

# UNIVERSITY OF ESWATINI

## SECOND SEMESTER MAIN EXAMINATION PAPER, NOVEMBER 2021

### FACULTY OF SOCIAL SCIENCES

#### DEPARTMENT OF ECONOMICS

**COURSE CODE: ECO428** 

CORPORATE FINANCE II

TIME ALLOWED: 2 HOURS

#### **Instructions**

- 1. This paper consists of Section A and B;
- 2. Section A is compulsory;
- 3. Answer any two (2) questions from Section B.
- 4. All questions in Section B carry equal marks of 30 each

#### Special Requirements

1. Scientific Calculator

#### Additional Material (s)

None

Candidates may complete the front cover of their answer book when instructed by the Chief Invigilator and sign their examination attendance cards but must **NOT** write anything else until the start of the examination period is announced.

No electronic devices capable of storing and retrieving text, including electronic dictionaries and any form of foreign material may be used while in the examination room.

DO NOT turn examination paper over until instructed to do so

#### **SECTION A**

#### Question 1 (Compulsory and Carries 40 Marks)

a) Consider the following information about two stocks where the probability of an economic boom is 40%:

Economic State	Return A (R <sub>A</sub> )	Return B (R <sub>B</sub> )
Boom	38%	6%
Recession	-4%	12%

- [4] Calculate the expected return for stock A and stock B. i. Calculate the standard deviation of stock A and stock B. [6] ii. [3] Calculate the correlation between stock A and stock B. iii. Calculate the total risk (standard deviation) of a portfolio, where 1/8 of your money iv. [4] is invested in stock A, and 7/8 of your money is invested in stock B. Calculate the expected return on a portfolio with equal proportions in the risky v. [3] assets, and 30% in a risk-free asset.
- b) Write brief notes on the following:
  - i. The mean variance rule
  - ii. Mergers and Acquisitions
  - iii. Systematic risk vs unsystematic risk
  - iv. Dividend Policy

[5 Marks Each]

### SECTION B (ANSWER ANY TWO QUESTIONS)

#### Question 2

- a) A new project with an expected life of 3 years is expected to result in an increase in sales revenue of E20 million in the first year, E30 million in the second year and E10 million in the third year. Operating costs will amount to 70% of sales revenue and the company is required to make an investment in working capital of E60 million at the beginning of the project, which is recoverable at the end of the life of the project. The cost of the project is E18 million and the residual value at the end of 3 years is E11 million. The required rate of return is 14%. Assuming no taxation, what is the project's NPV? What is the project's IRR?
- b) Discuss any five (5) motives behind mergers.

[15]

#### Question 3

Earlier this year, Sabelo sold 200 shares of stock he owned. He purchased the stock three years ago for E28 per share. Following is a table that shows the market value of the stock at the end of each year and the amount of the dividend that Stuart received during the year.

Year	Market Value (per share)	Dividend (per share)
1	E26	E0.60
2	28	0.60
3	32	0.60

- a) What total return (yield) did Stuart earn during the three- year period he held the stock?
- b) What return did Stuart earn for each year he held the stock?

[9]

- c) Suppose the risk-free rate of return,  $R_{RF}$  is 4 percent, and the market return,  $R_{M}$  is expected to be 12 percent. What is the required rate of return for a stock with beta coefficient,  $\beta$ , equal to 2.5? [3]
- d) Discus the steps involved in the evaluation of capital projects.

[15]

#### Question 4

- a) Loving Gardens (LG) has E6 million in assets, E700, 000 EBIT, 80,000 shares of stock outstanding, and a marginal tax rate equal to 40 percent. If LG's debt-to-total-assets ratio (D/TA) is 70 percent, it pays 12 percent interest on debt, whereas if the D/TA ratio is 40 percent, interest is 9 percent. Calculate LG's EPS and ROE (ROE = Net income/Equity) for each capital structure. Which capital structure is better?
- b) Classification is relevant for evaluating project risk and determining the ranking of projects. Projects may be classified in a number of different ways. Discuss the different categories of investment projects. [15]