



# MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ACCOUNTING BANKING AND FINANCE

SECOND YEAR FIRST SEMESTER EXAMINATION FOR

MASTER IN BUSINESS ADMINISTRATION (FINANCE OPTION)

**BAC 823: CORPORATE FINANCE**

**DATE: 20/8/2021**

**TIME: 9:00 – 12:00 NOON**

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## INSTRUCTIONS:

Answer question ONE and any other THREE questions

### QUESTION ONE (40 MARKS)

- a) Firms quoted and trading at the Nairobi Securities Exchange pursue shareholder wealth maximization goal. Justify the need why companies adopt this goal in contrast to other competing firm goals. (6 marks)
- b) A company is considering a new equipment. The net cashflows of the equipment have been estimated as given below. The equipment life is estimated to be two years.

Net Cash Flow	Year 1	Probability	Year 2	Probability
NCF	10,000	0.4	8,000	0.5
			12,000	0.5
NCF	12,000	0.6	16,000	0.4
			2,000	0.6

The cost of equipment is Kshs 20,000 and the company's cost of capital is 12 per cent.

### Required:

- i. Use the appropriate method to recommend whether the equipment should be bought or not. (7 marks)
- ii. Examine the limitations of method used to evaluate the new machine. (4 marks)
- c) Examine how dividend policy interact with capital structure to affect a firm's investment decision. (6 marks)

- d) Assess five ways informational efficiency impact corporate finance and investment. (8 marks)
- e) An investor is considering to invest either shares X and Y with the following returns.

X	Probabilities	Y	Probabilities
30%	0.10	-20%	0.05
20%	0.20	10%	0.25
10%	0.40	20%	0.30
5%	0.20	30%	0.30
-10%	0.10	40%	0.10

**Required:**

- i. Recommend to the investor which security to buy and why? (4 marks)
- ii. Advise the investor whether his investment is well diversified, suppose he wishes to invest in both share in equal proportion. (5 marks)

**QUESTION TWO (20 MARKS)**

- a) Differentiate among the schools of thought on dividends (Dividend Irrelevance, Dividend Preference and Tax aversion) and discuss their implication for shareholder value. (10 marks)
- b) Examine the potential effect of the following costs to the capital structure:
- i. Cost of financial distress. (4 marks)
- ii. Agency cost of equity. (3 marks)
- iii. Cost of asymmetric information. (3 marks)

**QUESTION THREE (20 MARKS)**

- a) In Japan, interest rates on short-term government bonds have been just over 0 percent in the past several years. If you could borrow and lend at risk -free rate of 0 percent, would using borrowed money to finance part of your portfolio still increase the risk of your position? (4 marks)
- b) Discuss the relevance of Capital Asset Pricing Model (CAPM) to investor's decision making. (6 marks)

c) A portfolio consists of three securities P, Q and R with the following parameters.

	P	Q	R	Correlation
Expected Return (%)	25	22	20	
Standard Deviation (%)	30	26	24	
Correlation				
PQ				-0.50
QR				+0.40
PR				+0.60

If the securities are equally weighted.

**Required:**

- i. Compute the standard deviation of the portfolio (4 marks)
- ii. Which set of securities should the investor hold and why? (6 marks)

**QUESTION FOUR (20 MARKS)**

The Mentala Plastics Company has been dumping in the local council waste collection centre some 30,000 Kg. of unusable chemicals each year. In addition to being an eyesore, the residents of a nearby estate have started complaining of bad odour emanating from the dump and suspect that the company is to blame.

The company has received information that these chemicals can be recycled at relatively little cost. The equipment to do it is however rather expensive and, in addition, the chemicals recovered are of a relatively poor quality. Investigations have shown that these chemicals can be sold to another firm at an average price of Sh.35 per Kg. The direct cost of recycling has been calculated at Sh.15 per Kg. but this is before depreciation and taxes.

The equipment for this process has an expected life of 10 years and a current cost of Sh.2 million. At the end of the ten years, it will be virtually worthless. For financial analysis, the company uses the straight-line method of depreciation and an average tax rate of 40%. It has a required rate of return of 15%.

**REQUIRED:**

- a) Does the project increase or decrease the wealth of the shareholders, to what extent? (6 marks)
- b) Discuss the pitfalls of using capital budgeting techniques in evaluating viable project. (4 marks)
- c) The firm is considering to lease the equipment or borrow from commercial banks. Advise the management the appropriate financing. (10 marks)

**QUESTION FIVE (20 MARKS)**

In recent past, four commercial banks in Kenya have faced temporal or permanent closure. The cause banks closure is attributable to agency problem.

**Required:**

- a) Explain what is meant by an “Agency problem”. (4 marks)
- b) Examine the impact of agency problem to shareholder wealth maximization. (6 marks)
- c) Assess mechanism that shareholders would adopt to minimize the agency problem. (10 marks)