## University of Swaziland <br> Department of Accounting Supplementary 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) Intelligent Solutions (IS), forecasts that its sales for January through May will be $\mathrm{E} 120,000, \mathrm{E} 140,000, \mathrm{E} 180,000, \mathrm{E} 160,000$ and E140,000 respectively. All sales are credit sales, and past experience indicates that $40 \%$ of the sales will be collected in the month of the sale and that the remaining $60 \%$ will be collected the following month. Consumers who pay in the month of sale will take the 2 percent cash discount offered by Intelligent Solutions for paying early. IS, normally purchases and pays for raw materials, which cost 50 percent of the sales, one month prior to selling the finished products. Employees' wages represent $30 \%$ of the sales and rent is E 6,000 per month. At the beginning of February, IS expects to have E8000 in cash, and it wants to maintain a target cash balance of E6000.

## Required:

a. Using the information provided, construct Cash Budget for February, March, and April.
b. Prepare an estimate of the required financing (or excess funds) - for each month during the period.
c. What is the maximum line of credit required?
(18 marks)
b) Bofors Corporation needs to raise $\mathrm{E} 500,000$ for one year to supply capital to a new store. Bofors buys from its suppliers on terms of $3 / 10$, net 90 , and it currently pays on Day 10 and takes discounts, but it could forego discounts, pay on Day 90, and get the needed E500,000 in the form of costly trade credit. Alternatively, Bofors could borrow from its bank on a 12 percent discount basis. What is the EAR of the lower cost source?

## QUESTION 2:

a) Your Company is considering three projects $\mathrm{X}, \mathrm{Y}$, and Z , whose costs and cash inflows after tax are as given below:

| Year | Project X | Project Y | Project Z |
| :---: | :---: | :---: | :---: |
| 0 | $\mathrm{E}(180,000)$ | $\mathrm{E}(150,000)$ | $\mathrm{E}(156,800)$ |
| 1 | 72,500 | 0 | $(108,000)$ |
| 2 | 72,500 | 0 | 200,000 |
| 3 | 72,500 | 250,000 | 200,000 |

## Required: Compute the

i) Net Present Value
ii) Internal Rate of Return
iii) Modified Internal Rate of Return
iv) Discounted Pay-back period for each of the projects. The firm's required rate of return is $13 \%$
v) Which Project(s) should be purchased if they are mutually exclusive?

Total (28 marks)

## QUESTION 3:

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.
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.

## Required:

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.

## QUESTION 4:

Write Short Note on the following:
i) Line of Credit and Revolving Credit
(10 marks)
ii) Cash-flow versus Accounting Income (6 marks)
iii) Inventory control systems

## End of Exam Question Paper

