

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

Programme of Study : Bachelor of Commerce
Year of Study : Year Three / Four
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 : Calculator

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

QUESTION 1:

- a. SUV Technologies, Matsapha, is in the business of producing automobile spares. As the company has recently experienced a continuous decline in its profitability, to turnaround, a new management team has been appointed. One of the areas to be addressed by them is whether or not the company's credit policy should be changed. In an attempt, SUV is considering changing its credit terms from 2/15, net 40 to 3/10, net 40 in order to speed up collections as well to boost up sales.

At present, 40 percent of SUV's paying customers take the discount. Under the new terms, discount customers are expected to rise to 50 percent. The change does not cause bad debt losses to rise above their present 2 percent level. However, sales are expected to increase from 1,500,000 to 2,000,000 as a result of increased cash discount. SUV's Variable cost ratio is 80%, the interest rate on funds invested in accounts receivables is 10 percent, and the firm's marginal tax rate is 40 percent.

Required:

- i) What is the DSO before and after change?
- ii) Calculate the cost of discount before and after the change.
- iii) Calculate the cost of carrying receivables before and after the change.
- iv) Calculate the bad debt losses before and after the change.
- v) What is the incremental profit from the change in credit terms? Should SUV change its credit terms?

NOTE: Use a 360 day year and round off all decimal digits to nearest integer.

(13 marks)

- b. The following information is available for two companies, both of which are in the confectionery industry.

	Polak	Siyabonga
Selling price per unit	E 15	E 20
Variable cost per unit	E 10	E 15
Quantity	20,000 units	25,000 units
Fixed operating costs	E 30,000	E 40,000
Interest	E 15,000	E 25,000
Tax rate	40%	40%
Number of Equity shares	5,000	9,000

Required:

- i) Calculate the EBIT and EPS for the two companies
- ii) Calculate the degree of operating leverage
- iii) Calculate the degree of financial leverage
- iv) Calculate degree of total leverage
- v) Discuss the relative riskiness of the two companies based on the leverage factors calculated.

(12 marks)

Total (25 marks)

QUESTION 2:

Write short notes on the following:

- i) The motives (reasons) for holding cash?
- ii) Sunk costs and opportunity costs with examples
- iii) Line of credit
- iv) Inventory control systems
- v) Operating leverage and operating break-even point

Total (5*5=25 marks)

QUESTION 3:

Southern African Power Corporation is engaged in the manufacture of power intensive products in Swaziland. It is a highly profitable company in the power space in African Continent. Now, as a part of its diversification plans, the corporation proposes to generate electricity using wind mills. The details of the proposal are given below:

1. Cost of the wind mill E 60 million.
2. Cost of land E 3 million.
3. Subsidy from the government to be received at the end of first year of installation E 3 million.
4. Maintenance cost will be E 0.8 million in year 1 and the same will increase by E 0.4 million every year.
5. Its life is estimated to be 10 years.
6. Cost of the funds invested 15%
7. Cost of electricity will be E 4.5 per unit in year 1. This will increase by E 0.10 per unit every year till year 7. After that it will increase by E 0.20 per unit
8. Residual value of the wind mill will be nil. However, land value will go to E 12 million, at the end of year 10.

9. Depreciation will be 100% of the cost of the wind mill in year 1 and the same will be allowed for tax purposes.
10. As wind mills are expected to work based on wind velocity, the efficiency is expected to be an average 30%. Gross electricity generated at this level will be 5 million units per annum. 4 percent of this electricity generated will be committed free to the State Electricity Corporation as per the agreement.
11. Corporate tax rate 30 percent

Required:

- i) Calculate the Net Present Value (Ignore tax on capital gains) and state whether the project is viable or not? **(23 marks)**
 - ii) List down two non-financial factors that should be considered before taking a decision. **(2 marks)**
- Note:** Round of the numbers to 2 decimal digits.

Total (25 marks)

For your calculation use the following discount factors.

Year	1	2	3	4	5	6	7	8	9	10
Discount factor	0.87	0.76	0.66	0.57	0.50	0.43	0.38	0.33	0.28	0.25

QUESTION 4:

- a. Aptech Corporation is in the business of assembling computers and in anticipation of demand for the coming year it expects to order 126,000 memory chips for inventory. Aptech uses this inventory at a constant rate. The cost of placing each order is E 200; the purchase price per chip is E 25; and the firm's inventory carrying cost is 20% of the purchase price. On average the supplier of memory chips takes 5 days to deliver the goods. Aptech Corporation desires to maintain safety stock equal to 30 day supply of chips. (Assume a 360-day year).

Required:

- i) What is the economic order quantity (EOQ)? (Round off to nearest integer)
- ii) What is the average inventory level?
- iii) What is the inventory level right after a delivery is made?
- iv) How many orders must Aptech place during a year?
- v) At what inventory level must Aptech place an order?

vi) What is its minimum cost of ordering and carrying inventory?
(15 marks)

b. Hi-Value Corporation has fixed operating costs of E 46,000 and variable costs that are 30 percent of the current sales price of E 2.15. At a price of E 2.15, Hi-Value sells 40,000 units. Hi-Value can increase sales by 10,000 units by cutting its unit price from E 2.15 to E 1.95, but variable cost per unit won't change. Should Hi-Value cut its price?

(10 marks)

Total (25 marks)

END OF QUESTION PAPER