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 : Financial Calculator

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

QUESTION 1:

a) The Lasser Company needs to finance an increase in its working capital for the coming year. Lasser has got the following 4 options before it.

   i) The firm can borrow from its bank on a simple interest basis for one year at 13 percent.
   ii) It can borrow on a 4-month, but renewable, loan at a 12 percent simple rate.
   iii) It can borrow on an instalment loan basis at a 5 percent add-on rate with 12 end-of-month payments.
   iv) The firm can increase its accounts payable by not taking discounts. Lasser buys on credit terms of 1/30, net 60 days.

   Required: What is the effective annual cost (EAR) of the least expensive type of credit, assuming 360 days per year? **(8 marks)**

b) Ngwenya Glass is a upcoming glass factory located at the outskirts of Mbabane city. In a drive to increase its sales the firm is considering easing its credit terms from 2/10, net 30 to 3/12, net 30 to speed up its collections. At present, 30% of its paying customers take the 2 percent discount.

   Under the new terms, discount customers are expected to rise to 50 percent. Regardless of the credit terms half of the customers who do not take discounts are expected to pay on time, whereas the remainder will pay 10 days late. However, bad debt losses are expected to remain at 2% level. Sales are expected to increase from E 2,000,000 to E 2,500,000 per year. Ngwenya's variable cost ratio is 65 percent, the cost of funds invested in accounts receivable is 10%. The firm is in 30 percent tax bracket. All costs associated with production and credit sales are paid on the day of the sales.

   i) What is the DSO before and after the change?
   ii) Calculate the costs of the discounts taken before and after the change
   iii) Calculate the cost of investment in accounts receivable before and after the change
   iv) Evaluate Ngwenya's change in credit policy and advice the management
   NOTE: Use contribution income approach. A year consists of 360 days

(20 marks)
Total (28 marks)

QUESTION 2:

a. Maverick Calculators, located in Matsapha Industrial Site, sells calculators that it purchases for E1500 each. It costs Maverick E 6,000 each time calculators are ordered, and carrying costs are 20 percent of the calculator's purchase price. Annual demand for these calculators is 100,000. It takes Maverick 8 days from the date of order to the date of receiving. The firm has a habit of keeping at least 5 days of inventory in stock.

Required:

i) What is the EOQ?
ii) How many orders must Maverick place each year?
iii) What is the value of the average inventory in store?
iv) What is the value of the maximum inventory in store?
v) At what inventory level should an order be placed?
vi) What are the total costs if the ordering quantity is a) EOQ b) 1000 c) 3000 calculators? Comment.
Assume a 360 day year. **(15 marks)**

b. The Swazi Artefacts produces giraffes, which it sells for E80 each. Fixed costs are E 4,000,000 for up to 200,000 giraffes. Variable costs are E48 per giraffe.

i) What is the operating breakeven point?
ii) What is Swazi Artefacts' degree of operating leverage at sales of
    a) 120,000 giraffes and 160,000 giraffes?
    b) Interpret the Degree of Operating Leverage coefficients.

(10 marks)
Total (25 marks)

QUESTION 3:

Your company is considering a machine which will cost E 500,000 at time 0 and which can be sold after 3 years for 200,000. E 120,000 must be invested at Time 0 in inventories and receivables; these funds will be recovered when the operation is closed at the end of year 3. The facility will produce sales revenues of E 500,000/year for 3 years; variable operating costs excluding depreciation will be 40 percent of sales. No fixed costs will be incurred. Operating cash in-flows will begin 1 year from today (at t = 1). The machine is to be depreciated at a rate of 30% using declining balance method. The company has a 40 percent tax rate and a 15 percent required rate of return. Inflation is zero.

Required:

i) What is the Project's NPV?
ii) What is the Project's IRR?

iii) Advice the management as to the viability of the project based on each of the above two criterion

(25 marks)

QUESTION 4:

i) Briefly explain the relationship between operating leverage and operating break-even point **(6 marks)**

ii) Briefly explain the Capital Budgeting Process **(5 marks)**

iii) Both accounts receivable and inventory are considered good collateral for short term loans. Explain the case of Accounts Receivable financing **(6 marks)**

iv) Briefly discuss any two methods used to accelerate collections **(5 marks)**

Total (22 marks)

END OF QUESTION PAPER