

CERTIFIED PUBLIC ACCOUNTANT ADVANCED LEVEL 2 EXAMINATION A2.1: STRATEGIC CORPORATE FINANCE DATE: WEDNESDAY 28, MAY 2025

INSTRUCTIONS:

- 1. Time Allowed: **3 hours 45 minutes** (15 minutes reading and 3 hours 30 minutes writing).
- 2. This examination has two sections; A & B.
- 3. Section A has one Compulsory Question while Section B has three optional questions to choose any two.
- 4. In summary attempt three questions.
- 5. Marks allocated to each question are shown at the end of the question.
- 6. The question paper should not be taken out of the examination room.

SECTION A

QUESTION ONE

It is currently believed that there is a shift in investment paradigm due to COVID -19 and the Russia and Ukraine war. There is a lot of uncertainties in market, the post COVID -19 projects require a lot of research and vigorous investment analysis.

Rebero Investment Co. (RI Co) is a private equity company working in Rwanda since 2012. Recently, it has been registered under the Kigali International Finance Center (KIFC). The company invests in different sectors including manufacturing, energy, Fintech and Heath care. Akariza Dorothy is a Chief Investment Officer (CIO) and her investment team is evaluating a new investment in a pharmaceutical company called "AMIZERO Ltd".

AMIZERO Ltd is a developing Malaria Vaccine in collaboration with the Government of Rwanda, with different partners including: USAID, UK Aid and World Health Organization (WHO). You are a Senior investment associate at RI Co and you have been assigned to lead investment analysts for doing research and drawing market recommendations on whether RI Co should invest in AMIZERO Ltd using the Adjusted Present Value (APV).

You have been provided with the five years financial data from 2017-2021 as extracted from AMIZERO Ltd.'s books of accounts. AMIZERO Ltd is considering the raise funds for its future expansion strategy in research and development of a Malaria vaccine.

Table 1. AMIZERO	Ltd Income S	Statement Evo	lution (2017-2021)
------------------	--------------	---------------	--------------------

PARMAY2025ICPARMAY2025 ICP	ARMAY2025ICPAR	RW "000"	2025ICPARMAY2	025 ICPARMAY20	25ICPARMAY2
Particulars ARMA 2025 CP	AR MAY2025 2017	2018	2025 2019	25 0 2020	2510 A 2021
Sales 2025 CPARMAY 2025 ICP	300,000	320,000	350,000	390,000	440,000
Cost of Sales	210,000	224,000	245,000	273,000	308,000
Gross profit	AR MAY20 90,000	96,000	105,000	2 117,000	132,000
Depreciation	AB MAY2 30,000 A	30,000	30,000	30,000	30,000
Operating income	AR MAY2 60,000 A	66,000	75,000	87,000	102,000
Interest expense	13,500	10,800	8,100	5,400	25,700
Taxable income	46,500	55,200	66,900	81,600	99,300
Tax expense (30%)	13,950	202 16,560	20,070	24,480	29,790
Net income ARMAY2025 19	<u>32,550</u>	202 <u>38,640</u>	46,830	57,120	69,510

The following assumptions were presented by analysts before making any investment appraisals: PARMAZOZE CHARMAZOZE CHARMA

1. The revenue income will increase at the rate of inflation expectation of 6% above risk free rate in the first three years of forecasting before it grows at the rate of 4% above risk free rate in the remaining years.

- 2. Gross profit margin is expected to be 55% in the first three years of forecasting and become 60% afterward.
- 3. The capital expenditure in research and development was expected to be FRW 375,000,000 in 2021 which is subject to capital depreciation allowance of 25% starting in 2023 using straight line basis with no scrap value.
- 4. Working capital will be 12% of the respective annual sales and it should be adjusted to the imported inflation of 3% per annum that is expected to be on the international market where AMIZERO Ltd gets inputs.
- 5. The following Table 2 shows industry comparable beta that was from data providers showing comparable data in the same sector:

Table 2 Industry comparable Beta

Comparable	5 ICPARMAY2025ICPARM	Ungeared Beta	Geared Beta
UMWETE	5 ICPARMAY2025ICPARM	1.2 CPARMAY2025ICPARMA	1.6 ICPARMAY2025ICPARMAY2
UBUZIMA	5 ICPARMAY 2025 ICPARM	21.3 ICPARMAY2025ICPARMA	1.7 ICPARMAY2025ICPARMAY2
SHISHIKARA	5 ICPARMAY2025ICPARM	21.4 CPARMAY2025ICPARMA	1.9 CPARMAY2025ICPARMAY2
NDAHIRO MAY202	5 ICPARMAY 2025 ICPARM	2121 ICPARMAY2025ICPARMA	1.2 CPARMAY2025ICPARMAY2

- 6. After consulting the Chief Investment Officer, the analysts have agreed to use the beta average of the comparable companies to calculate Adjusted Present Value (APV)
- 7. Risk-free rate is 11% and considering how the sector is performing since the Covid-19 crisis, the risk premium is 3% which is less than other sectors.
- 8. The Institute of Certified Public Accountants of Rwanda (ICPAR) has organized a workshop for CEOs (CEOs dinner) with the central theme: *How to use debt financing to improve the value of firms in post COVID Era*. The CEO and Co-founder of AMIZERO Ltd were attendees on that date. After the workshop, the CEO took a decision to use debt to improve the value of AMIZERO Ltd. He has proposed to the Board of Directors the new capital structure of 80:20 Equity to debt and the Board has approved it. The approval of the new capital structure helps AMIZERO Ltd to raise FRW75,000,000 in debt to help them to optimize capital structure and the value of the firm in general. The loan was obtained from the Cooperative Bank at 13% per year and the debt will be paid in four years with effect from 2022. AMIZERO Ltd could also alternatively finance this loan by using irredeemable preference debt of 6% paid annually.
- 9. The following balance sheet of the last two years (2020 and 2021) were extracted from AMIZERO Ltd.'s annual reports.

Table 3: AMIZERO Balance Sheet as 2020-2021

FINANCIAL POSITION AMIZERO LTD I	RW "000" CPARMAY2025 ICPARM	MAY2025ICPARMAY2
PARMAY2025ICPARMAY2025 ICPARMAY2025ICPARMAY2025 PARMAY2025ICPARMAY2025 ICPARMAY2025ICPARMAY2025	CPARMAY2025ICPARMAY2021CPARM	AY2025ICPA 2020
Cash and marketable securities 2025 CPARMAY2025	CPA RMAY20251CPAR 280,000 PARM	200,000
Accounts receivable 25 CPARMAY 2025 CPARMAY 2025	CPARMAY2025ICPARM65,000 PARM	AY2025 30,000
Inventory CPARMAY2025 ICPARMAY2025 ICPARMAY2025	CPA RMAY2025 CPARM 80,000 PARM	AAY2025ICI 50,000
Total current assets 5 ICPARMAY2025ICPARMAY2025	10PA RMAY202510PAR 425,000 PARA	280,000
Property, plant, and equipment 2025 CPARMAY 2025	ICPA MAY2025ICPAR 417,500 PARM	AY2025 435,000
Intangible assets 12025 ICPARMAY 2025 ICPARMAY 2025	ICPARMAY2025ICPARM500000CPARM	/Av2025 500000
Total assets ARMAY2025 ICPARMAY2025 ICPARMAY2025	CPA RMAY2025 CP 1,342,500 PARM	1,215,000
Current liabilities 2025 CPARMAY 2025 CPARMAY 2025	CPA (MAY2025) CPAR 594,750 PARM	450,000
Long-term debt 14Y2025 ICPARMAY2025 ICPARMAY2025	CPA RMAY2025 CPAR460,000 PARM	470,000
Share capital ARMAY 2025 ICPARMAY 2025 ICPARMAY 2025	CPA RMAY2025ICPAR 200,000 PARM	200,000
Retained earnings 2025 ICPARMAY 2025 ICPARMAY 2025	ICPARMAY2025ICPARM87,750 BARN	95,000
Total liabilities and equity MAY 2025 CPARMAY 2025	1,342,500 ARM	1,215,000

10. Since the incorporation of the company, AMIZERO Ltd has been consistently rated well in term of Corporate Social responsibility (CSR) and it has been complying with the quality control laboratory standard requirement of Rwanda Food and Drugs Authority (FDA). The last consumer survey has noted that there are a lot of complaints from customers that, quality of the drugs has deteriorated and have more side effects that results the death of some patients and the case has be filled to the related authorities. In addition, the current CEO has proposed that, the budget allocated to the supporting genocide survivors should be reduced from next years to improve the profitability. There is an allegation from employees, saying that, the last employment restructuring led to the cutting of employees, but AMIZERO Ltd has trained them with proper training so they have the skills that will help them to start business. The annual report of AMIZERO Ltd have disclosed the issue of destruction of wastes, but no tangible solutions for this issue has been highlighted by management, even though quantification of the penalties is still uncertain but it has high probability of being fined by FDA. After consulting the drugs and vaccine consultants, AMIZERO Ltd has found that there a potential competitor who is coming on the Rwandan market from Germany, and the CEO has started lobbying the licensing agencies to refuse to license the potential competitors.

The last board meeting has approved investment of FRW 20 million in renewable energy and FRW 15 million in climate projects that will significantly reduce the non-renewable energy that is used for both the company and the surrounding society.

- 11. AMIZERO Ltd profits are taxed at an annual rate of 30%
- 12. The Analyst will forecast from 2022-2026.

A2.1 AY 2025 CPARMAY 2025 CPARM

Required:

- a) Evaluate the viability of AMIZERO Ltd using Adjusted Present Value (APV) taking into consideration of the methods of debt financing proposed in note 8. (25 Marks)
- b) Discuss the appropriateness of the APV method in appraising AMIZERO Ltd.
- c) Ratio Analysis
- i) Using ratio analysis (Profitability, liquidity, solvency), assess the financial sustainability of AMIZERO Ltd.

 Note: Use a maximum of two ratios per category and use data for 2020 and 2021 only.
- ii) Interpret ratios in (i) above and draw conclusions on the financial sustainability of AMIZERO Ltd. (5 Marks)
- d) What are the other non-financial information about AMIZERO Ltd should you consider before investing in the company? (5Marks)
- e) Examine AMIZERO Ltd's Corporate Social Responsibility (CSR) initiatives and their impact on stakeholders. (6 Marks)

 (Total: 50 Marks)

SECTION B

QUESTION TWO

a) The Chief Finance Officer (CFO) of Kabuga Trading Company Ltd has reviewed a 6×9 Forward Rate Agreement (FRA) that the company entered 90 days ago as the pay-fixed/receive-floating party. selected data for the FRA are presented below and current National Bank of Rwanda (BNR) rates are presented in the table below. Based on the CFO's interest rate forecast, CFO considers whether the company should enter new positions in 2×5 FRA.

Table 1: Forward rate agreement information:

FRA term CPARMAY2025 ICPARMAY2025ICP	ARI 6 × 95 ICPARMAY2025ICPARMAY2025 ICPARMAY2025ICPARMAY20
FRA rate per annum	AR 0.70% CPARMAY2025ICPARMAY20
FRA notional amount CPARMAY 2025 CP	FRW 200,000,000 CPARMAY2025 CP
FRA settlement terms CPARMAY2025ICP	Advanced set, advanced settle CARMAY2025 CARMAY2025

Table 2: Central bank reference rate per maturity

Duration ICPARMAY2025 ICPARMAY2	Reference Rate per annum PARMAY
30-day Reference rate CPARMAY2025ICPARM	MAY2025 CPARMAY 0.75% RMAY2025 CPARMAY2025
60-day Reference rate PARMAY2025ICPARM	MAY2025 ICHARMAY 0.82% RMAY2025 ICHARMAY2025 ICPARMAY2025
90-day Reference rate PARMAY20251C PARM	MAY2025 ICPARMAY 0.90% RMAY2025 ICPARMAY2025
120-day Reference rate PARMAY2025 CPARM	MAY2025 ICPARMAY 0.92% RMAY2025 ICPARMAY2025
150-day Reference rate PARMAY 2025 CPARM	MAY2025 ICPARMAY 0.94% RMAY2025 ICPARMAY2025
180-day Reference rate PARMAY 2025 CPARM	MAY2025 ICPARMAY 0.95% RMAY2025 ICPARMAY2025
210-day Reference rate	MAY2025 ICPARMAY 0.97% RMAY2025 ICPARMAY2025
270-day Reference rate	MAY2025 ICPARMAY 1.00% RMAY2025 ICPARMAY2025

Three months later, the 6×9 FRA presented above reaches expiration, at which time the three-month National Bank of Rwanda (BNR) Reference rate is 1.1% per annum and the sixmonth BNR Reference rate is 1.2% per annum. The CFO determines that the appropriate discount rate for the FRA settlement cash flows is 1.1% per annum. Consider 360 days per year.

FRA Terms:

- 6×9 FRA = 3-month loan starting in 6 months.
- 2×5 FRA = 3-month loan starting in 2 months.

Required:

- i) What is the rationale for the company engaging in FRA transaction. (2 Marks)
- ii) Determine the fixed rate on the new suggested 2 x 5 FRA. (4 Marks)
- iii) Based on Table 2 above and the three-month BNR reference rate at expiration, determine the payment amount that the company will receive to settle the 6×9 FRA. (6 Marks)

A2.1 AY 2025 CPARMAY 2025 CPARM

b) Kigali Electronics Ltd has received a shipment of 2,450,000 electronic devices from an American supplier company, with each unit priced at USD 4. The company has been offered a three-month credit term to settle the payment. Although Kigali Electronics Ltd currently has its funds tied up in operations, it can borrow or deposit at an interest rate of 3% per quarter in both countries.

The following information is available with respect to USD/FRW

The spot rate RMAY 2025 ICPA	0.0130
Three months forward	0.0154
Strike price ARMAY2025 CPA	0.0154

The US\$ 9,800,000 three-month dollar call option is available with a premium worth USD \$75,000.

Required:

- i) Evaluate whether the money market hedge or the option hedge would be preferred to Kigali Electronics Ltd. (7 Marks)
- ii) Discuss SIX potential financial risks that Kigali Electronics Ltd will face. (6 Marks)

 (Total: 25 Marks)

QUESTION THREE

a) ABC Holdings, a large private equity firm, is considering the acquisition of XYZ Retail Ltd., a regional retail chain specializing in home goods and electronics. XYZ Retail Ltd. has been in operation for 15 years and has a solid market presence in the region. However, ABC Holdings wants to ensure that the company is worth the asking price and that there are no hidden risks that could affect the value of the acquisition. As the appointed due diligence examiner, you are tasked with reviewing all financial, operational, and strategic information about XYZ Retail Ltd. provided by its management. Below is the documentation provided to you for the due diligence process.

XYZ Retail Ltd has provided the following information:

1. The audited financial statements for XYZ Retail Ltd. over the past three years show consistent profitability, with a steady revenue stream and positive net profits. The following table outlines the key financial figures:

Yeary20	Revenue CPARMAY2025ICPARMAY2025I	CPA RINET Profit RMAY2025 ICPARMAY2025 ICPARMAY20
2022	FRW50 million AY20251CPARMAY2025	CPARIFRW5 million 2025 CPARMAY 2025 CPARMAY 20
2021	FRW45 million AY20251CPARMAY2025	CPAR FRW4 million 12025 CPARMAY 2025 CPARMAY 20
2020	FRW48 million AV20251CPARMAY2025	FRW3.5 million 025 CPARMAY2025 CPARMAY20

2. The company reported a one-off gain in 2022 of FRW 2 million from the sale of a distribution center. A significant decrease in revenue occurred in 2023 due to the loss of three key customers, resulting in a 10% drop in annual revenue. XYZ Retail has recently discontinued several underperforming product lines that have been eating into profit margins.

The company's management team has been in place for the last 5 years, with the CEO being the founder. There have been no major issues with corporate governance, though some employees have raised concerns about the risk management practices, particularly regarding data security and customer privacy.

- 3. The upside potential of acquiring XYZ Retail Ltd includes the synergies from integrating XYZ Retail into ABC Holdings' broader retail network, particularly in shared procurement and logistics. It also includes the access to new regional markets, particularly in the South and West, where XYZ Retail is planning to expand and the potential to bring in a new management team to address operational inefficiencies and improve performance. However, these opportunities must be weighed against the risks identified, particularly around the company's weak internal controls, potential tax liabilities, and declining earnings due to customer loss.
- 4. XYZ Retail Ltd. has not provided sufficient clarity on its tax planning strategies. The company's tax structure includes the use of offshore subsidiaries in tax-efficient jurisdictions for certain operations. Some uncertain tax positions related to the treatment of cross-border payments and transfer pricing. The lack of clear tax planning or strategy raises concerns about potential tax inefficiencies post-acquisition. Further investigation is needed to assess whether the company's tax structure can be optimized for ABC Holdings.
- 5. XYZ Retail Ltd has not disclosed any specific tax liabilities or legal penalties. However, the following potential risks have been flagged: The company operates across several jurisdictions, and there is a possibility of tax exposure due to complex cross-border transactions and transfer pricing issues with its international suppliers. The company is currently involved in a tax dispute with local authorities over the classification of certain expenses in 2021 and 2022, which may result in penalties or tax re-assessments. Additionally, the company has not provided a clear view of any pending lawsuits or claims related to product defects, although there have been informal reports of some customer complaints.
- 6. XYZ Retail Ltd has entered into several related party transactions with its parent company, XYZ Holdings. These transactions include the business support services (such as IT infrastructure and logistics management) that are provided at no charge from the parent company. Goods and services purchased from the parent at discounted rates, with no markup applied, making the company's cost of goods sold artificially low. The company has provided special pricing terms for certain customers that are subsidiaries of the parent company, which are not in line with market pricing. Given the change in ownership, ABC Holdings needs to evaluate the potential impact on the business of restructuring these transactions at market rates.
- 7. XYZ Retail Ltd. has provided financial forecasts for the next five years. A projected annual revenue growth rate of 8-10% is driven by the expansion into two new regional markets. An expectation of increased gross margins from 30% to 35% in the next two years due to cost-cutting measures and more efficient supply chain management. The assumptions underlying these projections include a continued increase in consumer demand, successful market entry in new regions, and a stable cost structure. The forecasts appear overly optimistic, with little to no justification for the high growth rates and margin improvements.

A2.1 AY 2025 CPARMAY 2025 CPARM

- 8. XYZ Retail Ltd has an inventory of FRW 8 million, which includes several obsolete items totaling FRW 1 million. The company has not taken any write-offs for obsolete inventory in the past three years. XYZ Retail Ltd has the fixed assets worth FRW10 million, but the majority of these are underutilized or in need of significant repairs. The company has not made provisions for depreciation on some older assets. The company has recently capitalized FRW 500,000 in costs related to a failed technology project, which has not yet generated any revenue. In addition, XYZ Retail Ltd. has stated that it intends to transfer all tangible assets, including inventory and fixed assets, as part of the sale. However, there is no clarity on the status of intangible assets like trademarks and customer relationships.
- 9. XYZ Retail Ltd.'s internal controls are limited. The company uses a basic accounting system that lacks real-time reporting capabilities, making it difficult to monitor financial performance accurately. There is limited documentation regarding internal risk management procedures, particularly in the areas of inventory management and customer data protection. The company does not have an established audit committee, and only one individual is responsible for both financial reporting and internal controls. ABC Holdings should consider whether additional investments in reporting systems and internal controls are needed to ensure proper monitoring post-acquisition.

Required:

Prepare a Report on Due Diligence for the acquisition of XYZ Retail Ltd. (9 Marks)

b) Mr. RUKUNDO, a director of Kigali Industries Limited, met Mr. Penzi, a director of Nyungwe Limited, during a business conference in Kigali. After returning to Kigali, Mr. RUKUNDO proposed to his board of directors the acquisition of Nyungwe Limited. During his presentation, he stated: "As a result of this acquisition, we will diversify our operations, and our earnings per share will rise by 15%, benefiting our shareholders greatly." No bid has yet been made, and Kigali Industries Limited currently owns 5% of Nyungwe Limited.

A bid would be based on an exchange of shares between the two companies: one Kigali Industries share for every seven Nyungwe shares.

The financial data for both companies are as follows:

PARMAY2025ICPARMAY2025 ICPARMAY20 PARMAY2025 ICPARMAY2025 ICPARMAY20 Financial Data AY2025 ICPARMAY20	Kigali Industries Limited (FRW)	Nyungwe Limited (FRW)
Turnover SICPARMAY2025 ICPARMAY20	251C 72.0 millionarmay20251CPARMA	55.0 million
Profit Before Tax 2025 CPARWAY20	251C 15.0 million RWAY20251CPARMA	2 12.0 million
Profit Available to Ordinary Shareholders	251C ARMAY2025 ICPARMAY2025 ICPARMAY 251C ARMAY2025 ICPARMAY2025 ICPARMAY 251C 9.5 millionparmay2025 ICPARMAY 251C 9.5 millionparmay2025 ICPARMAY	y2 25 ICPARMAY2025ICPARMAY y2 25 ICPARMAY2025ICPARMAY y2 8.0 million 025ICPARMAY
Dividend CPARMAY2025 ICPARMAY20	251C 4.0 million PARMAY20251CPARMAY	4.5 million 25 CPARMAY
Retained Earnings 2025 ICPARMAY20	2510 5.0 million PARMAY 2025 ICPARMA	4.0 million
Issued Ordinary Shares PARMAY20	25.0 millionarMay20251CparMay	18.0 million
Market Price per Share	2510 P/4: MAY2025 I CPARMAY2025 I CPARMAY 2025 I CP	20.6 PARMAY2025 CPARMAY
Par Value per Share 25 CPARMAY20	25ICPARMAY2025ICPARMAY2025ICPARMAY	20.1 PARMAY2025ICPARMAY
Cash Flow from Operations (A)20	2510 6.0 million PARMAY 2025 10 PARMAY	4.5 million

A2.1 AY2025 CPARMAY2025 CPARMAY2025 CPARMAY2025 CPARMAY2025 CPARMAY2025 CPARMAPage 9 of 16

PARMAY2025ICPARMAY2025 ICPARMAY PARMAY2025ICPARMAY2025 ICPARMAY Financial Data	Kigali Industries Limited (FRW)	Nyungwe Limited (FRW)
Total Liabilities Ay2025 CPARMAY	2025IC 20.0 million ARMAY2025ICPARMA	15.0 million
Total Assets ARMAY 2022 ICPARMAY	20251 120.0 million MAY20251CPARMA	$\frac{2}{3}$ 90.0 million $\frac{2}{3}$
Interest Expense	2025IC 1.5 million PARMAY 2025IC PARMA	1.0 million
Return on Assets (ROA)	2025IC 25% AY2025 ICPARMAY2025 ICPARMAY	Y2 6% PARMAY2025 CPARMAY2
Return on Equity (ROE)	2025IC 8% AY2025 ICPARMAY2025 ICPARMAY	Y2 7% PARMAY2025ICPARMAY2
Debt-to-Equity Ratio	2025IC P.0.4 AY2025 ICPARMAY2025ICPARMAY	
Inventory Turnover	4.5 times CPARMAY 2025 CPARMAY 2025 CPARMAY	3.8 times 2025 CPARMAY2
Receivables Turnover	2025IC 5.0 times ICPARMAY2025ICPARMA	4.2 times
Gross Profit Margin	2025IC 40% 2025 ICPARMAY 2025 ICPARMA	2 38% RMAY20251CPARMAY2
Operating Expenses 25 ICPARMAY	2025IC 8.0 million PARMAY 2025IC PARMAY	7.0 million
Capital Expenditure	2025IC 3.5 million ARMAY 2025IC PARMAY	2.0 million

Kigali Industries Limited is a leading manufacturing company in Rwanda, primarily engaged in the production of construction materials and consumer goods. The company has a strong market presence and is known for its high-quality products, as well as its commitment to sustainability and community development. Kigali Industries has been looking to expand its operations and diversify its portfolio in order to achieve better economies of scale and increase shareholder value.

Nyungwe Limited, on the other hand, is a medium-sized company that operates in the food processing industry in Rwanda. The company specializes in producing packaged food products for both local and regional markets. While Nyungwe has experienced steady growth, it has faced challenges in terms of distribution networks and market penetration, which has limited its expansion potential. However, its strong brand and customer loyalty present opportunities for growth if it gains access to better resources and larger markets.

Both companies are now considering a merger that would see Kigali Industries acquire Nyungwe Limited. This acquisition is viewed as an opportunity for Kigali Industries to diversify its operations and improve its profitability, while also providing Nyungwe with the necessary resources to expand and increase its market share.

Required:

- i) Using the relevant calculations (Earning per share), evaluate whether the takeover of Nyungwe Limited by Kigali Industries Limited is worthwhile for Kigali Industries' shareholders.

 (10 Marks)
- ii) Based on the provided information, calculate the expected post-acquisition share price of Kigali Industries Limited, assuming the takeover bid is successful. (6 Marks)

(Total: 25 Marks)

A2.1 AY 2025 CPARMAY 2025 CPARMAY 2025 CPARMAY 2025 CPARMAY 2025 CPARMAY 2025 CPARMAY 2025 CPARMAPage 10 of 16

QUESTION FOUR

Kigali Hospitality Ltd (KHL) is a listed hotel company specializing in providing high-quality accommodation, food, and conference services for both local and international guests. Below are the key considerations for Kigali Hospitality Ltd (KHL):

Kigali Hospitality Ltd (KHL) Environmental, Social and Governance (ESG) principles: Kigali Hospitality Ltd (KHL) aims to embed Environmental, Social, and Governance (ESG) principles into its operations from the start. Its sustainable business model targets high-income individuals, corporate clients, and international tourists, while benefiting the local economy and environment. Environmentally, KHL will adopt green practices such as energy-efficient technologies, waste reduction, water conservation, and sustainable certifications. Socially, it will support local communities through job creation, fair wages, training, and local sourcing, enhancing guest experiences with local culture. In terms of governance, KHL commits to strong ethical standards, transparency, and compliance, guided by an experienced leadership team and regular audits.

Government policies and regulations:

Rwanda is known for its strong government commitment to sustainable development and environmental conservation. Policies like the National Strategy for Transformation (NST1), the Green Growth and Climate Resilience Strategy, and the Rwanda Environmental Management Policy are critical frameworks that promote responsible business practices. KHL should adhere to local regulations that govern waste management, water conservation, emissions, and the use of renewable energy. These regulations are becoming increasingly important as Rwanda pushes toward becoming a middle-income economy by 2035, with a focus on green growth. The Rwandan government offers incentives for businesses that adopt sustainable practices, such as tax exemptions or subsidies for renewable energy investments. KHL can leverage these opportunities to reduce operational costs while contributing to Rwanda's environmental goals.

Tourism development and cultural sensitivity:

Tourism is one of Rwanda's most important economic sectors, contributing significantly to the country's GDP. However, it's crucial for hotels to operate in a way that aligns with the principles of sustainable tourism. Rwanda has a rich cultural heritage that is a significant draw for tourists. KHL should ensure that their operations respect local traditions and incorporate local culture into the guest experience. This includes using local arts, crafts, and cultural performances in their marketing and guest experiences. In doing so, the hotels will foster a sense of pride and involvement within the community, which could enhance their brand image and appeal. KHL can attract eco-conscious travelers by promoting eco-tourism initiatives, such as Gorilla Trekking in Volcanoes National Park, as part of their offerings. Eco-tourism is growing in popularity, and aligning their services with eco-friendly tourism practices will not only improve profitability but also promote Rwanda's tourism sector as a sustainable destination.

Local employment and skills development:

Given that Rwanda's labor market is evolving, both hotels should prioritize local employment and contribute to skills development in the hospitality sector, which is an essential area of Rwanda's economic growth. KHL can collaborate with local vocational training centers to provide hospitality training programs for young Rwandans. This will help address the skills gap in the industry and create job opportunities for locals, particularly in a country where youth unemployment is a challenge. Rwanda has made significant progress in promoting gender equality, with women holding a substantial proportion of political and business leadership positions. KHL should continue to foster gender diversity and empowerment by promoting equal employment opportunities, offering leadership programs for women, and ensuring inclusive work environments.

Climate change and resilience:

Rwanda is one of the most vulnerable countries to climate change in East Africa, with significant risks from flooding, droughts, and landslides. Hotels in Rwanda must focus on climate change resilience as part of their sustainability practices. KHL should implement climate-resilient infrastructure, including designing buildings that can withstand extreme weather conditions such as flooding or heavy rainfall. This could include rainwater harvesting systems, flood-resistant landscaping, and the use of energy-efficient, locally sourced construction materials. In alignment with Rwanda's goal to reduce its carbon emissions, both hotels can adopt practices such as energy-efficient lighting, solar-powered heating and cooling systems, and the use of low-emission vehicles for transportation services. They could also partner with the government and NGOs to plant trees as part of a larger reforestation effort to offset their carbon footprints.

Health and safety standards:

Given the potential for future health crises, health and safety standards are vital to the hospitality sector in Rwanda. KHL should integrate public health and safety practices into their operations. KHL should comply with the highest hygiene and sanitation standards to provide guests with a safe and comfortable stay. This includes frequent cleaning and disinfecting of high-touch areas, temperature checks for staff and guests, and ensuring that employees are trained in health and safety protocols. In the context of Rwanda's post-pandemic recovery, focusing on mental health and wellness tourism could become an important selling point for both hotels. Wellness programs, including meditation, spa treatments, and yoga sessions, can attract health-conscious travelers while promoting mental well-being in a peaceful environment like Rwanda's scenic landscapes.

Technological innovation and digitalization:

Rwanda is a leader in East Africa in terms of digital transformation and is striving to become a knowledge-based economy. Hotels in Rwanda should leverage digital technology to enhance operations and guest experiences. KHL can incorporate smart hotel technology to enhance customer satisfaction and operational efficiency. This includes adopting online booking platforms, keyless room entry, energy-saving technologies, and personalized guest experiences using digital tools. Leveraging Rwanda's growing internet penetration, both hotels should focus on digital marketing to reach international tourists. Social media campaigns, website optimization, and online reviews can be effective tools for building a strong online presence and attracting guests from around the world.

Corporate Social Responsibility (CSR):

Kigali Hospitality Ltd (KHL) integrates Corporate Social Responsibility (CSR) into its core strategy, focusing on community empowerment, employee welfare, and environmental sustainability. The company provides scholarships to underprivileged students, supports local small businesses, and ensures staff well-being through fair pay, safe working conditions, health insurance, and career development. KHL also promotes eco-friendly practices like energy conservation, recycling, and waste management to reduce its environmental impact. In response to criticisms about pricing and labor practices, KHL is enhancing transparency and ethical standards. Overall, CSR is central to KHL's mission to positively impact the community and build lasting stakeholder relationships.

Despite these efforts, local communities have raised concerns and threatened to boycott the company's services due to several reasons: the company has been accused of contributing to the rising cost of living by inflating prices of essential goods around the hotel; there have been reports of employees working under poor conditions, including long hours and low pay; the hotel's waste disposal practices are alleged to have polluted the surrounding environment; and some local businesses claim that KHL is monopolizing the local market by offering unfairly low wages and unfavorable contracts to local suppliers. The local community believes that the company's growth has come at their expense, leading to growing resentment. KHL has an annual turnover of FRW 15 billion and a market capitalization of FRW 90 billion. The company operates in Kigali City and caters to tourists, business travelers, and local customers.

KHL, a new hotel chain led by Ms. Kayitesi, an entrepreneur with an MBA in Hospitality Management and significant experience in the tourism and hospitality sector, plans to enter the market. She intends to establish a boutique hotel in Kigali, with a focus on providing luxury accommodations, fine dining, and event services. Ms. Kayitesi will collaborate with investors who will own 35% of the company. The company will be named Kigali Hospitality Ltd (KHL) with the flagship property being named "Luxe Kigali." The hotel will be located in downtown Kigali, and the mission of KHL is to provide world-class hospitality services while offering unique cultural experiences to its guests. KHL anticipates strong competition from well-established hotels such as Kigali Marriot Hotel, Radisson Blu, and Serena Hotel, which have been operating in the region for over a decade.

KHL 's competitive edge will be its focus on luxury, local cultural immersion, and personalized guest experiences. The hotel will target high-income individuals, corporate clients, and international tourists.

A2.1 AY 2025 CPARMAY 2025 CPARMAY 2025 CPARMAY 2025 CPARMAY 2025 CPARMAY 2025 CPARMAY 2025 CPARMAPage 13 of 16

Sales projections and the Operational costs for the hotel are forecasted as follows:

Peary2025ICPARMAY2025 ICPARMAY2025I	2026	2027	2028	2029	2030 AY2
PARMAY2025ICPARMAY2025 CPARMAY2025 PARMAY2025ICPARMAY2025 CPARMAY2025 PARMAY2025ICPARMAY2026 CPARMAY2025	Amount in	FRW'' Mi	llion" 2025	CPARMAY202 CPARMAY202 CPARMAY202	SICPARMAY2
Sales revenues: AY2025 ICPARMAY2025	CPARMAY2025 ICPA CPARMAY2025 ICPA CPARMAY2025 ICPA	RMAY2025ICI RMAY2025ICI	PARMAY2025	CPARMAY202 CPARMAY202	ICPARMAY2
Room revenues AY2025 CPARMAY2025	120,000	138,000	165,000	195,000	225,000
Food & beverage revenue RMAY2025	SPARMA 35,000	40,000	45,000	50,000	55,000
Conference & event revenues	20,000	23,000	27,000	30,000	35,000
Other services revenues	CP RMAY10,000	11,500	AR13,000	15,000	17,000
Retail & merchandise Revenues	SP RMAY2 5,00	5,500	AR 6,000	7,000	8,000
Operational costs: 25 CPARMAY2025	CPARMAY2025 ICPA	RMAY2025ICI	ARMAY2025 ARMAY2025	CPARMAY202	ICPARMAY2
Labor costs PARMAY2025 ICPARMAY2025	25,000	28,000	32,000	36,000	40,000
Water and electricity	7,000	8,000	9,000	10,000	11,000
Maintenance & repairs PARMAY2025	5,000	5,500	6,000	7,000	8,000
Food & beverage costs PARMAY2025	4,000	5,000	6,000	7,000	8,000
Marketing & advertising ARMAY2025	3,000	3,500	4,000	CPAR 5,000	6,000
Admin & general costs PARMAY2025	2,000	2,500	3,000	CPAR 3,500	4,000
Technology & software PARMAY2025	1,500	1,700	2,000	CPAR 2,500	3,000
Depreciation ARMAY2025 CPARMAY2025	CP RMAY202500	RMAY2600	700	CPARM/800	1,000
CSR Costs PARMAY2025 CPARMAY2025	CP RMAY2025 80	RMAY2 100	120	CPARMA150	200

KHL plans to employ 35 staff members, with leadership provided by a Managing Director, a Finance Director, an operations Director, and a Marketing Director. The company's board of directors will consist of 12 individuals with extensive experience in hospitality, marketing, and finance.

The hotel expects to reach its break-even point by the end of the third year. The total initial funding requirement for the hotel project is FRW 987 billion. The investors will contribute 35% of the capital, 40% of the government grant while the remaining 25% will be borrowed from the bank.

Ms. Kayitesi has been asked to present a business plan to the BPR Bank Plc, outlining the company's strategic vision and financial projections over the next five years to secure the necessary funding. MS. Kayitesi has been asked by the bank to present a comprehensive business plan for Kigali Hospitality Ltd (KHL) in order to provide the BPR Bank Plc for them to use the provided information to evaluate the feasibility of providing the necessary funding for the hotel's establishment and future expansion.

Required:

Prepare a business plan for Kigali Hospitality Ltd (KHL), highlighting the key features that the bank would consider relevant for funding. (25 Marks)

Note: clearly show financial projection

End of Question Paper

A2.1 AY 2025 CPARMAY 2025 CPARMAY 2025 CPARMAY 2025 CPARMAY 2025 CPARMAY 2025 CPARMAY 2025 CPARMAPage 14 of 16

Prese	Present va	Ine	interest	st fac	factor of		ber	period	ਜ਼	i% for n periods	L L	3riods	s, PVI	F(i,n)	02510 02510 02510	02510 02510 02510	02510 02510 02510	02510 02510 02510	02510 02510 02510	02510 02510
Period	%1 A A	2%	≥ 3%	~4%	2%	%9	7%	8%	6 %6 △	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	~20%
RMA RMA RMA	0.990	0.980	0.971	0.962	0.952	0.943	935	0.926	0.917	606.0	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
Y2 Y2	0.980	0.961	0.943	0.925	0.907	VO	Y2	Y2	0.842	0.826	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
025 025 025	0.971	0.942	0.915	0.889	0.864	0.840			0.772	0.751	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
1CF	0.961	0.924	0.888	0.855	0.823			0.735	0.708	0.683	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
AR SAR	0.951	906.0	0.863	0.822	0.784	PAH	0.713	0.681	0.650	0.621	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
MA MA	0.942	0.888	0.837	0.790	0.746	MA	999.0	0.630	0.596	0.564	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
Y20 Y20 Y20 Y20	0.933	0.871	0.813	092.0	0.711	0.665	0.623	583	0.547	0.513	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
25 25 25 25 25	0.923	0.853	0.789	0.731	0.677		0.582	0.540	0.502	0.467	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
GP/ CP/ CP/	0.914	0.837	0.766	0.703	0.645		0.544	0.500	0.460	0.424	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
OLR RA	0.905	0.820	0.744	9/90	0.614	707	0.508	0.463	0.422	0.386	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
AY AAY	968.0	0.804	0.722	0.650	0.585	0.527	0.475		0.388	0.350	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135
202 202 202	0.887	0.788	0.701	0.625	0.557		0.444	0.397	0.356	0.319	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112
510	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093
PA PA PA	0.870	0.758	0.661	0.577	0.505		0.388	0.340	0.299	0.263	0.232	0.205	0.181	0.160	0.141	0.125	0.11	0.099	0.088	0.078
12 RM RM	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.074	0.065
91 2 2 4 2 4 2 4 2	0.853	0.728	0.623	0.534	0.458	AY2	0.339	292	0.252	0.218	0.188	0.163	0.141	0.123	0.107	0.093	0.081	0.071	0.062	0.054
025 025 025	0.844	0.714	0.605	0.513	0.436	0.371		0.270	0.231	0.198	0.170	0.146	0.125	0.108	0.093	0.080	0.069	090.0	0.052	0.045
101	0.836	0.700	0.587	0.494	0.416			0.250	0.212	0.180	0.153	0.130	0.111	0.095	0.081	0.069	0.059	0.051	0.044	0.038
6 AR AR	0.828	0.686	0.570	0.475	0.396		0.277	0.232	0.194	0.164	0.138	0.116	0.098	0.083	0.070	090.0	0.051	0.043	0.037	0.031
20	0.820	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149	0.124	0.104	0.087	0.073	0.061	0.051	0.043	0.037	0.031	0.026
25	0.780	0.610	0.478	0.375	0.295	0.233	Y20	0.146	0.116	0.092	0.074	0.059	0.047	0.038	0.030	0.024	0.020	0.016	0.013	0.010
08 25	0.742	0.552	0.412	0.308	0.231			0.099	0.075	0.057	0.044	0.033	0.026	0.020	0.015	0.012	0.009	0.007	0.005	0.004
32 CP	0.706	0.500	0.355	0.253	0.181			0.068	0.049	0.036	0.026	0.019	0.014	0.010	0.008	0.006	0.004	0.003	0.002	0.002
4RA ARA	0.672	0.453	0.307	0.208	0.142	0.097	ARIV	0.046	0.032	0.022	0.015	0.011	0.008	0.005	0.004	0.003	0.002	0.001	0.001	0.001
200	0.608	0.372	0.228	0.141	0.087	IAY	0.034	0.021	0.013	0.009	0.005	0.003	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000

A2.1. Y2025 ICPARMAY2025 ICPARM

PARMAY2025ICPARMAY2025 ICPARMAY2025ICPARMAY2025 ICPARMAY2025 ICPARMAY2

Period 1% 2% 3% 4% 5% 6% 7% 8% 9% 10% 11% 12% 13% 14% 15% 14% 14% 15% 14%	Pres	ent v	alue i	Present value interest factor of an (ord)	t fact	or of	an (or	dinary	PARN	annuity c	of Frw1	v1 per	ır pel	period a	at i%	for n	peri	ods,	PVIFA(i,n)	A(i,n	PARN PARN PARN
0.980 0.971 0.862 0.943 0.926 0.917 0.909 0.881 0.885 0.877 0.882 0.927 0.939 0.947 0.882 0.847 0.842 0.945 0.948 0.845 0.847 0.842 0.947 0.883 0.891 0.884 0.887 0.847 0.883 0.884 <th< th=""><th>Period</th><th>X X X X</th><th>2 2 2%</th><th>33%</th><th>× × 4%</th><th>2 2 5%</th><th>%9</th><th>₹ %2 ₹ ₹</th><th>8% E</th><th>%6</th><th>≥ 10%</th><th>11%</th><th>12%</th><th>13%</th><th>Z14% Z</th><th>15%</th><th>16%</th><th>17%</th><th>≥18% ≥</th><th>19%</th><th>20%</th></th<>	Period	X X X X	2 2 2%	33%	× × 4%	2 2 5%	%9	₹ % 2 ₹ ₹	8% E	%6	≥ 10%	11%	12%	13%	Z14% Z	15%	16%	17%	≥18% ≥	19%	20%
1970 1942 1913 1886 1883 1809 1778 1779 1690 1668 1647 1807 1804 1804 1883 1808 1783 1779 1779 1600 1668 1647 1860 1863 1786 1773 1808 1784 2864 2867 2864 2874 2874 2874 2874 2874 2874 2874 2874 2874 2874 2874 2874 2865 2876 2874 2875 2874 2874 2875 2875 2875 2875 2874 2875 2875 2874 2874 2874 2874 2874 2874 2874 2874 2874 2874 <th< td=""><td>202 202 202 202 202</td><td>0.990</td><td>086.0</td><td>0.971</td><td>0.962</td><td>0.952</td><td>0.943</td><td>0.935</td><td>0.926</td><td>0.917</td><td>0.909</td><td>0.901</td><td>0.893</td><td>0.885</td><td>0.877</td><td>0.870</td><td>0.862</td><td>0.855</td><td>0.847</td><td>0.840</td><td>0.833</td></th<>	202 202 202 202 202	0.990	086.0	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2.944 2.884 2.829 2.775 2.673 2.674 2.571 2.531 2.444 2.402 2.394 2.828 2.775 2.673 2.673 2.674 2.571 2.544 2.444 2.402 2.346 2.775 2.671 2.744 2.444 2.402 2.346 3.465 3.346 3.346 3.346 3.346 3.346 3.346 3.346 3.240 3.170 3.037 2.944 2.944 2.944 2.944 2.944 2.944 2.946 2.743 3.689 3.689 3.789 3.775 3.949 3.889 3.774 3.949 3.784 3.774 3.949 3.884 3.744 3.744 4.774 4.674 4.524 4.747 <th< td=""><td>510</td><td>1.970</td><td>1.942</td><td>1.913</td><td>1.886</td><td>1.859</td><td>1.833</td><td>1.808</td><td>1.783</td><td>1.759</td><td>1.736</td><td>1.713</td><td>1.690</td><td>1.668</td><td>1.647</td><td>1.626</td><td>1.605</td><td>1.585</td><td>1.566</td><td>1.547</td><td>1.528</td></th<>	510	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3902 3808 3777 3 630 3.546 3.465 3.87 3.12 3.12 3.10 3.10 3.03 2.944 2.914 2.865 2.74 2.914 2.914 2.914 2.914 3.17 3.683 3.747 3.683 3.747 3.693 3.890 3.747 3.696 3.617 3.491 3.172 3.493 3.890 3.784 4.864 4.856 3.614 4.864 4.856 3.614 4.968 4.866 4.871 4.864 4.893 3.893 3.893 3.893 3.893 3.893 3.893 3.893 3.893 3.894 4.866 4.866 4.866 4.866 4.866 4.866 4.712 4.968 4.794 4.968 4.794 4.968 4.969 4.968 4.969 4.968 4.969 4.968 4.712 4.968 4.794 4.968 4.712 4.968 4.724 4.968 4.794 4.968 4.794 4.968 4.794 4.968 4.794 4.968	PA PA	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4853 4713 4580 4452 4329 4210 3993 3890 3791 3696 3605 3517 3433 3352 3274 3199 3177 6.786 5.601 5447 5242 50.06 5.389 5.286 5.286 5.286 5.389 4.786 4.487 4.683 4.786 4.487 4.683 4.886 4.487 4.684 4.285 4.486 4.487 4.684 4.785 5.984 3.784 3.889 3.784 3.889 3.488 3.889 3.488 3.889 3.488 3.889 3.488 3.889 3.889 3.889 3.889 3.889 3.889 3.889 3.889 3.889 3.889 3.889 3.889 3.889 3.889 3.889 3.889 3.889 3.889 3.889 3.888 3.888 3.888 3.888 3.888 3.888 3.888 3.888 3.888 3.888 3.888 3.888 3.888 3.888 3.888 3.888 <td< td=""><td>RN</td><td>3.902</td><td>3.808</td><td>3.717</td><td>3.630</td><td>3.546</td><td>3.465</td><td>3.387</td><td>3.312</td><td>3.240</td><td>3.170</td><td>3.102</td><td>3.037</td><td>2.974</td><td>2.914</td><td>2.855</td><td>2.798</td><td>2.743</td><td>2.690</td><td>2.639</td><td>2.589</td></td<>	RN	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5.796 5.601 5.417 5.242 5.076 4.917 4.767 4.623 4.486 4.355 4.211 3.998 3.784 3.784 3.689 3.784 3.689 3.589 3.589 3.488 4.712 4.234 4.207 4.039 3.898 3.784 4.08 4.712 4.084 4.08 4.724 4.234 4.09 4.834 4.100 4.039 3.488 4.100 4.039 3.488 4.100 4.039 3.898 3.784 4.084 4.034 4.	AY AY AY AY	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6.728 6.472 6.230 6.020 5.786 5.582 5.206 5.033 4.868 4.712 4.564 4.423 4.288 4.109 4.039 3.812 3.812 3.812 3.82 3.82 3.82 3.83 4.868 4.712 4.564 4.463 4.639 4.874 4.304 4.718 4.089 4.874 4.204 4.714 4.884 4.712 4.694 4.772 4.694 4.714 4.684 4.714 4.684 4.714 4.684 4.714 4.684 4.714 4.684 4.714 4.694 4.714 4.884 4.884 4.884 4.884 7.484 7.136 6.495 6.207 6.386 6.207 6.494 6.716 6.414 6.146 6.146 6.146 4.714 4.884 4.884 4.884 7.894 7.894 7.786 6.495 6.207 6.496 6.146 6.146 6.146 6.146 6.146 6.146 6.146 6.146 6.146 6.146 6.1	202 202 202	5.795		5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355	4.231	4.614	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326
7.652 7.325 7.326 7.326 7.326 7.328 5.146 4.968 4.799 4.639 4.487 4.944 4.207 4.078 3.03 4.487 4.946 4.772 4.607 4.451 4.303 4.656 8.656 8.162 7.786 7.786 7.435 7.108 6.816 5.759 5.536 5.328 5.136 4.946 4.772 4.607 4.451 4.308 4.487 4.487 4.491 4.481 4.896 5.826 5.216 5.016 5.216 5.019 4.833 4.659 4.487 7.486 5.759 5.536 5.216 5.016 5.216 5.019 4.838 4.834 7.487 7.487 7.616 6.496 6.206 5.424 5.761 6.496 6.207 5.443 7.546 7.487 7.103 6.786 6.244 6.126 6.496 6.207 5.448 7.884 7.487 7.487 7.103 6.786 6.849 6.849 6.849 6.849	2510 2510 2510 2510	6.728		6.230	6.002	5.786	5.582	5.389		5.033	4.868	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8.566 8.162 7.786 7.435 7.108 6.802 6.515 6.247 5.995 5.737 5.328 5.132 4.946 4.772 4.951 4.934 4.977 4.941 4.933 4.694 4.945 5.136 5.136 5.246 5.109 4.833 4.694 4.944 4.772 4.944 4.942 4.945 5.246 5.246 5.246 5.136 5.246 5.108 4.834 4.949 4.944 6.126 5.048 5.650 5.426 5.246 5.049 4.834 7.103 6.807 5.938 5.680 5.620 5.426 5.426 5.740 5.108 6.807 6.808 6.807 6.808 6.807 6.808 5.650 5.246 5.108 4.938 4.949 4.949 7.103 6.807 6.807 6.807 6.807 6.807 6.807 6.807 6.807 6.807 6.807 6.807 6.807 6.807 6.807 6.807 6.807 6.807 6.807 <th< td=""><td>PA PA</td><td>7.652</td><td>7.325</td><td>7.020</td><td>6.733</td><td>6.463</td><td>6.210</td><td>5.971</td><td></td><td></td><td>5.335</td><td>5.146</td><td>4.968</td><td>4.799</td><td>4.639</td><td>4.487</td><td>4.344</td><td>4.207</td><td>4.078</td><td>3.954</td><td>3.837</td></th<>	PA PA	7.652	7.325	7.020	6.733	6.463	6.210	5.971			5.335	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837
9.471 8.983 8.530 8.111 7.722 7.360 7.024 6.710 6.418 6.145 5.889 5.620 5.426 5.216 5.019 4.833 4.659 4.944 4 10.368 9.787 9.253 8.760 8.306 7.887 7.499 7.139 6.805 6.495 6.207 5.938 5.687 5.421 5.197 4.836 4.656 4.793 4.898 4.793 4.898 5.868 5.421 5.197 4.898 4.793 4.898 7.106 6.424 6.125 5.426 5.234 5.029 4.898 4.793 4.898 6.806 6.424 6.126 6.207 5.988 5.421 4.898 4.793 4.898 4.898 6.806 6.424 6.126 6.207 5.988 5.342 5.118 4.910 4.898 6.806 6.424 6.126 6.127 5.989 5.228 5.008 4.793 4.898 6.808 6.828 6.828 6.828 6.828<	RIV RIV RIV	8.566	8.162	7.786	7.435	7.108	6.802	6.515			5.759	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031
10.368 9.787 9.253 8.760 8.306 7.887 7.499 7.139 6.895 6.495 6.207 5.938 5.687 5.453 5.234 5.029 4.856 11.255 10.575 9.954 9.385 8.863 8.358 7.904 7.487 7.103 6.750 6.122 5.842 5.583 5.324 4.988 4.793 12.134 11.348 10.635 9.986 9.394 8.853 8.748 7.103 6.750 6.122 5.842 5.784 4.798 4.799 13.044 11.348 10.635 9.986 9.394 8.853 8.748 7.103 6.750 6.424 6.122 5.842 5.724 5.148 4.799 13.044 12.26 12.26 11.348 10.653 9.864 8.759 8.746 6.720 6.122 5.842 5.724 5.149 7.948 4.799 13.044 12.26 12.849 11.358 12.94 8.746 8.74	AY AY AY	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192
11.255 10.575 9.954 9.385 8.883 8.384 7.943 7.536 7.161 6.814 6.194 6.194 5.918 5.660 5.421 5.197 4.988 4.793 12.134 11.348 10.635 9.986 9.394 8.853 8.358 7.904 7.487 7.103 6.750 6.424 6.122 5.842 5.833 5.342 5.118 4.910 13.004 12.106 11.296 10.563 9.899 9.295 8.744 7.786 7.307 6.028 6.020 5.724 5.468 5.205 5.008 13.004 12.106 11.052 10.088 10.106 9.447 8.851 8.710 6.726 6.026 6.142 5.924 5.066 5.245 5.008 13.004 12.08 11.108 10.106 9.447 8.851 8.204 7.120 6.046 6.265 6.142 6.142 6.142 6.142 6.142 6.142 6.142 6.142 <t< td=""><td>202 202 202 202 202</td><td>10.368</td><td>9.787</td><td>9.253</td><td>8.760</td><td>8.306</td><td>7.887</td><td>7.499</td><td>7.139</td><td>6.805</td><td>6.495</td><td>6.207</td><td>5.938</td><td>5.687</td><td>5.453</td><td>5.234</td><td>5.029</td><td>4.836</td><td></td><td>4.486</td><td>4.327</td></t<>	202 2 0 2 202 202 202	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495	6.207	5.938	5.687	5.453	5.234	5.029	4.836		4.486	4.327
12.134 11.348 10.635 9.986 9.996 9.996 9.996 9.999 9.299 8.853 8.7904 7.487 7.103 6.750 6.424 6.122 5.842 5.583 5.342 5.118 4.910 13.004 12.106 11.296 10.563 9.899 9.295 8.744 7.786 7.367 6.928 6.020 5.724 5.468 5.209 5.008 13.004 12.106 11.296 10.563 9.899 9.295 8.744 7.786 7.367 6.026 6.026 6.122 5.847 5.769 5.096 13.865 12.849 11.938 10.106 9.447 8.851 8.719 6.719 6.729 6.025 5.954 5.065 5.965 5.965 5.905	51555	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814	6.492	6.194	5.918	2.660	5.421	5.197	4.988	4.793	4.611	4.439
13.004 12.106 11.296 10.563 9.899 9.295 8.745 8.244 7.367 6.982 6.628 6.302 6.724 5.748 5.275 5.295 5.008 13.865 12.849 11.938 11.118 10.380 9.712 9.108 8.559 8.061 7.606 7.191 6.811 6.462 6.142 5.847 5.575 5.324 5.092 14.718 13.578 12.611 11.652 10.838 10.106 9.447 8.851 8.312 7.549 7.120 6.729 6.373 6.047 5.495 5.045 5.022 15.562 14.292 13.134 12.690 10.828 10.059 9.372 8.756 8.201 7.702 7.250 6.840 6.265 5.949 5.845 5.316 17.226 15.678 11.690 10.828 10.059 9.372 8.756 8.201 7.702 7.250 6.840 6.546 5.847 5.348 5.316	PA PA	12.134	11.348	10.635	986.6	9.394	8.853	8.358	7.904	7.487	7.103	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533
13.865 12.849 11.938 11.118 10.380 9.712 9.108 8.559 8.061 7.606 7.191 6.811 6.462 6.142 5.847 5.575 5.324 5.092 14.718 13.578 12.561 11.652 10.838 10.106 9.447 8.851 8.313 7.824 7.379 6.974 6.04 6.265 5.954 5.668 5.405 5.162 15.562 14.292 13.166 12.166 11.274 10.477 9.763 9.122 8.549 7.250 6.840 6.467 6.128 5.945 5.162 5.222 16.398 14.292 13.754 12.669 10.659 9.372 8.756 8.201 7.702 6.266 6.938 6.560 6.938 6.503 6.918 5.718 5.222 16.398 14.374 10.659 9.372 8.249 7.366 6.938 6.550 6.928 6.539 6.529 5.584 5.316 18.046	RIV	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367	6.982	6.628		6.002		5.468	5.229	5.008	4.802	4.611
14.718 13.578 12.561 11.652 10.838 10.106 9.447 8.851 8.313 7.824 7.379 6.974 6.604 6.265 5.954 5.668 5.405 5.162 15.562 14.292 13.166 12.166 11.274 10.477 9.763 9.122 8.549 8.202 7.549 7.120 6.729 6.373 6.047 5.749 5.749 5.749 5.749 5.749 5.749 5.749 5.722 16.398 14.992 13.754 12.659 11.690 10.828 10.059 9.372 8.756 8.201 7.702 7.250 6.840 6.467 6.128 5.349 5.734 5.773 17.226 15.678 14.387 12.462 11.470 10.594 9.818 9.129 8.514 7.865 6.259 6.259 6.259 5.929 5.273 18.046 16.578 17.679 17.679 7.849 7.025 6.840 6.467 6.18 5.349	12 1AY 1AY 1AY	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.061	7.606	7.191	6.811	6.462	6.142			5.324	5.092	4.876	4.675
15.562 14.292 13.166 12.16 11.274 10.477 9.763 9.122 8.544 8.022 7.549 7.120 6.729 6.373 6.047 5.749 5.749 5.222 16.398 14.992 13.754 12.659 11.690 10.828 10.059 9.372 8.756 8.201 7.250 6.840 6.467 6.128 5.818 5.534 5.773 17.226 15.678 14.324 12.085 11.158 10.536 9.604 8.950 8.365 7.366 6.938 6.550 6.198 5.877 5.584 5.316 18.046 16.351 14.877 13.590 12.462 10.594 9.819 8.514 7.963 7.025 6.529 6.398 5.379 5.366 5.375 22.023 19.523 17.413 15.622 14.094 12.783 11.258 10.274 9.427 8.843 7.086 6.378 6.464 6.097 5.766 5.467 25.808 <td>91 202 202 202</td> <td>14.718</td> <td>13.578</td> <td>12.561</td> <td>11.652</td> <td>10.838</td> <td>10.106</td> <td>9.447</td> <td>8.851</td> <td>8.313</td> <td>7.824</td> <td>7.379</td> <td>6.974</td> <td>6.604</td> <td>6.265</td> <td>5.954</td> <td>5.668</td> <td>5.405</td> <td>5.162</td> <td>4.938</td> <td>4.730</td>	91 202 202 202	14.718	13.578	12.561	11.652	10.838	10.106	9.447	8.851	8.313	7.824	7.379	6.974	6.604	6.265	5.954	5.668	5.405	5.162	4.938	4.730
16.398 14.992 13.754 12.659 11.690 10.059 9.372 8.756 8.201 7.702 7.250 6.840 6.467 6.128 5.818 5.534 5.773 17.226 15.678 14.324 13.134 12.085 11.158 10.336 9.604 8.950 8.365 7.866 6.938 6.550 6.198 5.877 5.584 5.316 18.046 16.351 14.877 13.590 12.462 10.594 9.818 9.129 8.514 7.963 7.025 6.623 6.259 5.929 5.628 5.353 22.023 19.523 17.413 15.622 14.094 12.783 11.654 10.274 9.427 8.694 8.055 7.496 7.003 6.566 6.177 5.829 5.517 25.808 22.396 19.600 17.292 13.765 12.498 11.655 10.567 9.644 8.855 8.176 7.056 6.617 6.218 5.818 5.518 <	2510	15.562		13.166	12.166	11.274	10.477	9.763	9.122	8.544	8.022	7.549	7.120		6.373	6.047	5.749	5.475	5.222	4.990	4.775
7.226 1.5726 14.324 13.134 12.085 11.158 10.336 9.604 8.950 8.365 7.866 6.938 6.550 6.198 5.877 5.584 5.316 5.316 5.316 5.366 6.938 6.550 6.198 5.529 5.628 5.353 5.316 5.329 5.269 5.365 5.369 7.025 6.623 6.259 6.259 6.268 5.328 5.328 5.329 6.259 6.2623 6.259 6.259 6.278 7.328 7.320 6.873 6.642 6.097 5.766 5.467 5.567 5.469 7.025 6.873 6.047 8.694 8.055 7.496 7.003 6.647 6.097 5.766 5.477 5.829 5.517 5.589 5.539 5.539 5.539 5.539 5.539 5.539 5.539 5.539 5.539 5.539 5.539 5.539 5.539 5.539 5.539 5.539 5.539 5.539 5.548 5.548 5.548	PA PA	16.398	14.992	13.754	12.659	11.690	10.828	10.059		8.756	8.201	7.702	7.250	6.840	6.467	6.128	5.818	5.534	5.273	5.033	4.812
18.046 16.351 14.877 13.590 12.462 14.70 10.594 9.818 9.129 8.514 7.963 7.469 7.025 6.623 6.259 5.929 5.628 5.353 22.023 19.523 17.413 15.622 14.094 12.783 11.654 10.675 9.823 9.077 8.422 7.843 7.330 6.873 6.464 6.097 5.766 5.467 25.808 22.396 19.600 17.292 15.372 13.765 12.249 11.258 10.574 9.427 8.694 8.055 7.496 7.003 6.566 6.177 5.829 5.517 29.409 24.999 21.487 18.665 16.374 14.498 11.655 10.567 9.644 8.855 8.176 7.586 7.070 6.617 6.215 5.898 5.539 32.835 27.355 23.115 19.793 17.165 10.757 9.719 8.951 8.244 7.675 7.135 6.641 6	RIV RIV	17.226	15.678	14.324	13.134	12.085	11.158	10.336		8.950	8.365	7.839	7.366	6.938	6.550	6.198	5.877	5.584	5.316	5.070	4.843
22.023 19.523 17.413 15.622 14.094 12.783 11.654 10.675 9.823 9.077 8.422 7.843 7.330 6.873 6.464 6.097 5.766 5.467 25.808 22.396 19.600 17.292 15.372 13.765 12.409 11.258 10.274 9.427 8.694 8.055 7.496 7.003 6.566 6.177 5.829 5.517 29.409 24.999 21.487 18.665 16.374 14.498 11.655 10.757 9.779 8.951 8.244 7.636 7.070 6.617 6.215 5.858 5.539 32.835 27.355 23.115 19.793 17.165 10.757 9.779 8.951 8.244 7.634 7.105 6.617 6.246 5.880 5.554	20 A A A	18.046	16.351	14.877	13.590	12.462	11.470	10.594	9.818	9.129	8.514	7.963	7.469	7.025	6.623		5.929	5.628	5.353	5.101	4.870
25.808 22.396 19.600 17.292 15.372 13.765 12.409 11.258 10.274 9.427 8.694 8.055 7.496 7.003 6.566 6.177 5.829 5.517 5 29.409 24.999 21.487 18.665 16.374 14.498 12.948 11.655 10.567 9.644 8.855 8.176 7.586 7.070 6.617 6.215 5.858 5.539 5 32.835 27.355 23.115 19.793 17.159 15.046 13.332 11.925 10.757 9.779 8.951 8.244 7.634 7.105 6.642 6.233 5.871 5.548 5 39.196 31.424 25.730 21.482 18.256 15.762 13.801 12.233 10.962 9.915 9.042 8.304 7.675 7.133 6.661 6.246 5.880 5.554 5	202 202 202	22.023	19.523	17.413	15.622	14.094	12.783	11.654	10.675	9.823		8.422	7.843	7.330	6.873	6.464	6.097	992'9	5.467	5.195	4.948
29.409 24.999 21.487 18.665 16.374 14.498 12.948 11.655 10.567 9.644 8.855 8.176 7.586 7.070 6.617 6.215 5.858 5. 32.835 27.355 23.115 19.793 17.159 15.046 13.332 11.925 10.757 9.779 8.951 8.244 7.634 7.105 6.642 6.233 5.871 5. 39.196 31.424 25.730 21.482 18.256 15.762 13.801 12.233 10.962 9.915 9.042 8.304 7.675 7.133 6.661 6.246 5.880 5.	08 5 5 5	25.808	22.396	19.600	17.292	15.372	13.765	12.409	11.258	10.274	9.427	8.694	8.055	7.496	7.003		6.177	5.829	5.517	5.235	4.979
32.835 27.355 23.115 19.793 17.159 15.046 13.332 11.925 10.757 9.779 8.951 8.244 7.634 7.105 6.642 6.233 5.871 5.871 5.871 5.871 5.871 5.880	35	29.409	24.999	21.487	18.665	16.374	14.498	12.948	11.655	10.567	9.644	8.855	8.176	7.586	7.070	6.617	6.215	5.858	5.539	5.251	4.992
39.196 31,424 25.730 21,482 18.256 15.762 13.801 12.233 10.962 9.915 9.042 8.304 7,675 7.133 6.661 6.246 5.880 5.	RIV RIV	32.835	27.355	23.115	19.793	17.159	15.046	13.332	11.925	10.757	9.779	8.951	8.244	7.634	7.105		6.233	5.871	5.548	5.258	4.997
	05 (A)	39.196	31.424	25.730	21.482	18.256	15.762	13.801	12.233	10.962	9.915	9.042	8.304	7.675	7.133	6.661	6.246	5.880	5.554	5.262	4.999

A2.1 AY 2025 ICPARMAY 2025 ICP