



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY
FACULTY OF COMMERCE, HUMAN SCIENCES & EDUCATION**

DEPARTMENT OF ECONOMICS, ACCOUNTING & FINANCE

QUALIFICATION: BACHELOR OF ACCOUNTING (CHARTERED ACCOUNTANCY)	
QUALIFICATION CODE: 07BACC	LEVEL: 6
COURSE CODE: FAM601Y	COURSE NAME: FINANCIAL MANAGEMENT 200
SESSION: OCTOBER/NOVEMBER 2025	PAPER: PRACTICAL AND THEORY
DURATION: 2 HOURS 20 MINUTES	MARKS: 100

ASSESSMENT 6 – FIRST OPPORTUNITY EXAMINATIONS	
EXAMINERS:	Mr. Immanuel-King Kenaruzo
MODERATOR:	Mr. Simeon Nghiwilepo

INSTRUCTIONS	
<ul style="list-style-type: none">• This question consists of two questions with five (5) required.• Start each part of the required on a new page.• Answer All the questions in blue or black ink.• Show all your work on the answer sheet.• The use of a pencil is not allowed.• Questions relating to this paper may be raised in the initial 30 minutes after the start of the paper. Thereafter, candidates must use their initiative to deal with any perceived error or ambiguities and any assumption made by the candidate should be clearly stated.	

PERMISSIBLE MATERIALS

Non-programmable calculator/financial calculator

THIS QUESTION PAPER CONSISTS OF 8 PAGES (Including this front page)

FAM601Y, Assessment 6 (1ST Opportunity)

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BUSINESS OVERVIEW

NamPower, Namibia's national power utility, has for decades been a mainstay of the nation's economy and is now positioned, in a free, independent and stable Namibia, to be a main driver of Vision 2030, Namibia's blueprint for broad-based, sustainable economic growth.

NamPower's core business is the generation, transmission and energy trading, which takes place within the Southern African Power Pool (SAPP), the largest multilateral energy platform on the African continent. NamPower supplies bulk electricity to Regional Electricity Distributors (REDs), Mines, Farms and Local Authorities (where REDs are not operational) throughout Namibia.

CENORED

CENORED is the 3rd licensed regional electricity distribution company to be established in Namibia, after NORED and Erongo RED in 2002 and 2004 respectively.

CENORED license area covers the Otjozondjupa, part of Oshikoto and Omaheke and Kunene regions and has a customer base of approximately 34,000 customers in its main supply area (plus some 3,300 in the Omaheke Region and some 6,400 in Okahandja), ranging from large power users to single-phase prepayment clients over an area of approximately 120 000 square kilometres and 8 000 kilometres line infrastructure.

CENORED runs a coal-fired cogeneration (CHP) plant on the outskirts of Ruacana Waterfalls (RW). The plant jointly produces:

- Electricity (sold into the grid), and
- Process steam (sold to nearby industrial clients).
- It also generates minor by-products (fly ash and gypsum) which are saleable.

Which are produced in three processes:

Process 1 – Fuel Preparation

At RW coal-fired cogeneration plant, the production process begins with fuel preparation. Large consignments of raw coal are received, screened, crushed, and stored in silos before being conveyed to the boiler bunkers. During this stage, normal handling losses such as dust and moisture evaporation are expected of 2% of input with no scarp value. There is no opening or closing inventory in any given month in this process.

Process 2 – Boiler & HP Steam Generation

- Prepared coal is burned to produce high-pressure (HP) steam
- Water treatment chemicals and demineralised water added; blowdown and evaporation losses occur with normal loss as 5% of input and scarp value of N\$40 per tonne.
- Material and conversion cost both occur evenly throughout the process, with inspection done when material & conversion are 50% complete.

- Output measure: tonnes of HP steam transferred to Process 3 and inventory is valued at weighted average.

Fuel Preparation – Process 1	Units (kg)	Cost (N\$)
Units placed in production in the current period	50 000	52 500 000
<u>Costs incurred during the period</u>		
Finish goods	49 000	?
Normal loss	1 000	?
Boiler & HP Steam – Process 2	Units (tonnes)	Cost (N\$)
Work in process – beginning Materials (40% completed) Conversion (60% to be completed)	20 000	
Previous process		19 950 000
Direct material		2 273 500
Conversion costs		6 851 375
Units placed in production in the current period	?	
<u>Costs incurred during the period</u>		
Previous process cost		?
Direct material		45 660 000
Conversion costs		12 600 000
Work in process – ending Materials (50% completed) Conversion (30% completed)	5 000	
Normal loss	?	
Units completed and transferred to following process	?	

Process 3 – Turbine-Generator with Steam Extraction (Joint split-off)

The steam produced is carried forward into the turbine hall, where the combined turbine and generator convert its thermal energy into electricity. At the same time, part of the steam is extracted at an intermediate pressure and sold directly to nearby industrial clients, marking the split-off point for joint products. After this point, electricity is measured, transmitted into the national grid, and subject to wheeling and system operator charges, while the process steam is distributed through insulated pipelines to customers, incurring pumping and metering costs along the way.

Once the joint products are split off, each stream incurred its own additional costs. The electricity produced is channelled into the national grid and attracted transmission, wheeling, and system operator charges amounting to N\$90 for every megawatt-hour/tonne sold. At the same time, it could be sold under prevailing bulk supply agreements to NamPower at an average selling price of N\$6 500 per megawatt-hour/tonne. The process steam diverted for industrial use was delivered to customers through pipelines, which required pumping, condensate return, insulation maintenance, and customer metering. These post-split-off costs amounted to N\$30 per tonne of steam supplied, while the average realised selling price at the customer flange was N\$1 800 per tonne. The second process for the month of November 2025 yield 70 000 tones with a cost of N\$113 283 500 and N\$18 993 875 for direct material and conversion cost respectively, which is shared 40% and 45% respectively between process stream and electricity. The balance is shared equally by two saleable by-products which emerged at this stage: fly ash (the first by-product), which could be sold for N\$70 per tonne after incurring N\$10 per tonne in disposal costs, and gypsum (the second by-product), which realised N\$120 per tonne but required N\$15 per tonne in selling costs.

CITY OF WINDHOEK (COW)

COW electricity division has an investor (Hileni-Pohamba Ltd) who is willing to build an 80 MW combined-cycle gas turbine (CCGT) plant near Windhoek to sell bulk energy to NamPower under a standard offtake arrangement. Hileni-Pohamba Ltd wants to know how many kWh must be sold in a year to break even on the plant's annual cost obligations.

Cost item	Annual amount (N\$)	Notes
Depreciation (straight line, 25 years)	40,000,000	1,000,000,000 ÷ 25
Interest / finance charges (annual)	70,000,000	finance servicing estimate
Operation & maintenance (O&M)	35,000,000	routine plant O&M, spare parts
Fuel (gas)	189,216,000	The cost changes with based on the amount of electricity produced, based on 420,480 MWh × N\$450/MWh
Staffing & admin	18,000,000	These are all permanent staff who all receive a monthly salary, office admin
Insurance	6,000,000	annual insurance premium
Transmission / wheeling charges	37,843,200	The cost changes with based on the amount of electricity produced, based on 420,480 MWh × N\$90/MWh
Other (marketing, permits, misc)	5,000,000	regulatory
Total annual cost (sum of the above)	N\$401,059,200	(rounded to N\$401.06 million)

Reporting period: one year, the construction and installation cost of the plant is N\$1 billion. Assume the plant operates at an average utilisation that yields an overall production of electricity shown below.

Technical assumptions

- Nameplate capacity: 80 MW.
- Hours per year: 8,760.
- Assumed plant utilisation factor: 60% (i.e. average output = $80 \times 8,760 \times 0.60$).
- Annual generation (calculated): 420,480 MWh = 420,480,000 kWh.
- Selling price per MWh is N\$2,061.10 per MWh.

FINANCING BY INVESTOR

The investor of the 80 MW combined-cycle plant requires **N\$1 billion** to fund construction. Hileni-Pohamba Ltd is considering three financing routes:

1. Loan - Hileni-Pohamba Ltd has approached a consortium of local banks that has offered them 10 year loan of the capital required repayable at the expiration of the loan with 12% interest per annum, payable annually.
2. Preference shares - As an alternative, the company is considering issuing perpetual preference shares to institutional investors with a current market price expected to N\$95 per share at issue and nominal value of N\$100 per share and yielding returns of 11%.
3. Right issue – The company has 150 million shares in issue with a historical value of N\$15 each. The current trading price of the shares are N\$25 and will be issued at N\$20 to raise the capital, they have sufficient authorised shares for the rights issue. The proposed rights issue is 1:2. The company's beta is 1.2 and expected market return of 14%. Government bonds redeemable in 2029 and 2033 are yielding a return of 6% and 7%.

CENORED, KING LLC & NAMPOWER

CENORED, one of Namibia's regional electricity distributors, faced mounting pressure to expand and modernise its distribution infrastructure to reduce frequent outages in semi-urban and rural areas. However, the company was struggling with liquidity constraints and already carried significant arrears in payments owed to NamPower, its main supplier of bulk electricity.

To raise capital, CENORED entered into negotiations with a foreign private investor (King LLC), promising high returns on a new electrification and smart-metering project. In order to persuade King LLC, CENORED presented projections showing unusually low bulk electricity tariffs from NamPower. These tariffs were portrayed as "preferential rates" based on CENORED's "strategic partnership" with the utility. However, in reality, no such preferential agreement existed, and NamPower had in fact refused requests to lower tariffs, citing its own financial sustainability challenges.

King LLC, convinced by the promised cost savings, agreed to inject over N\$500 million into the project. Contracts were signed, and funds were released. NamPower soon became aware that its name and tariffs had been misrepresented in the investor pitch. NamPower issued a statement denying any preferential tariff arrangement with CENORED, which immediately created tension between the entities. King LLC, upon learning of the misrepresentation, FAM601Y, Assessment 6 (1ST Opportunity)

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threatened legal action but was locked into the financing agreement, exposing them to potential losses.

At the same time, CENORED continued to enjoy the benefits of the financing and proceeded with partial implementation of the project. In the background, communities served by CENORED began to worry that if the project failed or costs escalated, electricity tariffs might increase further to cover losses. Local employees at CENORED also expressed discomfort, as some had been asked to prepare promotional materials for the Investor that they knew were misleading.

	REQUIRED:	Sub-total	Total
A	Calculate the value of goods completed and transferred (finished goods), value of work in process closing inventory units for Boiler & HP Steam – Process 2. <i>Presentation and layout</i>	(24) (1)	(25)
B	Hileni-Pohamba Ltd requires an annual return of 11.5% of the capital cost invested, calculate the minimum revenue that COW should obtain to meet Hileni-Pohamba' Ltds request to break even.	(14)	(14)
C	Based on the information under financing by investor, calculate: 1. The cheapest financing option 2. How many shares do the current shareholders of Hileni-Pohamba Ltd need to maintain to keep their wealth as is before the rights issue. <i>Presentation and layout</i>	(19) (1)	(20)
D	Using the ethical triangle, apply it on the information under heading "CENORED, King LLC & NamPower" <i>Presentation and layout</i>	(15) (1)	(16)
	TOTAL MARKS		75

BUSINESS OVERVIEW

Angela Furniture Ltd is a medium-sized Namibian manufacturing company based in Windhoek, Khomas Region. Founded by Angela Ipinge in the early 2000s, the company produces a range of solid wooden desks using locally sourced hardwood, which is polished and finished in various designs. These desks are sold both locally and internationally.

Initially launched to complement the Namibia Trade Expo in 2016, where lead designer Henok Brandt sponsored the office furniture section, the desks quickly gained popularity. As a result, the company expanded its presence by participating in other national trade fairs and opening four retail stores across Namibia.

Under the contract, the distributor will determine order volumes, and Angela Furniture Ltd will fulfil the supply accordingly. The set price is **N\$2,800 per desk**, consistent across both local and export markets. However, Henok is hesitant, as she believes the company may be capable of exporting directly to international retailers without relying on an intermediary.

MANUFACTURING PROCESS

The production of a wooden desk begins with cutting kiln-dried hardwood planks into 2.5-metre slabs using a precision saw. These slabs are then planed and polished to the required smoothness, ensuring consistent quality.

Once prepared, the slabs are cut into specific patterns for the tabletop, drawers, and legs. Additional fittings such as drawer handles, hinges, and screws are sourced separately. These components are then assembled, beginning with frame construction, attaching legs, and securing drawers, before sanding and staining for the final finish.

Each wooden desk takes approximately:

- **60 minutes** for wood preparation and cutting,
- **90 minutes** for assembly and joining,

The desks are sold individually and packaged for safe local and international transport.

Hardwood timber	Note 1
Wood stain and varnish	Note 2
Labour cost	Note 3
Packaging (carton boxes)	Note 4
Water and Electricity	Note 5
Rent	Note 6

Notes:

1. **Hardwood Timber:** Angela Furniture Ltd sources high-quality hardwood planks from Kavango Timbers. During the current financial year, the company acquired 36 000 metres of planks at a cost of N\$95 per metre. An opening stock of 500 metres was available from 2024 at N\$90 per metre.
2. **Stain and Varnish:** The finishing process requires 500 millilitres of wood stain and varnish per desk. Any purchased in the current and prior year were at N\$60 per litre, with 20 litres carried over as opening and closing stock each year.

3. Labour Costs:
 - a. Two qualified carpenters at N\$35/hour,
 - b. Two assistant carpenters at N\$18/hour,
 - c. A factory manager remunerated based on production volume (salary for 2025 was N\$280,000).
4. Packaging: 15,500 cartons were purchased at N\$8.00 each. Classified as insignificant, excluded from production costing.
5. Utilities (Water & Electricity): Total annual cost = N\$1,108,200, apportioned as before (50% fixed, variable split 70/30 between factory and admin):

Month	Total meter reading	Total cost (R)
September	1,180	87,200
October	1,460	95,800
November	1,050	83,600
December	1,720	106,500
January	1,390	93,400
February	1,640	102,800
March	760	74,200
April	1,880	111,700
May	1,530	98,600
June	1,210	89,900
July	1,350	92,700
August	690	71,800

6. Rent: Facility rent for 250 m² building = N\$135,000. 210 m² allocated to factory.

During the year, 14,500 desks were produced, of which 7,200 desks were sold, owing to the effectiveness of the marketing strategy. There was no opening inventory of finished goods. The company values inventory on a FIFO basis. No work-in-progress inventory at the start or end of the year.

	REQUIRED:	Sub-total	Total
A	Prepare Angela Furniture Ltd's statement of goods manufactured for the year ended 31 August 2025.	(24)	(25)
	<i>Presentation and layout</i>	(1)	