TECHNICAL UNIVERSITY OF MOMBASA

School of business

DEPARTMENT OF ACCOUNTING AND FINANCE

UNIVERSITY EXAMINATIONS FOR MASTER OF BUSINESS ADMINISTRATION/SCIENCE (FINANCE).

BAC 5102; MANAGEMENT ACCOUNTING.

END OF SEMESTER EXAMINATIONS

SERIES; DECEMBER 2015

TIME; 3 HOURS

Instructions;

Answer question one and any other three questions

Paper 1

Question One.

FUKO ltd. has the following budgeted sales for the next six-month period:

Month	Unit Sales.
September	16,000
October	18,000
November	16,000
December	20,000
January	12,000

There were 3,000 units of finished goods in inventory at the beginning of September. Plans are to have an inventory of finished products that equal 20 percent of the unit sales for the next month.

Three kilograms of materials are required for each unit produced. Each Kilogram of material costs sh.12.50. Inventory levels for materials are equal to 30 percent of the needs for the next month. Materials inventory on. September 1 was 8,500 Kilograms.

Required:

a. Prepare production budgets in units for September, October and November. (10 marks)
b. Prepare a purchases budget in kilograms and shillings for each of the three months above. (10 marks)

(c) Briefly explain limitations of Budgeting. (10 marks)

Question two.

(a) The Super Bright Co. sells two products Bwerty and Slander. The financial controller has prepared the following information based on the sales forecast for the period.

Budgeted units	1,800	900
	Sh.	Sh
Unit selling price	350	220
Unit variable cost	150	120
Unit contribution	200	100
Total sales revenue	630,000	198,000
Less total variable cost	270,000	108,000
Contribution	360,000	90,000
Less direct avoidable fixed cost	100,000	30,000
Contribution to common financial cost	260,000	60,000
Common fixed costs		50,000

Required:

(i) Calculate the break-even point in units for each product.

(ii) Assuming the current sales mix is to remain, calculate the breakeven point for the units for the organization (10 marks)

(b) A company sells three products: D, E and F. The market for the products dictates that the numbers of products sold are always in the ratio of 3D:4E:5F.

Budgeted sales volumes and prices, and cost details for the previous period were as follows;

	D	E	F
SALES	300	400	500
SELLING PRICE PER UNIT	Sh. 80	Sh. 55	Sh. 70
CONTRIBUTION TO SAELES RATIO	70%	65%	50%

The budgeted total fixed costs for that period were sh. 31,200

Required:

(a) **Calculate** for that period:

(i) The break-even sales revenue. (4 marks)

(ii) The volume of each product that would have needed to be sold if the company had wanted to earn a profit of sh. 29,520 in that period. ***(6 marks)***

Question Three.

AC manufactures three products, X, Y and Z using the same production line.

Details of the three products are shown below:

	x	y	z
SELLING PRICE PER UNIT	Sh.28.00	Sh. 36.00	Sh. 42.00
VARIABLE COST PER UNIT	Sh. 12.00	Sh. 10.00	Sh. 21.50
PROCESSING TIME PER UNIT	2 hours	4 hours	2 hours

The production line has a capacity of 30,000 processing hours per month and is not used to make any other products. The monthly demand for the products at the current selling prices is as follows: X: 8,000 units, Y: 6,000 units and Z: 6,000 units.

No inventories are held.

Required:

(a) **Calculate** the optimum production plan and the resulting contribution per month based on the above information. (10 marks)

AC's Managing Director has now completed a review of the market and has decided to discontinue Product Y. It has been established that a new competitor has entered the market with a product that is technically superior to Product Y. Also, the competitor seems to be adopting a market penetration pricing policy and AC will not be able to match the low selling price. The review established that for Product X the monthly demand would be 8,000 units at a selling price of sh.28 per unit, and that for Product Z the monthly demand would be 6,000 units at a selling price of sh..42 per unit. For both products, a reduction in the selling price of sh.1 per unit would increase demand by 1,000 units and an increase in the selling price of sh.1 per unit would reduce demand by 1,000 units. This relationship will exist for all levels of monthly demand.

The current machinery necessitates that production runs must be for 1,000 units.

Required:

(b) **Calculate** the optimum monthly production plan and the resulting contribution. (Note: the maximum processing time is 30,000 hours per month). (10 marks)

Question Four.

(a). The following information relates to cost estimates for the production of item Zed.

	Sh..
Direct materials	100,000
Direct wages	80,000
Direct expenses	35,000
Indirect factory costs	55,000
Administration costs	30,000
Distribution costs	30,000
Selling expenses	25,000

Additional information;

During the year ended 30th November 2007, prime cost will rise by 15% indirect factory costs will increase by 10% administration costs, distribution costs and selling expenses will each increase by 5%. The company expects to make 20% profit on the selling price of product Zed.

Required:

Prepare a statement to show the selling price of product zed for the year ended 30th November 2007. (10 marks)

(b) The catalunya Co. is a manufacturer of clothing that sells its output directly to clothing retailers, one of its department manufacturer's swelters. The department has a production capacity of 50,000 swelters per month. Because of the liquidating of one of its major customer, the company has excess capacity for the next quarter. Currently, monthly production and sales volume is at 70%of

the company's capacity at a selling price of sh. 40 per sweaters. Expected costs and revenues for the next month at an activity level of 35,000 units are as follows:

	Sh.
Direct labour	420
Direct materials	280
Variable manufacturing overheads	70
Manufacturing non-variable overheads	280
Marketing & distribution costs	105
Total costs	1,155
Sales	1,400
Profit	245

Catalunya is expecting an up-surge in demand and considers that the excess capacity is temporary. Nakumat has offered to buy for its staff 20,000 sweater each month for the next three months at sh. 25 per sweater. Nakumat would collect the sweaters from Catalunya factory thus saving Catalunya marketing and distribution expenses. However Nakumat requires its logo to be inserted on the sweaters and Catalunya has predicted this to cost kshs. 2 per sweater.

Required:

Showing all your workings advice Catalunya on whether to accept or reject the Nakumat order (10 marks)

Question Five

(a) Lulus ltd. Manufactures and distributes furniture in the county of Mombasa. The company currently faces a challenge on transport management. The company owns a lorry which has a capacity of 100 tables or 300 chairs or any combination of the two products where the space freed by removing a table allows three chairs to be stacked in. The maximum demand for these products is 70 tables and 240 chairs. The company's margin from each table sold is sh.100 and the margin from each chair sold is sh.50.

Required;

Advice the company on the best combination and calculate the profit at the best level.

(10 marks)

(b) Team Kubwa is planning a music event in TUM hall. TUM has given Team Kubwa two options on hiring the hall i.e Pay TUM sh. 13 for each spectator and sh. 4,000 for hiring the venue or pay sh. 2,000 to hire the venue for the night and sh.23 per spectator.

Team Kubwa will also pay sh. 2,000 to the band that will perform that night and sh. 2 per spectator to the firm that provides the security for the event. The spectators will pay a ticket price of sh.75 to attend the event. Team Kubwa expects 250 spectators.

Required;

Advice team Kubwa on which hiring option to take. (10 marks)