



# MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ACCOUNTING BANKING AND FINANCE

THIRD YEAR SPECIAL/ SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF COMMERCE

BAC 308 CORPORATE FINANCE

DATE: 24/3/2021

TIME: 2.00-4.00 PM

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## INSTRUCTIONS:

*Answer question one and any other two questions.*

### QUESTION ONE (30 MARKS)

- a) Discuss the main objectives of a firm (10 marks)
- b) With the help of a diagram explain an optimum portfolio (5 marks)
- c) Briefly explain THREE types of mergers (9 marks)
- d) Consider two investments, P and Q each having the following investment characteristics;

Investment	Expected Return (%)	Proportion
P	10	2/3
Q	20	1/3

### REQUIRED:

Compute the expected return of a portfolio of the two assets. (6 marks)

## QUESTION TWO (20 MARKS)

Moto Ltd is taking over Rola Ltd; the following information is available for both companies which are quoted on the stock exchange:

	Moto	Rola
Net sales	Ksh.1,600, 000	Ksh.1,250, 000
Profit after tax	Ksh. 800, 000	Ksh.700, 000
Number of shares	100,000	50,000
Market price per share	Ksh.100	Ksh.80

Calculate the following for the companies:

- Earnings per share for the two companies (4 marks)
- Price earnings ratio for the two companies (4 marks)
- Market capitalization for the two companies (4 marks)
- Earnings per share after the merger and comment on the EPS effect to the shareholders of the two companies (8 marks)

## QUESTION THREE (20 MARKS)

Four assets have the following distribution of returns.

<i>Probability Occurrence</i>	<i>Rate of return (%)</i>			
	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
0.1	10.0%	6.0%	14.0%	2.0%
0.2	10.0	8.0	12.0	6.0
0.4	10.0	10.0	10.0	9.0
0.2	10.0	12.0	8.0	15.0
0.1	10.0	14.0	6.0	20.0

### REQUIRED:

- Compute the expected return and standard deviation of each asset.
- Compute the covariance of asset
  - A and B
  - B and C
  - B and D

**QUESTION FOUR (20 MARKS)**

- a) Discuss the assumptions of the Capital Asset Pricing Model (10 marks)
- b) Consider two investments X & Y each having the following characteristics:

<b>Investment</b>	<b>Expected Return (%)</b>	<b>Proportion</b>
X	20	2/3
Y	40	1/3

**REQUIRED:**

Compute the portfolio standard deviation if the correlation coefficient between the assets is

- i. 1
- ii. 0
- iii. -1

**QUESTION FIVE (20 MARKS)**

- a) Briefly discuss the three levels of market efficiency (9 marks)
- b) Ravin is considering purchasing debentures of Ksh.100, 000 issued by a company, maturing in 5 years. The interest payable by the company on the dentures is 7%p.a., the appropriate capitalization rate is 5%. Calculate what Ravin should pay now to purchase the debentures if they mature at par value. (11 marks)