# University of Swaziland <br> Department of Accounting Supplementary Exam Paper - Semester - I 

| Programme of Study | $:$ Bachelor of Commerce |
| :--- | :--- | :--- |
| Year of Study | $:$ Year Three / Level 5 |
| Title of Paper | $:$ Intermediate Business Finance |
| Course Code | AC $322 / 415$ |
| Time Allowed | $: \mathbf{3}$ Hours. |

Instructions: 1. Total number of questions on this paper is four (4).
2. Answer all the questions.
3. The marks awarded for a question / part is indicated at the end of each question / part of question.
4. Where applicable, submit all workings and calculations on the answer sheet alongside the case.
5. Calculations are to be made to two decimal places of accuracy unless otherwise instructed.

Note: You are reminded that in assessing your work, account will be taken of accuracy of the language and the general quality of expression, together with the layout and presentation of your final answer.

Special requirement : Calculator

This paper is not to be opened until permission has been granted by the invigilator.

## QUESTION 1:

a) KIA Corporation has a bond that has a Face Value equal to E1,000 and an 8 percent coupon rate of interest. The bond, which matures in 15 years, is callable at $\mathrm{E} 1,080$ in 6 years. If the bond's current market price is E 1,044 , what is its yield to call (YTC)?
b) Ms Conventional has paid a constant E2 per share dividend to its common stock holders for the past 20 years. Beginning with the next dividend, Ms Conventional expects to increase the dividend at a constant rate equal to 2.5 percent per year into perpetuity. Investors require a $12 \%$ rate of return to purchase this stock.
i) What is the market value of Ms Conventional's common stock?
ii) What will be the expected price of this stock 3 years from now?
c) Today is January 1, 2013, and according to the results of a recent survey, investors expect the annual interest rates in the years 2016-2018 to be

| Year | 1 Year Rate |
| :---: | :---: |
| 2016 | $7.0 \%$ |
| 2017 | $5.0 \%$ |
| 2018 | $3.0 \%$ |

The rates given here include the risk-free rate, $\mathrm{K}_{\mathrm{RF}}$, and appropriate risk premiums. Today, a three-year bond - that is, a bond that matures on December 31, 2015 has an interest rate equal to $5 \%$.

## Required:

What is the YTM for bonds that mature at the end of 2016, 2017, and 2018? (6 marks) Total (24 marks)

## QUESTION 2:

Write short note on the following:
a) Working capital investment strategies
b) The role of financial intermediaries with special reference to Swaziland
c) Agency problem and mechanisms used to minimize such problems.
d) Expectation theory
e) DuPont Analysis

## QUESTION 3:

a) Swaziland Investments is considering two assets X and Y for inclusion in one of their portfolios. The probability distributions of expected returns of these assets are shown in the table below:

| State of <br> economy | Probable state <br> of economy | Stock X <br> Rate <br> return | of | Rtock Y <br> Rate <br> return | of |
| :--- | :---: | :--- | ---: | :--- | :--- |
| Recession | 0.10 | -0.40 |  | 0.60 |  |
| Normal | 0.60 | 0.20 |  | 0.30 |  |
| Boom | 0.30 | 0.90 |  | 0.60 |  |

## Required:

i) Calculate the expected rate of return for each of these two stocks (6 marks)
ii) Suppose, Swaziland Investments has got a corpus of E 50,000 and wishes to put E 15,000 in stock X and the remainder in stock Y , what will be the expected return and standard deviation of this portfolio?
( 10 marks)
iii) Explain the importance of correlation co-efficient in the context of portfolio risk. (4 marks)
b) At the end of its fiscal year, BCA had a current ratio of 4.0X and a quick ratio of 3.5X. If its total current assets equalled E 95,000 at the end of the year,

## Required:

What was BCA's current liabilities and inventory?

## QUESTION 4:

The Board of Directors of Ruby Ltd. requests you to prepare a statement showing the working capital requirements forecast for a level of activity of 156,000 units of production. The following information is available for your calculation.

|  | E per unit |
| :--- | ---: |
| Raw materials | 90 |
| Direct Labour | 40 |
| Overheads | 75 |
|  | 205 |
| Profit | 60 |
| Selling price per unit | 265 |

1. Raw materials are in stock on average one month
2. Materials are in process, on average 2 weeks (Assume $50 \%$ in completion stage.)
3. Finished goods are in stock, on average one month
4. Credit allowed by suppliers - one month
5. Time lag in payment from receivables -2 months
6. Lag in payment of wages- $11 / 2$ weeks
7. Lag in payment of overheads - one month
$20 \%$ of the output is sold against cash. Cash in hand and bank is expected to be E 60,000 . It is to be assumed that production is carried on evenly throughout the year. Wages and overheads accrue similarly and a time period of 4 weeks is equivalent to a month.
