University of Swaziland
Department of Accounting
Main Exam Paper - Semester - II

Programme of Study	:	Bachelor of Commerce
Year of Study	:	Year Three / Level Five
Title of Paper	:	Corporate Finance I
Course Code	:	AC 325/416
Time Allowed	:	**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 : Graph Paper & Financial Calculator

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

QUESTION 1:

a. Swazi Candles is a big manufacturer of stylized candles in different shapes and colours, located in Ezulweni Valley. Through-out the year the firm uses 500,000 tons of wax for making the candles and the purchase price of the wax for the firm is E 1,000 per ton. The cost of placing each order is E 2,500 and the carrying cost is 10% per ton. It takes the company 7 days from the date of order to the day of receiving. The firm has a habit of keeping at least 5 days of inventory in stock.

Required:

i) What is the EOQ? (Round it off to nearest integer)
ii) How many orders should Swazi Candles place each year?
iii) What is the value of the average inventory in store?
iv) At what inventory level should an order be placed?
v) What are the total costs if the order quantity is a) EOQ b) 4,000 c) 6,000 units? Coment.
vi) Now, suppose the supplier of wax offers a discount of **1 percent** for orders at least 7,000 tons, should the firm increase its ordering quantity to utilize the discount?

(15 marks)

b. The Mopeni Company must arrange financing for its working capital requirements for the coming year. The following options are available for Mopeni.

i) Borrow from its bank on a simple interest basis (interest payable at the end of the loan) for one year at a 10 percent simple rate.
ii) Borrow on a four month renewable loan at a 9.5 percent simple interest.
iii) Borrow on an instalment loan basis at a 5 percent add-on rate with 12 end-of-month payments
iv) Obtain the needed funds by no longer taking discounts and thus increasing its accounts payable. Mopeni buys on terms of 1/15, net 60.

Required:
What is the **EAR** of the least expensive type of credit, assuming 360 days per year?

(10 marks)
Total (25 marks)

QUESTION 2:

Patricia Dlamini, the owner of Purity Garments., is planning to request a line of credit from her bank. She is a novice in budgeting and she asks you, a finance expert to help her with the preparation of cash budget. Her marketing manager has provided you with the following sales forecasts and purchases forecasts by the production manager for the firm.

Month and Year	Sales	Purchases
November, 2014	E 50,000	E 60,000
December	80,000	40,000
January, 2015	25,000	30,000
February	35,000	20,000
March	40,000	40,000
April	50,000	35,000

- Collection estimates obtained from the credit department are as follows:
  Collections within the month of sale, 25 percent
  Collections the month following the sale, 60 percent.
  Collections the second month following the sale, 15 percent
- Other cash inflows are expected to be E 5,000 in February and E 10,000 in March.
- Payments for purchases are typically made during the month following the one in which these costs have been incurred.
- Wages and salaries amount to 20 percent of preceding month's sales
- Lease payments are E 2,500 a month
- Depreciation charges will be E 8,000 a month
- Tax of E 10,000 is due in March
- The firm intends to buy noncurrent assets of E 2,000 in the month of January
- A principal payment of E 3,000 is due in February.
- Cash on hand on 1st January 2015 will amount to E 500

Required:

i) Prepare a cash budget for the first four months of the year 2015

ii) Assuming that the firm wishes to maintain E 2,000 of minimum cash balance through-out the budget period, determine the required total financing or excess cash balance for each month, January through April

iii) Required line of credit to cover the needed financing for the period January through April. How large would this line have to be? Explain your answer

(25 marks)

QUESTION 3:

Sai Prints needs E 400,000 to buy a photo copier. There are two alternative financial plans which are under consideration to raise the needed finances.

Plan A	25% debt at an interest rate of 8 percent and the remaining by the issue of common stock.
Plan B	40% debt at an interest rate of 10 percent and the remaining to be raised by the issue of common stock

The current market price per share is E200. Assume a tax rate of 30%

Required:

i) If Sai Prints Earnings before Interest and Taxes (EBIT) are E 40,000 and E 60,000 what are the Earnings Per Share (EPS) under the two financial plans?
ii) Graph the two financial plans on the same set of EBIT-EPS axes. Identify the indifference point.
iii) Over what range of EBIT is each plan preferred?
iv) Discuss the leverage and risk associated with each financial plan.

(20 marks)

QUESTION 4:

a. Your company is considering two mutually exclusive projects, X and Y, whose costs and cash inflows after tax are shown below:

Year	X	Y
0	E – 2,000	E -2,000
1	200	2,000
2	600	200
3	800	100
4	1,400	75

The projects are equally risky, and the firms required rate of return on the projects is 12 percent.

Required:

i) Calculate NPV of each of the projects.
ii) Calculate IRR of each of the projects
iii) Also calculate MIRR of each of the projects
iv) Recommend which project is better based on each of the above three criterion.

(12 marks)

b. Write Short Note on the following:

i) The factors that must be considered while choosing a bank when you borrow.
ii) Relationship between operating leverage and operating break-even point.
iii) Two conditions that can lead to conflicts between IRR and NPV techniques.

(3*6 = 18 marks)
Total (30 marks)

End of exam question paper