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

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|---|---|---|
| Programme of Study | : | Bachelor of Commerce |
| Year of Study | : | Year Three / Level Five & Six |
| 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.** Swazi Seeds and Fertilizers must borrow E3,400,000 to finance its working capital requirements. The bank has offered a 50 day simple interest loan with a quoted interest rate of 8 percent.

**Required:**

Calculate the loan's APR and $r_{EAR}$ assuming there is

i) No compensating balance requirement

ii) A 12 percent compensating balance requirement, which must satisfy from the loan proceeds.

iii) How much does Swazi Seeds and Fertilizers have to borrow so that it has E3,400,000 to pay its bills, if the loan requires a 12 percent compensating balance?

**NOTE: Take $r_{PER}$ up to five decimal digits.**

**(8 marks)**

**b.** Patricia Dlamini recently leased space in the Riverstone Mall and opened a new business, Patricia Fashions. Business has been good, but Patricia has frequently run out of cash. This has necessitated late payments on certain orders, which in turn is beginning to cause a problem with suppliers. Patricia plans to borrow from Standard bank to have cash ready as needed, but first she needs a forecast of just how much she must borrow. Accordingly, she has asked you to prepare a cash budget for the critical period, February and March.

Patricia Fashions forecasts that its sales for January through April will be E80,000, E90,000, E100,000 and E70,000 respectively. All sales are made on credit, and past experience indicates that 30 percent of the sales will be collected in the month of the sale and that the remaining 70 percent will be collected the following month. Customers who pay in the month of the sale will take the 2 percent cash discount offered by Patricia Fashions for paying early. Patricia Fashions normally purchases and pay for raw materials, which cost 60 percent of the sales price, one month prior to selling the finished products. Employees' wages represent 20 percent of the sales price, and rent is E4,000 per month. At the beginning of February, the firm expects to have E4,000 in cash. Its target cash balance is E5,000.

**Required:**

i) Prepare a monthly cash budget for the months of February and March.

ii) Prepare an estimate of the required financing (or excess funds)

iii) If Patricia Fashions requires a line of credit, to cover the needed financing for the period February and March, how large would this line have to be? Explain your answer.

**(17 marks)**
**Total (25 marks)**

**QUESTION 2:**

a. The CFO of Oasis Camping Equipment has decided that the company must sell its products on credit. As a result, she is evaluating two credit items.

1) Net 40, which would generate E80,000 in annual sales and have an average collection period (DSO) equal to 55 days.
2) Net 30, which would generate E72,000 in sales and have an average collection period equal to 40 days

The firm's variable cost ratio is 80 percent, and the average cost of funds 15 percent. All operating costs are paid when inventory is sold and all sales are collected at the DSO.

**Required:**

Which credit terms should the CFO recommend according to NPV method?

**(15 marks)**

b. Khuba Electronics Inc. produces stereo components that sell for E100 each. Khuba's fixed costs are E200,000; 5000 components are produced and sold each year; Variable cost per unit is E50. Khuba estimates that it can change its production process, adding E400,000 to investment and 50,000 to fixed operating costs.

This change will

1. reduce variable costs per unit by E10
2. increase output by 2,000 units
3. but, the sales price will have to be lowered to E95 to sell the 7,000 components.

Khuba has tax loss carryovers, so its current tax rate equals zero. Khuba uses no debt, and its average cost of capital is 10 percent.

**Required:**

i) What is the incremental EBIT?
ii) Estimate the rate of returns on new investment
iii) Should Khuba make the change?
iv) Would Khuba's degree of operating leverage increase or decrease if it made the change? What about its operating break-even point?
Interpret the results and comment.

**(15 marks)**
**Total (30 marks)**

**QUESTION 3:**

You are a financial analyst for Damon Electronics Company. The director of capital budgeting has asked you to analyze two proposed capital investments, Projects X and Y. Each project has a cost of $10,000, and the required rate of return (r) for each project is 12 percent. The projects' expected net cash flows are as follows:

| Expected Net Cash Flows | | |
|---|---|---|
| Year | Project X | Project Y |
| 0 | E(10,000) | E(10,000) |
| 1 | 6,500 | 3,500 |
| 2 | 3,000 | 3,500 |
| 3 | 3,000 | 3,500 |
| 4 | 1,000 | 3,500 |

**Required:**

i) Calculate each project's Discounted payback period, Net present value, Internal rate of return and Modified internal rate of return
ii) Which project or projects should be accepted if they are independent?
iii) Which project should be accepted if they are mutually exclusive according to each criteria?
iv) How much a change in the required rate of return produce a conflict between the NPV and IRR rankings of these two projects? Would this conflict exist if 'r' were 5 percent?
v) Why does the conflict exist? **Total (25 marks)**

**QUESTION 4:**

Write **Short Note** on the following:

i) Techniques for assessing a firm's stand-alone risk
ii) Revolving credit, Commitment fee
iii) Operating leverage and operating break-even point
iv) Methods of using inventory as security in inventory financing

**Total (4*5=20 marks)**

**END OF QUESTION PAPER**