



Riara School of Business
Nurturing business innovators

JANUARY– APRIL 2023 TRIMESTER
EXAMINATION FOR BACHELOR OF BUSINESS ADMINISTRATION

DAY PROGRAMME

RAC 202: PRINCIPLES OF MANAGEMENT ACCOUNTING

DATE: APRIL 2023
HOURS

TIME: 2

INSTRUCTIONS

- i) Answer question one and any other two**
 - ii) Marks allocated to each question are shown at the end of the question**
 - iii) Arrange your work neatly and indicate the questions answered in the Examination booklet**
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RAC: 202 PRINCIPLES OF MANAGEMENT ACCOUNTING

QUESTION ONE COMPULSORY 30 MARKS

Zimco Media Group has three major divisions:

Newspapers.

Television.

Film studios.

Summary financial data (in millions of shillings) for years 2019 and 2020 is given as follows:

Year	Operating income		Revenue		Total assets	
	2019 Sh.	2020 Sh.	2019 Sh.	2020 Sh.	2019 Sh.	2020 Sh.
Newspapers	900	1,100	4,500	4,600	4,400	4,900
Television	130	160	6,000	6,400	2,700	3,000
Film studios	220	200	1,600	1,650	2,500	2,600

The manager of each division has an annual bonus plan based on his division's return on investment (ROI). The company defines ROI as operating income divided by total assets. Senior executives from divisions reporting increases in the division's ROI from the prior year are automatically eligible for a bonus. Senior executives of division reporting a decline in ROI have to provide persuasive explanations for the decline. To be eligible for any bonus, and they are limited to 50% of the bonus paid to the division managers reporting an increase in ROI.

J. Kanyama, manager of the newspapers division is considering a proposal to invest Sh. 200 million in a fast speed printing process with colour options. The estimated increment to year 2021 operating income would be Sh. 30 million. The media group has a 12% required rate of return for investments in all three divisions.

In the month of January 2023, the Financial Director of the company proposed that there is need to employ a Management Accountant and the Chief Executive Officer of the company is of a different opinion since the company has been operating well for over 15 years without a Management Accountant.

Required:

(a)(i) Use the Dupont Method to explain differences among the three divisions in their 2020 ROI. (Use 2020 total assets as the denominator). **(5 marks)**

(ii) Using Return on Investment (ROI), explain whether J Kanyama should undertake the fast-speed printing press investments proposal **(3 marks)**

(iii) T. J. Zimco the Chairman of the media group has received a proposal to base senior executive compensation in each division on Residual Income (RI) defined as operating income less imputed interest charge. Compute the residual income (RI) of each division in the year 2020 **(3 marks)**

(iv) Would adoption of the residual income (RI) basis change J. Kanyama's decision on the acceptance of the fast-speed printing press investment proposal? **(3 marks)**

(b) Describe other non-financial measures that T.J. Zimco can use to measure their performance in addition to the above financial performance measures. **(4marks)**

c) Assuming the Chief Executive Officer has been convinced on the employment of the Management Accountant and you have been called for the interview for the job and you have been asked the value addition that you as a Management Accountant will bring to the T.J.Zimco company. Clearly state the value addition that you will bring to the company as a Management Accountant. **(4marks)**

(d) Management accountants should behave ethically. They have an obligation to follow the highest standards of ethical responsibility and maintain good professional image. The Institute of Management Accountants (IMA) has developed four standards of ethical conduct for management accountants and financial managers. Describe the four ethical standards developed by (IMA). **(4marks)**

e) A manager of XYZ LTD has a choice between i) A risky contract promising shs. 7 million with probability 0.6 and shs. 4 million with probability 0.4 and

A diversified portfolio consisting of two contracts with independent outcomes each promising Shs. 3.5 million with probability 0.6 and shs. 2 million with probability 0.4. The manager has been informed that based on this information available a decision should be made using the Expected Monetary Value approach (EMV). The manager has approached you as a Management Accountant of the company on the computation of EMV and advise on the project the company should undertake. Required

(i) Compute the expected monetary value of each alternative above **(2marks)**

(ii) Advise the manager on the best alternative **(2marks)**

QUESTION TWO

(i) Describe the assumptions underlying the cost- volume-profit analysis. (5marks)

(ii) Assume that you are planning to sell 600 badges at the forthcoming Nairobi show at a sh. 9 each. The badges cost sh. 5 to produce and you incur sh. 2000 to rent a booth in the showground required; -

a) Compute the break-even point in units and in shillings **(2marks)**

b) Compute the margin of safety in units % and I shillings **(2marks)**

c) Compute the number of units that must be sold to earn a profit before of 20% of sales **(3mrks)**

- d) Compute the number of units that must be sold to earn an after-tax profit of sh. 1,640 if the tax rate is 30% (3mrks)
- e) Define the term Sales Variance and describe what causes it to arise (5mrks)

QUESTION THREE

3(a) Briefly distinguish between the following terminologies used in cost accounting clearly stating the importance of the distinction for decision making purposes:

- (i) Controllable costs and non-controllable costs (4 marks)
- (ii) Fixed costs and marginal costs (4 marks)
- (iii) Discretionary costs and periodic costs (4 marks)
- (iv) Cost tracing and cost accumulation (4 marks)
- (b) Describe four factors that affect the price of a product (4 marks)

(Total: 20 marks)

QUESTION FOUR

High-tex Engineering Company Limited wishes to set flexible budgets for each of its operating departments. A separate maintenance department performs all routine and major repair works on the company's equipment and facilities. The company has determined that maintenance department performs all routine and major repair works on the company's equipment and facilities. The company has determined that maintenance cost is primarily a function of machine hours worked in the various production departments. The maintenance cost incurred, and the actual machine hours worked during the months of January, February, March, and April 2020 were as follows:

Month	Machine hours in Production departments	Maintenance department's Costs
		Sh.
January	800	350
February	1,200	350
March	400	150
April	1,600	550

Required:

- a) Determine the cost estimation function using:
- i High-low method. (4marks)
 - ii Regression analysis (4 marks)
- Using the regression function estimate:
- i The maintenance costs that would have been incurred if the machine hours were expected to be 900 in the month of May 2020. (1 mark)
 - ii The maximum machine hours that would have been worked If the maintenance cost incurred had been limited to Sh.400,000 for the month of May 2020. (4 marks)

- Assuming that in the month of May 2020 machine hours were 900, establish a 95% confidence interval for this point estimate. (Assume $t_c = 2.7764$ and standard error of estimate, $s_e = 63.25$). **(3 marks)**
- State and briefly explain the limitations of budgets in the management of business firms **(4marks)**

(Total 20 marks)