## University of Swaziland <br> Department of Accounting <br> Main Exam Paper

| Programme of Study | $:$ Bachelor of Commerce |
| :--- | :--- |
| Year of Study | $:$ Year four (Full Time); Level 5 (Part Time) |
| Title of Paper | $:$ Business Finance I. |
| Course Code | $:$ AC 403 (Full Time)/IDE AC 403 (Part Time) |
| Time Allowed | $: \mathbf{3}$ Hours. |

Instructions: 1. The 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 and P V tables

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

## QUESTION 1:

a) The Swazi Holdings has total capital of E 800 million invested in five stocks:

| Stock | Investment (E) | Stock's Beta Co- <br> efficient |
| :--- | :---: | :---: |
| Royal Swazi Pulp | 256 million | 0.5 |
| Manzini Limited | 192 | 2.0 |
| Khuba Insurance | 128 | 4.0 |
| Leather Limited | 128 | 1.0 |
| Mbabane Bank | 96 | 3.0 |

The return on Swaziland Government T-bills is 6 per cent, whereas, the returns on SSX All-share Index have the following estimated probability distributions for the next period.

| Probability | Market Return |
| :---: | :---: |
| 0.2 | $12 \%$ |
| 0.1 | 10 |
| 0.4 | 13 |
| 0.1 | 17 |
| 0.2 | 16 |

## Required:

i) Compute the expected return for the market
ii) Compute the beta coefficient for Swazi Holdings
iii) What is the estimated equation for the Security Market Line (SML)?
iv) Compute the Swazi Holdings' required rate of return for the next period.
v) Suppose, Gamedze Mpendulo, the President, receives a proposal for a new stock. The investment needed to take a position in the stock is E50 million, it will have an expected return of 18 per cent, and its estimated beta coefficient is 2.0 . Should the new stock be purchased and included in the portfolio? At what expected rate of return should Gamedze Mpendulo be indifferent to purchasing the new stock?
(15 marks)
b) In general, can the riskiness of a portfolio be reduced to zero, by increasing the number of stocks in the portfolio? Explain.
( 5 marks)
c) The Dlamini Company's bonds have 5 years remaining to maturity, interest is paid annually, the bonds have a E 1,000 par value, and the coupon interest rate is 9 per cent.
i) Compute the approximate Yield To Maturity for the bonds if the current market price is E 829
ii) Would you pay E 829 for this bond if you thought that the approximate rate of interest was $12 \%\left(k_{d}=12 \%\right)$ ? Explain your answer.
(8 marks)
d) The current price of a preference share is E90 and the annual dividend is E 4.5. What is the yield on the preference share?
(2 marks)
Total (30 marks)

## QUESTION 2:

a) Discuss in detail the role of financial intermediaries and the economic functions they perform. Provide suitable examples from the financial system existing in Swaziland where available.
(15 marks)
b) Last year African Safari reported its net income after tax as E 650,000. A review of its income statement shows that African Safari's operating expenses (excluding depreciation and amortization) were $\mathrm{E} 1,500,000$, its depreciation and amortization expense was E 300,000 , and its tax rate was 35 per cent. African Safari has no debt - that is, all equity firm.
i) What was its sales revenue last year?
ii) What was the net cash-flow last year?

## QUESTION 3:

a) Quality Breads is a medium sized retailing shop, located in Matsapha Industrial Site that bakes its own breads. They require 100,000 units of wheat flour annually to cater for the demand in that area. The cost of each unit of wheat flour is E 7. Annual carrying costs are $10 \%$, and the cost of placing an order with its supplier is E15 per order. On average the supplier takes 7 days to deliver the goods. Quality Breads desired to maintain safety stock of 500 units to avoid stock outs.

## Required:

i) What is the Economic Order Quantity? (Round off to nearest integer)
ii) At what inventory level should an order be placed?
iii) What is the maximum inventory of wheat flour?
iv) What will Quality Bread's average inventory be?
v) What is the total inventory cost at EOQ?
vi) How often must Quality Bread order?
vii) What is Quality Breads' added cost if it orders 2,000 units rather than the EOQ quantity? What if it orders 2,200 units each time? Comment. (Assume a 360 day year)
(18 marks)
b) First Grade Olives sells a kilogram of Olive oil container for E 500. The variable cost to process and package each bottle is E 350 and fixed operating costs are E 200,000 annually. First Grade Olives usually sells 1000 kilograms each year, has an interest expense equal to $\mathrm{E} 40,000$ and its marginal tax rate is 30 per cent.

## Required:

i) What is First Grade Olive's operating Break-even Point?
ii) What is its Financial Break-even Point?
iii) Interpret the results thereof.

## QUESTION 4:

Joyce Dlamini an aspiring entrepreneur has leased a shop in Gables to start a business in buying and selling wooden handicrafts. Business has been good but Joyce has frequently run out of cash. This has necessitated late payment on certain orders, which in turn is causing a problem with suppliers. Joyce is planning to borrow from the bank to keep the cash ready when needed. Before she borrows, she needs to have a forecast of how much she should borrow. Accordingly she asked you to prepare a cash budget by giving the following estimates of sales and purchases for the period May 2012 through Jan 2013.

| Year | Month | Sales |
| :---: | :--- | ---: |
| 2012 | May | E 90,000 |
| 2012 | Jun | 90,000 |
| 2012 | Jul | 180,000 |
| 2012 | Aug | 270,000 |
| 2012 | Sep | 360,000 |
| 2012 | Oct | 180,000 |
| 2012 | Nov | 45,000 |
| 2012 | Dec | 180,000 |
| 2013 | Jan | 90,000 |
|  |  |  |

Collection estimates obtained from the credit and collection department are as follows: Collections with in the month of sale, 10 per cent; collections the month following the sale, 75 per cent; collections the second month following the sale, 15 per cent.

Payments for labor and raw material are typically made during the month following the one in which these costs have been incurred. Total labor and raw material costs are estimated for each month as follows:

| Year | Month | Purchases |
| :--- | :--- | ---: |
| 2012 | May | E45,000 |
| 2012 | Jun | 45,000 |
| 2012 | Jul | 63,000 |
| 2012 | Aug | 441,000 |
| 2012 | Sep | 153,000 |
| 2012 | Oct | 117,000 |
| 2012 | Nov | 81,000 |
| 2012 | Dec | 45,000 |
|  |  |  |

- General and administrative salaries will amount to approximately E $13,500 \mathrm{a}$ month;
- Lease payments are E 4,500 a month;
- Depreciation charges will be $\mathrm{E} 18,000$ a month;
- Miscellaneous expenses will be E 1,350 a month;
- Income tax payments of E 30,000 will be due in both Sep and Dec;
- A progress payment of $E 90,000$ on a new design studio must be paid in October;
- Cash on hand on $1^{\text {st }}$ Jul will amount to E 66,000.


## Required:

i) Prepare a cash budget for the last six months of 2012.
(18 marks)
ii) Assuming that the firm wishes to maintain E 45,000 of minimum cash balance throughout cash budget period, determine the required total financing or excess cash balance for each month, July through December.
(2 marks)
iii) If Joyce is requiring a line of credit to cover the needed financing for the period July to Dec, how large would this line have to be? Explain your answer.
( 5 marks)
Total ( 25 marks)

