University of Swaziland
Department of Accounting
Main Exam Paper

Degree/Diploma and Year of Study	:	B.Com IV
Title of Paper	:	Business Finance I.
Course Code	:	AC 403
Time Allowed	:	**3 Hours.**

Instructions:

1. **Total number of questions on this paper are four (4).**
2. **Answer all 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) The Swazi Pulp Industries bond currently sells for E955, has a 12% coupon interest rate and a E1,000 par value, pays interest annually, and has 15 years to maturity.

i) Calculate the Yield To Maturity (YTM) on this bond. Will you buy this bond if your required rate of return is 14%? Explain. ***(5 marks)***

ii) Explain the relationship that exists between coupon interest rate and required rate of return on a bond. ***(2 marks)***

b) Assume that the return on Swazi Government 6 month Treasury Bills is 9% per annum and the return on Swaziland Stock Exchange (SSX) All Share Index is 16%.

a) Draw a Security Market Line (SML). (Market risk (x axis)-required return (y axis)).
b) Calculate Market Risk Premium.
c) Calculate required return on asset A having a beta of 0.80 and asset B having a beta of 1.30.
d) Draw in the betas and required returns from part 'c' for assets A and B on the axes in part 'a'. Label the risk premium associated with each of these assets, and discuss them. ***(8 marks)***

c) Complete the statement given below and sales information in the table that follows for Big Wig Company using the following data:

Debt ratio = 50%
Quick ratio = .80 times
Total asset turnover = 1.5 times
Days sales outstanding (DSO) = 36 days
Gross profit margin = 25%
Inventory turnover ratio = 5 times
Assume a year consists of 360 days.

Statement of financial position

Cash	?	Accounts payable	?
Accounts receivable	?	Long term debt	60,000
Inventories	?	Common stock	?
Fixed assets	?	Retained earnings	97,500
Total assets	E300,000	Total liabilities & equity	?
Sales	?	Cost of goods sold	?

(15 marks)
Total (30 marks)

QUESTION 2:

a) Why should a company focus primarily on wealth maximization or maximizing earnings per share instead of profit maximization? Discuss in detail by giving illustrations where ever required. ***(18 marks)***

b) Explain the major functions of a finance manager. What do these functions have in common? ***(7 marks)***
Total (25 marks)

QUESTION 3:

a) The Credit Manager, Matsapha Wood Works, Matsapha is contemplating to change its Credit Policy. The proposal is to amend the credit terms to '2/10, net 30', instead of 'net 30'. Under this proposed Credit Policy 50 percent of the customers is expected to avail discount and pay on the 10^{th} day and remaining 50 percent will pay on 30^{th} day. Bad debt losses will remain at 2 percent of sales.

The average collection period is expected to decrease to 20 days from 30 days. Sales are expected to increase from E 720,000 to E 770,000. The company's variable cost ratio is 70% and the corporate tax rate is 30%. The company's opportunity cost of investment in working capital is 10%.

Required:

Calculate the effect the proposed change in credit policy using 360 as the number of days in the year and advice the company based on your analysis.

Note: Show the working clearly as a part of your answer.

(10 marks)

b) Real Industries, a real estate contractor in Mbabane, is developing a cash budget for October, November and December. Real's sales in September were E 400,000. Sales of E 800,000, E 600,000, and E 200,000 have been forecast for October, November, and December respectively.

Historically, 50% of the firm's sales have been on cash, and the remaining 50% will be collected a month after sale. In December the firm will receive a cash dividend of E50,000 from stock in a subsidiary. The firm's purchases represent 70% of sales all made for cash. Rent of E5,000 will be paid each month. Wages and salaries amount to E12,000 a month. An interest payment of E5,000 is due in December.

At the end of September, Real's cash balance was E40,000 and the company wishes to maintain a minimum cash balance of E70,000.

Required:

i) Determine the end of month cash balances for each month, October through December.
ii) Determine the required total financing or excess cash balance for each month, October through December. ***(10 marks)***

Total (20 marks)

QUESTION 4:

a) Ngwenya Plastics, manufacturer of all kinds of plastic products, now wants to introduce a new line of high quality plastic glasses. The necessary equipment to manufacture this new product is estimated to cost E 120,000 and would last 4 years. The tax relevant rate of depreciation is 25% on written down value. The equipment's estimated salvage value is E 8,000. The glasses can be sold at E5 each.

Regardless of the level of production, the manufacturer will incur cash cost of E 22,000 each year if the project is undertaken. The overhead costs allocated to this new line would be E 5,000 and the variable costs are estimated at E3 per glass. Ngwenya Plastics forecasts that it can sell about 100,000 glasses per year. Also, it is estimated that the firm requires additional working capital of E60,000 to this line and the weighted cost of capital of the firm is 20 percent and corporate tax rate is 30 percent.

Required:

Calculate the Net Present Value of the new line of production and advice Ngwenya Plastics as to the viability of the new line of production.

For your calculations use the following discount factors:

Year	**1**	**2**	**3**	**4**
Discount Factors	0.8333	0.6944	0.5787	0.4823

(15 marks)

b) The following inventory data pertain to Mittal Pulps in Nhlangano.

1. Annual sales are 436,000 units.
2. The purchase price per unit is E86.
3. Carrying cost is 25% of the purchase price of goods.
4. Fixed ordering cost is E50 per order.
5. Four days are required for delivery.
6. Safety stock is 5 days usage in inventory.

Required:

i) Find out the optimal (EOQ) quantity to be ordered.
ii) How many orders must Mittal Pulps place each year?
iii) At what inventory level should an order be placed? (Assume a 360 day year)
iv) Calculate the total cost of ordering and carrying inventories if order quantity is 1,500 units, 1,200 units and at the optimal (EOQ) quantity? Comment.

(10 marks)
Total (25 marks)

END OF QUESITON PAPER