



MACHAKOS UNIVERSITY COLLEGE

**(A Constituent College of Kenyatta University)
University Examinations for 2015/2016 Academic Year**

SCHOOL OF BUSINESS AND ECONOMICS

**DEPARTMENT OF BUSINESS ENTREPRENEURSHIP AND MANAGEMENT
SCIENCES**

**FIRST SEMESTER EXAMINATION FOR BACHELOR OF COMMERCE
(EVENING CLASS)**

BAC 300: MANAGEMENT ACCOUNTING 1

Date: 1/12/2015

Time: 8:30 – 10:30 AM

INSTRUCTIONS

Answer Question One and Any Other Two Questions

QUESTION ONE. Compulsory

- a) Explain the meaning of the following terms as used in management accounting
- (i) Cost
 - (ii) Cost object
 - (iii) Standard Cost (3 marks)
- b) Economic order quantity is a technique used to determine the optimum quantity to be obtained from suppliers. State three benefits enjoyed by firms when they establish the economic order quantities at the right time. (3 marks)
- c) Explain the meaning of the following costs as used when making cost saving decision.

- (i) Relevant cost
- (ii) Sunk cost
- (iii) Product cost
- (iv) Opportunity costs (6 marks)

- d) Forward business is considering replacing its machine A with a current book value of Shs. 300,000 with a machine B costing Shs. 280,000. Both machines are considered to have an economic life of 4 years and each is able to produce 30,000 units per year

If the company decides to buy machines B, it will save on variable cost since machine B absorbs shs. 3 of variable overhead while machine A absorbs Shs. 5. Machine A can currently be sold at a value of Shs. 250,000.

If Machine A is retained, the company will have to update its operating system every year at a cost of Shs. 10,000 per year in order to maintain its efficiency.

Should the business replace Machine A. Advice the management? (8 marks)

- e) Around Africa company specializes in manufacturing socks and gloves. The company is considering production of scarves as a new line of its products to the market in the coming year. The company has provided the following information to assess the viability of the production.

Fixed expenses sh.45,000

Sales sh.360,000

Sales (units) sh. 12, 000

Variable cost per unit sh. 10

Using the contribution margin ratio method

- (i) Establish the break-even point (4 marks)
- (ii) Calculate the Margin of safety (3 marks)
- (iii) Interpret your answer in (i) and (ii) above (3 marks)

QUESTION TWO

Workers in Lebea Company work in shifts. A normal shift is usually composed of 10 men, 5 ladies and 5 supervisors who are usually paid at a standard hourly rate of Sh. 10, Sh. 20 and Sh. 30 respectively.

A shift is expected to work for 40 hours a week and produce an output of 10,000 units. In a particular week, the shift available consisted of 13 men, 4 ladies and 3 supervisors who are paid at the rates of Shs. 30, Sh.40 and Sh. 50 respectively. 960 units were produced during the week and two hours were lost due to abnormal lost time.

- (a) Compute the following variables
- (i) Labour cost variance (4 marks)
 - (ii) Labour rate variance (4 marks)
 - (iii) Labour efficiency variance (4 marks)
 - (iv) Labour lose time variance (4 marks)
- (b) As a unit manager in your company, you are engaged in the preparation of departmental budget for the coming financial year. Identify clearly four shortcomings you would expect when preparing and implementing your budget (4 marks)

QUESTION THREE

- a) Benao Manufactures uses materials MZ to produce its products. The following information is available in respect of a material MZ

Re-order quantity	1800 units
Minimum consumption	150 units per week
Maximum consumption	450 units per week
Normal consumption	300 units per week
Re-order period	3 to 5 week

Calculate

- (i) Re – order level (2 marks)
 - (ii) Minimum stock level (4 marks)
 - (iii) Maximum stock level (3 marks)
- b) Using the decision making model explain how an organization is able to make cost saving or revenue optimizing decisions when choosing among alternatives (11 marks)

QUESTION FOUR

- a) Rhesa Ltd produces two products, product A and product B.
The plant and machinery has a capacity of producing 5000 units of product A and 1000 units of product B in a year.
Material L and M are required to produce the two products. Both products consume 12 units of material L. Product A consumes 4 units of material M while product B consumes only 2 units of material M.
The company expects the price of material L and M to be Shs. 15 and Shs. 25 respectively in the coming year 2.
- (i) Prepare the direct material usage budget for Rhesa Ltd for the year 2 (both in units and in revenue amount) (6 marks)
 - (ii) Calculate direct material cost per unit of product A and Product B (4 marks)
- b) Bakura Limited intends to invest either in project A or Project B. The initial capital outlay is Shs. 200,000. The expected cash inflows from the projects are as follows

Year	Project A	Project B
	Ksh.	Kshs.
1	90,000	50,000
2	80,000	60,000
3	75,000	70,000
4	60,000	80,000
Scrap Value	-	20,000

The Company's cost of capital is 15%

- (i) Calculate the net present value of each project. (8 marks)
- (ii) Advise the management on the project to invest in. (2 marks)

QUESTION FIVE

- a) Afya manufactures financial year ends on 31st December. The business provides the following information related to year 2015

Total fixed costs (for the whole year) Sh. 90,000

Expected total sales by the close of the year (in units) 7,500

Variable cost per unit Shs. 5

The firm has been selling its product at Shs. 50 for the better part of the year; the price is not expected to change sby the close of the year

- (i) How much should the firm sell to break – even (3 marks)
 - (ii) Identify the margin of safety if the sales target is met (4 marks)
 - (iii) Calculate the profit when the sales volume is 15% more than the breakeven volume. (4 marks)
- b) Zecho Manufacturers produces two products in each of their departments. Every department is served by one processing machine
- The company provided the following data related to department B served by machine K₁ which is operating in its full capacity

	Product 7	Product 8
Selling price per unit	Sh. 60	Sh. 50
Variable expenses per unit	Shs. 36	Shs. 35
Demand per week (in units)	2,000	2,200
Processing time required on		
Machine K ₁ , per unit	1 minute	30 seconds

All other machines have excess unutilized capacity Machine. K1 has a full capacity of 2400 minutes per week thus being the constrained resource.

Advice the management on the optimal production mix

(9 marks)