

# UNIVERSITY EXAMINATIONS 2022/2023 ACADEMIC YEAR SUPPLEMENTARY EXAMINATIONS BACHELOR OF COMMERCE

COURSE CODE: BCF 312

COURSE TITLE: CORPORATE FINANCE

DATE:

10<sup>TH</sup> AUGUST,2023

TIME: 8.00AM - 10.00AM

# **INSTRUCTIONS TO CANDIDATES**

1. Answer a total of three questions; question one and any other two questions.

2.Questionone carries 30 marks and each of the other two questions carry 20 marks each.

#### **QUESTION ONE**

a) According to the shareholder theory, the primary purpose of a firm is usually defined as value maximization (for shareholders) which refers to maximization of a firm's equity, which is in fact the present value of expected benefits (cash flows) that shareholders can expect from the firm. According to this definition, a firm's value can be maximized only when expected benefits are maximized in the long-run.

Assess this statement with reference to the strengths of wealth maximization objective of a firm.

[6 marks]

b) The finger millet Project along the upland areas of lower Rift has the following cashflows over its useful life of 3 years. The market value (Abandonment value) has also been given.

Year	Cash flow	Abandonment
0	- 4,800	4,500
1	2,000	3,000
2	1,875	1,900
3	1,750	_

#### Required:

Determine when to abandon the project assuming a discount rate of 10%.[5 marks]

- c) Discuss the importance of international capital budgeting. [8 marks]
- d) Achievers Limited has obtained a grant to support under privileged children in the Mjini slums at the outskirts of Bungoma town. The Managing Director has approached you with the following data relating to a project they want to undertake:

The project will require initial investment of Kshs 100 million. The estimated annual net cash inflows over the next five years under three environmental factors are as follows:

<b>Environmental factor</b>	Probability	Amount '000
Most pessimistic	0.25	27,000
Most likely	0.5	36,000
Most optimistic	0.25	40,000

Concerns have been raised by National Environment Management Authority (NEMA) on the environmental impact assessment of this project. The estimated cost to be paid to NEMA is Kshs 10 million in the 3<sup>rd</sup> year and there is a probability of 0.1 that this will happen.

The company cost of capital is 16%.

#### Required:

Advice Achievers Ltd on whether they should undertake the projects. (11 marks)

#### **QUESTION TWO**

- a) With the help of a graph, distinguish between systematic and unsystematic risk (7 marks)
- b) Paramount bank is expected to pay you dividend of Kshs 7.60 per share in the coming year and to trade for Kshs 55.50 per share at the end of the year. Investment with equivalent risk to Paramount bank have expected return of 8.8%.

# Required:

i) Compute the price you would pay today for Paramount bank share

[3 marks]

ii) Calculate the dividend yield and capital gain if any that you would expect.

[3 marks]

c) Ocean Freight Limited has four subsidiaries in which it has invested in the following properties:

Subsidiary	Proportion of investment - %	Beta
North	50	0.7
West	30	0.9
East	15	1.3
South	5	1.5

#### Required:

i) Holding Company's beta

(3 marks)

ii) Assuming that the risk free rate is 7% and the market risk premium is 5%. Determine the holding company's rate of return. (4 marks)

#### **QUESTION THREE**

- a) The capital structure of a firm is affected by both equity and debt financing. Discuss the factors that affect the capital structure. [8 marks]
- b) Esambo Limited has investment capital of Kshs 20,000,000. It wishes to invest in two projects Y and Z in the following proportion: Kshs 12 million in Y and Kshs 8 million in Z. The returns on these securities depend on the state of the economy as shown below:

State of the economy	Probability	Returns of Y	Returns of Z
Boom	0.4	18%	24%
Normal	0.5	14%	22%
Recession	0.1	12%	21%

# Required:

Compute the expected portfolio returns

(7 marks)

c) Identify the assumptions of Net Operating Income Theory of capital structure [5 marks]

#### **QUESTION FOUR**

a) MaarifaLtd plans to pay Kshs 23 per share in dividends during the current financial year. Its equity cost of capital is 7% and the dividends grow at 5%. You are required to compute the value of Maarifa stocks[6 marks]

- b) Mwema Ltd an unlevered firm generates average earnings before interest and tax of Kshs 20 M per annum. The market value of the company as at 31st October 2017, the company's financial year end was Kshs 120M, the management of the company are contemplating the use of debt finance and has provided the following additional information:
  - The estimated present value of any future financial distress call is Kshs 80M
  - The probability of financial distress could increase with leverage according to the following schedule

Value of debt - Kshs M	Probability of financial distress
25	-1
50	0.0125
75	0.0250
100	0.0625
125	0.1250
150	0.3125
200	0.7500

The corporation rate of tax is 30%

### Required:

i)	The company's cost of equity as at 31st October 2017	[3 marks]
ii)	Weighted average cost of capital as at 31st October 2017	[2 marks]

c) With the help of graphs, explain the three approaches of working capital management [9 marks]

#### **QUESTION FIVE**

a) Capricon Limited investments are an all equity financial company with cost of capital of 12%. The company is considering the following capital projects:

Project	Initial capital outlay (' 000)	Expected cash flow in one year	Beta
A	4,000	4,380	0.3
В	4,000	4,520	0.5
С	6,000	7,120	0.1
D	8,000	9,540	1.5
Е	8,000	9,600	2.0

The risk free rate is 10% and expected return on average market portfolio is 15%

## Required:

Using Capital Asset Pricing Model, evaluate the projects and show the ones that are acceptable. Justify your decision. (14 marks)

b) Explain the assumptions of Modigliani and Miller hypothesis of capital structure. [6 marks]