MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF BUSINESS ADMINISTRATION

………… YEAR FIRST SEMESTER EXAMINATION FOR

MASTERS OF SCIENCE IN AGRIBUSINESS

AGB 803: FINANCIAL MANAGEMENT FOR AGRIBUSINESS

DATE: **TIME:**

INSTRUCTIONS:

- **Answer any FOUR Questions // All Questions have equal Marks**

QUESTION ONE (20 MARKS)

Cheese industries has an annual sales of Kshs. 5 billion; a cost of sales of 70% of sales and purchases that are 60% of cost of goods sold. Cheese also has an average age of inventory of 70 days, average collection period of 45 days, and average payment period of 40 days.

Required

a) Compute the following:

   i. Investment inventory held by Cheese over the period (3 marks)

   ii. The amount of account receivables the company has done over the cycle. (2 marks)

   iii. Cheese's operating cycle in days (2 marks)

   iv. The amount of trade credit extended by suppliers over the period (3 marks)

   v. The cash conversion cycle (2 marks)

b) Explain the concept of NPV (Net Present Value) and the theoretical meaning of the decision rule under which projects are accepted. (6 marks)

c) "Managers are expected to run corporations in the best interest of the shareholders. Presumably, the firm should maximize long term shareholder wealth; but that sometimes is not the case". Discuss the agency problems that arise as per the theory of the firm. Do you think ethical behavior of managers has a role to play in resolving agency problems? (7 marks)

QUESTION TWO (20 MARKS)

NGOBE Company is considering to invest Kshs.1 million in Pesticide Research and expects incremental cash flows of Kshs. 150,000 in perpetuity from this investment. Alternatively, the company could invest the same money in a marketing campaign for juice processed by Machakos county plant. In this 'made in Macha juice campaign' it will generate significant cash flows immediately for the next 5 years (Yr1- Kshs.450, 000; Yr2- 350,000; Yr3- 300,000; Yr4- 200,000 & Yr5- 100,000) before campaign slows down. A financial analyst has estimated what the opportunity cost of capital on projects in the next 6 months in Kenya will be given the uncertain state of the economy and likelihood (estimated at a probability of 0.5) of realizing expected cash flows as 12%.

Required:

a) Compute the risk-adjusted discount rate for the project cash flows (5 marks)

b) Compute the NPV of both investments (10 marks)

c) Advise NGOBE company which investment to undertake based on shareholder wealth creation if the company has only Kshs. 1. 2 million to invest. (10 marks)

QUESTION THREE (20 MARKS)

LEI Engineering Ltd has the following capital structure, which is considered optimal.

Debt	25%
Preferred shares	15%
Ordinary shares	<u>60%</u>
	100

LEI expected Net income this year is Kshs. 34,285, its established dividend payout ratio is 30 Percent; while its tax rate is 40%. Investors expect earnings and dividend to grow at a constant Rate of 9% in the future. LEI paid dividends of Kshs. 3.6 per share last year and its shares Currently sell at a price of Kshs. 54. LEI can obtain new capital in the following ways:

1. Preferred shares with a dividend of Kshs. 11 sold to the public at a price of Kshs. 95 per share.

2. Debt; which can be sold at an interest rate of 12%

Required

a) Determine the cost of each capital structure component (3 marks)

b) Calculate the weighted average cost of capital (4 marks)

c) LEI is considering adding the following agribusiness investment opportunities to its portfolio. They are typical average risk projects for the firm.

Project	Cost @ t=0	Rate of Return
A	Kshs. 10,000	17.4%
B	20,000	16.0
C	10,000	14.2
D	30,000	13.7
E	10,000	12.0

Which investment should LEI Eng. Ltd accept and Why? (8 marks)

d) "The banking sector is one of the primary sources of funds for a business, especially where financial markets are not developed".

Required:

i. Identify and explain two types of capital from both banking sector and financial market.

ii. Give at least one advantage and disadvantage, for each source of finance. (10 marks)

QUESTION FOUR (20 MARKS)

a) A new Tea truck will increase revenues by Kshs.50, 000 and operating expenses by Kshs. 30,000 per year. It will be depreciated over 3 years at Kshs. 10,000 per year. Your firm's marginal tax rate is 35%. Capital expenditures will be Kshs. 3,000 annually but no additional working capital will be needed. Calculate the yearly free cash flow. (6 marks)

b) A doghouse project requires an initial investment of Kshs. 50,000 and will produce FCFs (Free cash Flows) of Kshs. 20,000 for four years. At a 15% nominal cost of capital, Compute the NPV of the project. (6 marks)

c) The payback period method of evaluating investment projects is widely used by investors, although it has several limitations. Explain the advantages that account for its wide use.

(6 marks)

d) What is dividend and why are they paid? Explain two methods of paying dividend by Kenyan companies. (7 marks)

QUESTION FIVE (20 MARKS)

a) Explain any three challenges facing small scale farmers in raising financing for their activities. (10 marks)

b) Explain this statement "There's a trade-off between risk and return." what are the risks that face transformation of subsistence agriculture to agribusiness that pays the farmer a salary? (15 marks)