.00
B	**Oil Milling Division**	
	Variable cost per Kg of processed edible Oil	Shs. 10.00 per Kg
	Fixed cost per Kg of processed edible Oil	Shs. 7.50 per Kg
C	**Marketing Division**	
	Variable cost per Can of 2 Kg of edible Oil	Shs. 3.75
	Fixed cost per Can of 2 Kg of edible Oil	Shs. 8.75

The Fixed Costs are calculated on the basis of the estimated quantity of 2, 000 Kgs of Oil seeds harvested 1000 Kgs of processed oil and 500 Cans of edible oil packed by the division for the period.

The other oil mills buy the same quality of oil seeds at Shs 12.50 per Kg in the market. The market price of edible oil processed by the oil mill if sold without being parked by the marketing division is Ksh 62.50 per Kg of oil.

Required:

a) Compute the whole profit of the company of harvesting 2,000 Kgs of oil seeds, processing it into edible oils and selling the same in 2 Kg Cans as estimated for the period under review.

b) Compute the transfer prices that would be used for internal transfer from (1) Harvesting Division to Oil Mills Division and (2) from Oil mill Division to Marketing Division under the following pricing methods:

(i) Shared Contribution in relation to Variable costs and

(ii) Market Price

c) Which Transfer Pricing Method will each Divisional Manager Prefer to use and why?

QUESTION FOUR

Service organizations, such as banks and hospitals, have commonly been noted for their lack of standard costing systems, and their relatively unsophisticated budgeting and control systems compared with large manufacturing organizations. But this is changing and many large service organizations are now revising their use of management accounting techniques.

Requirements:

a) Explain which features of large-scale service organizations encourage the application of activity-based approaches to the analysis of cost information.

b) Explain which features of service organizations may create problems for the application of activity-based costing.

c) Explain the uses for activity-based cost information in service industries.

Many large service organizations were at one time state-owned, but have been privatized. Examples in some countries include electricity supply and telecommunications. They are often

regulated. Similar systems of regulation of prices by an independent authority exist in many countries, and are designed to act as a surrogate for market competition in industries where it is difficult to ensure a genuinely competitive market. Explain which aspects of cost information and systems in service organizations would particularly interest a regulator, and why these features would be of interest.

QUESTION FIVE

Abkaber Co assembles three models of motorcycle at the same factory: the 50 cc Sunshine, the 250 cc Roadster and the 1000 cc Fireball. It sells the motorcycles throughout the world. In response to market pressures Abkaber has invested heavily in new manufacturing technology in recent years and, as a result, has significantly reduced the size of its workforce. Historically, the company has allocated all overhead costs using total direct labour hours, but is now considering introducing Activity Based Costing (ABC). Abkaber's accountant has produced the following analysis:

	Annual output (Units)	**Annual Direct Labour Hours**	**Selling Price (Shs per unit)**	**Raw Materials Cost (Shs per unit)**
Sunshine	2000	200,000	4000	400
Roadster	1600	220,000	6000	600
Fireball	400	80,000	8000	900

The three cost drivers that generate overheads are:

Deliveries to retailers – the number of deliveries of motorcycles to retail showrooms;
Set-ups – the number of times the assembly line process is re-set to accommodate a production run of a different model of motorcycle;
Purchase orders – the number of purchase orders.

The annual cost driver volumes relating to each activity and for each model of motorcycle are as follows:

	Number of deliveries to Retailers	**Number of Set- ups**	**Number of Purchase orders**
Sunshine	100	35	400
Roadster	80	40	300
Fireball	70	25	100

The annual overhead costs relating to these activities are as follows:

	Shs in "000"
Deliveries to Retailers	2,400
Set- ups Costs	6,000
Purchase orders	3,600

Required:

a) Calculate the total profit on each of Abkaber Co.'s three models using the existing method of allocating overheads based on labour hours.

b) Recalculate the total profit on each of Abkaber Co's three models using activity based costing.

c) Evaluate the labour hours and the activity based costing methods in the circumstances of Abkaber Co.

QUESTION SIX

The following data is available for XYZ Ltd.

Sales	Shs 200,000
Less: Variable cost	60,000
Contribution	140,000
Fixed Cost	100,000
EBIT	40,000
Less Interest	5,000
Profit before tax	35,000

Find out:

(a) Using concept of financial leverage, by what percentage will the taxable income increase, if EBIT increases by 6 %.

(b) Using the concept of operating leverage, by what percentage will EBIT increase if there is 10% increase in sales and,

(c) Using the concept of leverage, by what percentage will the taxable income increase if the sales increase by 6%. Also verify the results in view of the above figures.