NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF NATURAL RESOURCE AND SPATIAL SCIENCES
DEPARTMENT OF AGRICULTURE & NATURAL RESOURCES SCIENCES

QUALIFICATION: BACHELOR OF AGRICULTURE	
QUALIFICATION CODE: 27BAGR	**LEVEL:** 7
COURSE CODE: FMA 720S	**COURSE NAME:** FINANCIAL MANAGEMENT (AGRICULTURE)
DATE: January 2020	**PAPER:** THEORY
DURATION: 3 Hours	**MARKS:** 100

SECOND OPPORTUNITY / SUPPLEMENTARY EXAMINATION QUESTION PAPER	
EXAMINER(S)	M. Lubinda
MODERATOR:	S. Kalundu

INSTRUCTIONS

1. Answer ALL four (4) questions.
2. Read all the questions carefully before answering.
3. Number your answers.
4. Make sure your student number appears on the answering script.

PERMISSIBLE MATERIALS

1. Examination paper.
2. Examination script.
3. Calculator

THIS QUESTION PAPER CONSISTS OF 6 PAGES (Including this front page)

QUESTION ONE	[MARKS]
a. Briefly discuss asset valuation. Your discussion should explain what asset valuation is and the different asset valuation techniques.	(6)
b. Consider a tractor whose purchasing cost is N$550,000 and an estimated useful life and terminal value of 10 years and N$50,000, respectively. Using the double-declining balance method, prepare a depreciation ledger that shows annual depreciation, accumulated depreciation, book value for the first four years.	(6)
c. A conservancy is planning to start a Hoodia processing enterprise and has approached you to assess the financial viability of the enterprise, in terms of profitability. The conservancy plans to harvest and process 200 tons of hoodia each year, and each ton is expected to be sold at N$2000. It anticipates the direct cost to be N$700 per ton on labor and N$500 per ton on other operating expenses. The conservancy's only fixed cost will be those associated with the use of a chipping and drying machine. The purchasing costs of the machine are anticipated to be N$120,000, and the conservancy expects to use it for five years at the end of which its value will be N$20,000. The conservancy intends to use the straight-line method to estimate the annual cost of using the equipment based on this information to answer the questions below.	
i. Prepare an Enterprise Budget for Hoodia, with a base unit of per kilogram, and state whether the enterprise financially feasible?	(9)
ii. Estimate the break-even price (per kg) and break-even quantity (in kgs) for the Hoodia enterprise.	(4)
TOTAL MARKS	**[25]**

QUESTION TWO [MARKS]

a. On 31 Dec 2018, Amos Poultry LLP completed its first year in business. Suppose you have just been employed as a Manager at Amos Poultry LLP, and your first assignment is to prepare the company's balance sheet for the financial year ended 31 Dec 2018. To accomplish the task, the following information, on transactions that Amos Poultry made in 2018, is provided to you:

- The company received a cash investment of N$350,000 from its owners.
- The company received N$300,000 loan from a bank. The company is obligated to pay back the loan, with a 10% interest, in two equal annual payments.
- A poultry house valued at N$450,000 was constructed using the company's money.
- The first batch of day-old chicks worth N$100,000 was purchased.
- Chicks worth N$20,000 died before being marketed.
- Feed and vaccines for N$40,000 were purchased.
- Sold all the surviving chickens in the first batch and made a cash profit of N$160,000.
- The second batch of day-old chicks worth N$120,000 were purchased.
- At the end of 2018, the company owed its creditors N$80,000 from credit purchases of inputs. The debt was structured as follows: 40% of it attracted no interest, while 60% attracted interest. Payment on this debt was made in the 2018 financial year.
- At the end of 2018, accumulated depreciation was estimated at N$30,000.

<u>Task</u>: As a Manager, you have two options. The first option is to hire an accountant to prepare the balance sheet for you and forfeit marks for this question. The second option is to use the information provided to answer the questions below:

i. Prepare a balance sheet ledger and enter the transactions above using the double-entry system. (15)

ii. Using the ledger, you have prepared in part b(i), generate a balance sheet for Sori Sori conservancy for the financial year ended 31 December 2018. (10)

TOTAL MARKS [25]

QUESTION THREE	[MARKS]
a. Describe the DuPont Analysis System, and briefly explain how you would use it to assess the earning power of a company in terms of return on assets.	(5)
b. Briefly discuss the equity statement. Your discussion should highlight its structure, purpose and use, and interpretation.	(5)

c. The accompanying table shows comparative balance sheets for ABC Ltd the financial years 2017 and 2018. Use the information to answer the questions below.

	Dec 31 2017 (N$ '000)	Dec 31 2018 (N$ '000)
ASSETS		
Cash	130	20
Accounts Receivable	200	260
Inventory	470	580
Net Fixed Assets	700	700
Total Assets	**1,500**	**1,560**
LIABILITIES AND EQUITY		
Accounts payable	330	510
Notes payable	270	100
Long-term debt	300	300
Common stock	100	100
Retained earnings	500	550
Total Liabilities and Equity	**1,500**	**1,560**

i.	Use the indirect method to prepare and interpret the cash flow statement for ABC Ltd for the 2018 financial year. Make sure you show all the steps of the indirect method.	(10)
ii.	Use the indirect method to prepare and interpret the equity statement for ABC Ltd for the 2018 financial year.	(5)

TOTAL MARKS **[25]**

QUESTION FOUR [MARKS]

Assume you are a Manager for a Community Forest Project that supports the harvesting and marketing of non-timber forestry products. Suppose one of the Community Forests your project supports, is anticipating a large order for devil's claw in January through April 2019. The Community Forest would like to assess whether it will generate sufficient revenue to cover the cost of the order. Suppose further that you have been provided with the following actual and projections of cash inflows and cash outflows:

- Actual and Projected Cash Inflows

Credit Sales (Actual/Projected)	N$'000
December	90
January	120
February	100
March	80
April	110

  - The Community Forest's average collection period on credit sales is 30 days.

- Projected Cash outflows
  - Credit purchases of devil's claws are expected to be 40 percent of the previous month's sales. Monthly purchases of devil's claws are expected to be 40 percent of last month's sales. The average payment period of 30 days is expected on all purchases
  - Selling, general, and administrative expenses are projected to be N$90,000, N$40,000, N$30,000, N$40,000 from January through April.
  - Other operating expenses are expected to be N$20,000 per month

Based solely on the projections above, and an assumed beginning cash balance of N$50,000 in January, answer the following questions:

a. Prepare a cash flow budget for the period January through April. Determine whether or not borrowing will be necessary during the period, and if it is, when and for how much. (20)

b. Suppose the Community Forest wishes to maintain at all times a minimum cash balance of N$50,000. Determine whether or not borrowing will be necessary during the period, and if it is, when and for how much. (5)

TOTAL MARKS **[25]**

THE END

22/10/2019

Financial Ratios

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$\text{Inventory turnover} = \frac{\text{Cost of goods sold}}{\text{Inventory}}$$

$$\text{Gross Profit Margin} = \frac{\text{Gross Profit}}{\text{Total Sales}}$$

$$\text{Average Payment Period} = \frac{\text{Accounts payable}}{\text{Average purchases per day}}$$

$$\text{Times interest earned ratio} = \frac{\text{Net profit before interest and tax}}{\text{Interest expense}}$$

$$\text{Operating Profit Margin} = \frac{\text{Operating Profit}}{\text{Sales}}$$

$$\text{Return on Equity} = \frac{\text{Net Profit after taxes}}{\text{Total Equity}}$$

$$\text{Asset turnover} = \frac{\text{Sales}}{\text{Total Assets}}$$

$$\text{Quick Ratio} = \frac{\text{Current Assets less Inventory}}{\text{Total Current Liabilities}}$$

$$\text{Average Collection Period} = \frac{\text{Accounts receivable}}{\text{Average Sales per day}}$$

$$\text{Debt ratio} = \frac{\text{Total liabilities}}{\text{Total Assets}}$$

$$\text{Leverage Ration} = \frac{\text{Total Liabilities}}{\text{Total Equity}}$$

$$\text{Net Profit Margin} = \frac{\text{Net Profit after taxes}}{\text{Sales}}$$

$$\text{Return on Assets} = \frac{\text{Net Profit after taxes}}{\text{Total Assets}}$$

Other Formulas and Information

$$\text{Break-even quantity} = \frac{\text{Total cost}}{\text{Expected Output price}}$$

$$\text{Break-even price} = \frac{\text{Total cost}}{\text{Expected Output}}$$

Straight-line Depreciation: $Annual\ Depreciation = \frac{Cost - Salvage}{Useful\ Life}$

A debit increases assets and reduces liabilities and equity
A credit reduces assets and increases liabilities and equity

A cash inflow is a reduction in assets and an increase in liabilities and equity
A cash outflow is an increase in assets and a decrease in liabilities and equity