

### "Investing in Africa's future"

# COLLEGE OF BUSINESS PEACE LEADERSHIP GOVERNANCE

#### NMAC309: FINANCIAL MANAGEMENT

### END OF SEMESTER FINAL EXAMINATIONS

### NOVEMBER 2022

# LECTURER: MR. MARTIN DZAPASI

### **DURATION: 3 HOURS**

### INSTRUCTIONS

- 1. This paper contains **TWO (2)** Sections with **FIVE (5)** questions.
- 2. Section A is compulsory
- 3. Answer any **TWO (2)** questions from **Section B**.
- 4. Start each question on a new page.
- 5. All answer scripts should be left with the invigilator at the end of the examination.

Authorized Materials: Non-Programmable Calculators.

### **SECTION A**

#### Question 1

Africa Investments, specializing in animal husbandry, is considering a new capital expenditure project. It is operating in joint venture with another separate company called Remington Investments. Africa Investments is considering embarking on piggery. It has been unable to raise enough capital for the project and as a result it has partnered with Remington Investments to operate in a joint venture. They believe that the project will enjoy monopoly for three years. After this, it expects to face stiff competition from new farmers entering into the industry. The director of finance has assigned a team to carry out a feasibility study and they have provided the following details

- I. The project has an immediate cost of \$1 800,000.00
- II. The project requires \$260000, \$120000 and \$130000 working capital injection in year one (1) to three (3) respectively.
- III. Sales are expected to be \$1 400 000.00 per annum for years 1 to 2, falling to \$900,000.00 per annum for the next two years then the last year, it will be 700 000.00. No further sales of the product are expected after the end of this five-year period.
- IV. Cost of sales is 40% of sales.
- V. Distribution costs represent 3% of sales.
- VI. 15% of net profits are payable Remington Investments, the year after the profits are earned.
- VII. At the end of 5 years the investment will have a scrape value of \$200 000.00
- VIII. The company's cost of capital is 7%.
  - IX. It is Africa Investments' policy to accept projects with a target payback period of 3 years
  - X. The target return on capital of Remington Ltd is 25%

#### Required

- a) Calculate the Net Present Value of the project at the company's required rate of return and advise on the acceptability of the project. (26 Marks)
- **b)** Compute the return on capital employed of the project and advice the management

(10 Marks)

c) Contrast the two investment appraisal techniques. Which one should be adopted by Africa Investments? (12 Marks)

2 marks will be given for good presentation

# Question 2

The following information relates to two companies, Fair Deal Ltd and Smart Play Ltd

State of economy	Probability of occurrence	Fair Deal Ltd Returns	Smart Play Ltd Returns
Boom	0.30	16	40
Normal	0.50	11	10
Recession	0.20	6	-20

a) Compute the expected return of:

(i) Fair Deal Ltd Returns and	(4 Marks)
(ii) Fair Deal Ltd Returns	(4 Marks)

b) Compute the standard deviation of the two companies. (10 Marks)c) Compute the coefficient of variation of the two companies and comment of the results

# **Question 3**

a) Discuss any five (5) motives of operating beyond a company's international boundary (25 Marks)

### Question 4

It is not always in the best interest of companies to be acquired or taken over by others. The directors of companies under threat of a takeover may employ defensive tactics to avoid it. Such tactics may either pre-merger or post-merger.

Elaborate three (3) Pre-merger tactics and three (3) Post-merger tactics.

(25 Marks)

(7 Marks)

### Question 5

a. Examine five (5) causes of financial distress and explain ways to overcome the causes identified. (25 marks)

## END OF EXAM

List of Formulae

WACC = 
$$\left(\frac{V_e}{V_{e+}V_{d+}V_p}\right) k_{e+} \left(\frac{V_d}{V_{e+}V_{d+}V_p}\right) k_{d(1-T)} + \left(\frac{V_p}{V_{e+}V_{d+}V_p}\right) k_{pref}$$
  
 $\mathbf{Ke} = \frac{\mathbf{D}_0(1+\mathbf{g})}{\mathbf{P}_0} + \mathbf{g}$ 

$$Ke = CAPM = Rf + \beta(Rf - Rm)$$

$$K_{pref} = \frac{d}{P_0}$$

$$Kd = \frac{i(1 - t)}{P_0}$$

$$Approximate Yield to Maturity = \frac{I + (Fd - Vd)/n}{[(Fd + 2Vd)]/3}$$

$$\sigma^{2} = \sum P_{n} \left( R_{n} - E(R) \right)^{2}$$
  
Covariance = 
$$\frac{\sum (\text{Return}_{ABC} - \text{Average}_{ABC}) * (\text{Return}_{XYZ} - \text{Average}_{XYZ})}{(\text{Sample Size}) - 1}$$
  
Correlation Coefficient = 
$$\frac{\text{Covariance}_{a,b}}{\sigma_{a}\sigma_{b}}$$

$$\sigma_{\text{portfolio}} = \sqrt{w_1^2 \sigma_1^2 + w_2^2 \sigma_2^2 + 2w_1 w_2 C \sigma v_{1,2}}$$
$$E(\mathbf{R}) = p_1 \mathbf{R}_1 + p_2 \mathbf{R}_2 + \dots + p_n \mathbf{R}_n$$