

### THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

# PATHFINDER

### MAY 2025 DIET PROFESSIONAL LEVEL EXAMINATIONS

**Question Papers** 

Suggested Solutions

Examiner's Reports

and

**Marking Guides** 

#### FOREWARD

This issue of the **PATHFINDER** is published principally, in response to a growing demand for an aid to:

- (i) Candidates preparing to write future examinations of the Institute of Chartered Accountants of Nigeria (ICAN);
- (ii) Unsuccessful candidates in the identification of those areas in which they lost marks and need to improve their knowledge and presentation;
- (iii) Lecturers and students interested in acquisition of knowledge in the relevant subject contained herein; and
- (iv) The professional; in improving pre-examinations and screening processes, and thus the professional performance of candidates.

The answers provided in this publication do not exhaust all possible alternative approaches to solving these questions. Efforts had been made to use the methods, which will save much of the scarce examination time. Also, in order to facilitate teaching, questions may be edited so that some principles or their application may be more clearly demonstrated.

It is hoped that the suggested answers will prove to be of tremendous assistance to students and those who assist them in their preparations for the Institute's Examinations.

#### <u>NOTES</u>

Although these suggested solutions have been published under the Institute's name, they do not represent the views of the Council of the Institute. The suggested solutions are entirely the responsibility of their authors and the Institute will not enter into any correspondence on them.

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#### THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA



### PROFESSIONAL LEVEL EXAMINATION – MAY 2025 CORPORATE REPORTING EXAMINATION INSTRUCTIONS

#### PLEASE READ THESE INSTRUCTIONS BEFORE THE COMMENCEMENT OF THE PAPER

- 1. Check your pockets, purse, mathematical set, etc. to ensure that you do not have prohibited items such as telephone handset, electronic storage device, programmable devices, wristwatches or any form of written material on you in the examination hall. You will be stopped from continuing with the examination and liable to further disciplinary actions including cancellation of examination result if caught.
- 2. Write your **EXAMINATION NUMBER** in the space provided above.
- 3. Do **NOT** write anything on your question paper **EXCEPT** your examination number.
- 4. Do **NOT** write anything on your docket.
- 5. Read all instructions in each section of the question paper carefully before answering the questions.
- 6. Do **NOT** answer more than the number of questions required in each section, otherwise, you will be penalised.
- 7. All solutions should be written in **BLUE** or **BLACK INK**. Any solution written in **PENCIL** or any other **COLOUR OF INK** will not be marked.
- 8. You are required to attempt **Question ONE (compulsory), any TWO Questions in** Section B and any TWO Questions in Section C.
- 9. Check that you have collected the correct question paper for the examination you are writing.

#### TUESDAY, MAY 20, 2025

#### DO NOT TURN OVER UNTIL YOU ARE TOLD TO DO SO

### THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA PROFESSIONAL LEVEL EXAMINATION – MAY 2025 CORPORATE REPORTING

Time Allowed: 3<sup>1</sup>/<sub>4</sub> hours (including 15 minutes reading time)

INSTRUCTION: YOU ARE REQUIRED TO ATTEMPT FIVE OUT OF THE SEVEN QUESTIONS IN THIS PAPER

#### SECTION A: COMPULSORY QUESTION (30 MARKS)

#### **QUESTION 1**

(a) Breakthrough Plc is in the process of releasing its financial statements through one of the daily newspapers on or before May 31, 2024. The following drafts were prepared by the Company's Chief Accountant.

Draft consolidated statement of financial position as at December 31,

	2023	2022
	<del>N</del> '000	<del>N</del> '000
Assets:		
Non-current assets:		
Property, plant and equipment	2,630,000	2,010,000
Goodwill	60,000	50,000
Investment in an associate	540,000	<u> </u>
Total non-current assets	<u>3,230,000</u>	<u>2,640,000</u>
Current assets:		
Inventories	1,300,000	1,160,000
Trade receivables	1,220,000	1,060,000
Cash and cash equivalents	100,000	280,000
Total current assets	<u>2,620,000</u>	<u>2,500,000</u>
Total assets	<u>5,850,000</u>	<u>5,140,000</u>
Equity and liabilities:		
Equity		
Share capital	200,000	170,000
Share premium account	60,000	30,000
Revaluation reserves	100,000	290,000
Retained earnings	<u>508,000</u>	<u>500,000</u>
	868,000	990,000
Non-controlling interests	<u>120,000</u>	<u>90,000</u>
Total equity	<u>988,000</u>	<u>1,080,000</u>
Non-current liabilities	1,700,000	1,200,000
Current liabilities	<u>3,162,000</u>	<u>2,860,000</u>
Total liabilities	<u>4,862,000</u>	<u>4,060,000</u>
Total equity and liabilities	<u>5,850,000</u>	<u>5,140,000</u>

Draft consolidated statement of profit or loss and other comprehensive income for the year ended December 31, 2023

	<b>№′000</b>
Revenue	9,400,000
Cost of sales	<u>(6,800,000)</u>
Gross profit	2,600,000
Distribution and administrative expenses	(1,200,000)
Interest expense	(80,000)
Share of profit in associate	60,000
Profit before tax	1,380,000
Income tax expense (including tax on income from associate	
¥20 million)	(420,000)
Profit for the period	960,000
Attributable to:	
Equity holders of the parent	910,000
Non-controlling interests	50,000
-	960,000

### Draft group statement of recognised income and expense for the year ended December 31, 2023

	<b>№</b> ′000
Foreign exchange difference of associate	(10,000)
Impairment losses on property, plant and equipment offset	
against revaluation surplus	<u>(190,000)</u>
Net expense recognised in equity	(200,000)
Profit for the period	910,000
•	710,000

# Draft group statement of changes in equity for the year ended December 31, 2023

	<del>N</del> ′000
Recognised income and expense for the period	710,000
Dividends paid	(892,000)
New shares issued	<u>60,000</u>
Total movement during the year	(122,000)
Equity at the beginning of the year	<u>990,000</u>
Equity at the end of the year	<u>868,000</u>

#### Additional information:

- (i) Any impairment on goodwill has been included in the draft financial statements for the year ended December 31, 2023.
- (ii) There was no disposal of property, plant and equipment during the year. Depreciation charged for the period was ¥120 million.

- (iii) It was established that there was no actuarial gain or loss in the year.
- (iv) Included in dividends paid during the year was ₩800 million paid to Waterside Plc, a subsidiary company through which Breakthrough Plc conducts its investment activities. The transfer was made on January 1, 2023 for specified portfolio of investments but no transfer of profit or loss occurred. Ninety-five percent of the profits and one hundred per cent of the losses in the specified portfolio of investments are to be transferred to Breakthrough Plc at the end of the year annually and the capital is expected to be returned in four years' time.

The statement of financial position extract of Waterside Plc as at December 31, 2023 is as follows:

	₩′000
Investment at fair value through profit or loss	<u>780,000</u>
Share capital	800,000
Retained earnings	<u>(20,000)</u>
	<u>780,000</u>

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(v) Breakthrough Plc is yet to make provision for its seventy per cent acquisition and holding in Dandy Plc on January 1, 2022. However, the company wants to set up a provision for reconstruction costs of ¥20 million retrospectively on the acquisition. The fair values of the net assets acquired were as follows:

	<mark>₩</mark> ′000
Property, plant and equipment	140,000
Inventories and work in progress	<u>180,000</u>
	<u>320,000</u>

The purchase consideration was \$200 million in cash and \$50 million (discounted value) deferred consideration payable on January 1, 2023. The difference between the discounted value of the deferred consideration (\$50 million) and the amount payable (\$58million) is included in interest expense.

(vi) The composition of current liabilities, non-current liabilities and retirement benefit liability are as presented below:

Current liabilities:	2023 <del>N</del> '000	2022 <del>N</del> '000
Trade payables	2,682,000	2,400,000
Interest payable	100,000	90,000
Taxation	<u>380,000</u>	<u>370,000</u>
	<u>3,162,000</u>	<u>2,860,000</u>
Non-current liabilities:	2023 <del>N</del> '000	2022 <del>N</del> '000
Deferred consideration – purchase of Dandy Plc	58,000	-
Liability for the purchase of property, plant and equipment	288,000	-
Loans repayable	1,242,000	1,110,000
Provisions for deferred tax	60,000	50,000
Retirement benefit liability	<u>52,000</u>	<u>40,000</u>
	<u>1,700,000</u>	<u>1,200,000</u>
Movements in retirement benefit:	2023 <del>N</del> ′000	
Liability as at January 1, 2023	40,000	
Current and past service costs charged to income statement	26,000	
Contributions paid to retirement benefit scheme	<u>(14,000)</u>	
Liability as at December 31, 2023	<u>52,000</u>	

#### **Required**:

(a) Prepare Breakthrough Group consolidated statement of cashflows for the year ended December 31, 2023 using the indirect method.

(20 Marks)

(b) The Chief Accountant understands the guidelines for the preparation of financial statements - one of which is provisions or contingencies. In the course of the preparation of the financial statements, a sum of ¥200 million was captured under this heading. On further investigation, it was discovered that the ¥200 million was made up of the following: ¥20 million for court case involving a supplier, ¥70 million paid for advertisement rights, ¥50 million provision for future losses in business operations and ¥60 million for judgement debt on appeal.

#### **Required:**

- i. Advise on the appropriateness of the amount of ¥200 million captured in the financial statements. (2 Marks)
- ii. Compute the correct amount of provisions or contingencies, if the ¥200 million recognised in the financial statements is wrong. (3 Marks)
- iii. Discuss the treatment of the previous entries made in the books to the extent to which the financial statements is wrong. (5 Marks)

(Total 30 Marks)

# SECTION B: YOU ARE REQUIRED TO ATTEMPT TWO OUT OF THE THREE<br/>QUESTIONS IN THIS SECTION (40 MARKS)

#### **QUESTION 2**

Kankanfo Group Plc, is a well established company that is planning to expand through acquisition of some companies.

The Directors of the company have identified two potential target companies, Gombe Limited and Uzor Limited.

Extracts from the financial statements of the two companies are as follows:

# Statement of profit or loss and other comprehensive income for the year ended December 31, 2021.

	Gombe Limited <del>N</del> '000	Uzor Limited ¥'000
Revenue	272,000	264,000
Cost of sales	(168,000)	(183,800)
Gross profit	104,000	80,200
Administrative expenses	(72,000)	(56,000)
Profit from operations	32,000	24,200
Finance costs	(12,000)	(16,000)
Net profit before tax	20,000	8,200
Income tax expense	<u>(6,000)</u>	<u>(4,000)</u>
Profit for the year	<u>14,000</u>	<u>4,200</u>
Other comprehensive income:		
Items that will not be reclassified to P or L		
Surplus on revaluation		<u>24,000</u>
Total comprehensive income	<u>14,000</u>	<u>28,200</u>
Statement of financial position as at Decem	ıber 31, 2021	
-	Gombe	Uzor
	Limited	Limited
	<mark>₩</mark> ′000	<mark>\</mark> ¥′000
Non-current assets:		
Property, plant and equipment	<u>128,000</u>	<u>140,200</u>
Current assets:		
Inventories	24,000	28,000
Receivables	<u>48,000</u>	<u>40,000</u>
Current assets	<u>72,000</u>	<u>68,000</u>
Total assets	<u>200,000</u>	<u>208,200</u>
Equity and liabilities: Equity		

Ordinary share capital (¥1 each)	64,000	48,000
Revaluation reserves		20,000
Retained earnings	<u>30,000</u>	<u>20,200</u>
	<u>94,000</u>	<u>88,200</u>
Non-current liabilities:		
Loan notes	<u>64,000</u>	<u>72,000</u>
Current Liabilities:		
Trade payables	20,000	20,000
Income tax	6,000	4,000
Borrowings	<u>16,000</u>	<u>24,000</u>
	<u>42,000</u>	<u>48,000</u>
Equity and liabilities	<u>200,000</u>	<u>208,200</u>

#### Statement of changes in equity for year ended December 31, 2021

	Gombe	Uzor
	Limited	Limited
	<b>₩</b> ′000	<mark>\</mark> ¥′000
Bal. b/f January 1, 2021	88,000	64,000
Total comprehensive income	14,000	28,200
Dividend paid	<u>(8,000)</u>	<u>(4,000)</u>
Bal. December 31, 2021	<u>94,000</u>	<u>88,200</u>

#### Additional Information:

- (i) Uzor Limited revalued its property, plant and equipment (PPE) for the first time on January 1, 2021. The property, plant and equipment of Gombe Ltd are very similar in age and type to that of Uzor Limited. Gombe Limited has a policy of maintaining all its property, plant and equipment at depreciated historical costs, using 20% rate on straight line basis. Both Gombe Limited and Uzor Limited charge depreciation on PPE to cost of sales. Uzor Limited has transferred the excess depreciation on the re-valued assets from revaluation reserve to retained earnings.
- (ii) On December 31, 2021 Gombe Limited supplied goods at the normal selling price of ¥9,600,000 to another Company Mamagold Limited. Gombe Limited's normal selling price is at a mark up of 60% on costs. Mamagold Limited paid for the goods in cash on the same day. The terms of the selling agreement were that Gombe Limited repurchase these goods on June 30, 2022 for ¥10,000,000. Gombe Limited accounted for this transaction as sales for the year ended December 31, 2021.
- (iii) It is the practice of Kakanfo Group Plc to appraise potential investment opportunities by making use of the following ratios:
  - Gearing;
  - Turnover to capital employed;

- Gross profit margin; and
- Return on capital employed.

Your Senior Accountant computed the four key ratios for the two target companies from the financial statement extracts provided and the result are as follows:

	Gombe	Uzor
	Limited	Limited
	<b>₩′000</b>	<mark>\</mark> ¥′000
Gearing	46%	52.1%
Turnover to capital employed	1.6	1.4
Gross profit margin	38.2%	30.4%
Return on capital employed	18.4%	13.1%

(iv) After the computation in (iii) above, the Senior Accountant concluded that performance of Gombe Limited is better than that of Uzor Limited. Therefore, Kankanfo Group Plc should carry out due diligence on Gombe Limited with a view to making a bid to acquire it.

However, as the Chief Accountant of Kankanfo Group Plc., you are not sure whether the conclusion of your Senior Accountant is correct in view of information in notes (i) and (ii) above.

#### **Required**:

a. Carry out the necessary adjustments that would be appropriate on the financial statements of Gombe Limited and Uzor Limited to facilitate comparison showing your answers in tabular form, with columns for original figures, adjustments, new figures and justifying reasons for the adjustments.

(10 Marks)

- b. Recalculate the four key ratios for Gombe Limited and Uzor Limited using the new figures obtained after the necessary adjustments. (4 Marks)
- c. Evaluate your Senior Accountant's conclusion in the light of your answer in (a) and (b) above. (6 Marks)

(Total 20 Marks)

#### **QUESTION 3**

You are the accountant of Oretente Plc, that prepares consolidated financial statements. Your Managing Director, who is not versatile in accounting, has recently attended a seminar at which key financial reporting issues were discussed. He remembers being told the following:

Financial statements of an entity should reflect the substance of its transactions; Revenue from the contracts with customers should only be recognised when certain conditions have been satisfied. Transfer of legal onwnership to the goods is not necessarily sufficient for an organisation to recognise revenue from their 'sale'.

The reporting date of Oretente Plc is July 31.

In the year to July 31, 2020, the company entered into the following transactions:

**Transaction 1:** On August 1, 2019, Oretente Plc sold one of its branches to Danto Plc for  $\frac{1}{2}4$  million. The net assets of the branch in the financial statements of Oretente Plc immediately before the sale was  $\frac{1}{2}1$  million. Danto Plc is a subsidiary of a bank and was specifically incorporated to carry out the purchase – it has no other business operations. Danto Plc received the  $\frac{1}{2}4$  million to finance this project from its parent in the form of a loan. Oretente Plc continues to control the operations of the branch and receives an annual operating fee from Danto Plc. The annual fee equates the operating profit of the branch for the 12 months less the interest payable on the loan taken out by Danto for the 12 months to the previous July 31. If this amount is negative, then Oretente Plc must pay the negative amount to Danto Plc. Any payments to or by Oretente Plc must be made by August 31 following the end of the relevant period. In the year to July 31, 2020, the branch made an operating profit of  $\frac{1}{2}, 400,000$ .

**Transaction 2**: On February 1, 2020, Oretente Plc sold a property to a bank for \$15 million. The market value of the property at the date of the sale was \$30 million. Oretente Plc continues to occupy the property rent-free. Oretente Plc has the option to buy the property back from the bank at the end of every month from February 29th, 2020 until January 31, 2025. Oretente Plc has not yet exercised this option. The repurchase price will be \$15 million plus \$150,000 for every complete month that has elapsed from the date of sale to the date of repurchase. The bank cannot require Oretente Plc to repurchase the property until the agreement lapses after January 31, 2025. The directors of Oretente Plc expect property prices to rise at around 5% each year for the foreseeable future.

#### **Required**:

- a. Discuss the conditions that need to be satisfied before revenue can be recognised. You should support your answer with reference to International Financial Reporting Standards as appropriate. (8 Marks)
- b. Discuss how the transactions described above will be dealt with in the consolidated financial statements of Oretente Plc for the year ended July 31, 2020. (12 Marks)

#### (Total 20 Marks)

#### **QUESTION 4**

a. Mr. Okon, your immediate boss and the Chief Accountant of Young Stars group of companies, participated in an MCPD organised by ICAN in collaboration with the Financial Reporting Council of Nigeria (FRCN). Much emphasis was on improving the quality of information in annual report at the programme.

One of the presentations that was of utmost interest to Mr. Okon has to do with the criticisms of traditional reporting model; being insufficient to address diverse requirements of users. The presenter was also of the opinion that annual reports and relevant disclosure notes prepared in accordance with IFRS do not satisfy the information needs of some users. Likewise, the Conceptual Framework for Financial Reporting does not really address most of the issues.

Based on the discussion at the seminar, Mr. Okon suggested that your company should give due consideration to the production of annual sustainability reports which considers both financial and non-financial information. This is necessary, in the light of the pressure to demonstrate how your company contributes to sustainable development in relation to its impact on society and the environment.

#### **Required**:

- i. Discuss the basic criticisms of the IFRS reporting framework. (5 Marks)
- ii. Appraise the progress towards adoption of sustainability reporting both globally and in Nigeria. (5 Marks)
- iii. In other to educate Mr. Okon, explain key components of the reporting standard that must be complied with and the basic inputs that must be provided for the preparation of the company's sustainability report.

(5 Marks)

b. Different types of capital play key roles in the value creation process; explain briefly the roles of each type of capital. (5 Marks)

#### (Total 20 Marks)

#### SECTION C: YOU ARE REQUIRED TO ATTEMPT TWO OUT OF THE THREE QUESTIONS IN THIS SECTION (30 MARKS)

#### **QUESTION 5**

Aribatise is a public liability company which holds a few financial instruments:

#### **Required:**

Discuss how these transactions should be accounted for in accordance with IAS 32 and IFRS 9 in the financial statements to December 31, 2024.

- a. A 3% bond purchased on January 1, 2022 for ¥500,000. The nominal value is ¥600,000 and redemption will be at par on December 31, 2027. The coupon is received annually in arrears. The effective interest rate on the bond is 9.7%. The company has classified the bond as "held to maturity". The market value of the bond at December 31, 2024 is ¥550,000. (4 Marks)
- b. An investment was made in the equity shares of Ojutiri Plc. 6,000 shares were purchased (a 1% stake) at a cost of ¥20 per share on April 1, 2022. A transaction fee of ¥600 was charged on the purchase. The firm intended to sell the shares within three months and so classed the investment as fair value through profit or loss. The market value of the investment continued to rise and so the company decided not to sell in the near future. The market value of the shares over the three years has been as follows:

	<b>№</b> ′000
December 31, 2022	64
December 31, 2023	68
December 31, 2024	70

(5 Marks)

c. The company issued a convertible bond at par on December 31, 2024, raising ¥1,000,000. The coupon on the bond is 4%. The rate on an equivalent redeemable bond is 7%. The bond can be redeemed at par on December 31, 2027 or converted into equity shares at a rate of five shares per ¥200. The bond has not been classed as fair value through profit or loss. (6 Marks)

(Total 15 Marks)

#### **QUESTION 6**

a. Share-based payment occurs when an entity purchases good or services from another party such as, a supplier or employee and rather than pay directly in cash, the transactions are settled by issuing shares, share options or future cash amount linked to the value of the shares.

Before the publication of IFRS 2 – Share-Based Payments, there appeared to be an anomaly to the extent that, if a company pays its employee in cash, an expense is recognised in the statement of profit or loss but if the payment is in share options, no expense is recognised.

#### **Required**:

Discuss briefly **THREE** types of share-based payment transactions recognised under IFRS 2. (3 Marks)

b. Adimula Plc is a company established by a group of Information Technology (IT) experts based in Lagos with offices in various computer villages across the six geo-political zones of the country. The company has a special development programme for its young employees, which involves sending them to Japan on regular basis to acquire knowledge in Artificial Intelligence (AI) as well as internet of things (IOT).

However, because of shortage of I.T experts with specialisation in AI in the country, the multinational companies operating in Nigeria frequently poaches the staff of Adimula Plc, after they had been trained by the company.

The board of directors of Adimula Plc decided to introduce a staff incentive scheme to prevent losing employee to the multinational companies.

In view of this, Adimula Plc granted 100 cash share appreciation rights (SARs) to each of its 500 employees. Each grant is conditional upon the employee working for Adimula Plc over the next three (3) years.

Further information available about the SARs are as follows;

Year	Actual employees leaving the company in the year	Estimate of further employees that may leave in future	Number of employees whose interest is expected to vest and actually vested
Dec. 31, 2019	35	60	405
Dec. 31, 2020	40	25	400
Dec. 31, 2021	22		403

Adimula Plc estimates the fair value of SARs at the end of each year in which liability exist as shown below:

Year	Fair value
December 31, 2019	15
December 31, 2020	18
December 31, 2021	20

#### **Required**:

Calculate the expense and liability that will be shown in the financial statements of Adimula Plc for all the relevant years. (12 Marks)

(Total 15 Marks)

#### **QUESTION 7**

Daramson is a Limited Liability Company whose financial statements are prepared using International Financial Reporting Standards. The company has the following transactions.

#### Transaction 1:

Daramson has outsourced its waste collection to a private sector provider called Urban Waste and Co and pays an annual amount for its services. Urban Waste and Co buys vehicles and uses them for Daramsons waste collection only. The vehicles are painted with the Daramson Company Limited's name and colours. Daramson can use the vehicles and the vehicles are used for waste collection for nearly all of the asset's life. In the event of Urban Waste and Co's business ceasing, Daramson can obtain legal title to the vehicles and carry on the waste collection service. (5 Marks)

#### Transaction 2:

Daramson owns a warehouse which it leased to Agroallied Limited used as a storage facility for pesticides and chemicals. The government has announced its intention to enact a legislation requiring property owners to accept liability for environmental pollution. As a result, Daramson has introduced a hazardous chemical policy and has begun to apply the policy to its properties. Daramson had received report that the chemicals from Agroallied Limited have contaminated the land surrounding the warehouse. Daramson has no recourse against Agroallied or its insurance company for the clean-up costs of the pollution. At October 31, 2021, it has become certain that the draft legislation requiring a cleanup of land already contaminated will be enacted shortly after the year end. (5 Marks)

#### Transaction 3:

On November 1, 2010, Daramson purchased an equipment at a cost of \$10 million. The estimated useful life of the equipment was 20 years. On October 31, 2016, the equipment was abandoned because of changes in technology. The equipment in its current state can be used in another line of business. The current replacement cost for the equipment equivalent size is \$4.2 million. Because of the nature of the noncurrent asset, value-in-use and net selling price are unrealistic estimates of the value of the equipment. The change in use would have no effect on the estimated life of the equipment. (5 Marks)

#### **Required**:

Discuss how the transactions 1-3 should be accounted for in the financial statements of Daramson Limited. (Total 15 Marks)

#### **SOLUTION 1**

(a)

#### Breakthrough Plc. Consolidated statement of cash flows for the year ended Dec 31, 2023

Operating activities: Profit before tax	₩′000	₩′000 1,380,000
Add back – non-cash and non-operating items:		
Depreciation	120,000	
Current and past service cost	26,000	
Impairment of goodwill	16,000	
Interest expense	80,000	
Share of associate's profit after tax	<u>(60,000)</u>	<u>182,000</u>
Cash flows from operations before working	-	
capital changes		1,562,000
Changes in working capital:		
Decrease in inventories	40,000	
Increase in trade receivables	(160,000)	
Increase in trade payables	282,000	<u>162,000</u>
Cash flows from operating activities after	r	1 724 000
changes in working capital	(380,000)	1,724,000
Tax paid Retirement-benefit contributions		
	<u>(14,000)</u>	(394,000)
Net cash generated from operating activities		1,330,000
Investing activities:		
Net cash invested in acquisition of Dandy Plc	(200,000)	
Investment in financial assets	(800,000)	
Dividend received from associate	70,000	
Cash purchase of property, plant & equipment	(502,000)	
Net cash used in investing activities		(1,432,000)
Financing activities:		
Proceeds on issue of shares #(30 million + 30		
million)	60,000	
Acquisition of additional loans	132,000	
Interest paid	(62,000)	
Dividend paid to parent's shareholders		
₩(892million – 800million)	(92,000)	
Dividend paid to non-controlling interests	<u>(116,000)</u>	
Net cash generated from financing activities		<u>(78,000)</u>

Net decrease in cash		(180,000)
Cash and cash equivalents at January 1, 2023 Cash and cash equivalents at December 31,		<u>280,000</u>
2023		<u>100,000</u>
Cash and cash equivalents represented by:		
	2023	2022
	NUMAA	NUMAA

	<b>₩′000</b>	<b>₩′000</b>
Cash & cash equivalents	<u>100,000</u>	<u>280,000</u>
	<u>100.000</u>	<u>280,000</u>

#### Working notes:

1. The ₦96 million variance (₦196 million less ₦100 million) relates to Note (iv) Breakthrough has yet to recognise the provision arising from its 70 per cent purchase of Dandy Plc at the acquisition date. This adjustment affects the computation of the non-controlling interests at acquisition and its subsequent re-measurement, which in turn influences the dividend attributable to that interest, as set out below:

<b>₩'000</b>
90,000
96,000
<u>50,000</u>
236,000
<u>120,000</u>
<u>116,000</u>

#### 2. Ascertain the goodwill at acquisition of Dandy Plc

(Acquisition date – January 1, 2022/2023)

	<b>₩</b> ′000
Purchase consideration by Breakthrough Plc (#200 million +	
₩50 million)	250,000
Non-controlling interests ( $30\% \times \$320$ million)	<u>96,000</u>
Cost of business combination	346,000
Fair value of net assets (₦140 million + ₦180 million)	<u>320,000</u>
Acquired goodwill	<u>26,000</u>

3.	
To determine the impairment loss on goodw	ríll: ₩'000
Existing goodwill b/f (Jan 1, 2023)	50,000
New acquired goodwill (on acquisition of Dandy	7) <u>26,000</u>
Expected amount of goodwill	76,000
Consolidated goodwill (actual amount of goodw	ill) <u>60,000</u>
Impairment loss on goodwill	<u>16.000</u>
4.	
Property, plant & equipment:	<b>₩′000</b>
Balance b/f	2,010,000
Add: Fair-value at acquisition of Dandy Plc	<u>140,000</u>
	2,150,000
Depreciation charge for the year	(120,000)
Impairment charge for the year (offset)	<u>(190,000)</u>
Expected balance c/f	1,840,000
Actual balance c/f	<u>2,630,000</u>
Additions to assets during the year	<u>790,000</u>
Cash acquisition = $\$790$ million – $\$288$ million =	₩502 million
5.	
Investment in associate:	<b>₩′000</b>
Balance b/f	580,000
Share of associate's profit before taxes	60,000
Share of associate's income tax	(20,000)
Foreign-exchange losses	<u>(10,000)</u>
Expected balance c/f	610,000
Actual balance c/f	<u>540,000</u>
Cash dividends received from associate	<u>70.000</u>

Movement in Ioan liability:	₩′000
Balance b/f	1,110,000
Balance c/f	<u>1,242,000</u>
Acquisition of additional loans	<u>132,000</u>

6.

<b>₩′000</b>
1,060,000
<u>1,220,000</u>
<u>160.000</u>
<b>₩′000</b>
2,400,000
<u>2,682,000</u>
<u>282.000</u>
<b>₩′000</b>
90,000
<u>72,000</u>
162,000
<u>100,000</u>
<u>62,000</u>
<b>₩′000</b>
370,000
<u>390,000</u>
760,000
<u>380,000</u>
<u>380.000</u>
<b>₩′000</b>
50,000
<u>60,000</u>
<u>10.000</u>

12.		
	Income tax expense:	<b>₩′000</b>
	Current tax expense (balancing figure)	390
	Deferred tax expense	<u>10</u>
	Income tax expense (excluding associate)	<u>400</u>
13.		
	Non-controlling interests (NCI):	<b>₩′000</b>
	Balance b/f	90,000
	Share of profit after tax	<u>50,000</u>
	Expected balance c/f	140,000
	Actual balance c/f	<u>120,000</u>
	Dividend paid to NCI	<u>20.000</u>
14.		
	Movement in inventories & WIP:	<b>₩′000</b>
	Balance b/f	1,160,000
	Fair-value uplift on newly acquired Dandy Plc	<u>180,000</u>
	Expected balance c/f	1,340,000
	Actual balance c/f	<u>1,300,000</u>
	Decrease in inventories	<u>40.000</u>
15		

15.

Additional equity issued:	Share Capital (₦'000)	Share Premíum (₦'000)
Balance b/f	170,000	30,000
Balance c/f	<u>200,000</u>	<u>60,000</u>
Proceeds on issue of shares	<u>30.000</u>	<u>30.000</u>

16.

### Ascertaining the balances on retained earnings and revaluation reserve

	Retained earnings OCE) ₩'000	(incl. Revaluation reserve ₩'000
Balance b/f	500,000	290,000
Foreign-exchange loss – associate	(10,000)	-
Net impairment loss in PPE (offset against gain on revaluation)	_	(190,000)
Profit for the year (Parent %)	910,000	-
Dividends paid	<u>(892,000)</u>	Ξ
Expected balance c/f	508,000	100,000
Actual balance c/f	<u>508,000</u>	<u>100,000</u>

Net cash paid / (invested) in acquisition of Dandy Plc:	<b>₩′000</b>
Cash consideration	200,0000
Less: Cash & cash equivalents acquired	(0)
Net cash outflows	<u>200.000</u>

- (b) An analysis of each component of the ₩200 million under the guidelines of IAS 37 Provisions, Contingent Liabilities and Contingent Assets is required.
  - i. Advice on the appropriateness of the ₩200 million recognised: The total of ₩200 million was classified under provisions or contingencies, but based on IAS 37, not all of these items qualify for recognition as provisions.

Examination of each component:

- 1. N20 million court case involving a supplier Appropriate as a provision if:
  - There is a present obligation from a past event;
  - An outflow of resources is probable; and
  - The amount can be reliably estimated.

Conclusion: If these conditions are met, this qualifies as a provision.

- 2. ₩70 million Advertisement rights
  - This is a prepaid expense or intangible asset depending on the nature and timing of the benefit; and
  - Does not meet the definition of a provision or contingency

Conclusion: This is an incorrect classification; rather it should be recognised as a current asset or as an intangible assets and amortised if appropriate.

- 3. ₩50 million Provision for future business losses
  - IAS 37 prohibits provisions for future operating losses.

Conclusion: This is not allowed under IAS 37.

- 4. ₩60 million Judgment debt on appeal
  - A judgment debt under appeal may be a contingent liability, unless there is appeal and is likely to succeed, in which case it becomes a provision.

Conclusion: The accounting treatment on the judgment debt under appeal depends on the following:

- If probable: Recognise as provision;
- If possible (not probable): Disclose as contingent liability; and
- If remote: No action required.
- (ii) Computation of the correct amount of provision or contingencies based on the analysis:

Item or Description	Amount (₦'m)	Treatment	Include in Provision?
Court case with supply client	20	Provision (if probable)	Yes
Advertisement rights	70	Prepaid/Intangible asset	No
Provision for future losses	50	Not allowed under IAS 37	No
Judgment debt on appeal	60	Depends on probability	Possibly (assume probable)

Assumption: We assume the judgment debt on appeal is probable (to provide computation).

Correct Provision amount is = ₩20m + ₩60m = ₩80 million

(iii) Discuss the treatment of incorrect entries in the books

**₩**′m

- Incorrect amount recognised: 200
- Correct amount recognised: (80)
- Excess recognised: <u>120</u>

This excess needs to be reclassified or written back depending on nature:

Amount (₦′m)	Description	Adjustment needed
70	Advertisement rights	Reclassify as prepaid expense or intangible asset on the statement of financial position.
50	Provision for future losses	Write back to profit or loss as no provision is allowed

#### Examiner's report

Part (a) of the question tests candidates' knowledge of how to prepare group consolidated statement of cash flows using indirect method. Part (b) tests candidates' knowledge of how to compute correct amount of provisions or contingencies; treatment of the previous errors made and advise on the appropriateness of the amount to be recognised in the financial statements.

All the candidates attempted the question and their performance was very poor.

The common pitfalls of the candidates were their inability to prepare correctly group statement of cash flows using indirect method; they were also not able to apply correctly the treatment of provisions and contingencies in the financial statements.

Candidates are advised to pay more attention to the principles of preparing the consolidated group cash flows in accordance with the relevant IFRS. They should also make use of ICAN Study Texts for better performance in future examinations of the Institute.

Marks	Marks
F	
4	
31⁄4	
31⁄4	
1	
<b>2</b> <sup>1</sup> / <sub>2</sub>	
11⁄4	
11/4	
13/4	
<u>1<sup>3</sup>/4</u>	20
2	
3	
<u>5</u>	<u>10</u>
	<u>30</u>
	$\begin{array}{c} 4\\ 3^{1/4}\\ 3^{1/4}\\ 1\\ 2^{1/2}\\ 1^{1/4}\\ 1^{1/4}\\ 1^{3/4}\\ 1^{3/4}\\ 1^{3/4}\\ 1^{3/4}\\ \end{array}$

#### **SOLUTION 2**

#### (a) Adjustments of financial statement of Gombe Ltd and Uzor Ltd

Gombe Ltd <u>Statement of P or L</u> <u>extracts</u>	Original figures	Adjustments		New figures	
	<b>₩'000</b>	<b>₩′000</b>	<b>₩′000</b>	₩′000	
Revenue	272,000	9,600		262,400	
Cost of sales	<u>(168,000)</u>		(6,000)	<u>(162,000)</u>	
Gross profit	104,000			100,400	
Admin expenses	<u>(72,000)</u>			<u>(72,000)</u>	
Profit from operations	<u>32,000</u>			<u>28,400</u>	
Extract of SFP					
Inventories	24,000		6,000	30,000	
Borrowing (Non-current)	64,000			64,000	
Borrowings (Current)	16,000		9,600	25,600	
Equity	94,000	3,600		90,400	

#### Workings:

The sales and lease back should be treated as short-term borrowing, while the cost of the sales and gross profit margin should be adjusted for ease of comparison.

Sales №9,600,000 Cost of sales №9,600,000 x <sup>100</sup>/<sub>160</sub> = №6,000,000 Margin on Sales = (№9,600,000 - №6,000,000)) = №3,600,000

Uzor Ltd	Original figure ₦'000	Adjustments ₦′000	New figure ₦'000
Property plant & equipment	140,200	(20,000)	120,200
Revaluation reserve	20,000	(20,000)	
Equity	88,200	(20,000)	68,200
Cost of sales	183,800	(4,000)	179,800
Gross profit	80,200	4,000	84,200
Profit from operations	24,200	4,000	28,200

#### Working notes for justification:

Excess depreciation on revaluation will be \$20,000,000 at 20% = \$4,000,000.

To be comparable the property, plant and equipment of Gombe Ltd and Uzor Ltd should be shown at either cost or at a revalued amount, with revaluation done on the same basis. It is not feasible to revalue Gombe Ltd's property, plant and equipment for purpose of comparison. However Uzor's Ltd property, plant and equipment can be shown at cost by reversing the revaluation on them and their depreciation effects.

(0)	(b) <b>computation of factos based on revised infancial statements</b>				
			Gombe Ltd	Uzor Ltd	
	Ratios	Formula			
(i)	Gearing	<u>Total borrowings</u>	$=\frac{64,000+25,600}{100}$	72,000 + 24,200	
	-	Capital employed	90,400+89,600 89,600 100	96,000 + 68,200	
			$=\frac{89,600}{180,000}\mathrm{x}\frac{100}{1}$	$=\frac{96,200}{164,200} \times \frac{100}{1}$	
			= 49.8%	= 58.5%	
(ii)	Asset	Turnover	<u>262,400</u>	<u>264,000</u>	
	turnover	Capital employed	180,000	164,200	
			= 1.5 times	= 1.6 times	
(iii)	Gross profit	<u>Gross profit</u> x <u>100</u>	<u>100,400 x 100</u>	<u>84,200 x 100</u>	
	margín	Revenue 1	262,400 1	264,000 x 1	
			= 38.3%	= 31.9%	
(iv)	Return on	<u>Operating profit</u>	= <u>28,400</u> x <u>100</u>	<u>28,200</u> x <u>100</u>	
	capital employed	Capital employed	180,000 1	164,200 1	

#### (h)Computation of ratios based on revised financial statements

#### **Evaluation of the Senior Accountant's conclusion** (c)

i. The reason is to make the financial statements of Gombe Ltd and Uzor Ltd comparable;

= 15.8%

= 17.2%

- Gombe Ltd has a higher gross profit margin, however, the return on ii. capital employed is lower. The main reason for this is that Gombe Ltd administrative expenses are higher than that of Uzor Ltd;
- iii. The revenue of both companies is now almost identical due to the elimination of the effect of the inter-company sales from the account of Gombe Ltd:
- iv. The assets turnover ratio before and after adjustments do not show any significant difference;
- Gombe Ltd has advantage in gearing ratio. The gearing ratio of both ν. companies increased but more for Uzor Ltd. This could influence directors only, if they plan or intend to change the financial structure of the company;
- vi. Overall it would appear that Uzor Ltd would be a better investment opportunity than Gombe Ltd. This exercise shows the importance of adjusting financial statements to achieve uniform accounting policies when making this kind of decision. It should be noted however, that the sales of Gombe Ltd was incorrectly accounted for, while Uzor revaluation is acceptable if done by registered estate valuer.

#### Examiner's report

Part (a) of the question tests candidates' knowledge of how to adjust the financial statements with revaluation of property, plant and equipment and inter-company sales, while part (b) test's candidates ability to compute relevant ratios after the adjustments to the financial statements and part (c) requires candidate to evaluate and interprete the financial statements based on the ratios computed.

Majority of the candidates attempted the question and their performance was above average.

The common pitfalls of the candidates was their inability to correctly adjust the financial statements with revaluation of property, plant and equipment and intercompany sales figures. They were not able to compute profit margin and mark up.

Candidates are advised to ensure that they prepare more on all aspects of ratio analysis, especially on how to incorporate adjustments into the financial statements. They should acquaint themselves with this section of the syllabus and practice relevant past questions on ratio analysis and interpretation of financial statements for better performance at this level of the Institute examinations.

#### Marking guide

		Marks	Marks
a.	Adjustment of financial statement of Gombe and Uzor Ltd:		
	Adjustment of statement of profit or loss in Gombe Ltd	<b>2</b> ½	
	Adjustment of statement of financial position in Gombe Ltd	<b>2</b> ½	
	Adjustment of statement of profit or loss in Uzor Ltd Adjustment of statement of financial	21/2	
	position in Uzor Ltd	<u>2½</u>	10
b.	Calculation of four key ratios based on revised financial statement:		
	Gearing	1	
	Turnover to capital employed	1	
	Gross profit margin	1	
	Return on capital employed	<u>1</u>	4
С,	Valuation of the Senior Accountant's conclusions:		
	Any six correct points discussed <b>Total</b>		<u>6</u> <u>20</u>

#### **SOLUTION 3**

(a) Conditions that must be satisfied before revenue can be recognised in accordance with IFRS 15 – Revenue from Contracts with Customers.

#### i. Identify the contract(s) with a customer

A contract exists only when it has commercial substance, the parties have approved it, each party's rights can be identified, payment terms are clear and collection is probable.

#### ii. Identify the separate performance obligations in the contract

The promised good or service must be capable of being distinct and separately identifiable within the context of the contract.

#### iii. **Determine the transaction price**

The consideration an entity expects to be entitled to must be reliably measured, including any variable consideration estimated using the expected-value or most-likely-amount method.

#### iv. Allocation of the transaction price to the performance obligations

When a contract has multiple performance obligations, the transaction price must be allocated on a relative stand-alone-selling-price basis.

#### v. **Recognise revenue when or as at an entity satisfies performance**

Revenue is recognised only when (or as) the customer obtains control of the promised asset. Transfer of legal title alone is not sufficient; the substance (ability to direct the use and obtain the benefits) is decisive.

## (b) Treatment of transactions 1 and 2 in the consolidated financial statement of Orentente Plc for the year ended July 31, 2020.

#### Transaction 1:

- The key issue is whether Oretente Plc has transferred control of the branch.
- Oretente Plc continues to control the operations of the branch and the amount that it receives from Danto Plc is the operating profit of the branch less the interest payable on the loan;
- Oretente Plc also suffers the effect of any operating losses made by the branch. Therefore, the position is essentially the same as before the 'sale' and Oretente Plc has not satisfied any performance obligation in return for the consideration of \24million;

- Although, Danto Plc is not a subsidiary of Oretente Plc as defined by IFRS 10-Consolidated financial statements, it is a special purpose entity (quasi-subsidiary);
- It gives rise to benefits for Oretente Plc that is in substance no different from those that would arise if it were a subsidiary. Its assets, liabilities, income and expenses must be included in the consolidated financial statements;
- The assets and liabilities of Danto Plc are included in the consolidated statement of financial position at #21million (their original value to the group);
- The loan of N24million is recognised as a non-current liability;
- The profit on disposal of #2million and the operating fee of #3,600,000 are cancelled as intra-group transactions; and
- The operating profit of \\$6,000,000 is included in consolidated profit or loss as is the loan interest of \\$2,400,000.

#### Transaction 2:

- Oretente Plc has the option to repurchase the property but cannot be required to do so;
- This is a call option in which the repurchase price is equal to or above the original selling price, therefore, it should be accounted for as a financing arrangement,
- Oretente Plc has not transferred control of the property to the bank as it still has the right to exercise this option, therefore, no performance obligation has been satisfied which could justify the recognition of revenue;
- The transaction is essentially a loan secured on the property, rather than an outright sale;
- The ₩150,000 payable for each month that the bank holds the property is interest on the loan;
- The property remains in the consolidated statement of financial position at its cost or market value (depending on the accounting policy adopted by Oretente Plc);
- The loan of #15million and accrued interest of #900,000 (6 x #150,000) are reported under non-current liabilities; and
- Interest of \\$900,000 is recognised in consolidated profit or loss.

#### Examiner's report

Part (a) of the question tests candidates' knowledge on the conditions that need to be satisfied before revenue can be recognised in the financial statements with reference to IFRS 15 – Revenue from Contracts with Customers, while part (b) tests the application of accounting standards on repurchase of property and transfer of control on sales of a branch.

Majority of the candidates attempted the question and their performance was below average.

The common pitfalls of the candidates were their lack of understanding of the requirements of the question as it relates to practical application and in-depth knowledge of accounting standards on the transactions in the financial statements.

Candidates are advised to pay more attention to the provisions and application of relevant International Financial Reporting Standards (IFRS) on key financial reporting issues in the financial statements for better performance in future examinations.

#### Marking guide

narmny garac	Marks	Marks
a. <b>Conditions that must be satisfied before</b> revenue can be recognised in accordance with IFRS 15:		
Mentioning of appropriate accounting standard	1/2	
Five conditions mentioned	5	
Explanation of the five conditions mentioned	<u>2<sup>1</sup>/2</u>	8
b. Treatment of transactions 1 and 2 in the consolidated financial statement of Orentente Plc:		
Discussion of any six (6) accounting issues in transaction 1	6	
Discussion of any six (6) accounting issues in transaction 2 Total	<u>6</u>	<u>12</u> 20
Total		

#### **SOLUTION 4**

#### (a) i. **Basic criticisms of IFRS reporting framework**

Most of the criticisms center on the following points:

- High implementation, application and transition costs especially if the adoption of IFRS is needed or required by small and medium sized businesses (SME's). It will be a big disadvantage for SMEs as they will incur the large transition costs and the level of complexity of IFRS may not be absorbed by SMEs;
- Heavy reliance of fair-value measurement which is subjective and more prone to increase volatility in the value of assets;
- Limited coverage of non-financial drivers as issues such as carbon footprint, human-capital development and supply-chain resilience sit largely outside IFRS, yet strongly influence enterprise value;
- Converting to IFRS makes the IASB the monopolist in terms of setting the standards resulting in lack of competition;
- Layer upon layer of standards and disclosure check-lists can overwhelm preparers and confuse lay users;
- The benefits of converting or transiting to IFRS cannot be seen until later point due to the fact that it takes some years for the harmonisation and to have sufficient years of financial statements to be prepared under IFRS to improve consistency;
- Extraordinary loss or gain is not allowed in the new IFRS and this remains an issue;
- Financial statements emphasise past transactions; while also considering future cash-generating ability, climate threats or intangible value creation;
- IFRS reporting framework like the traditional reporting model was designed primarily for equity investors; broader stakeholders often find the information irrelevant or inaccessible; and
- Multinational companies may have to change the internal systems to make it compatible with the new reporting standards.

#### ii. **Progress towards adoption of sustainability reporting**

The concept of sustainability is that organisations and individuals should meet their own needs today without compromising the needs of future generations. Organisations tend to communicate economic, environmental and social impacts, their sustainability activities through sustainability reports. Even though sustainability reporting is largely voluntary, many companies worldwide issue annual reports on sustainability and corporate responsibility. These companies represent all sectors and industries across the globe.

More and more companies are recognising the need to make their operations more sustainable. Over the past twenty years or more, the number of organisations that have made sustainability a key strategic focus has increased significantly.

#### Global adoption of sustainability reporting

- International Sustainability Standards Board (ISSB) was created in 2021. The ISSB Standards aim to enhance investor-company dialogue by providing decision-useful, globally comparable sustainability-related disclosures;
- In June 2023, general sustainability-related disclosures (**IFRS S1**) and climate-related disclosures (**IFRS S2**) were published;
- Recently, it was discovered that over 1,000 companies have referenced the International Sustainability Standards Board (ISSB) in their reports, and 30 jurisdictions are making progress towards introducing ISSB standards in their legal or regulatory frameworks;
- In addition, a few governments have introduced mandatory sustainability reporting. For example: Corporate Sustainability Reporting Directive (CSRD) and European Sustainability Reporting Standards (ESRS) phased in from financial year 2024. In US, SEC's proposed climate-disclosure rule (still pending finalisation); voluntary Sustainability Accounting Standard Board (SASB) and Task Force on Climate related Financial Disclosures (TCFD) alignment amongst large filers;
- French law requires the annual reports of companies to include information on their environmental and social performance;
- All state-owned companies in Sweden must present a sustainability report using Global Reporting Initiative (GRI) guidelines on a 'comply or explain' basis;
- Also, some stock exchanges have sustainability reporting as a listing requirement. One of such stock exchange is the Johannesburg Stock Exchange in South Africa, which has been a leading light in this area; and

• The IFRS foundation's progress report highlights the importance of introducing sustainability-related disclosure requirements into regulatory frameworks through the adoption or use of ISSB Standards.

#### Adoption of sustainability reporting in Nigeria

- Nigeria is a front-runner in Africa, with the Financial Reporting Council (FRC) establishing the Adoption Readiness Working Group (ARWG) in June 2023 to drive the adoption of IFRS S1 and S2 standards. IFRS Adoption Roadmap outlines steps for implementing IFRS S1 and S2 standards in Nigeria;
- In March 2024, Nigeria unveiled its IFRS adoption roadmap, outlining necessary steps for implementing these standards;
- The Nigeria Exchange Group (NGX) introduced Sustainability Disclosure Guidelines in 2018, mandating publicly listed companies to report their sustainability performance. Sustainability Disclosure Guidelines and NGX's guidelines require publicly listed companies to report sustainability performance;
- Nigeria has also enacted the Climate Change Act and launched an Energy Transition Plan, demonstrating its commitment to sustainability and reducing greenhouse gas emissions. The Act provides a framework for mainstream climate change management at a national level; and
- Energy transition plan aims to reduce energy poverty and climate change crisis, with a goal of net zero emission by 2060.

# iii. Key components of the reporting standards and inputs for sustainability report

A number of organisations have produced codes of practice and guidelines for companies to follow when preparing their sustainability reports. Two such organisations are The Global Reporting Initiative (GRI) and The Sustainability Accounting Standards Board (SASB). GRI Sustainability Reporting Standards (GRI Standards) and sustainability accounting standards published by SASB provide disclosure guidance on sustainability reports. The content of these reports depends on which of the sustainability standards each reporting entity adopted.

The GRI standards are structured as a set of interrelated standards issued in a modular structure and comprise:

- Universal standards (100 series);
- GRI 101: Foundation sets out reporting principles;

- GRI 102: General disclosures provides contextual information about the organisation and its sustainability practices; and
- GRI 103: Management approach explain how an organisation manages a material topic and to be used for each material topic in a sustainability report.

S/N	TYPE OF CAPITAL	Role in value creation process		
1.	Financial: equity, debt, cash flows	Provides the monetary resources necessary to fund operations and strategic growth.		
2.	Manufactured	Provides tangible infrastructure (plants, equipment, IT networks) that transforms inputs into products and services.		
3.	Intellectual	Provides patents, copyrights, systems, data analytics and organisational know-how that drive innovation and competitive advantage.		
4.	Human	Provides employees' skills, experience, motivation and well-being which are the engine of productivity and creativity.		
5.	Social and relationship	Provides trust-based networks with customers, suppliers, regulators and communities that underpin brand reputation and license to operate.		
6.	Natural	Provides environmental resources and ecosystem services (energy, water, minerals, and biodiversity) consumed or affected by the business which preserves long-term viability.		

#### 4b. Roles of different types of capital in value creation process

#### Examiner's report

Part (a) of the question tests candidates' knowledge of the basic criticisms of the IFRS reporting framework; appraisal of the progress towards adoption of sustainability reporting globally and in Nigeria; and the key components of the reporting standard that must be complied with in the preparation of company's sustainability report. Part (b) tests the key roles of different types of capital in value creation process.

Few of the candidates attempted the question and their performance was below average.

The common pitfalls of the candidates were their lack of knowledge of the progress made towards adoption of sustainability reporting globally and in Nigeria. Majority of the candidates do not understand roles of different types of capital in value creation process.

Candidates are advised to carry out in-depth study to cover all areas of the syllabus and pay attention to all issues beyond financial reporting that are examinable at this level of the Institutes' examination. They should also make use of ICAN Study Texts for better performance in future examinations.

#### Marking guide

		Marks	Marks
a.i	Basic criticisms of the IFRS reporting framework		
	Any five correct points discussed		5
ii.	Adoption of sustainability reporting:		
	Any five points to discuss adoption of sustainability reporting in Nigeria	21/2	
	Any five points to discuss adoption of sustainability reporting globally	<u>2½</u>	5
iii.	Key components of the reporting standard for		
	sustainability report		5
b	Roles of different types of capital in value creation process:		
	Any five correct points mentioned	<b>2</b> <sup>1</sup> / <sub>2</sub>	
	Discussion of five correct points mentioned	<u>2½</u>	<u>5</u>
	Total		<u>20</u>

#### **SOLUTION 5**

#### (a) Accounting for 3% bond in accordance with IAS 32 and IFRS 9

- i. The bond must initially be recorded at its purchase price of \\$500,000;
- ii. If classified as 'held to maturity', it must be re-measured at the end of the reporting period to its amortised cost;
- iii. The market value is not relevant;
- iv. Interest will be credited to profit or loss using the effective interest rate, resulting in finance income of \\48,500 (9.7% x \\500,000);
- v. The effective rate reflects the total return received by the investor over the duration of the bond minus the coupon plus **\100**, 000 premiums on redemption;
- vi. The coupon recorded in the statement of cash flows is \$18,000 (3% x \$600,000); and
vii. The difference between the effective interest and the actual coupon is added to the investment to give an amortised cost at the end of Year 3 of №530, 500 (№500,000 + №48,500 – №18,000).

#### (b) Accounting for equity shares in Ojutiri Plc. in accordance with IAS 32 and IFRS 9

- i. The shares will initially be recorded at their cost of \$60,000;
- ii. As they have been classified as fair value through profit or loss the transaction costs must be expensed to profit or loss immediately;
- iii. At the end of each reporting period, the shares must be re-measured to their market value, with the resulting gain or loss being taken to profit or loss;
- At January 1, year 3 the investment has a carrying value of ₩68,000. By the December 31, year 3, this value is now ₦71,000. A ₦3,000 gain will therefore be recognised in profit or loss for the year; and
- v. Even though the investment is no longer intended for sale in the short term, it must remain classified as fair value through profit or loss as IAS 32 does not permit reclassification into or out of this category.

#### (c) Accounting for a convertible bond in accordance with IAS 32 and IFRS 9

- i. A convertible bond represents a compound instrument. In essence, issuing a convertible bond is equivalent to issuing a non-convertible bond plus a call option on the entity's shares;
- ii. Therefore, the investment should be divided into a liability portion and an equity portion;
- iii. To establish the liability (debt) element, the future cash flows from the bond are discounted at the normal market rate to establish the value of an equivalent but redeemable bond;
- iv. Using a rate of 7% gives a net present value of:

(\$40,000 / 1.07) + (\$40,000 / 1.07 x 1.07) + (\$1,040,000 1.07 x 1.07 x 1.07) = \$921, 270;

v. As the bond was issued for \$1, 000,000, it implies that the call option embedded within the bond was sold for \$78,730 (\$1,000,000 - \$921,270); and

vi. Therefore, the proceeds of ₩1,000,000 will be shown in the statement of cash flows as a financing cash flow, and the credit will be split into non-current liabilities ₩921,700 and equity ₩78,730.

## Examiner's report

The question tests candidates' knowledge of the practical applications and how transactions should be accounted for in accordance with IAS 32- Financial Instruments: Presentation and IFRS 9- Financial Instruments in relation to accounting for 3% bond, equity shares in a public quoted company and convertible bond.

Few of the candidates attempted the question and their performance was below average.

The common pitfalls of the candidates were their inability to interpret the question correctly; they could not correctly state the correct accounting treatment for a 3% bond; equity shares in a public quoted company and for a convertible bond. Majority of the candidates cannot state and apply the various provisions of IAS 32 and IFRS 9 to the transactions.

Candidates are advised to familiarise themselves with all aspects of the syllabus and pay attention to the provisions of all accounting standards in the syllabus as well as their application in the financial statements.

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# Marking guide

		Marks
a	Accounting for 3% bond in accordance with IAS	
	32 and IFRS 9	
	Any four correct points mentioned and discussed	4
b	Accounting for equity shares in Ojutiri Plc in	
	accordance with IAS 32 and IFRS 9	
	Any five correct points mentioned and discussed	5
С	Accounting for a convertible bond in accordance	
	with IAS 32 and IFRS 9	
	Any five correct points mentioned and discussed	<u>6</u>
	Total	<u>15</u>

#### **SOLUTION 6**

(a) Under IFRS 2 – Share-Based Payment, there are three main types of share-based payment transactions that an entity may recognise. These are:

#### i. Equity-settled share-based payments

This is the most common form of share-based payment.

• Definition: The entity receives goods or services in exchange for equity instruments (such as shares or share options).

- Recognition: An expense is recognised in the statement of profit or loss and a corresponding increase is made in equity.
- Measurement: The fair value of the equity instruments granted is measured at the grant date and is not remeasured thereafter.

Example: An employee is granted share options as part of a compensation package.

#### ii. Cash-settled share-based payments

- Definition: The entity receives goods or services and settles the obligation by paying a cash amount based on the price or value of its shares or other equity instruments.
- Recognition: A liability is recognised (instead of equity), along with an expense.
- Measurement: The liability is measured at the fair value at each reporting date until settlement, and revalued through profit or loss.

Example: A supplier is promised a cash bonus equivalent to the value of a fixed number of shares after providing services.

#### iii. Share-Based Payments with cash or equity alternatives

- Definition: The entity or the counterparty has a choice of whether the transaction is settled in cash or equity instruments.
- Treatment: The accounting depends on who has the choice:
  - If the entity has the choice: It must assess whether there is a present obligation to settle in cash; and
  - If the counterparty has the choice: The transaction is treated as a compound financial instrument, with separate components for the equity and cash-settled parts.

Example: An employee can choose to receive a bonus in the form of either cash or shares.

These three transaction types ensure that all forms of share-based compensation are accounted for consistently, resolving the anomaly that existed before IFRS 2 was issued.

(b)	Computation of expense and liability for the year ended			
		Dec. 31 2019	Dec. 31 2020	Dec. 31 2021
		₩	₽	₽
	Number of employees whose	405	400	403
	interest is expected to vest (i)			
	Number of rights (ii)	100	100	100
	Fair value of rights (iii)	15	<u>    18</u>	20
	Total expected expense (i x ii x iii)	607,500	720,000	806,000
	Fraction of vesting period	1/3	2/3	3/3
	Liability at year end	202,500	480,000	806,000
		(607,500 x 1/3)	(720,000 x 2/3)	806,000 x 3/3
	Liability at the beginning		<u>(202,500)</u>	<u>(480,000)</u>
	Expenses charged to P or L	₩ <u>202,500</u>	<u>₩277,500</u>	₩ <u>326,000</u>

#### Examiner's report

Part (a) of the question tests candidates' knowledge of the types of share-based payments transactions in accordance with IFRS 2- Share-Based Payments and the application of the principle that will be shown in the financial statements.

Majority of the candidates attempted the question and their performance was average.

The common pitfalls of the candidates were their inability to understand the provisions of IFRS 2 They do not know how to calculate the expense and the liability that will be shown in the financial statements.

Candidates are advised to pay more attention to all aspects of the syllabus and the accounting standards for better performance in Institute's future examinations.

#### Marking guide

		Marks	Marks
a.	Three types of share based transactions		
	recognised under IFRS 2:		
	Equity-settled share based payments	1	
	Cash-settled share based payments	1	
	Share-based payments with cash or equity		
	alternatives	<u>1</u>	3
	Calculation of expenses and liability in the financial statements of Adimula Plc:		
b.	Expenses and liability as at December 31, 2019	4	
	Expenses and liability as at December 31, 2020	4	
	Expenses and liability as at December 31, 2021	<u>4</u>	<u>12</u>
	Total		<u>15</u>

#### **SOLUTION 7**

#### Transaction 1

The issue contained in trasaction 1 is Lease arrangement.

The issue here is whether the arrangement with the private sector provider Urban Waste and Co is, or contains, a lease, even if it does not take the legal form of a lease. The substance of the arrangement should be considered in connection with the Conceptual Framework for Financial Reporting and IAS 17 on Leases. Key factors to consider are as follow:

- (i) Who obtains most of the benefit from the asset?
- (ii) Who controls the asset by operating it or directing others to do so?
- (iii) Who has the right to use the asset or to direct others to do so?
- (iv) Who has the risks and rewards associated with the asset?

The answer in each case is Daramson.

- i. Urban Waste and Co buys the vehicles and uses them exclusively for Daramson. If Urban Waste and Co ceases business, Daramson can re-possess the vehicles and continue to use them for waste collection.
- ii. Daramson controls the vehicles, since it stipulates how they are painted, and ostensibly owns them because they must be painted with Daramson's name.
- iii. Daramson can use the vehicles and uses them exclusively for waste collection for nearly all their life.
- iv. Following on from this, Daramson has the risks and rewards associated with the asset. The arrangement is in substance a lease. As Daramson has substantially all the risks and rewards of ownership, the arrangement should be treated as a finance lease.
- v. The vehicles should be recorded in assets in Daramson statement of financial position, with a corresponding lease liability. The value of the lease may be determined by considering the fair value of acquiring the vehicle.
- vi. The service element relating to the waste collection may be considered separately.

#### Transaction 2:

The transaction relates to IAS 37-Provisions, contingent liabilities and contingent assets. Provisions must be recognised in the following circumstances and must not be recognised if they do not apply.

- i. There is a legal or constructive obligation to transfer benefits as a result of past events.
- ii. It is probable that an outflow of economic resources will be required to settle the obligation.
- iii. A reliable estimate of the amount required to settle the obligation can be made.
- iv. A legal or constructive obligation is one created by an obligating event. Here the obligating event is the contamination of the land, because of the virtual certainty of legislation requiring the clean-up.
- v. As Daramson has no recourse against Agroallied Limited or its insurance company, this past event will certainly give rise to a transfer of economic benefits from Daramson.
- vi. Consequently, Daramson must recognise a provision for the best estimate of the clean-up costs. It should not set up a corresponding receivable, since no reimbursement may be obtained from Agroallied Limited or its insurance company.

#### Transaction 3:

This transaction is based on impairment of equipment.

- i. The basic principle of IAS 36-Impairment of Assets is that an asset should be carried at no more than its recoverable amount, that is, the amount to be recovered through use or sale of the asset.
- ii. If an asset's carrying value is higher than its recoverable amount, an impairment loss has occurred.
- iii. The impairment loss should be written off against profit or loss for the year.
- iv. An organisation must determine, at each reporting date, whether there are any indications that impairment has occurred. In this case, impairment is indicated because the use to which the equipment is to be put has changed significantly, a situation which will continue for the foreseeable future.
- v. The recoverable amount is defined as the higher of the asset's fair value less costs to sell and the asset's value in use.
- vi. However, these values are unavailable because of the specialised nature of the asset and the only information available is depreciated replacement cost.

vii. Using a depreciated replacement cost approach, the impairment loss would be calculated as follows.

Asset	Cost or replacement cost <del>N</del> 000	Acc. Dep <del>N</del> '000	Carrying amount <del>N</del> '000
Equipment	<u>10,000</u>	<u>(3,000)</u> (W1)	7,000
Equipment			
equivalent s	ize <u>4.200</u>	<u>(1.260)</u> (W2	) (2,940)

Impairment loss

<u>4,060</u>

Daramson should therefore recognise an impairment loss of 44,060 in profit or loss for the year. The carrying amount of the equipment is higher than its recoverable value.

# Workings:

- i. Accumulated depreciation on equipment is calculated as follows: 10,000,000 / 20yrs = 1500,000 per annum, for 6 yrs will be  $1500,000 \times 6 = 13,000,000$
- ii. Accumulated depreciation on equipment equivalent size is calculated as  $\frac{4,200,000}{20}$  /  $\frac{20}{20}$  =  $\frac{1210,000}{20}$  per annum, for 6 yrs will be  $\frac{1210,000}{20}$

# Examiner's report

The question tests candidates' practical understanding of the procedure for accounting for various transactions in the financial statements of a limited liability company.

Majority of the candidates attempted the question and their performance was below average.

Common pitfall of the candidates was their inability to apply the provisions of IAS 37 - Provision, Contingent Liabilities and Contingent Assets and IAS 36 - Impairment of Assets. They were able to present the solutions in a logical manner.

Candidates are advised to pay more attention to the practical application of the accounting standards that are examinable at this level of the Institute's examination.

Marks

Accounting for transactions in the financial statements of Daramson Limited:	
Transaction 1: Lease arrangements	
Any five correct points	5
Transaction 2: Provision under IAS 37	
Any five correct points	5
Transaction 3: Impairments of equipment	
Any five correct points	<u>5</u>
Total	<u>15</u>

# THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA



# **PROFESSIONAL LEVEL EXAMINATION – MAY 2025**

# **ADVANCED TAXATION**

# **EXAMINATION INSTRUCTIONS**

#### PLEASE READ THESE INSTRUCTIONS BEFORE THE COMMENCEMENT OF THE PAPER

- 1. Check your pockets, purse, mathematical set, etc. to ensure that you do not have prohibited items such as telephone handset, electronic storage device, programmable devices, wristwatches or any form of written material on you in the examination hall. You will be stopped from continuing with the examination and liable to further disciplinary actions including cancellation of examination result if caught.
- 2. Write your **EXAMINATION NUMBER** in the space provided above.
- 3. Do **NOT** write anything on your question paper **EXCEPT** your Examination number.
- 4. Do **NOT** write anything on your docket.
- 5. Read all instructions in each section of the question paper carefully before answering the questions.
- 6. Do **NOT** answer more than the number of questions required in each section, otherwise, you will be penalised.
- 7. All solutions should be written in **BLUE** or **BLACK INK**. Any solution written in **PENCIL** or any other **COLOUR OF INK** will not be marked.
- 8. Tax and Capital Allowances rates are provided with this examination paper
- 9. You are required to attempt **Question ONE (Compulsory)**, any **TWO Questions in Section B and any TWO Questions in Section C.**
- 10. Check that you have collected the correct question paper for the examination you are writing.

# TUESDAY, MAY 20, 2025

#### DO NOT TURN OVER UNTIL YOU ARE TOLD TO DO SO

# THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA PROFESSIONAL LEVEL EXAMINATION – MAY 2025

# **ADVANCED TAXATION**

Time Allowed:  $3^{1}/_{4}$  hours (including 15 minutes reading time)

#### INSTRUCTION: YOU ARE REQUIRED TO ATTEMPT FIVE OUT OF THE SEVEN QUESTIONS IN THIS PAPER

#### SECTION A: COMPULSORY QUESTION (30 MARKS)

#### **QUESTION 1**

Nancy Nigeria Limited, a manufacturer of soaps and detergents, was incorporated on April 1, 2020, but commenced business on July 1, 2020.

At the 2023 Annual General Meeting of the company, the shareholders approved resolutions for the increase in the company's share capital in 2024 and request for long-term bank loan in the first quarter of 2025, to fund expansion of the company's operations.

In December 2024, the company made preliminary request to its bankers and part of the documents to be submitted included the audited financial statements and tax clearance certificate (TCC) of the last three years. The company has been paying its taxes regularly, but it is yet to request for TCC since the commencement of business.

The appointment of the company's former tax consultants was terminated in early 2024, after the discovery by the Federal Inland Revenue Service (FIRS) of the tax consultancy firm's professional misconduct in the annual returns filed on behalf of a client. The matter is currently before a Court of competent jurisdiction.

Your firm of tax consultants has been engaged to procure the TCC for the company, after recomputing the tax liabilities from inception to the financial year ended December 31, 2024. The Managing Director stressed that the company is willing to make additional tax payments, if a case of under-payment of taxes is established.

After accepting the engagement, your Principal Partner, during interaction with the Managing Director, opined that based on the provisions of the Companies Income Tax Act 2004 (as amended), the FIRS may consider instituting back duty audit on the company, hence the need for early preparation for their visit. The Managing Director seems not to understand the submission made by the Principal Partner.

The company has provided all the financial records necessary for the conduct of this assignment.

The following details of the statement of profit or loss were extracted from the financial records of the company for the year ended December 31, 2024:

	<mark>\</mark> 1′000	<mark>\</mark> ¥′000
Turnover		145,700
Cost of sales		<u>(66,250)</u>
Gross profit		79,450
Other operating income		<u>3,000</u>
		82,450
Deduct:		
Personnel cost	21,000	
Power and rates	3,800	
Depreciation	5,500	
Repairs and maintenance	1,900	
Allowance for doubtful debts	5,800	
Finance cost	2,200	
Donations and subscriptions	2,450	
Legal and professional fees	4,500	
Transport and travelling	1,100	
Telephone and postage	900	
Loss on disposal of a motor vehicle	1,800	
Other operating expenses	3,350	
Preliminary expenses written off	1,200	
Transfer to general reserve	<u>2,000</u>	<u>57,500</u>
Net profit for the year		24,950

The following additional information was made available:

# (i) Adjusted profit/(loss) and turnover:

Accounting period	Adjusted profit/(loss)	Turnover
	<b>₩</b> ′000	<b>₩</b> ′000
Period ended December 31, 2020	(27,950)	65,800
Year ended December 31, 2021	2,600	90,500
Year ended December 31, 2022	6,200	108,250
Year ended December 31, 2023	12,870	124,600

# (ii) **Other operating income:**

· · · · · · · · · · · · · · · · · · ·	<mark>\</mark> 1000
Excess on revaluation of industrial building	1.300
Dividend received (net)	<u>1,700</u>
	<u>3,000</u>

(iii)	Repairs and maintenand	ce:		
· ·				<mark>\</mark> ¥′000
	Improvement to industria	al warehouse		1.000
	Repairs of industrial plan	ıt		400
	Renewals of tools and im	plements		200
	Maintenance of motor ve	hicle		<u>300</u>
				<u>1,900</u>
(iv)	Allowance for doubtful	debts:		
(177				<b>₩′000</b>
	General allowance for do	ubtful debt		4,350
	Specific allowance for do	ubtful debt		1,750
	Bad debt written off			900
	Bad debt recovered			<u>(1,200)</u>
				<u>5,800</u>
(v)	Donations and subscript	tions.		
(•)	Donations and Subscript			₩′000
	Contribution to a fund cre	eated by a State		
	Government for victims o	-		1,000
	Award of scholarship to 3	indigent students		1,200
	Subscription to manufact	urers' association		250
				<u>2,450</u>
(vi)	Legal and professional f	iees:		
				<mark>\</mark> ¥′000
	Audit and accountancy fe	262		1,600
	Legal- acquisition of long			1,500
	Legal- new issue of share	5		<u>1,400</u>
				<u>4,500</u>
(vii)	Other operating expense	25:		
· •				<mark>\</mark> ¥′000
	Provision of unbranded X	ampers to custor	mers	1,100
	Local government teneme	ent rate		750
	Income tax provisions			<u>1,500</u>
				<u>3,350</u>
(viii)	. , ,			_
	QCE	Date of	Number	Amount
	In decaded 11 (11)	acquisition	of items	<b>№'000</b>
	Industrial building	May 15, 2020	1	15,000
	Non-industrial building	June 6, 2020	2	8,000
	Furniture and fittings	June 16, 2020	10 1	2,400 12000
	Industrial plant	July 1, 2020	T	12000

Motor vehicles	July 1, 2020	3	7,500
Motor vehicles	July 1, 2022	2	6,000
Furniture and fittings	September 1, 2022	2	600
Industrial plant	October 1, 2024	1	18,000

(ix) A motor vehicle assigned to the General Manager, which cost ₦3 million at the date of purchase on July 1, 2022, was sold for ₦1.2 million on December 31, 2024.

#### **Required:**

As the newly engaged Tax Consultant, you are to draft a report to the Managing Director showing/stating the:

- a. Adjusted profit for the year ended December 31, 2024 (7 Marks)
- b. Company's tax liabilities for the relevant assessment years (ignore minimum tax computations) (20 Marks)
- c. Provisions of the CITA 2004 (as amended) on back duty audit (3 Marks)

(Total 30 Marks)

# SECTION B:YOU ARE REQUIRED TO ATTEMPT TWO OUT OF THREE<br/>QUESTIONS IN THIS SECTION(40 MARKS)

#### **QUESTION 2**

Dandy Producing Company Limited operates in both onshore and offshore in the riverine areas in Nigeria. It has been in the oil prospecting business for many years.

The company applied for and was granted a petroleum prospecting licence (PPL) on January 1, 2023 after studying the provisions of the Petroleum Industry Act, 2021.

The company's financial records for the year ended December 31, 2023 are as follows:

	<b>N</b> ′míllíon	N'million
Revenue earned:		
Value of crude oil sold		486,000
Value of condensate from associated gas sold		128,000
Value of natural gas liquid from associated gas sold		112,500
Income from refinery operations		25,100
Gross revenue		751,600
Expenses deducted:		
Production cost	330,400	
Cost of gas reinjection wells	1,600	
Drilling cost incurred	6,650	
Depreciation of plant, machinery and fixtures	2,010	
Decommissioning and abandonment cost	2,500	
Repairs and maintenance	4,200	
Royalty cost incurred and paid	171,500	
Niger Delta Development Commission charge	340	

Term Dona Conc Host Loca Envi Cost	nce cost and bank charges hinaling cost ations to approved charity homes cession rentals community fund I government municipal levy ronmental remediation fund incurred in seeking information for oil deposits profit	615 2,345 195 74,110 23,200 250 2,800 <u>540</u>	<u>623,255</u> 128,345
Add	itional information made available:		
(i) (ii)	Losses brought forward from previous year was Repairs and maintenance:	₦380 million.	
(11)	Repairs and mannenance:		¥'million
	Repairs of plant and machinery		970
	Repairs or alteration of production utensils		<u>3,230</u>
			<u>4,200</u>
(iii)	Drilling cost incurred comprised:		
(111)	brinning cost mean ca comprised,		¥'million
	Tangible drilling cost for first exploration well		3,990
	Drilling of the first two appraisal wells		<u>2,660</u>
			<u>6,650</u>
<u>.</u> (iv)	Production allowance after commencement of amounted to ¥6,401 million.	the Petroleum	Industry Act, 2021
(v)	Capital allowances computed and agreed:		
(•7	capital anomalieus computea ana agreeu,		<b>₩</b> ′million
-	For the current year		2,750
-	Unrecouped brought forward		<u>1,350</u>
			<u>4,100</u>
1	Eveloper we water a supradivite the CDN was NIZED		

(vi) Exchange rate agreed with the CBN was  $\frac{1}{2}752$  to a USD (\$).

# **Required:**

As a newly qualified accountant just appointed by the company as its Tax Consultant, compute hydrocarbon tax in line with the provisions of Petroleum Industry Act, 2021. (20 Marks)

# QUESTION 3

The growth and development of digital trade facilitate globalisation through the establishment of borderless economic relationship. The digital economy in the first quarter of 2024 accounted for up to 15% of global gross domestic product (GDP) and is expected to contribute one-fifth of GDP by 2026.

The Africa Digital Economy Summit (AfriDES) reported that the Nigeria's digital economy's contribution to the nation's GDP in quarter 1 of 2024 was 14.8%. However, as a result of the nature of transactions involved in the digital space, Nigeria, like many other developing countries, is yet to reap the full potentials of digital economy.

The Tax Reform Committee is seeking for memoranda from accounting and tax professionals and the general public, on how the nation's digital economy can be repositioned for better contribution to the nation's development.

As a professional accountant with experience in fiscal policy, you have been invited by the Committee to present a memorandum on digital economy in Nigeria.

#### **Required:**

You are to prepare a report for the attention of the Committee, addressing the following thematic areas:

- a. The key challenges of taxing digital goods and services (7 Marks)
- b. Ways of tackling the challenges associated with taxing digital economy

(9 Marks)

c. The provisions of the Finance Act, 2019 in respect of digital and other services by a foreign entity with significant economic presence (4 Marks)

(Total 20 Marks)

#### **QUESTION 4**

A clarion call for mergers and acquisitions as a business strategy for corporate entities in Nigeria was canvassed by various speakers at a workshop organised for small and medium-sized business operators.

The guest speaker was emphatic about this issue when he submitted that over 90% of Nigeria's small and medium-sized enterprises (SMEs) will not be able to survive the expected "economic hurricane" that comes with the full implementation of the African Continental Free Trade Agreement. According to him, only highly capitalised entities will be able to compete favourably with companies from South Africa, Kenya, Egypt, Morocco and others, within the continent.

A professional accountant and one of the speakers at the event opined that whatever arrangement of mergers, acquisitions or takeover to be chosen to improve capital base, has its tax implications, hence professional accounting or tax consulting firms should be engaged for advice and guidance.

The founder and majority shareholder of a hitherto thriving clothing and fabric company was one of the participants at the workshop. Due to intense competition from

the Asian market, the company's fortunes had dwindled in the last five years. The shareholders have been contemplating a complete re-organisation and restructuring of the business.

The workshop has given the founder another option (merger or acquisition), which the company may explore.

Your tax consulting firm has just been engaged to provide advice on specific issues concerning mergers and acquisition as well as re-organisation and restructuring.

#### **Required**:

You have been directed by your firm's Principal Partner to take charge of the assignment and submit a report to him for his review before sending the same to the client. Your report should cover:

- a. Tax considerations for mergers and acquisition when a new company takes over an existing company (10 Marks)
- b. Tax concessions and conditions in respect of entities that engaged in business re-organisation and restructuring (8 Marks)
- c. The powers of Federal Inland Revenue Service in respect of mergers and acquisitions (2 Marks)

(Total 20 Marks)

# SECTION C:YOU ARE REQUIRED TO ATTEMPT TWO OUT OF THREE<br/>QUESTIONS IN THIS SECTION(30 MARKS)

#### **QUESTION 5**

LIS Limited is engaged in the manufacture of leather bags and shoes. The company commenced business in 2010. Due to downturn in the economy, which has significant effect on the purchasing power of customers, there has been a remarkable fall in the demand for its products.

The shareholders of the company, at its Annual General Meeting in December 2022, approved the request made by the management to relocate the factory from Bauchi State to Ibadan, Oyo State.

The following activities/transactions took place immediately after the Annual General Meeting:

- the company's warehouse in Azare town, Bauchi, which cost ¥11 million in 2018 was sold for ¥16.5 million in June 2023. The amount formed part of the cost of the new factory in Ibadan, which was completed in December 2023 at ¥22 million;
- (ii) in March 2024, the Bauchi factory, which cost ¥35 million in 2010 was sold to a private company owned by the Managing Director's old school mate, for the sum of ¥55 million. The market value of the factory by an independent valuer, was put at ¥60 million, ¥50 million of the sales proceeds, was however

applied to the construction of the factory in Ibadan, while \$5 million was retained in the company's bank account; and

(iii) the retained amount of \$5 million is expected to be used in the acquisition of shares in a Nigerian listed company in 2025.

#### **Required**:

As the company's Tax Consultant, you are to:

- a. Compute, in accordance with the provisions of Capital Gains Tax Cap C1 LFN 2004 (as amended), the:
  - i. Capital gains made on the transactions (9 Marks)
  - ii. Capital gains tax payable (if any) (4 Marks)
- b. Comment on the provisions of the Finance Act 2023 in respect of application of roll-over relief on shares disposed. (2 Marks)

(Total 15 Marks)

#### **QUESTION 6**

The use of unethical business strategies by some major multinational companies in reducing or evading taxes in their countries of residence, especially in the developing countries (such as Nigeria), are well documented.

From available data and evidence in Nigeria, the use of transfer pricing practices, which are considered to pose major risk to the direct tax base, is found to be the most significant strategy being used to short-change the government in revenue generation.

Of recent, many of these multinational companies have shifted their focus by operating in tax haven environments. Although, governments in some developed countries have come up with various legislative mechanisms to mitigate this act, this cannot be said of governments in developing countries.

At a recent event held to discuss strategies to improve tax revenue, some tax experts have suggested strengthening the transfer pricing regulations and possible adoption of strategies employed by developed countries in mitigating the effect of tax sheltering potential of tax havens.

# **Required**:

- a. Explain the concept of connected taxable persons and identify the category of persons regarded as connected persons within the concept of the Transfer Pricing Regulations, 2018. (6 Marks)
- b. Describe the dispute resolution mechanism available to an aggrieved taxpayer under Transfer Pricing Regulations, 2018. (3 Marks)
- c. Discuss the regulatory measures being used by some developed countries in mitigating against potential activities in tax havens. (6 Marks)

(Total 15 Marks)

#### **QUESTION 7**

According to the National Bureau of Statistics, the solid mining sector contributed 7.86% to the overall gross domestic product (GDP), in the first quarter of 2024. Although, this figure is higher than those recorded in the first quarter of 2023 (6.73%) and fourth quarter of 2023 (4.47%), in real terms, the mining sector grew by 6.30% year-on-year in the first quarter of 2024.

The abysmal performance of the sector to the growth and development of the Nigerian economy has been a cause of concern to the government. In a bid to address this issue, the Federal Government has unveiled series of transformative strides aimed at revitalising the sector.

At the forefront of this transformation is the complete overhauling of the procedures involved in the possession and purchase of minerals as provided for in Sections 92 - 96 of the Nigerian Minerals and Mining Act, 2007 (as amended).

The Federal Government is also reviewing the possibility of encouraging both incorporated and proposed mining companies enjoy the various taxation incentives as enshrined in the Industrial Development (Income Tax Relief) Act and other pioneer incentives regulations released by the Nigerian Investment Promotion Commission (NIPC) in 2014 and 2017.

The Managing Director of a mining company, which was incorporated three years ago, has approached your firm of Chartered Accountants to provide advice on government policy direction in the sector.

#### **Required**:

As the Manager in charge of corporate tax matters in the accounting firm, you have been directed by the Principal Partner to prepare a report for his review before sending same to the client, addressing the following:

- a. Possession and purchase of minerals in accordance with the provisions of the Principal Act (5 Marks)
- b. Tax incentives available to pioneer industries (3 Marks)
- c. Treatment of losses and capital allowances for pioneer products (5 Marks)
- d. Restrictions applicable to pioneer industries

(Total 15 Marks)

(2 Marks)

# **NIGERIAN TAX RATES**

#### 1. CAPITAL ALLOWANCES

	Initial %	Annual %
Building Expenditure	15	10
Industrial Building Expenditure	15	10
Mining Expenditure	95	Nil
Plant Expenditure (excluding Furniture & Fittings)	50	25
Manufacturing Industrial Plant Expenditure	50	25
Construction Plant expenditure (excluding Furniture and Fittings)	50	Níl
Public Transportation Motor Vehicle	95	Nil
Ranching and Plantation Expenditure	30	50
Plantation Equipment Expenditure	95	Níl
Research and Development Expenditure	95	Nil
Housing Estate Expenditure	50	25
Motor Vehicle Expenditure	50	25
Agricultural Plant Expenditure	95	Níl
Furniture and Fittings Expenditure	25	20
	1 - 1	

2. INVESTMENT ALLOWANCE Up to August 31, 2023 (10%); and Finance Act 2023 (NIL)

#### 3. RATES OF PERSONAL INCOME TAX

Graduated tax rates and consolidated relief allowance of \$200,000 or 1% of Gross Income, whichever is higher + 20% of Gross Income.

	Taxable Income (¥)	Rate of Tax (%)
First	300,000	7
Next	300,000	11
Next	500,000	15
Next	500,000	19
Next	1,600,000	21
Over	3,200,000	24

After the relief allowance and exemption had been granted, the balance of income shall be taxed as specified in the tax table above.

- COMPANIES INCOME TAX RATE: Finance Act 2019 specifies: 30% (Large Company) 20% (Medium-Sized Company) 0% (Small Company)
   TERTIARY EDUCATION TAX: 2% of assessable profit (up to December 2014)
  - TERTIARY EDUCATION TAX:2% of assessable profit (up to December 31, 2021)2.5% of assessable profit (with effect from January 1,2022 to August 31, 2023) and 3% of assessable profit,with effect from September 1, 2023 (Finance Act 2023)

10%

7.5%

6. CAPITAL GAINS TAX

7.

8.

- VALUE ADDED TAX
- HYDROCARBON TAX 15% (Petroleum prospecting Licence and Marginal Fields Companies)

30% (Petroleum Mining Lease Companies)

#### **SOLUTION 1**

#### JASCOBAN & Co (TAX CONSULTANTS) Mowe, Ogun State

Date:

The Managing Director Nancy Nigeria Limited Enugu

Dear Sir,

# RE: Computation of Adjusted Profit and Tax Liabilities for the Relevant Assessment Years

We refer to your request on computation of adjusted profit for the year ended December 31, 2024 and tax liabilities for 2021, 2022, 2023, 2024 and 2025 assessment years. Our comments are as follows:

#### a. Adjusted profit for the year ended December 31, 2024

As shown in the attached appendix 1, the adjusted profit of the company for the year ended December 31, 2024 is  $\frac{1}{4}$ 43,300,000.

#### b. Tax liabilities for 2021- 2025 assessment years

Appendix 2 presents the report of the companies income tax and tertiary education tax payable for 2021 through 2025 assessment years, while that of capital gains tax is in appendix 3.

#### c. **Provisions of the CITA 2004 (as amended) on back duty audit**

- i. The CITA 2004 (as amended) provides for the conduct of back duty audit to be conducted on a taxpayer if for instance the tax returns earlier submitted is suspected to contain errors or omissions, with deliberate intention of the taxpayer; or failure to disclose in full any income or earnings in the returns submitted.
- ii. The principal Act allows the tax authority to go back as far as 6 years before the year of examination.
- iii. During the course of the audit, the records of the taxpayer are audited to examine the truth in the information that were earlier produced in the annual returns.
- iv. The tax computation is reviewed based on the findings from the audit exercise. This is compared with the results in the tax computations earlier submitted.
- v. The taxpayer is mandated to pay if there is shortfall in the amount of tax liabilities earlier made in form of additional assessment.
- vi. However, this additional assessment arising from this audit is subject to the objection and appeal procedures.

We hope this report adequately represents the mandate given to us. Should you require further clarification, we will be glad to address it.

Yours faithfully, Dean Jayeola

Appendix 1: Adjusted profit for the year ended Decem	ber 31, 2024	
	<b>₩′000</b>	<mark>\</mark> ″000
Net profit as per accounts		24,950
Add back:		
Depreciation	5,500	
Improvement to industrial warehouse	1,000	
General allowance for doubtful debts	4,350	
Legal- acquisition of long lease	1,500	
Legal- issue of shares	1,400	
Loss on disposal of motor vehicle	1,800	
Provision of unbranded xmas hampers	1,100	
Income tax provisions	1,500	
Preliminary expenses written off	1,200	
Transfer to general reserve	<u>2,000</u>	<u>21,350</u>
		46,300
Deduct: Non-taxable ítems		
Excess on revaluation of industrial building	1,300	
Dividend received (net)	<u>1,700</u>	<u>3,000</u>
Adjusted profit	_	43,300

Appendix 2: Computation of tax liabilities for 2021-2025 assessment years		
	<b>₩′000</b>	<b>N′000</b>
2021 assessment year		
Basis period: 1/7/20 - 31/12/20		
Adjusted loss		27,950
Capital allowance for the year	17,376.25	
Capital allowance utilised	Nil	Nil
Unutilised capital allowance c/f	<u>17,376.25</u>	
Total loss c/f		27,950
Companies income tax @ 20%		<u>Níl</u>
Tertiary education tax @ 2% of adjusted profit		<u>Nil</u>

# 2022 assessment year

27,950 <u>(2,600)</u> <u>25,350</u>	2,600 <u>(2,600)</u>
4,752.5 <u>17,376.25</u> 22,128.75 <u>Nil</u> <u>22,128.75</u>	Nil <u>Nil</u>
	<u>Nil</u>
	<u>65</u>
25,350 (6,200) 19,150 8,742.5 <u>22,128.75</u> 30,871.25 <u>Níl</u> 30,871.2	6,200 <u>(6,200)</u> Níl <u>Níl</u>
	<u>Nil</u>
	<u>155</u>
19,150 <u>(12,870)</u> <u>6,280</u>	12,870 <u>(12,870)</u>
	$(2,600) \\ 25,350$ $4,752.5 \\ 17,376.25 \\ 22,128.75 \\ Nil \\ 22,128.75 \\ 22,128.75 \\ (6,200) \\ 19,150 \\ 8,742.5 \\ 22,128.75 \\ 30,871.25 \\ Nil \\ 30,871.25 \\ Nil \\ 30,871.2 \\ 19,150 \\ (12,870) \\ 19,150 \\ (12,870) \\ 19,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ 10,150 \\ (12,870) \\ (12$

Capital allowance for the year Capital allowance b/f Capital allowance available Capital allowance utilised Unutilised capital allowance c/f Total profit	5,592.5 <u>30,871.25</u> 36,463.75 <u>Nil</u> <u>36,463.75</u>	Nil <u>Nil</u>
Companies income tax @ 30%		<u>Nil</u>
Tertiary education tax @ 3% of ¥12,870,000		<u>386.1</u>
<b>2025 assessment year</b> Basis period: 1/1/24 - 31/12/24 Adjusted profit Balancing charge on disposal of vehicle (W3)		43,300 <u>825</u> 44,125
Unrelieved loss b/f Loss relieved Unrelieved loss c/f Capital allowance for the year Capital allowance b/f	6,280 <u>(6,280)</u> <u>Nil</u> 15,482.75 <u>36,463.75</u>	<u>(6,280)</u> 37,845
Capital allowance available Capital allowance utilised Unutilised capital allowance c/f Total profit	51,946.5 <u>(37,845)</u> <u>14,101.5</u>	(37,845) <u>Níl</u>
Companies income tax @ 30%		<u>Níl</u>
Tertiary education tax @ 3% of \44,125,000		<u>1,323.75</u>

# Appendix 3: computation of capital gains tax on disposal of the motor vehicle

Sales proceeds Less: Cost of acquisition	<b>№'000</b> 1,200 <u>3,000</u>
Capital gains	<u>Níl</u>
Capital gains tax@10%	<u>Níl</u>

Appendíx 4: Capital allowances schedule						
	Industrial	Non-ind	Furniture	Indust	Motor	Cap.
	building	building	&	plant	Vehicle	Allow
			fittings			
	IA 15%	IA 15%	IA 25%	IA 50%	IA 50%	
	AA 10%	AA 10%	AA 20%	AA 25%	AA 25%	
	₩′000	<b>₩</b> ′000	<b>₩</b> ′000	<mark>\</mark> ¥′000	₩′000	₩′000
2021 A/Y						
Cost	15,000	8,000	2,400	12,000	7,500	
IA	(2,250)	(1,200)	(600)	(6,000)	(3,750)	13,800
AA	(637 <i>.</i> 5) W1	(340)	(180)	(750)	(468.75)	2,376.25
lnv.						
Allowance	·			<u>(1,200)</u>		<u>1,200</u>
						<u>17,376.25</u>
2022 A/Y						
TWDV	12,112.5	6,460	1,620	5,250	3,281.25	
AA	<u>(1,275) W2</u>	<u>(680)</u>	<u>(360)</u>	<u>(1,500)</u>	<u>(937.5)</u>	<u>4,752.5</u>
2023 A/Y						
TWDV	10,837.5	5,780	1,260	3,750	2,343.75	
Addition			600		6,000	
IA			(150)		(3,000)	3,150
AA	<u>(1,275)</u>	<u>(680)</u>	<u>(450)</u>	(1,500)	(1,687.5)	<u>5,592.5</u>
						<u>8,742.5</u>
2024 A/Y						
TWDV	9,562.5	5,100	1,260	2,250	3,656.25	
AA	(1,275)	(680)	(450)	(1,500)	(1,687.5)	<u>5,592.5</u>
	<u>(</u>	<u></u>	<u></u>	(2)	<u>(2);;;;;;</u>	<u></u>
2025 A/Y						
TWDV	8,287.5	4,420	810	750	1,968.75	
Disposal	0,20,15	1, 120	010	, 50	<u>(375)</u>	
Disposal					<u></u> <u>W3</u>	
					1,593 <i>.</i> 75	
Addition	1,000			18,000	1,333,1J	
IA	(150)			(9,000)		9,150
AA	<u>(1,360)</u>	<u>(680)</u>	<u>(450)</u>	(9,000) <u>(2,999)</u>	<u>(843.75)</u>	<u>6332.75</u>
AA	(1,500)	<u>(000)</u>	(430)	(2,999)	<u>(1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1</u>	<u>0552.75</u> <u>15,482.75</u>
c/f	7 777 5	2 7/10	360	6 751	750	<u>1,402./ J</u>
ΥI	<u>7,777.5</u>	<u>3,740</u>	<u>360</u>	<u>6,751</u>	<u>750</u>	

# Workings

(1) **2021 Y/A (AA)** 

Industrial building This is a case of 6 months in the basis period, hence annual  $AA = \frac{Cost-IA \times 1/2}{n}$ 

$$= (\underline{15,000 - 2250}) \times \frac{1}{2}$$
  
10  
=  $\underbrace{\$637.5}$ 

#### (2) **2022 Y/A (AA)**

Industrial building

This is a case of 12 months in the basis period, hence annual AA = Cost-IA

 $n = \frac{15,000 - 2250}{10} = \frac{11,275}{10}$ 

#### (3) **2025 Y/A (Disposal of motor vehicle)**

2025 Y/A (Disposal of motor vehicle)	
	Motor vehicle IA 50% AA 25% <del>N</del> '000
Cost	<u>3,000</u>
IA AA (for 3 years)= 375 x 3 Total capital allowance claimed up to date of disposal	1,500 <u>1,125</u>
	<u>2,625</u>
TWDV at disposal (cost - total capital allow)	375
Sales proceeds	1,200
Balancing charge (sales proceeds - TWDV)	<u>825</u>

#### Examiner's report

The question is divided into three parts. The first part tests the candidates' understanding of the provisions of Companies Income Tax Act Cap C21 LFN (CITA) 2004 (as amended) in respect of computations of adjusted profit. The second part tests the candidates' knowledge of computations of tax liabilities. The third part tests candidates' understanding of back duty audit.

This being a compulsory question, all the candidates attempted the question. Candidates demonstrated a fair understanding of the question and performance was average.

The commonest pitfall was the inability of some candidates to identify correctly the allowable and disallowable expenses in the computations of adjusted profit and tax liabilities of a company.

Candidates are advised to familiarise themselves with issues concerning computations of companies income tax by reading extensively the Institute's Study Text, other relevant textbooks, the CITA 2004 (as amended), and relevant Finance Acts when preparing for future examination.

#### Marking guide

L' KUL	ming guide	Marks	Marks
a.	Computation of adjusted profit		
	Heading	1/2	
	Depreciation	1/2	
	Improvement to industrial warehouse	1/2	
	General allowance for doubtful debts	1/2	
	Legal- acquisition of long lease	1/2	
	Legal- issue of shares	1/2	
	Loss on disposal of motor vehicle	1/2	
	Provision of unbranded xmas hampers	1/2	
	Income tax provisions	1/2	
	Preliminary expenses written off	1/2	
	Transfer to general reserve	1/2	
	Excess on revaluation of industrial building	1/2	
	Dividend received (net)	1/2	
	Adjusted profit	<u>1/2</u>	7
b.	Computation of tax liabilities		
	2021 assessment year		
	Adjusted loss	1/4	
	Capital allowance for the year	1/4	
	Companies income tax	1/4	
	Tertiary education tax	1⁄4	
	2022 assessment year		

Adjusted profit	1/4
Loss relieved	1/4
Capital allowance for the year	1/4
Total profit	1/4
Companies income tax	1/4
Tertiary education tax	1/4
2023 assessment year	
Adjusted profit	1/4
Loss relieved	1/4
Capital allowance for the year	1/4
Capital allowance b/f	1/4
Total profit	1/4 1/
Companies income tax	1/4 1/4
Tertiary education tax	74
2024 assessment year	
Adjusted profit	1/4
Loss relieved	1/4
Capital allowance for the year	1/4
Capital allowance b/f	1/4
Total profit	1/4 1/4
Companies income tax	1/4 1/4
Tertiary education tax	74
2025 assessment year	
Adjusted profit	1/4
Balancing charge	1/4
Loss relieved	1/4
Capital allowance for the year	1/4
Capital allowance b/f Total profit	1/4 1/4
Companies income tax	74 1/4
Tertiary education tax	74 1/4
Computation of capital gains tax	74
Sales proceeds	1/4
Cost of acquisition	1/4
Capital gains	1/4
Capital gains tax	1/4
Appendix 4: Capital allowances schedule	
2021 assessment year	
IA Industrial building	1/4
IA Non-industrial building	74 1/4
IA Furniture and fittings	1/4 1/4
IA Industrial plants	1/4
IA Motor vehicles	1/4
AA Industrial building	1/4

AA Non-industrial building	1/4
AA Furniture and fittings	1/4
AA Industrial plants	1/4
AA Motor vehicles	1/4
Inv. allowance Industrial plant	1/4
Total of capital allowance	1/4
2022 assessment year	
AA Industrial building	1/4
AA Non-industrial building	1/4
AA Furniture and fittings	1/4
AA Industrial plants	1/4
AA Motor vehicles	1/4
Total of capital allowance	1/4
2023 assessment year	
IA Furniture and fittings	1/4
IA Motor vehicles	1/4
AA Industrial building	1/4
AA Non-industrial building	1/4
AA Furniture and fittings	1/4
AA Industrial plants	1/4
AA Motor vehicles	1/4
Total of capital allowance	1/4
2024 assessment year	
AA Industrial building	1/4
AA Non-industrial building	1/4
AA Furniture and fittings	1/4
AA Industrial plants	1/4
AA Motor vehicles	1/4
Total of capital allowance	1/4
2025 assessment year	
Disposal Motor vehicle	1/4
IA Industrial building	1/4
IA Industrial plant	1/4
AA Industrial building	1/4
AA Non-industrial building	1/4
AA Furniture and fittings	1/4
AA Industrial plants	1/4
AA Motor vehicles	1/4
Total of capital allowance	1/4
Workings- 2025 assessment year Disposal	
Total capital allowance claimed	1/4
TWDV at disposal	1/4
Balancing charge	$\frac{1}{4}$

20

# c. **Provisions of CITA on back duty audit**

(1 mark for correct discussion of the provision, subject to a maximum of 3 points) **Total** 

#### **SOLUTION 2**

#### Dandy Producing Company Limited Computation of hydrocarbon tax For 2023 assessment year

<u>3</u> <u>30</u>

	<b></b> ¥′million	<b>N</b> ′million
Revenue		
Value of crude oil sold		486,000
Value of condensate from associated gas sold		128,000
Value of natural gas liquid from associated gas		<u>112,500</u>
Gross revenue		726,500
Balancing charge		<u>Nil</u>
Total income		726,500
Allowed deductions (Section 263)		
Production cost	330,400	
Cost of gas reinjection wells	1,600	
Drilling cost	6,650	
Decommissioning and abandonment	2.500	
Repairs and maintenance	4,200	
Royalties cost incurred and paid	171,500	
NDDC charge	340	
Terminaling cost	2,345	
Concession rentals	74,110	
Host community fund	23,200	
Local government municipal levy	250	
Environmental remediation fund	<u>2,800</u>	
Total allowable deductions (S.263)	<u>619,895</u>	<u>(619,895)</u>
Total costs subject to CPR limit (W1)	<u>623,995</u>	
Excess allowable cost carried forward	<u>NIL</u>	
Adjusted profit		106,605
Less: Loss relief		<u>(380)</u>
Assessable profit		106,225
Less: Section 266 and 6 <sup>th</sup> schedule deductions		
Capital allowance for the year	2,750	
Unrecouped b/f	<u>1,350</u>	( <u>4,100)</u>

	102,125
Less: production allowance	( <u>6,401</u> )
chargeable profit	<u>95,724</u>
Hydrocarbon tax@15% od ¥95,724	<u>14,358.6</u>

#### Workings

1.	Cost –price –ratio (CPR) limit		
a.	Gross revenue	¥' million	<u>₩</u> 'million <u>726,500</u>
I	Maximun allowable @65% on gross revenue of ¥726,500		<u>472,225</u>
b.	Total operating cost Capital allowances Total eligible costs		619,895 <u>4,100</u> 623,995
	Less: Exempted cost incurred [(section 263 (1)] Royalties paid NDDC Charge Concession rentals Host community fund Environmental remediation fund	171,500 340 74,110 23,200 <u>2,800</u>	
ci.	Total exempted cost		<u>(271,950)</u>
ii	=B-C1=Net total costs to be subject to CPR		<u>352,045</u>
C2	Maximum allowable cost is the lower of (i) and (ii) Which is ₦352,045 million		
D.	Total allowable cost ( in line with the Practice of FIRS) = $C1+C2$ ( that is , Exempted cost +CPR restricted cost) = $\frac{1}{271,950}$ million + $\frac{1}{252}$ , 045 million		

<u>=₩623,995 million</u>

**Note:** We sincerely believe that capital allowances should not have been added to total operating cost in determining the total eligible costs in the computation of CPR limit. But in this situation, we adhered strictly to the format of FIRS, being the Federal tax administration.

Henceforth, candidates are advised to adhered to this format (FIRS circular), pending any subsequent review of the same.

#### Examiner's report

The question tests candidates' knowledge of computations of hydrocarbon tax of a company that operates in both onshore and shallow water areas in line with the provisions of Petroleum Industry Act, 2021.

About 80% of the candidates attempted the question, and majority of them showed a good understanding of its requirements, hence their performance was above average. The commonest pitfall of the candidates was their inability to identify correctly the allowable and disallowable expenses relevant to the computations of cost-price ratio and hydrocarbon tax.

Candidates are advised to study extensively the Circular issued by the Federal Inland Revenue Service (FIRS) on hydrocarbon tax computations and relevant sections of the Petroleum Industry Act, 2021 when preparing for future examination.

Marks

#### Marking guide

(a)	Computation of hydrocarbon tax	
	Heading	1/2
	Value of crude oil sold	1/2
	Value of condensate from associated gas sold	1/2
	Value of gas liquid from associated gas	1/2
	Gross revenue	1/2
	Production cost	1/2
	Cost of gas reinjection wells	1/2
	Drilling cost	1/2
	Decommissioning and abandonment cost	1/2
	Repairs and maintenance	1/2
	Royalties paid	1/2
	NDDC charge	1/2
	Terminaling cost	1/2
	Concession rentals	1/2
	Host community fund	1/2
	Local government levy	1/2
	Environmental remediation fund	1/2
	Total allowable deductions (S.263)	1/2
	Total costs subject to CPR limit	1/2
	Excess allowable costs c/f	1/2
	Adjusted profit	1/2
	Loss relief	1/2
	Assessable profit	1/2
	Capital allowance for the year	1/2
	Unrecouped capital allowance	1/2
	Production allowance	1/2

Chargeable profit	1/2
Hydrocarbon tax	11/2
Workings 1 (CPR limit):	
Gross revenue	1/2
Maximum allowable @ 65% of gross revenue	1/2
Capital allowances	1/2
Total eligible costs	1/2
Total exempted cost	1/2
Net total costs to be subject to CPR	1/2
Maximum allowable costs	11/2
Total allowable cost	<u>1/2</u>
Total	20

#### **SOLUTION 3**

#### Bam Abbey & Co. (Chartered Accountants)

Ceremonial Building Road, Abeokuta

November 25, 2024

The Chairman Tax Reform Committee Abuja, FCT

Dear Sir,

#### Memorandum on Digital Economy in Nigeria

I refer to your Committee's request for memoranda in respect of digital economy in Nigeria. My comments are as follows:

#### a. Challenges of taxing digital economy in Nigeria

The rapid growth in information and communication technology (ICT) in Nigeria has brought with it boundless opportunities and changes in the way we do business. Today, a significant number of transactions in Nigeria (sale and purchase of goods and services) are transacted using mobile devices and online payment platforms. This is broadly referred to as electronic commerce (e-commerce).

Whilst there are numerous benefits of e-commerce, the paradigm shift from a physical to an 'invisible' business framework comes with its challenges. Some of these challenges include:

i tracking transactions especially for the purposes of taxation. The drive towards growing non-oil tax revenue (through fiscal optimisation) and eliminating leakages are not mutually exclusive objectives. Thus, the process of diversifying the revenue base of the economy can only be further complemented by the choices the Federation makes to arrest revenue leakages from the digital economy;

- ii. the inability to adequately capture the quantum of attendant direct and indirect taxes payable on e-commerce transaction has left leakages in the tax system (that is, loss of tax revenue to the government);
- iii. the applicable rules for corporate taxation have failed to effectively capture the realities of a modern economy in our world of fast-paced digital transactions. There are also various profitable business models in digital services that derive income from countries without creating palpable physical presence;
- iv. given that non-resident companies are taxed in Nigeria based on profits derived from Nigeria, the question as to whether a foreign company is liable to pay income tax in Nigeria is usually controversial. Section 13 of the Companies Income Tax Act (CITA) implies that a non-resident company must have physically performed activities in Nigeria before it can be concluded that such a company has income tax liability in Nigeria; and
- v. the Federal Inland Revenue Service (FIRS) is, however, making efforts to ensure that income arising from e-commerce is subjected to Nigerian tax. These efforts seem to have yielded some results in the aspect of indirect taxes as opposed to direct tax. In recent times, the FIRS has made attempts to assess some foreign mobile application transport operators to income tax in Nigeria on the basis that the income for services they provide is derived from Nigeria. However, the absence of the required fixed base or physical operations in Nigeria under Section 13 of CITA has made it difficult for the FIRS to establish liability of such foreign companies to Nigerian tax.

# b. Ways of tackling the challenges associated with taxing digital economy in Nigeria

Digital economy is growing rapidly in Nigeria just as it is happening all over the world, therefore, there is need for urgent actions in Nigeria to block tax revenue leakages associated with existing gaps in taxing digital economy. Such actions include

i. review of the scope of "fixed base" under section 13 of CITA: Although Nigeria, not a member of the OECD or the EU, it is important that the scope of "fixed base" under Section 13 of the CITA be expanded to ensure that the Nigerian digital economy is effectively captured for tax purposes. The introduction of a digital fixed base in Nigeria will certainly increase the tax base, thereby sharing the collective tax burden of taxpayers while ensuring an increase in government revenue;

- ii. adoption of creative approach through innovative tax legislation: It has become expedient for the Nigerian tax authorities to explore a more creative approach to ensure taxation of the digital economy. Nigeria will need to borrow a leaf from other nations who have taken bold steps to tackle the non-taxation of the digital economy to plug revenue leakages through innovative tax legislation rather than seeking to extend the interpretation of obsolete legislations that are not sufficient to bring cross border digital transactions into the tax net. Given the peculiarities and innovations of the digital economy, it will be most appropriate for the Nigerian Government to enact a legislation to adequately cater for the taxation of the digital economy rather than trying to make it fit into existing tax laws;
- iii. automated tax administration: The implication of this for the digital economy is two-fold. On one hand, full (or substantial automation) of the tax processes or system increases the degree of exposure of tax officers, administrators, taxpayers and other stakeholders in the use and mastery of those processes. On the other hand, it enhances the prospects of positioning the tax system and its electronic platforms for a robust and seamless interface with diverse payment platforms which can facilitate tracking of electronic transactions liable to tax in Nigeria;
- iv. data handling: Another critical success factor in a digital economy is data handling. Elsewhere, data is treated with something akin to reverence but Nigeria's data gathering and storage processes are still not fully integrated. This will require huge investments, including for data protection as the recent ransomware "WannaCry" threat showed;
- v. strategic partnership with digital economy service providers: The FIRS should form "a strategic partnership with institutions which provide platforms to carry out digital transactions in Nigeria. This would ensure that the objective of minimising and reducing tax leakages especially from the digital economy is achieved at a faster pace;
- vi. ratification of multilateral conventions: Ratification of multilateral conventions on tax related treaties to end profit shifting and tax evasion by multinational companies. The benefits are that the convention will swiftly modify existing bilateral tax treaties to implement tax treaty related matters in a cost efficient manner, instead of individual negotiations and amendment of the treaty. The treaty will address abuse of tax laws, raise government tax revenue, promote transparency and check illicit financial flows; and
- vii. capacity development: There is need for capacity development for tax administrators so they can implement a seamless interface with the different payment systems available in Nigeria.

# c. The provisions of the Finance Act, 2019 on digital and other services in relation to significant economic presence (SEP) of a foreign entity

The Finance Act. 2019 introduced the concept of significant economic presence (SEP) to expand the scope of Nigerian tax on foreign companies deriving income from their activities in Nigeria which were hitherto not captured in the tax net. Consequently, the Companies Income Tax (Significant Economic Presence) Order, 2020 ("the Order") was issued by the Federal Government of Nigeria.

The Order provides clarification on what constitute a SEP for foreign companies doing business, or providing services to customers, in Nigeria, in line with Section 13(2)(c) and (e) of CITA.

The Order provides that a foreign company shall have a SEP in Nigeria in any accounting year, where it:

- i. derives ¥25 million annual gross turnover or its equivalent in other currencies from any or combination of the following digital activities:
  - streaming or downloading services of digital contents, including but not limited to movies, videos, music, applications, games and e-books to any person in Nigeria; or
  - transmission of data collected about Nigerian users which has been generated from such users activities on a digital interface, including website or mobile applications; or
  - provision of goods or services other than those under sub-paragraph 5 of the Order, directly or indirectly through a digital platform to Nigeria; or
  - provision of intermediation services through a digital platform, website or other online applications that link suppliers and customers in Nigeria;
  - ii. uses a Nigerian domain name (i.e., .ng) or registers a website address in Nigeria: or
  - iii. has a purposeful and sustained interaction with persons in Nigeria by customising its digital page or platform to target persons in Nigeria, including reflecting the prices of its products or services in Nigerian currency or providing options for billing or payment in Nigerian currency.

Please do not hesitate to contact me if your Committee needs any further clarification on the above subject.

Yours faithfully,

Bolaji Abbey Principal Partner BAM Abbey & Co (Chartered Accountants)

#### Examiner's report

The question tests candidates' understanding of challenges of taxing digital goods and services; ways of tackling the identified challenges; and the provisions of the Finance Act, 2019 in respect of foreign entity with significant economic presence in Nigeria offering digital and other services.

About 70% of the candidates attempted the question, and majority of them showed a good understanding of its requirements, hence their performance was above average.

The commonest pitfall of the candidates was their inability to state correctly the provisions of the Finance Act, 2019 in respect of foreign entity with significant economic presence in Nigeria offering digital and other services.

Candidates are advised to study extensively the Institute's Study Text, other relevant textbooks, the Companies Income Tax Act, 2004 (as amended), and relevant Finance Acts when preparing for future examination.

#### Marking guide

		Marks	Marks
a.	<b>Challenges of tax digital economy in Nigeria</b> <b>Heading</b> 1½ marks for each challenge of taxing digital economy, subject to maximum of 4 points	1	
		<u>6</u>	7
b.	<b>Ways of tackling the challenge associated with taxing digital economy in Nigeria</b> 1½ marks for each way of tackling the challenges associated with digital economy, subject to maximum of 6 points		9
С.	The provisions of the finance Act, 2019 on digital and other services in relation to significant economic presence (SEP) of a foreign country 2 marks for each discussion of the provisions of the Finance Act, 2019 on digital and other services in relation to SEP of a foreign entity, subject to a maximum of 2 points Total		4 <u>20</u>
#### **SOLUTION 4**

#### Obiageli & Co (Tax Consultants) Asaba Road, Umunede, Delta State

#### **INTERNAL MEMO**

Date: .....

From: Assistant Manager To: Principal Partner

#### SUBJECT: RE: Mergers and Acquisitions and other Related Matters

I refer to our client's request on tax considerations for mergers and acquisitions when a new company takes over an existing company; tax concessions and conditions to be met by a company seeking for reorganisation and restructuring; and powers of the Federal Inland Revenue Service (FIRS) in respect of mergers and acquisition. I hereby present a report for your review before same is presented to the client.

# a. Tax considerations for mergers and acquisitions when a new company takes over an existing company

- i. Where a new company takes over an existing or old company, the old company is deemed to have ceased business while the new company is deemed to have commenced a new business. The cessation rules will apply to the old company, while the commencement rules will apply to the new company.
- ii. Filing of annual returns: The new company that emerges from a merger process is expected to file audited accounts and returns with the FIRS within eighteen months from the date of its incorporation or not later than six months after the end of its first accounting period, whichever is earlier. Meanwhile, it should be noted that a mere change of name of an existing business entity does not constitute a new company. Such companies will continue to be treated as old businesses on ongoing concern basis.
- iii. Basis of assessment: The commencement rules will apply to the new company.
- iv. Claim of capital allowances: No initial allowance will be claimed on the transferred assets. The annual allowance claimable will be based on the tax written down value of the transferred assets.
- v. Unabsorbed losses and capital allowances brought forward: The unrelieved losses and unabsorbed capital allowances of the individual merging companies will not be allowed to be carried forward and set off against the assessable profits of the new company after the merger. However, the utilised capital allowances may be added to the tax written down value of the assets taking over for annual allowance purposes in the enlarged entity.

- vi. Stamp duties: Stamp duty payment will arise on the share capital of the new company. If a merger also results in increase in share capital, stamp duty will be paid on the increase in share capital. Besides, merger of companies will also involve the sale/transfer of assets of the merging companies to the new company, necessary transfer or sale documents must be prepared to reflect the change of title. Stamp duties will be paid on documents perfecting these titles in accordance with the Stamp Duties Act.
- vii. Merger cost: There are some costs which are incurred in the merger process due to the involvement of professionals and regulatory agencies, for example, financial advisers, solicitors, stockbrokers, estate valuers, issuing houses, corporate affairs commission, Nigerian Exchange, Securities and Exchange Commission. The FIRS may seek to disallow these expenses on the basis that they are capital in nature and as such not tax deductible.
- viii. Value added tax and withholding tax: The fees paid to the professionals for services rendered in connection with the merger will attract value added tax and withholding tax at the appropriate rates.
- ix. Guarantee or security for payment of tax: The FIRS may require the new company to guarantee or give security to the satisfaction of the FIRS, for the payment in full of all tax due or to become due by any of the ceased companies.
- x. End of service award: When companies merge, the services of some employees may no longer be needed. The new company may have to pay benefits, such as gratuity, compensation for loss of employment and other retirement benefits. These expenses will be treated as allowable for the new company.

# b. Tax concessions and conditions to be met before qualifying for same in respect of entities that engaged in business re-organisation and restructuring

#### Applicable tax concessions include:

- i. the commencement and cessation provisions are not applied;
- ii. for capital allowances purposes, the assets sold or transferred shall be deemed to have been sold for an amount equal to the residue of qualifying expenditure thereon on the day following such sale or transfer;
- iii. the company acquiring the assets shall not be entitled to any initial allowance thereon and shall be deemed to have received all allowance already granted to the vendor company up to the date of the sale or transfer; and
- iv. there is no reference to unutilised losses incurred in the old trade. Such losses cannot be transferred to the new business and may not be relieved in any other way.

#### Conditions to be met before qualifying for such tax concessions

The Finance Act, 2019 introduced amendment to Section 29(9) of CITA to the effect that:

- i. qualification for exemption from commencement and cessation rules in a business restructuring amongst related parties to now include requirements to be related for a period of at least one year (365 days) prior to the restructuring;
- ii. no disposal of assets post restructuring until after one year; and
- iii. flouting of this provision will lead to a revocation of the exemption.

# c. The powers of Federal Inland Revenue Service in respect of mergers and acquisitions

- i. The consent of the Federal Inland Revenue Service, including clearance with respect to any capital gains tax that may be due and payable, must be obtained before any merger, take-over, transfer or restructuring of a trade or business carried on by a company can take place.
- ii. The Companies Income Tax Act (CITA) gave the FIRS powers to the extent that no merger can be concluded without obtaining the consent or direction of the FIRS. Under CITA, no merger, take-over, transfer or restructuring of the trade or business carried on by a company can take place without having obtained the FIRS's direction and clearance with respect to any tax that may be due and payable.

Thank you, Obí Akande

#### Examiner's report

The question tests the candidates' knowledge of the tax implications arising from merger and acquisition when a new company takes over an existing company; the tax concessions and conditions in respect of entities that engaged in business reorganisation and restructuring; and the powers of FIRS in merger and acquisition activities.

About 70% of the candidates attempted the question and they exhibited a fair understanding of its requirements. The performance was average.

The commonest pitfall was the inability of some candidates to explain the tax concessions available to entities that engaged in business re-organisation and restructuring.

Candidates are advised to read widely the Institute's Study Text, the Companies Income Tax Act, 2004 (as amended), and other relevant textbooks, when preparing for future examination.

# Marking guide

Ma	irking guide	Marke	Marke
a <i>.</i>	Tax considerations for mergers and acquisition when a new company takes over an existing	Marks	Marks
	<b>company</b> Heading 1 <sup>1</sup> / <sub>2</sub> marks for each discussion of tax consideration for	1	
	mergers and acquisition when a new company takes over an existing		
	company, subject to a maximum of 6 points	<u>9</u>	10
b.	Tax concessions and conditions to be met before qualifying for same in respect of entities that engaged in business re-organisation and restructuring 2 marks for each applicable tax concessions, subject to a maximum of 3 points 1 mark for each condition to be met before qualifying tax concessions, subject to a maximum of 2 points	6 <u>2</u>	8
С.	The powers of FIRS in respect of mergers and acquisitions 1 mark for each discussion of power of FIRS in respect of mergers and acquisitions,		
	subject to a maximum of 2 points <b>Total</b>		<u>2</u> <u>20</u>

#### **SOLUTION 5**

aii

#### ai LIS Limited Computation of capital gains For 2023 assessment year

i or 2029 assessment year	<del>N</del> ′000	<del>N</del> ′000
Sales proceeds Less: Cost of acquisition Capital gains	<b>₩ UUU</b>	16,500 <u>11,000</u> 5,500
Determination of rolled-over relief Lower of: Amount re-invested in Ibadan factory	<u>22,000</u>	
Sales proceeds on disposal of warehouse Less: Cost of acquisition of ware house Amount rolled-over Net capital gains	16,500 <u>11,000</u>	<u>(5,500)</u> <u>Níl</u>
Computation of capital gains for 2024 assessment		
year	<del>N</del> ′000	<b>N</b> ′000
Sales proceeds Less: Cost of acquisition Capital gains		60,000 <u>35,000</u> 25,000
Determination of roll-over relief		
Lower of: Amount re-invested in Ibadan factory Sales proceeds on disposal of bauchi factory Less: Cost of acquisition of ware house Amount roll-over Net capital gains	50,000 <u><i>60,000</i> 35,000</u>	<u>(15,000)</u> <u>10.000</u>
Computation of capital gains tax for the relevant assessment year		
<b>2023 assessment year</b> Capital gains	<u>NIL</u>	
Capital gains tax @ 10% of capital gains	<u>Nil</u>	

#### 2024 assessment year

Capital gains

₩10,000,000

<u>₩1,000,000</u>

Capital gains tax@10% of capital gains

#### b. The provisions of the Finance Act, 2023 in respect of application of rollover relief on shares disposed

Section 31(6) of Companies Income Tax Act, 2004 is amended by Section 4 of the Finance Act, 2023. It provides for the inclusion of stocks and shares as assets that qualify for roll-over relief on disposal and re-investment on similar assets.

The provisions of the Finance Act state that, for the application of roll-over relief for shares pursuant to Sections 30 and 31 of CITA 2004, the proceeds from qualifying disposals must be reinvested within the same year of assessment in the acquisition of eligible shares in the same or other Nigerian companies.

#### Examiner's report

The question tests candidates' understanding of the provisions of Capital Gains Tax Act Cap C1 LFN 2004 (as amended) and the Finance Act, 2023 in respect of roll-over relief and tax computations.

About 90% of the candidates attempted the question. Candidates showed a good understanding of the requirements of the question and their performance was above average.

The commonest pitfall was the inability of some candidates to explain correctly the provisions of the Finance Act 2023 in respect of application of roll-over relief on shares disposed.

Candidates are advised to read the Institute's Study Text, the Finance Act, 2023 and other relevant textbooks, as this would go a long way in assisting them to pass future examination.

Mark	ing guide		
		Marks	Marks
a. (i)	Computation of capital gains for 2023		
	assessment year		
	Sales proceeds	1⁄2	
	Less: cost of acquisition	1⁄2	
	Capital gains	1⁄2	
	Amount re-invested in Ibadan factory	1⁄2	
	Sales proceeds on disposal of warehouse	1⁄2	
	Less: cost of acquisition of warehouse	1/2	
	Amount roll-over	1/2	
	Net capital gains	1	
	Computation of capital gains for 2024		
	assessment year		
	Sales proceeds	1⁄2	
	Less: cost of acquisition	1⁄2	
	Capital gains	1⁄2	
	Amount re-invested in Ibadan factory	1⁄2	
	Sales proceeds on disposal of Bauchi factory	1⁄2	
	Less: cost of acquisition of Bauchi factory	1⁄2	
	Amount roll-over	1⁄2	
	Net capital gains	<u>1</u>	9
a(ii)	Computation of capital gains tax for the		
	relevant assessment year		
	2023 assessment year (Nil)	2	
	2024 assessment year (\1,000,000)	<u>2</u>	4
b <i>.</i>	The provisions of the Finance Act, 2023		
	In respect of application of roll-over		
	relief on shares disposed		
	2 marks for correct rendition of the		
	Provisions of the Finance Act, 2023 in		
	respect of application of roll-over relief		•
	on shares disposed		<u>2</u> 15
	Total		<u>15</u>

#### **SOLUTION 6**

a. Concept of connected taxable persons and category of persons regarded as connected persons

Connected taxable persons include persons, individual, entities, companies, partnerships, joint ventures, trust or associations (collectively referred to as "connected taxable persons"). Also includes the persons referred to in section 13, section 22 of CITA, section 15 of PPTA, section 10 of PITA, article 9 of OECD Model Tax Convention and "associated enterprise" in OECD guidelines.

The following persons will be regarded as connected taxable persons (that is, related parties) within the context of the Transfer Pricing Regulation, 2018:

- i. any entity dealing with a related party (associate subsidiary, joint venture);
- ii. members of a local group of companies;
- iii. members of a conglomerate;
- iv. multinationals;
- v. an entity in a group located in a free trade zone;
- vi. a group entity that has a pioneer status;
- vii. intra company profits which is taxable under different regimes for example, tax exempt export profits;
- viii. loss making entity within a profitable group;
- ix. related parties subject to tax at different rates; and
- x. permanent establishment.

Under the 2018 Regulations, the definition of connected persons have been widened to accommodate where one person has the ability to control or influence the other person in making financial, commercial or operational decisions, or there is a third person who has the ability to control or influence both persons in making financial, commercial decisions.

#### b. Dispute resolution under Income Tax (Transfer Pricing) Regulations, 2018

- i. Based on the 2018 guidelines, a taxpayer who has any objection on assessment cannot approach the Decision Review Panel for a review of the assessment received from FIRS.
- ii. Taxpayers are now expected to lodge their complaints with the Head, FIRS Transfer Pricing Unit (TPU) within 30 days of the date of receipt of the assessment notice.
- iii. Effective March 12, 2018, the Head of TPU has the prerogative to decide whether or not to refer the taxpayer's objection to the Decision Review Panel.

# c. Regulation measures used in mitigating against potential activities in tax havens

To avoid tax competition, many high tax jurisdictions have enacted legislations to counter the tax sheltering potential of tax havens.

Generally, such legislations tend to operate in one of the following seven ways:

- i. attributing the income and gains of the company or trust in the tax haven to a taxpayer in the high-tax jurisdiction on an arising basis. Controlled foreign corporation legislation is an example of this;
- ii. transfer pricing rules, standardisation of which has been greatly helped by the promulgation of OECD guidelines;
- iii. restrictions on deductibility, or imposition of a withholding tax when payments are made to off shore recipients;
- iv. taxation of receipts from the entity in the tax haven, sometimes enhanced by notional interest to reflect the element of deferred payment. The EU withholding tax is probably the best example of this;
- v. exit charges, or taxing of unrealised capital gains when an individual, trust or company emigrates;
- vi. many jurisdictions employ blunter rules, for example, in France, securities regulations are such that it is not possible to have a public bond issue through a company incorporated in a tax haven; and
- vii. also becoming increasingly popular is "forced disclosure" of tax mitigation schemes. Broadly, these involve the revenue authorities compelling tax advisers to reveal details of the scheme, so that the loopholes can be closed during the following tax year, usually by one of the five methods indicated above. Although not specifically aimed at tax havens, given that so many tax mitigation schemes involve the use of offshore structures, the effect is much the same.

#### Examiner's report

The question tests candidates' understanding of the concept and category of persons regarded as connected taxable persons; dispute resolution available to an aggrieved taxpayer under the Transfer Pricing Regulations, 2018; and the regulatory measures being used by some developed countries in mitigating potential tax havens.

About 60% of the candidates attempted the question. Candidates showed a fair understanding of the requirements of the question and their performance was average.

The commonest pitfall was the inability of some candidates to explain correctly the regulatory measures being used by some developed countries in mitigating potential tax havens.

Candidates are advised to read the Institute's Study Text, the Transfer Pricing Regulations, 2018, and other relevant textbooks, as this would go a long way in assisting them to pass future examination.

# Marking guide

		Marks	Marks
a.	Concept of connected taxable persons and the category of persons regarded as connected persons 1 mark for correct description of the concepts of connected taxable persons in line with the		
	provisions of the law	1	
	1 mark for each category of persons regarded as connected person, subject to a maximum of 5 points	<u>5</u>	6
b <i>.</i>	Dispute resolution under Transfer Pricing		
	<b>Regulations 2018</b> 1½ marks for each correct discussion of dispute		
	resolution under Transfer Pricing Regulation		
	2018, subject to a maximum of 2 points		3
С.	Regulatory measures used in mitigating potential tax havens		
	1 mark for each correct discussion of regulatory measures used in mitigating against potential activities in tax havens, subject to a		
	maximum of 6 points		<u>6</u>
	Total		<u>15</u>

#### **SOLUTION 7**

# Ayorínde & Co (Chartered Accountants) Kabba Road, Lokoja

#### **INTERNAL MEMO**

Date: .....

From: Manager (Corporate Tax Matters) To: Principal Partner

# Subject: RE: Possession and Purchase of Minerals and Tax Incentives available to Pioneer Industries and Related Matters

I refer to our client's request on procedures for possession and purchase of minerals; incentives available to pioneer industries; treatment of losses and capital allowances of pioneer period; and restriction applicable to pioneer industries. I hereby present a report for your review before the same is presented to the client.

#### a. **Possession and purchase of minerals in accordance with the provisions of the Principal Act**

Section 93 of the Nigerian Minerals and Mining Act 2007 provides that no person, other than an officer of the Ministry authorised in that behalf by the Minister and acting in the execution of his duty, shall possess any mineral unless:

- i. the mineral is won from a mineral title area of which the person is the holder and which entitles him to explore and exploit the minerals; or
- ii. the person holds a permit to possess or purchase that mineral issued under the provisions of the Act; or
- iii. the person is in respect of that mineral within the meaning of regulations made under the Act, a duly authorised agent or employee of any person permitted by paragraphs (i) and (ii) above to possess the mineral.

**Purchase of minerals**; Section 94 provides that no person shall purchase any mineral unless he holds a licence to purchase minerals issued under this Act.

#### b. Tax incentives available to pioneer industries

- i. The profit of a pioneer company during the pioneer period is exempted from tax;
- ii. Any amount of loss or net loss incurred by the pioneer company during pioneer period shall be available for relief against other periods. Net loss is the aggregate of losses of the pioneer period;
- iii. The qualifying capital expenditure incurred during the pioneer period is not subject to capital allowance computation during the pioneer period. They are deemed to be incurred on the first day of the post-pioneer period;
- iv. The provision for the commencement of a new business is applied on the profit of the post- pioneer period in arriving at the assessable profit; and

v. Dividend paid out of pioneer profit shall not be chargeable to tax in the hands of the recipient.

#### c. Treatment of losses and capital allowances of pioneer period Losses

- (i) Where the Revenue Service is satisfied that a pioneer company has incurred a loss in any accounting period within the tax relief period, it shall issue a certificate to the company accordingly (IDA Section 10 (6)).
- (ii) In determining whether such a loss has been made, the Revenue Service may in its absolute discretion exclude such sum as may be in excess of an amount appearing to the Revenue Service to be just and reasonable in respect of:
  - remuneration to directors of the company; and
  - interest, service, agency or other similar charges made by a person who is a shareholder of the company or by a person controlled by such shareholder (IDA Section 13(3)).
- (iii) A net loss incurred by a pioneer company shall be deemed to have been incurred by the company on the day on which its new trade or business commences, that is, on the day following the expiry of the tax relief period (IDA Section 14(3)).
- (iv) For each accounting period, the Revenue Service shall issue to the pioneer company a statement showing the amount of the income or loss for that period.
- (v) Any dispute between the Revenue Service and the company with regards to the statement of income or loss issued by the Revenue Service shall be subject to objection and appeal in like manner as if such statement were in assessment under CITA.

#### **Capital allowances**

- (i) No capital allowance shall be claimed during the pioneer period.
- (ii) Qualifying capital expenditure incurred prior to or during the pioneer period shall be brought forward to the new trade or business and shall be deemed to have been acquired on the first day of the new trade or business.

#### d. Restrictions applicable to pioneer industries

- i. Non-pioneer product during pioneer period: If during the pioneer period, a pioneer company deals in products other than the pioneer product, any profit derived from such a transaction cannot be exempted from taxation despite the fact that the transaction is taking place during the pioneer period. In essence, the tax exemption period is applicable only to pioneer products for which the pioneer certificate was originally granted; and
- ii. Restrictions on dividends distribution and on the granting of loans (Section 18): During its tax relief period, a pioneer company shall not:

- make any distribution to its shareholders, by way of dividend or bonus, in excess of the amount by which the account maintained for the exempt profits is in credit at the date of such distribution; and
- grant any loan without first obtaining the consent of the Minister. The consent of the Minister shall only be given if he is satisfied that the pioneer company is obtaining adequate security and a reasonable interest for any such loan.

Thank you.

Tobi Babatolu

#### Examiner's report

The question tests the candidates' understanding of the provisions of the Nigerian Minerals and Mining Act, 2007 (as amended) in respect of possession and purchase of minerals; tax incentives available to pioneer industries; and the treatment of losses, capital allowances and restrictions applicable to pioneer industries.

About 80% of the candidates attempted the question and they showed a good understanding of it, resulting in an above average performance.

The commonest pitfall was some candidates' inability to explain correctly the provisions of the principal Act in respect of possession and purchase of minerals.

Candidates are advised to read the Institute's Study Text, Nigerian Minerals and Mining Act, 2007 (as amended), and other relevant textbooks when preparing for future examination.

		Marks	Marks
a.	Possession and purchase of minerals in accordance with the provisions of the principal Act		
	Heading	1⁄2	
	1½ marks for each discussion of possession of minerals in accordance with the provisions of the principal Act, subject to		
	a maximum of 2 points	3	
	1½ marks for discussion of purchase of minerals in accordance with the		
	provisions of the principal Act	<u>1½</u>	5

b.	<b>Tax incentives available to pioneer industries</b> 1 mark for each discussion of tax incentives available to pioneer industries, subject to a maximum of 3 points		3
С.	<b>Treatment of losses and capital allowances</b> <b>of pioneer period</b> 1 mark for each discussion of treatment of losses of pioneer period, subject to a maximum of 3 points	3	
	1 mark for each discussion of treatment of capital allowances of pioneer period, subject to a maximum of 2 points	<u>2</u>	5
d.	<b>Restrictions applicable to pioneer industries</b> 1 mark for each discussion of restriction applicable to pioneer industries, subject to a maximum of 2 points <b>Total</b>		2 <u>15</u>

## THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA



# **PROFESSIONAL LEVEL EXAMINATION – MAY 2025**

# STRATEGIC FINANCIAL MANAGEMENT

## **EXAMINATION INSTRUCTIONS**

#### PLEASE READ THESE INSTRUCTIONS BEFORE THE COMMENCEMENT OF THE PAPER

- 1. Check your pockets, purse, mathematical set, etc. to ensure that you do not have prohibited items such as telephone handset, electronic storage device, programmable devices, wristwatches or any form of written material on you in the examination hall. You will be stopped from continuing with the examination and liable to further disciplinary actions including cancellation of examination result if caught.
- 2. Write your **EXAMINATION NUMBER** in the space provided above.
- 3. Do **NOT** write anything on your question paper **EXCEPT** your Examination number.
- 4. Do **NOT** write anything on your docket.
- 5. Read all instructions in each section of the question paper carefully before answering the questions.
- 6. Do **NOT** answer more than the number of questions required in each section, otherwise, you will be penalised.
- 7. All solutions should be written in **BLUE** or **BLACK INK**. Any solution written in **PENCIL** or any other **COLOUR OF INK** will not be marked.
- 8. A formula sheet and discount tables are provided with this examination paper.
- 9. You are required to attempt **Question ONE (Compulsory)**, any **TWO Questions in** Section B and any TWO Questions in Section C.
- **10**. Check that you have collected the correct question paper for the examination you are writing.

#### WEDNESDAY, MAY 21, 2025

#### DO NOT TURN OVER UNTIL YOU ARE TOLD TO DO SO

## THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

## **PROFESSIONAL LEVEL EXAMINATION – MAY 2025**

## STRATEGIC FINANCIAL MANAGEMENT

Time Allowed:  $3^{1}/_{4}$  hours (including 15 minutes reading time)

#### INSTRUCTION: YOU ARE REQUIRED TO ATTEMPT FIVE OUT OF THE SEVEN QUESTIONS IN THIS PAPER

#### SECTION A: COMPULSORY QUESTION

(30 MARKS)

- - - -

#### **QUESTION 1**

Kola Plc. is a large listed company involved in two business sectors. Its main business is in the production of food and drink for supermarkets and other large traders. It also owns a chain of restaurants nationwide. Kola's Board of Directors (BoD) think that the company is undervalued and is of the opinion that it should focus on the rapid innovation taking place in the food and drink production sector.

Therefore, Kola's BoD has decided to unbundle the restaurant business into a company called ZK Ltd and Kola Plc can either spin-off or sell ZK Ltd after the demerger so that Kola Plc can focus on its remaining business of food and drink production. Initially, Kola Plc's shareholders will own ZK Ltd on the basis of owning one ZK Ltd share for every Kola Plc share owned by them.

MK Ltd is a large unlisted company controlled by 20 shareholders who all have a significant stake in the business. MK Ltd owns a number of hotels around the country and is looking to diversify into the restaurant business. MK Ltd has approached Kola Plc about the possibility of purchasing ZK Ltd. MK Ltd will finance the purchase either through a cash-only offer or a share-for-share offer.

If ZK Ltd is demerged, it will be listed on the stock exchange as an independent company. Kola Plc is unsure whether to sell ZK Ltd to MK Ltd or demerge it into an independent company.

Extracts from Kola Plc's financial statements are as follows:

<del>N</del> M
5,010
1,000
1,180
2,470
360

Kola Plc's shares are trading at ₦2.45 each and have an equity beta of 1.3. The part of the business which will become ZK Ltd accounts for 24.5% of Kola Plc's total equity value.

Kola Plc's loan notes A currently have a total market value of \$2,100m. Loan notes B currently have a total market value of \$400m. The pre-tax cost of debt has been determined at 4.3% for loan notes A and 4.1% for loan notes B. After the unbundling, loan notes B will be serviced by ZK Ltd and loan notes A will remain with Kola Plc. but the pre-tax cost of debt for both will increase by 0.3%. It is expected that ZK Ltd will maintain its capital structure after the unbundling.

MK Ltd's debt to equity ratio is estimated to be 40:60 in equivalent market value terms and it has 1,200 million shares in issue.

The restaurant industry is dominated by Yani Plc, a large listed company which owns many restaurants around the country. The average equity beta for the restaurant industry is estimated at 1.38.

The average debt equity ratio in the restaurant industry is 20:80.

All companies pay corporate tax at a rate of 20% per year and tax is payable in the same year as the profits it is based on. The risk-free rate of return is estimated at 3% and the market risk premium at 7.2%.

The following estimated information will be applicable to ZK Ltd if it is demerged.

Kola Plc's sales revenue is ¥4,500m currently, of which 20% is attributable to ZK Ltd. It is estimated that after ZK Ltd is demerged, its annual sales revenue growth rate will be 6% and the profit margin before interest and tax will be 21% of sales revenue, for each of the next four years. It can be assumed that the current tax allowable depreciation will remain equivalent to the amount of investment needed to maintain the current level of operations, but that ZK Ltd will require an additional investment in assets of ¥0.25 for every ¥1 increase in sales revenue.

After the initial four years, the annual growth rate of the company's free cash flow is expected to be 2.5% for the foreseeable future.

The following estimated information applies to the acquisition of ZK Ltd by MK Ltd, if ZK Ltd is acquired.

The average price earnings (PE) ratio for the hotel industry is 15.61, however, MK Ltd's PE ratio is estimated to be 10% lower than this.

Extracts from the current statements of profit or loss applicable to MK Ltd and ZK Ltd are as follows:

	MK Ltd	ZK Ltd	
	N'M	N'M	
Profit before Interest and tax	305.0	161.2	
Interest	(91.2)	(14.8)	
Tax (20%)	<u>(42,8)</u>	<u>(29.3)</u>	
Profit after tax	<u>171.0</u>	<u>117.1</u>	

After the acquisition, it is expected that the PE ratio of the combined company will be midpoint between the two individual companies' PE ratios. The annual after-tax profits will increase by ¥62m due to combination of the two companies.

MK Ltd has proposed to pay for acquiring ZK Ltd either through a cash offer of ¥0.66 for a ZK Ltd share, or one MK Ltd share for every three ZK Ltd shares. MK Ltd will borrow the money needed to pay for the acquisition.

#### **Required:**

- a. Estimate the value of each ZK Ltd share if it is demerged and listed as an independent company. Note: (Calculate to nearest №1 million except per share data that should be done to two decimal places). (12 Marks)
- b. Estimate:
  - i. the additional equity value created when combining MK Ltd and ZK Ltd.

(4 Marks)

ii. the percentage gain to each of MK Ltd's and ZK Ltd's shareholder group under each payment method. (4 Marks)

iii.the impact of MK Ltd's capital structure under each payment method (5 Marks)

c. Evaluate the financial and other factors that both MK Ltd's shareholders and ZK Ltd's shareholders would consider prior to agreeing to the acquisition, and the impact of MK Ltd's capital structure under each payment method. (5 Marks)

(Total 30 Marks)

# SECTION B:YOU ARE REQUIRED TO ATTEMPT TWO OUT OF THREE<br/>QUESTIONS IN THIS SECTION(40 MARKS)

#### **QUESTION 2**

An oil company has recently acquired rights in a certain area to conduct surveys and test drillings for oil where it is found in commercially exploitable quantities.

The area is already considered to have good potential for finding oil in commercial quantities. At the outset the company has the choice to conduct further geological tests

or to carry out a drilling programme immediately. On the known conditions, the company estimates that there is a 70:30 chance of further tests showing a 'success'.

Whether the tests show the possibility of ultimate success or not, or even if no tests are undertaken at all, the company could still pursue its drilling programme, or alternatively consider selling its rights to drill in the area. Thereafter, however, if it carries out the drilling programme, the likelihood of final success or failure is considered dependent on the foregoing.

- If 'successful' tests have been carried out, the expectation of success in drilling is given as 80:20;
- If the tests indicate 'failure', then the expectation of success in drilling is given as 20:80;
- If no tests have been carried out at all the expectation of success in drilling is given as 55:45.

Costs and revenues have been estimated for all possible outcomes and the net present value of each is given below:

Net present value <b>№'m</b>
100
120
-50
-40
65
15
45

#### You are required to:

- a. Draw up a decision (probability) tree diagram to represent the above information. (10 Marks)
- b. Evaluate the tree in order to advise the management of the company on its best course of action. (7 Marks)
- c. Discuss the value of decision trees in providing management with guidance for decision making. Give examples of any situations where you consider their use would be of benefit. (3 Marks)

#### (Total 20 Marks)

#### **QUESTION 3**

Zeco Plc (ZP) is a listed company in the residential building construction industry. Over the past five years results have been disappointing and consequently the share price has fallen from a high of ¥3.50 per share five years ago to only ¥1.05 per share today. This deterioration in performance and share price have been accompanied by an increase in financial gearing to a high level.

Zeco Plc capital structure is as follows:

	<b>⊮′m</b>	
<b>Equity:</b> Share capital (¥0.50 per share nominal value) Retained earnings	40 35	
<b>Long – term liabilities:</b> 6.5% irredeemable loan notes (₦100 per loan note nominal value)	250	
7% bank loan	20	

Zeco Plc. loan notes are quoted at N65 per loan note and both the loan notes and the bank loan are secured. Zeco Plc equity beta is 2.3.

#### New venture

To improve performance, Zeco Plc. is considering the construction of commercial properties such as office blocks and industrial complexes. This is a new activity for Zeco Plc and it is expected that the risks involved will be different from its current activity. The Finance Director has proposed that a project-specific discount rate should be used to appraise the new venture, but the Commercial Director does not believe this is necessary.

Delac Commercial Properties Plc. (DCP) undertakes commercial construction projects similar to those being considered by Zeco Plc. DCP has an equity beta of 1.25. DCP has №100m of ordinary shares in issue, currently quoted at №2.60 per №1 nominal value ordinary share. The company also has №110m of loan notes in issue, currently quoted at №96 per №100 nominal value.

Both companies pay tax at 20%, the risk-free rate is 4% and the expected return on the market portfolio is 10%.

#### **Required**:

- a. i. Using the Capital Asset Pricing Model, calculate Zeco Plc current cost of equity and a project-specific cost of equity suitable for the new venture. (6 Marks)
  - ii. Referring to your calculations above, comment briefly on the view of the Commercial Director. (2 Marks)
- b. Discuss three problems Zeco Plc may be facing as a result of its current high level of gearing. (6 Marks)

c. In respect of both equity and debt, discuss the risk-return relationship and how it affects Zeco Plc. financing costs. (6 Marks)

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(Total 20 Marks)
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### **QUESTION 4**

Tolu Ltd (TL) is expecting to receive \$24,000,000 on 1 February 2026, which will be invested until it is required for a large project on 1 June 2026. Due to uncertainty in the markets, the company is of the opinion that it is likely that interest rates will fluctuate significantly over the coming months although it is difficult to predict whether they will increase or decrease.

TL's treasury team wants to hedge the company against adverse movements in interest rates using one of the following derivative products:

- Forward rate agreements (FRAs)
- Interest rate futures
- Options on interest rate futures

TL can invest funds at the relevant inter-bank rate less 20 basis points. The current inter-bank rate is 4.09%. However, TL is of the opinion that interest rates could increase or decrease by as much as 0.9% over the coming months.

The following information and quotes are provided from an appropriate exchange on \$ futures and options. Margin requirements can be ignored.

Three-month \$ futures, \$2,000,000 contract sizePrices are quoted in basis points at 100 – annual % yieldDecember 2025:94.80March 2026:94.76June 2026:94.69

Options on three-month \$ futures, \$2,000,000 contract size, option premiums are in annual %.

	Calls				Puts	
December	March	June	Strike	December	March	June
0.342	0.432	0.523	94.50	0.090	0.119	0.271
0.097	0.121	0.289	95.00	0.312	0.417	0.520

BK Bank has offered the following FRA rates to TL:

1-7:	4.37%
3-4:	4.78%
3-7:	4.82%
4-7:	4.87%

It can be assumed that settlement for the futures and options contracts is at the end of the month and that basis diminishes to zero at contract maturity at a constant rate, based on monthly time intervals. Assume that it is 1 November 2025 now and that there is no basis risk.

#### **Required**:

a. Based on the three hedging choices TL is considering, recommend a hedging strategy for the \$24,000,000 investment, if interest rates increase or decrease by 0.9%. Support your answer with appropriate calculations and discussion.

(16 Marks)

b. A member of TL's treasury team has suggested that if option contracts are purchased to hedge against the interest rate movements, then the number of contracts purchased should be determined by a hedge ratio based on the delta value of the option.

#### **Required**:

Discuss how the delta value of an option could be used in determining the number of contracts purchased. (4 Marks)

(Total 20 Marks)

# SECTION C:YOU ARE REQUIRED TO ATTEMPT TWO OUT OF THREE<br/>QUESTIONS IN THIS SECTION(30 MARKS)

#### **QUESTION 5**

Benco Plc (Benco) has recently become a listed company. Prior to its flotation, this previously family-owned private company made dividend decisions each year to suit the requirements at the time of both the company and the small number of family shareholders who held substantially all of the company's equity. There was no long-term, stable dividend policy, in place.

Following flotation, the family is no longer involved in the day-to-day management of the firm but has retained 45% of the equity, which currently represents the largest single block of shares owned. None of the family members is a Director of the firm any longer, but one member has been retained as a non-executive director. The new Board of Directors consists of a group of young professional managers who are all keen in growing the business rapidly.

Now that it is a listed company, the question of establishing a more formal dividend policy has arisen and a forthcoming board meeting will address the issue. As the

company's Finance Director you have been approached by two Directors who have made the following observations.

#### Director A

The value of the company's shares is tied to the level of the company's dividend, so we should pay the maximum dividend possible. If at any time this policy places pressure on finances, then raising further equity will be that much easier, given the policy of maximum dividends the company will have established.

#### Director B

What strikes me is the variety of different views on this issue among our shareholders. Some shareholders tell me they want us to maximise the dividends as they depend so much on the income and are not primarily concerned with capital growth. Others say they would prefer the company to retain much of its profits to invest in new projects so as to maximise the share price.

Both Directors A and B have limited financial knowledge.

#### **Required:**

Prepare briefing notes for the forthcoming board meeting that:

- Set out the key considerations for a company in Benco's position when formulating a dividend policy.
- Address the specific points made by the two directors and how Benco might address the fact that particular groups of investors may have different preferences in respect of dividends.
- Explain to the board the relationship between a company's dividend policy and the 'agency problem' in business finance. (15 Marks)

#### **QUESTION 6**

a. Prices of zero-coupon bonds reveal the following pattern of forward rates:

Year	Forward rates
1	4%
2	6%
3	8%
4	10%

A bond with face value of \$1,000 pays annual coupon of 7.5% with maturity of three years.

- i. What is the price of the bond? (3 Marks)
- ii. Estimate the yield to maturity (YTM) of the bond. Explain why an investor holding the bond may not realise the calculated YTM. (5 Marks)
- b. i. Calculate the duration of the bond. What does duration measure? (4 marks)
  - As a bond portfolio manager, you are to make a choice between the following two bonds.
     Bond A Bond B

	Bond A	Bond B
Maturity (Years)	6	8
Duration (Years)	6	7.2

If it is generally believed that interest rates in the market will increase, which of the two bonds would you select and why?

No calculations are required

(3 Marks) (Total 15 Marks)

#### **QUESTION 7**

You recently had a conversation with one Director of a client company. He shared:

'Over the weekend I was reading an article on finance in a Sunday newspaper. It said that as shareholder wealth maximisation is the generally accepted corporate objective, net present value is the most logical approach to investment appraisal'. It then went on to say that "the 'capital asset pricing model' is the best way to find the appropriate discount rate to use. This is apparent because you can use the average rate of return from other businesses, also it ignores the specific risk of the investment concerned."

This all seems nonsense to me. These days corporate management needs to be concerned with more than just the shareholders. What about all of the other groups who contribute to the business? They cannot be ignored. Even if shareholders' wealth were the key issue, I do not see how NPV fits in. Surely internal rate of return is more to the point because it favours investments that get the best returns and cover financing costs. Those investments will make the shareholders richer. As for CAPM, it seems to defy all logic. It cannot be correct to ignore the returns that the investing business seeks and just concentrate on other businesses. Risk must be taken into account. In our business we compare weighted average cost of capital with the IRR and this seems more logical than using CAPM.'

The Director went on to say:

'The article also said that, in theory, it does not make any difference to the shareholders whether new finance is raised from a share issue or a loan stock issue as they both cost the same. We raise all of our new finance from retained earnings, which does not cost anything, but loan finance has a cost.'

#### **Required**:

Draft a reply to the Director, bearing in mind that he is clearly not very well informed on finance. (15 Marks)

### Formulae

Modigliani and Miller Proposition 2 (with tax)

$$K_{EG} = K_{EU} + (K_{EU} - K_D) \frac{V_D}{V_{EG}} (1 - t)$$

Asset Beta

$$\beta_A = \left[\frac{V_E}{(V_E + V_D(1-T))}\beta_E\right] + \left[\frac{V_D(1-T)}{(V_E + V_D(1-T))}\beta_D\right]$$

#### Equity Beta

$$\beta_E = \beta_A + (\beta_A - \beta_D) \left(\frac{V_D}{V_E}\right) (1-t)$$

**Growing Annuity** 

$$PV = \frac{A_1}{r-g} \left( 1 - \left(\frac{1+g}{1+r}\right)^n \right)$$

Modified Internal Rate of Return

$$MIRR = \left[\frac{PV_R}{PV_I}\right]^{\frac{1}{n}} (1 + r_e) - 1$$

The Black-Scholes Option Pricing Model

$$C_0 = S_0 N(d_1) - E e^{-rt} N(d_2)$$
$$d_1 = \frac{ln\left(\frac{S_0}{E}\right) + (r + 0.5\sigma^2)T}{\sigma \sqrt{T}}$$
$$d_2 = d_1 - \sigma \sqrt{T}$$

#### The Put Call Parity C + Ee<sup>-rt</sup> = S + P

#### **Binomial Option Pricing**

$$u = e^{\sigma \times \sqrt{T/n}}$$
  

$$d = 1/u$$
  

$$a = e^{rT/n}$$
  

$$\pi = \frac{a-d}{u-d}$$

The discount factor per step is given by  $= e^{-rT/n}$ 

Annuity Table

Present value of an annuity of 1 i.e.

# $\frac{1 - (1 + r)^n}{r}$

Where r = discount rate

n = number of periods

Discount rate	(7)
Discount rule	(4/

Perío											
(n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0.990	0.980	0.971	0∙962	0∙952	0.943	<b>0</b> ∙935	0.926	0.917	0.909	1
2	<b>1</b> ·970	1.942	1.913	1.886	1.859	1.833	<b>1·808</b>	1.783	1.759	1.736	2
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487	3
4	3.902	3.808	3.717	3∙630	3.546	3.465	3.387	3.312	3.240	3.170	4
5	4-853	4.713	4.580	4.452	4.329	4·212	<b>4·100</b>	3.993	3.890	3.791	5
6	5.795	5.601	5.417	5.242	5.076	4.917	<b>4</b> ·767	4.623	4.486	4·355	6
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4·868	7
8	7.652	7.325	<b>7</b> ∙020	6.733	6.463	6-210	5.971	5.747	5.535	5-335	8
9	8.566	8.162	<b>7</b> ·786	7.435	<b>7·108</b>	6.802	6.515	<b>6</b> ·247	5-995	5.759	9
10	9.471	8-983	8.530	8·111	7.722	7·360	7.024	6·710	6.418	6.145	10
11	10.368	<b>9</b> ∙787	9.253	8.760	8.306	7.887	7.499	<b>7</b> ·139	6.805	6.495	11
12	<b>11</b> ·255	<b>10</b> ·575	9.954	9·385	8.863	8.384	7.943	<b>7</b> ∙ <b>5</b> 36	7'161	<b>6</b> ∙814	12
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	<b>7</b> ·904	7.487	<b>7·103</b>	13
14	13.004	12.106	11.296	10.563	9.899	9·295	8.745	<b>8</b> ·244	<b>7</b> ∙786	7.367	14
15	13.865	12.849	11.938	<b>11·118</b>	10.380	9.712	9.108	8.559	8.061	<b>7</b> ⋅606	15
(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0.901	0.893	0.885	0.877	0∙870	0.862	0.855	0.847	<b>0∙84</b> 0	0.833	1
2	1.713	1.690	1.668	1.647	1·626	1.605	1.585	1.566	1.547	1.528	2
3	2.444	2.402	<b>2·361</b>	2.322	2.283	2.246	2.210	<b>2</b> ·174	<b>2</b> ·140	<b>2</b> ·106	3
4	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589	4
5	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	<b>2·991</b>	5
6	4·231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326	6
7	4·712	4.564	4.423	4∙288	4.160	4.039	3.922	3.812	3.706	3.602	7
8	5.146	4.968	4.799	<b>4</b> ⋅639	4.487	4·344	<b>4</b> ·207	<b>4</b> ∙078	3.954	3.837	8
9	5·537	5.328	5.132	<b>4</b> ∙946	4·772	4.607	4.451	4.303	4.163	<b>4</b> ∙031	9
10	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	<b>4</b> ·192	10
11	6.207	5∙938	5.687	5.453	5.234	5.029	4.836	4∙656	4.486	4.327	11
12	6.492	6.194	5-918	5.660	5.421	5.197	4-988	4.793	<b>4·611</b>	4.439	12
13	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4-910	4.715	4.533	13
14	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611	14
15	7·191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	<b>4</b> ∙ <b>87</b> 6	4.675	15

#### NORMAL DISTRIBUTION

This table gives the area under the normal curve between the mean and a point Z standard deviations above the mean. The corresponding area for deviations below the mean can be found by symmetry.

Z →



$Z=\frac{(x-\mu)}{\sigma}$	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	.0000	.0040	.0080	.0120	.0159	.0199	.0239	.0279	.0319	.0359
0.1	.0398	.0438	.0478	.0517	.0557	.0596	.0636	.0675	.0714	.0753
0.2	.0793	.0832	.0871	.0910	.0948	.0987	.1026	.1064	.1103	.1141
0.3	.1179	.1217	.1255	.1293	.1331	.1368	.1406	.1443	.1408	.1517
0.3	.1554	.1591	.1628	.1664	.1700	.1736	.1772	.1808	.1844	.1879
0.4	.1554	.1591	.1020	.1004	.1700	.1750	.1772	.1000	.1044	.1075
0.5	.1915	.1950	.1985	.2019	.2054	.2088	.2123	.2157	.2190	.2224
0.6	.2257	.2291	.2324	.2357	.2389	.2422	.2454	.2486	.2518	.2549
0.7	.2580	.2611	.2642	.2673	.2704	.2734	.2764	.2794	.2823	.2852
0.8	.2881	.2910	.2939	.2967	.2995	.3023	.3051	.3078	.3106	.3133
0.9	.3159	.3186	.3212	.3238	.3264	.3289	.3315	.3340	.3365	.3389
1.0	.3413	.3438	.3461	.3485	.3508	.3531	.3554	.3577	.3599	.3621
1.1	.3643	.3665	.3686	.3708	.3729	.3749	.3770	.3790	.3810	.3830
1.2	.3849	.3869	.3888	.3907	.3925	.3944	.3962	.3980	.3997	.4015
1.3	.4032	.4049	.4066	.4082	4099	.4115	.4131	.4147	.4162	.4177
1.4	.4192	.4207	.4222	.4236	.4251	.4265	.4279	.4292	.4306	.4319
1.5	.4332	.4345	.4357	.4370	.4382	.4394	.4406	.4418	.4430	.4441
1.6	.4452	.4463	.4474	.4485	.4495	.4505	.4515	.4525	.4535	.4545
1.7	.4554	.4564	.4573	.4582	.4591	.4599	.4608	.4616	.4625	.4633
1.8	.4641	.4649	.4656	.4664	.4671	.4678	.4686	.4693	.4699	.4706
1.9	.4713	.4719	.4726	.4732	.4738	.4744	.4750	.4756	.4762	.4767
							-			
2.0	.4772	.4778	.4783	.4788	.4793	.4798	.4803	.4808	.4812	.4817
2.1	.4821	.4826	.4830	.4834	.4838	.4842	.4846	.4850	.4854	.4857
2.2	.4861	.4865	.4868	.4871	.4875	.4878	.4881	.4884	.4887	.4890
2.3	.4893	.4896	.4898	.4901	.4904	.4906	.4909	.4911	.4913	.4916
2.4	.4918	.4920	.4922	.4925	.4927	.4929	.4931	.4932	.4934	.4936
2.5	.4938	.4940	.4941	.4943	.4945	.4946	.4948	.4949	.4951	.4952
2.6	.4953	.4955	.4956	.4957	.4959	.4960	.4961	.4962	4963	.4964
2.7	.4965	.4966	.4967	.4968	.4969	.4970	.4971	.4972	.4973	.4974
	.4903	.4975	.4976	.4977	.4977	.4978	.4979	.4980	.4980	.4981
2.8	.4974	.4973	.4983	.4983	.4984	.4984	.4985	.4985	.4986	.4986
2.9	.4901	.4902	.4905	.4905	.4304	.4304	.4000	.4505	.4000	.4000
3.0	.49865	.4987	.4987	.4988	.4988	.4989	.4989	.4989	.4990	.4990
3.1	.49903	.4991	.4991	.4991	.4992	.4992	.4992	.4992	.4993	.4993
3.2	.49931	.4993	.4994	.4994	.4994	.4994	.4994	.4995	.4995	.4995
3.3	.49952	.4995	.4995	.4996	.4996	.4996	.4996	.4996	.4996	.4997
3.4	.49966	.4997	.4997	.4997	.4997	.4997	.4997	.4997	.4997	.4998
3.5	.49977				0.001070/202					and a period of
5.5	.45511									

#### **SOLUTION 1**

#### a) Cost of capital of ZK Ltd

- Current value of equity =  $24.5\% \times (N2.45 \times 2,000 \text{ shares}) = N1,200 \text{ m}$  approximately.
- Total market value of debt = ₦400m
- Average asset beta in the restaurant industry  $(\beta_A)$

$$\beta_{A} = \left[\frac{V_{E}}{(V_{E} + V_{D}(1 - T))}\beta_{E}\right] + \left[\frac{V_{D}(1 - T)}{(V_{E} + V_{D}(1 - T))}\beta_{D}\right] = \frac{1.38 \times 80}{80 + 20(1 - 0.2)} + 0 = 1.15$$

(Assume beta of debt = 0)

- Equity beta of ZK Ltd ( $\beta_E$ )  $\beta_E = \beta_A + (\beta_A - \beta_D) \left(\frac{V_D}{V_E}\right) (1 - t) = 1.15 + (1.15 - 0) \left(\frac{400}{1,200}\right) (1 - 0.20) = 1.46$
- Cost of equity of ZK Ltd  $K_E = 3 + (1.46 \times 7.2) = 13.51\%$
- Post tax cost of debt of ZK Ltd = 4.4 (1 0.2) = 3.52%
- WACC of ZK Ltd = ((13.51% × №1,200m) + (3.52% × №400m))/(№1,200m + №400m) = 11.01%, say 11%.

#### Estimate of ZK Ltd equity if demerger is undertaken

- Current sales revenue attributable to ZK Ltd =  $20\% \times \frac{1}{2}4,500m = \frac{900m}{100}$
- EBIT Margin = 21% of revenue
- Tax rate = 20%
- Additional asset investment = ₦0.25/₦1 of additional revenue
- Growth in FCFF, after first four years = 2.5%
- Cost of capital = 11% (see workings)

#### Cash flows, years 1 to 4 (\mathcal{H}'m)

Year	1	2	3	Total	
Sales revenue (R)	<u>954</u>	<u>1011</u>	<u>1072</u>		
EBIT $(1 - t) = R (0.21)(1 - 0.20)$	160	170	180		
Additional asset investment*	<u>(14)</u>	<u>(14)</u>	<u>(15)</u>		
FCFF	146	156	165		
PV at 11%	<u>132</u>	<u>127</u>	<u>121</u>	= 495	
PV of FCFF years 5 – infinity:					
$\frac{175 \times 1.025}{0.11 - 0.025} \times (1.11)^{-4}$					= <u>1,390</u>
$0.11 - 0.025 \times (1.11)^{-1}$					
Total value of the company (i.e. $V_E + V_D$ )					=1,885
Less value of debt (20%)					377
Total value of equity (80%)					1,508
Value per share = $\$1,508m/2000m$ shares =					<u>₩0.75</u>

ZK Ltd original value per share = \$1,200/2,000m shares = 0.60 Gain = (\$0.75 - \$0.60) /\$0.60 = 25%.

\* Additional asset investment:

Year  $1 = 0.25 \times (\$954 - 900) = \$14m$   $2 = 0.25 \times (1,011 - 954) = \$14m$   $3 = 0.25 \times (1,072 - 1011) = \$15m$  $4 = 0.25 \times (1,136 - 1072) = \$16m$ 

#### **Alternative Method**

Every item that goes into the calculation of FCFF is related to sales revenue and since the sales revenue grows at 6% in the first 4 years, the FCFF must also grow at 6%. The PV of the FCFF in the first 4 years can be greatly simplified by using growing annuity:

$$PV = \frac{A_1}{r - g} \left( 1 - \left(\frac{1 + g}{1 + r}\right)^n \right) = \frac{146}{0.11 - 0.06} \left( 1 - \left(\frac{1.06}{1.11}\right)^4 \right) = 492m$$

This answer is much accurate than the yearly calculations because it avoids most of the rounding errors inherent in the former. This approach saves a lot of examination time because all the calculations in years 2 – 4 are avoided.

#### b) i) Additional equity created

- MK Ltd P/E ratio =  $90\% \times 15.61 = 14.05$
- MK Ltd value of equity = 14.05 × №171.0m = №2,402.6m
- ZK Ltd equity value = \1,200m
- ZK Ltd estimate of PE ratio = \1,200/\117.1m = 10.25
- Profit after tax of combined company = №171.0m + №117.1m + №62m = №350.1m
- Average PE ratio of combined company =  $\frac{1}{2}(14.05 + 10.25) = 12.15$
- Estimate of equity value of combined company =  $\$350.1m \times 12.15 = \$4,253.7m$
- Additional equity value created by from combining the two companies = №4,253.7m - (№1,200m + №2,402.6m) = №651.1m

## ii) Cash offer

Kola Plc's shareholders will receive \$0.66 per share from sale of ZK Ltd, or  $\$0.66 \times 2,000$  million shares = \$1,320m in total ZK Ltd original value per share = \$0.60Gain = \$0.06/\$0.60 = 10%

MK Ltd total shareholders' value is estimated at = \$4,253.7m - \$1,320m= \$2,933.7m, or \$2,933.7m/1,200 million shares = \$2.44 share MK Ltd estimate of original value = \$2,402.6m/1,200 million = \$2 per Share Gain = \$0.44/\$2 = 22%

## Share-for-share offer

Additional shares issued by MK Ltd = 2,000 million/3 = 667 million Equity value of combined company = \$4,253.7mPer share value = \$4,253.7m/1,867 million shares = \$2.28

```
Gain to ZK Ltd's shareholders

\Re 2.28 - (\Re 0.60 \times 3) = \Re 0.48

\Re 0.48/\Re 1.80 = 26.7\%

Gain to MK Ltd's shareholders from combining the company

Gain = \Re 2.28 - \Re 2 = 0.28

Gain (%) = 0.28 = 14\%

2
```

MK Ltd: Impact on capital structure from the two payment methods
 MK Ltd, before acquisition
 Market value of equity: ₩2,402.6m (see above)
 Market value of debt = 40/60 × ₦2,402.6m = ₦1,601.7m

#### **Combined company, cash payment through debt borrowing** Market value of equity: \%2,933.7m or 46.9% Market value of debt = \%1,601.7m + \%1,320m + \%400m\* = \%3,321.7m or 53.1%

(Note:  $\aleph$ 2,933.7m +  $\aleph$ 3,321.7m =  $\aleph$ 6,255.4m; 46.9% = ( $\aleph$ 2,933.7m/ $\aleph$ 6,255.4m) × 100% and 53.1% = ( $\aleph$ 3,321.7m/ $\aleph$ 6,255.4m) × 100%)

# Combined company, share-for-share exchange

Market value of equity: ₦4,253.7m or 68.0% Market value of debt: ₦1,601.7m + ₦400m\* = ₦2,001.7m or 32.0%

(Note: \$4,253.7m + \$2,001.7m = \$6,255.4m;  $68.0\% = (\$4,253.7m/\$6,255.4m) \times 100\%$  and  $32.0\% = (\$2,001.7m/\$6,255.4m) \times 100\%$ )

\* In the above cases, when the two companies are combined, it is assumed that MK will continue to service loan notes B or cancel them by paying them off through an equivalent borrowing.

#### c) Other factors to be considered by the shareholders

The value estimates are based on predicted variables, both for the demerger valuation and the acquisition valuations. It is likely that there will be changes to the actual variables, and it is recommended that MK Ltd undertake sensitivity analysis and assess the results of this before making the final acquisition decision.

ZK Ltd's shareholders probably have three areas they would want considered further with respect to the acquisition with the share-for-share exchange.

First, they would become part of a larger company with interests both in hotels and in restaurants and they would own just under 36% (667m shares/1,867m shares) of the share capital of the new combined company. However, they would be minority shareholders. As such, they may feel that they do not have sufficient influence in the major decisions the company makes.

Therefore, ZK Ltd's shareholders may be of the opinion that operating as a stand-alone demerged independent company may give them a better opportunity to shape the company's strategy. On the other hand, they may equally decide that they would need to be part of a large company to be able to compete effectively against Yani Plc.

Second, ZK Ltd's shareholders cannot be certain whether the 26.7% additional value is realistic or not. This may be especially pertinent because MK Ltd is an

unlisted company and therefore may keep proprietary/strategic information private, limiting the ability for external parties to undertake a full and effective evaluation.

Third, because MK Ltd is an unlisted company, ZK Ltd's shareholders may be concerned about how they would be able to exit the company, if they want to. For instance, if their investment portfolios become imbalanced when the companies are combined, they may need to sell some shares to rebalance it. MK Ltd should consider the possibility of undertaking a partial listing in order to make the deal more palatable for ZK Ltd's shareholders.

In addition to ensuring that the acquisition is financially beneficial for them, MK Ltd shareholders' main concern would be that ZK Ltd's shareholders will own a significant portion of the combined company (just under 36%). This could mean that the new shareholders would have a significant influence on the way the company is run and its strategic direction, which may be different to what MK Ltd's current shareholders want.

#### Examiner's report

This is a standard question on business valuation and demerger.

Part (a) tests candidates' knowledge of:

- Cost of capital involving degearing and regearing
- Valuation of business using FCFF and P/E ratio

Part (b) requires candidates to estimate the additional equity value created after the combination of MK and ZK and the gain of each party after the combination.

Part (c) requires candidates to identify other factors to consider by the respective shareholders.

They are also to identify how the suggested methods of payment will affect the capital structure of MK Ltd.

Being a compulsory question, almost all the candidates attempted the question.

Part (a) is reasonably straight forward and it is very disappointing that many candidates failed to gain more than average marks. A number of them struggled to calculate the appropriate cost of capital and could not calculate the FCFF. In addition, the candidates could not recognise the need to make use of growing annuity in order to avoid waste of time in the discounting process.

Part (b) was also poorly attempted with many candidates scoring far below the average score. It was clear that most of the candidates did not know what to do at all.

In part (c), most of the candidates provided a relatively better solution. However, the answers were generic in nature and thereby losing valuable marks.

It is recommended that students preparing for this examination need to practice with examination types of questions.

#### Marking guide

		Marks	Marks
a,	Cost of capital of Zk Ltd	1	
	Total market value of debt	1/2	
	Average asset beta	1	
	Equity beta of Zk Ltd	1	
	Cost of equity of Zk Ltd	1/2	
	Post tax cost of debt of Zk Ltd	1	
	WACC of Zk Ltd	1	
	Current sales revenue attributable to Zk Ltd	1/2	
	Cashflows year 1 to 4	<b>5</b> ½	12
b. (i)	MK Ltd P/E ratio	1/2	
	MK Ltd value of equity	1/2	
	Zk Ltd estimate of P/E ratio	1/2	
	Profit after tax of combined company	1/2	
	Average PE ratio of combined company	1/2	
	Estimate of equity value of combined company	1/2	
	Additional equity value created	1	4
(ii)	Estimate of % gain to MK Ltd and Zk Ltd shareholders		
(,	Cash offer to Kola plc shareholders	1	
	Cash offer to MK Ltd shareholders	1	
	Share for share offer : Additional shares issued by Mk Ltd	1	
	Gain to MK Ltd shareholders	<u>1</u>	4
/:::)	Compliand Company, Daymont cachinging through debt	_	
(iii)	Combined Company: Payment cashpoint through debt borrowing.		
	Market value of equity	1/2	
	Market value of debt	72 1½	
	Combined company : share for share exchange	1 /2	
	Market value of equity	1/2	
	Market value of debt	1½	
	Recommendation given	<u>1</u>	5
		—	
С.	Other factors to be considered by shareholders	5	<u>5</u>
	Total		<u>30</u>

#### **SOLUTION 2**



			<b></b> ¥′m
b)	The EV at point F is	0.8 ×100	80
		$+ 0.2 \times (50)$	<u>(10)</u>
			<u>70</u>

The decision at point D will be to pursue the programme rather than sell the rights, and the EV at point D is therefore 70.

		<del>FT</del> M
The EV at point G is	0.2 ×100	20
	$+ 0.8 \times (50)$	<u>(40)</u>
		<u>20</u>

The decision at point E will be to sell the rights rather than pursue the programme, and the EV at point E is 15.

		₩m
The EV at point C is	0.55 × 120	66
	$+0.45 \times (40)$	<u>(18)</u>
		<u>48</u>
		<b></b> ¥′m
The EV at point B is	0.7 × 70	49
	$+0.3 \times 15$	<u>4.5</u>
		<u>53,5</u>

The decision at point A is between

a) Conducting tests	EV ₦53.5 million
b) Not conducting tests and pursuing the programme -	EV ₦48 million
c) Not conducting tests and selling the rights -	EV ₦45 million

The EV at point A, choosing option (a) with the highest EV, is ₩53.5 million.

c) Decision trees are useful in giving a simple diagrammatic representation of the various decision options open to management, and the possible outcomes of each decision. They also draw attention to the immediate decision to be made, and may help management to avoid wasting unnecessary time deliberating 'second stage' decision (such as at points D and E in (a)) which cannot yet be made.

A decision tree might also help management to eliminate decision options which are not worthwhile to consider further, and to focus attention on the more viable options.

#### Examiner's report

This question tests candidates' knowledge of decision tree in capital budgeting.

The candidates were expected to draw and evaluate a decision tree. Less than ten percent of the candidates attempted the question and performance was extremely poor. It was evident that almost all the candidates do not know anything about decision tree!

The performance was therefore extremely woeful.

Candidates are reminded that questions can come from any part of the syllabus and they should therefore, cover the entire syllabus comprehensively when preparing for future examination.

#### Marking guide

		Marks
a.	Drawing of decision tree diagram	10
b <i>.</i>	Evaluation of decision tree	7
С.	Discuss the value of decision tree	<u>3</u>
	Total	20

#### **SOLUTION 3**

a) i) Current K<sub>E</sub>:

Using Zeco's own equity beta:

 $K_{E} = 4\% + 2.3(10\% - 4\%) = 17.8\%$ 

Project specific K<sub>E</sub>:

Need to use the proxy (DCP) to derive a suitable beta as Zeco Plc own beta is not suitable for the new venture due to different risk.

• Degear the equity beta of the proxy (i.e. DCP). This means converting the equity beta to asset. This removes the financial risk of DCP.

$$\beta_A = \left[\frac{V_E}{(V_E + V_D(1 - T))}\beta_E\right] + \left[\frac{V_D(1 - T)}{(V_E + V_D(1 - T))}\beta_D\right]$$

 $V_{E} = 100m \times \$2.60 = \$260m$ 

 $V_D = 110m \times 0.96 = 105.60m$ 

$$\beta_A = \frac{260 \times 1.25}{260 + 105.60 \ (1 - 0.20)} + 0^* = 0.94$$

(\* In the absence of information, it is assumed that debt is risk-free with beta of zero).
In the above calculations, remember to use the values of equity and debt of the proxy.

• Next, regear the above asset beta, using Zeco's financial gearing. This is to incorporate the financial risk of Zeco.

$$\beta_E = \beta_A + (\beta_A - \beta_D) \left(\frac{V_D}{V_E}\right) (1 - t)$$

(Remember to use the values of equity and debt of zeco).  $V = N40m (N0.50 \times N1.05 = N0.4m)$ 

 $V_E = \$40m / \$0.50 \times \$1.05 = \$84m$ 

			<b></b> ¥′m
$V_{\rm D}$	Loan notes = ₦250m × ₦0.65	=	162.50
	Bank loan	=	20.00
	Total V <sub>D</sub>	=	<u>182.50</u>

 $\beta_{\rm E} = 0.94 + (0.94 - 0) \times (\frac{182.50}{84}(1 - 0.2) = 2.57$ 

 $K_E = 4\% + 2.57 \times (10\% - 4\%) = 19.42\%$ 

### iii) Comment

The project-specific cost of equity is higher than the current cost of equity, indicating that a higher return would be needed by shareholders to compensate for the higher risk of the new venture. Appraising the venture using the existing cost of equity, as advised by the commercial director, would therefore result in an over-statement of the venture's net present value, potentially leading to an incorrect decision being made.

### b) **Gearing problems**

### Increased earnings volatility

High gearing increases the volatility of Zeco Plc earnings as the interest payable is unaffected by any change in the activity level. If Zeco Plc experiences a reduction in its activity level, the percentage reduction in earnings will be greater than the percentage reduction in activity level. This increased volatility in earnings represents the financial risk of the company.

### Cost of equity finance

Increased volatility of earnings will increase the cost of equity, making equity finance more expensive. The financial risk premium can be seen by comparing the asset beta of 0.94 ( $K_E = 9.64\%$ ) with the equity beta of 2.57 ( $K_E = 19.42\%$ )

## Debt capacity

The gearing level will affect Zeco's ability to raise new debt finance and how much debt it can support (debt capacity). Given its high gearing level, Zeco Plc may find that it cannot raise any more debt finance.

## Bankruptcy risk

High gearing leads to a high interest obligation for Zeco Plc and an increased risk of being unable to pay all of its interest following an unexpected reduction in profits/cash flow. This could result in default by Zeco Plc on its interest payments and subsequent forced liquidation by its lenders.

## Note: Only three problems were required.

## c) Risk –return relationship

The risk-return relationship explains why different sources of finance have different costs. An investor's required rate of return will be determined primarily by the level of risk the investment has. If an investment carries a high level of risk, the investor will require a high rate of return to compensate for that risk, investing in a low-risk investment will mean a lower level of return will be required.

A rational investor would not invest in a high-risk investment offering a low return as they could obtain the same return in a lower-risk investment. A low-risk investment offering high returns would not exist as it would be undervalued and the high demand for that investment would increase the price and therefore reduce the return.

## Zeco Plc finance costs

The risk-return relationship will result in Zeco Plc shareholders and lenders having different required rates of return.

The equity holders have no guaranteed return as Zeco Plc is under no obligation to pay a dividend each year and capital growth is also not guaranteed (in fact, the share price has fallen). Also, if the company was liquidated, the equity holders would come last in the order of payment and possibly receive nothing.

By comparison, the lenders (loan note holders and the bank) face lower risk as their interest is a contractual obligation and must be paid. The fall in share price will not directly affect the lenders as they do not participate in any capital growth/decline. Zeco Plc lenders do face the risk of default in the event of Zeco Plc being unable to pay the interest, but both the loan notes and the bank loan are secured on Zeco Plc assets so the risk of any loss due to default is reduced, assuming the assets realise sufficient value to repay the debt.

The above effects can be seen in Zeco Plc finance costs with their cost of equity being higher than their cost of debt. For example, the current cost of equity is 17.8% which is higher than the cost of bank loan which is only 7%. The loan notes are also cheaper, costing 10% ( $\pm$ 6.50/ $\pm$ 65.00). The loan notes are more expensive than the bank loan as they are irredeemable and thus have no guaranteed repayment date, increasing the risk compared with the bank loan which is repayable in the future.

## Examiner's report

This is a three-part question on cost of capital and leverage.

Part (a) of the question tests the candidates' knowledge of CAPM, including the calculation of project's specific cost of equity.

In part (b), candidates were expected to discuss the problems of high level of leverage.

In part (c), candidates were expected to discuss the risk-return relationship of both equity and debt capital.

Almost all the candidates attempted the question but performance was just average. Candidates lost valuable marks due to the following reasons:

- The use of wrong formulae, for example, interchanging asset beta formula with that of equity beta;
- Misinterpreting D:E ratio; and
- The use of wrong values of equity and debt in the relevant gearing and ungearing formulae.

Once again, we recommend that students preparing for this examination should practise past questions.

## Marking guide

		Marks	Marks
a. i.	Cost of equity using Zeco equity beta	1	
	Degear equity beta using proxy	2	
	Regear assets beta	3	
ii.	Comments by commercial director	<u>2</u>	8
b.	Discussion of 3 gearing problem	6	6
С.	Discussion of risk –return relationship Discussion of how risk-return relationship affects Zeco	2	
	plc in terms of equity Discussion of how risk-return relationship affects Zeco	2	
	plc in terms of debt Total	<u>2</u>	<u>6</u> 20

### **SOLUTION 4**

#### a) Using FRAs

FRA rate 4.82% (3 - 7), since the investment will take place in three months' time for a period of 4 months.

#### If interest rates increase by 0.9% to 4.99%

Investment return = $4.79\% \times 4/12 \times $24,000,000 =$	\$383,200
Payment to BK Bank = (4.99% - 4.82%) × \$24,000,000 × 4/12 =	\$(13,600
Net receipt =	\$369,600
Effective annual interest rate = $369,600/24,000,000 \times 12/4 =$	4.62%
If interest decrease by 0.9&% to 3.19%	
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	¢ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~

Investment return = $2.99\% \times 4/12 \times $24,000,000 =$	\$239,200
Receipt from BK Bank = (4.82% - 3.19%) × 24,000,000 × 4/12 =	\$130,400
Net receipt =	\$369,600
Effective annual interest rate (as above)	4.62%

## Using futures

Need to hedge against a fall in interest rates, therefore go long in the futures market (i.e. buy futures).

TL needs March contracts as the investment will be made on 1 February.

No. of contracts needed =  $24,000,000/2,000,000 \times 4$  months/ 3 months = 16 contracts.

Basis Current price (on 1/11) – futures price = total basis (100 - 4.09) - 94.76 = 1.15Unexpired basis = 2/5 × 1.15 = 0.46

If interest rates increase by 0.9% to 4.99%	
Investment return (from above) =	\$383,200
Expected futures price = $100 - 4.99 - 0.46 =$	94.55
Loss on the futures market = $(0.9455 - 0.9476) \times $2,000,000$	
$\times 3/12 \times 16 =$	\$(16,800)
Net return =	\$366,400
Effective annual interest 366,400/24,000,000 $\times$ 12/4 =	4.58%
If interest rates decrease by 0.9% to 3.19%	
Investment return (from above) =	\$239,200
Expected futures price = $100 - 3.19 - 0.46 = 96.35$	
Gain on the futures market = $(0.9635 - 0.9476) \times (2,000,000 \times 3/12 \times 16)$	\$127,200
Net return	\$366,400
Effective annual interest rate (as above)	4.58%

## Using options on futures

Need to hedge against to fall in interest rates, therefore buy call options. As before, TL needs 16 March call option contracts (\$24,000,000/\$2,000,000) × 4 months/3months).

If interest rates increase by 0.9% to 4.99%		
Exercise price	94.50	95 <i>.</i> 00
Futures price	94.55	94.55
Exercise?	Yes	No
Gain in basis points	5	0
Underlying investment return (from above)	\$383,200	\$383,200
Gain on options (0.0005 × 2,000,000 × 3/12 × 16)	\$4,000	\$0
Premium		
0.00432 × \$2,000,000 × 3/12 × 16	\$(34,560	
0.00121 × \$2,000,000 × 3/12 × 16		\$(9,680)
Net return	\$352,640	\$352,640
Effective interest rate	4.41%	4.67%
If interest rates decrease by 0.9% to 3.19%		
Exercise price	94.50	95 <i>.</i> 00
Futures price	96.35	96.35
Exercise?	Yes	Yes
Gain in basis points	185	135
Underlying investment return (from above)	\$239,200	\$239,200
Gain on options		
$(0.0185 \times 2,000,000 \times 3/12 \times 16)$	\$148,000	

$(0.0135 \times 2,000,000 \times 3/12 \times 16)$		\$108,000
Premium		
As above	\$(34,560)	
As above		\$(9,680)
Net return	\$352,640	\$337,520
Effective interest rate	4.41%	4.22%

#### Alternative presentation of calculation

#### Forward rate agreement

FRA rate 4.82% (3 - 7), since the investment will take place in three months' time for a period of 4 months.

Possible scenarios	Rates rise by 0.9%	Rates fall by 0.9%
Ref. rate (now = 4.09%)	4.99%	3.19%
Actual return on investment (Ref. rate – 0.2%)	4.79%	2.99%
Impact of FRA (4.82% - Ref. rate)	0.17%)	1.63%
Net income (%)	4.62%	4.62%
Net outcome (\$) = $24,000,000 \times 4/12 \times 4.62\%$	369,600	369,600

**Note**: Ref. rate = reference rate, which in this question is the inter-bank rate. **Futures**: March contracts to buy at 94.76 or 5.24% (100 - 94.76). No of contracts needed = $$24,000,000/$2,000,000 \times 4 \text{ months/3 months} = 16$ 

No of contracts needed =  $24,000,000/2,000,000 \times 4$  months/3 months = 16 contracts.

#### Basís

Current basis (on 1/11) = (100 - spot interest rate) – current futures price = total basis = (100 - 4.09) - 94.76 = 1.15Unexpired basis =  $2/5 \times 1.15 = 0.46$ 

- So if interest rates increase by 0.9% to 4.99% the estimated futures price is 100 - (4.99 + 0.46) = 94.55% (or 5.45%).
- If interest rates decrease by 0.9% to 3.19% the estimated futures price is 100 (3.19 + 0.46) = 96.35 (or 3.65%).

	Rates rise by 0.09%	Rates rise by 0.09%
Ref. rate (now = 4.09%)	4.99%	3.19%
Return on investment (Ref rate – 0.2%)	4.79%	2.99%
Impact on futures:		
Opening rate on 1/11 (to receive)	5.24%	5.24%
Closing rate on 1/2 (to pay)	<u>(5.45%)</u>	<u>(3.65%)</u>
Net outcome on futures	(0.21%)	1.59%
Overall net outcome (actual × futures)	<u>4.58%</u>	<u>4.58%</u>
Net outcome in \$ (4.58% × ₦24m × 4/12)	(0.2%)	1.59%
Overall net outcome (actual × futures)	<u>4.58%</u>	<u>4.58%</u>
Net outcome in \$ (4.58% $\times$ $\Re$ 24m $\times$ 4/12)	\$366,400	\$366,400

## **Options on futures**

March call options at 5% (95.00) or 5.5% (94.50) can be chosen. This solution illustrates the outcome if 5% is chosen, which is the rate closest to the current inter-bank rate. Again 16 contracts will be needed.

Possible scenarios	Rates rise by 0.09%	Rates rise by 0.09%
Ref. rate (now $= 4.09$ )	4.99	3.19%
Return on investment (Ref. rate - 0.2%)	4.79%	2.99%
Impact of futures		
Call option rate 1 Nov	5.0%	5.0%
Closing rate 1 Feb (to pay)	5.45%	3.65%
Net outcome on future	Do not exercise	1.35%
Premium	(0.121)%	(0.121)%
Outcome (actual + option – premium)	4.67%	4.22%
In \$ (% \$24,000,000 × 4/12)	373,600	373,600

## Discussion

The FRA offer from BK Bank gives a slightly higher return compared to the futures market; however, TL faces a credit risk with over-the-counter products like the FRA, where BK Bank may default on any money owing to TL if interest rates should fall. The March call option at the exercise price of 94.50 seems to fix the rate of return at 4.41%, which is lower than the return on the futures market and should therefore be rejected. The March call option at the exercise price of 95.00 gives a higher return compared to the FRA and the futures if interest rates increase, but does not perform as well if the interest rates fall. If TL takes the view that it is more important to be protected against a likely fall in interest rates, then that option should also be rejected. The choice between the FRA and the futures depends on TL's attitude to risk and return; the FRA gives a small, higher return, but carries a credit risk. If the view is that the credit risk is small and it is unlikely that BK Bank will default on its obligation, then the FRA should be chosen as the hedge instrument.

b) The delta value measures the extent to which the value of a derivative instrument, such as an option, changes as the value of its underlying asset changes. For example, a delta of 0.8 would mean that a company would need to purchase 1.25 option contracts (1/0.8) to hedge against a rise in price of an underlying asset of that contract size, known as the hedge ratio. This is because the delta indicates that when the underlying asset increases in value by \$1, the value of the equivalent option contract will increase by only \$0.80.

The option delta is equal to  $N(d_1)$  from the Black-Scholes option pricing formula. This means that the delta is constantly changing when the volatility or time to expiry change. Therefore, even when the delta and hedge ratio are used to determine the number of option contracts needed, this number needs to be updated periodically to reflect the new delta.

## Examiner's report

This is a two-part question which tests the candidates' understanding of the risk management element of the syllabus.

In part (a) of the question, a company who is expecting to receive a large sum of money, plans to invest the money for a given period of time and wishes to hedge against interest rate risk. Three hedging techniques are being considered:

- Forward rate agreement (FRA)
- Interest rate futures, and
- Option on interest rate futures.

Part (b) of the question tests candidates' understanding of the concept of delta hedging.

As usual, only about 10% of the candidates attempted the question and performance was generally poor.

Candidates showed complete lack of knowledge of this area of the syllabus. This is a clear indication that candidates can expect similar questions from time to time.

Candidates cannot continue to sample what parts of the syllabus they want to study as this will adversely affect their performance. Candidates are to ensure they cover all aspects of the syllabus when preparing for future examination.

## Marking guide

		Marks	Marks
a <i>.</i>	Hedging strategy using Forward rate agreements(FRAs)	4	
	Hedging strategy using interest rate futures	5	
	Hedging strategy using options on futures	5	
	Discussion and recommendation of hedging choice	<u>2</u>	16
b.	Discussion of how delta value of an option could be used in		
	determining number of contracts.	4	<u>4</u>
	Total		<u>20</u>

## **SOLUTION 5**

## Notes on dividend policy for a company in Benco's position

In theory, companies should make all investments available to them that increase shareholder value (i.e., all positive NPV investments, when discounted at the shareholders' opportunity cost of capital). Any funds remaining after undertaking such investments should be distributed to shareholders as dividends so that the shareholders can invest them as they see fit. The dividend decision is, therefore, a residual decision. As a company's share price is the PV of its future dividends, shareholders should be indifferent about how the PV is made up (i.e., the size of each year's dividend).

One point of view is that individual shareholders who dislike a particular dividend policy can adjust the cash flows to suit their own needs. They can do this by 'creating' dividends through the sale of shares or conversely they can buy more shares to cancel the effect of dividends. One drawback to this strategy, however, is the question of transaction costs in the real world. However, in practice, Benco's dividend policy will be affected by a number of other issues than purely its own investment policy.

**Dividend signaling**. In reality, shareholders do not have perfect information concerning the future prospects of the company, so the pattern of dividend payments actually functions as a key indicator of likely future performance (increased dividends is taken as a signal of confidence which causes estimates of future earnings to increase, so increasing the share price, and vice versa). This supports the argument for the relevance of dividend policy and the need for a stable (and increasing) dividend pay-out.

**Preference for current income** (as displayed by certain of the private shareholders referred to by Director B). This implies that many shareholders will prefer companies which pay regular dividends and will, therefore, value their shares more highly.

**Clientele effect**. Investors may be attracted to firms by their dividend policy, for example, because it suits their particular tax position. Major changes in dividend policy may well upset particular clienteles who may then sell their shares, so pushing down the share price. While this may be off-set by other clientele buying the shares and boosting the share price, the climate of uncertainty concerning long-term dividend policy often depresses the share price.

**Cash**. Shortage of cash can affect dividend policy, although money may be borrowed to fund a dividend payment to avoid negative signaling effects. In summary, companies should establish a dividend policy which is stable, which sets a stable, rising dividend per share, and which sets the dividend at a level below anticipated earnings to provide for new investment (avoiding the need for new share issue) and to provide a cushion if an unexpected fall in earnings is experienced. Excess earnings over investment needs

and normal dividends can be returned to shareholders via a special dividend or used to repurchase the firm's shares.

## Addressing the issue of differing shareholder preferences

Director A's comments reflect the dividend valuation model but overlook the issues of both the funds available to a company and the investment calls on the company in any given year. Furthermore, Modigliani and Miller showed that, in the absence of taxes and transaction costs, dividends are irrelevant to the value of a company. In principle, it does not matter when dividends occur, provided that their PV is maximised. Furthermore, transaction costs somewhat undermine the director's comments on raising new finance.

Director B's comments are illustrative of the clientele effect as discussed above.

The way in which a company will try to address the issue of differing preferences of different groups shareholders depends on the current mix of shareholders (which the company must remain aware of at all times), what other similar companies do, and the effect that changes in dividend payout have had on the share prices of similar companies in the past. It is vital that the company makes clear to shareholders what its long-term dividend policy is, why any changes in dividend policy are being made and what the likely effect will be on shareholder value of any future proposed investments.

In reality, the aspirations of the new management team may mitigate against the family shareholders' desire for dividend payments as required and so the only way ahead is to communicate a planned, long-term dividend policy even if this means driving away those family shareholders.

## The relationship between a company's dividend policy and the 'agency problem'

This is apparent in the way that managers/directors do not necessarily act in the best interests of shareholders. Shareholders may seek to keep some control over their money by insisting on high pay-out ratios (in line with Director A's comments), thereby forcing managers/directors wanting new funds for investments to justify why the investment is sound. However, there is an agency cost here in the form of the cost of the new share issue.

Managers/directors may, therefore, be motivated to adopt a low dividend pay-out policy which circumvents this need to justify projects by creating retained earnings which can be used to fund new projects. Even if they do this, however, there may still be an agency cost for shareholders in that managers may invest in empire building projects rather than in those that maximise shareholder wealth. In addition, an over-reliance on retentions can lead to dividend cuts which upset shareholders, depress the share price and increase the cost of equity.

### Examiner's report

This is a question on the relevance of dividend policy. Almost all the candidates attempted the question with variable level of performance. It is a question which candidates normally found very challenging, although this does mask the fact that strong candidates were still able to score good marks. Weaker candidates struggled, in particular, with the third requirement, often making little or no attempt to explore the relationship between dividend policy and the agency problem, and certainly failing to identify the potential agency costs involved.

Similarly, responses by weaker candidates to the second requirement often lacked any practicality. It was in these latter sections that most marks were lost.

Candidates are advised to ensure they master this area of the syllabus when preparing for future examination.

## Marking guide

	Marks	Marks
Discussion of key consideration on dividend policy for benco Plc	6	6
Addressing the issue of differing shareholder preferences	5	5
Discussion of the relationship between dividend policy and		
agency problem	4	<u>4</u>
Total		<u>15</u>

...

### **SOLUTION 6**

## a) i) Calculation Price

					Ħ
Year 1		1 75/(1.04)		=	72.115
2		75/(1.04 × 1.06)		=	68 <i>.</i> 033
3		$1,075/(1.04 \times 1.06 \times 1.08)$		=	<u>902.912</u>
<b>Current price</b>					<u>1,043.060</u>
ii)	Calculation of YTM				
	Year	CF	PV at 5%	PV at 6%	
	0	-1043.060	-1043.060	-104	3.060
	1	75	71.429	70.755	
	2	75	68.027	66.150	
	3	1,075	<u>928.625</u>	<u>902.</u>	<u>591</u>
	NPV		25.021	- 3.5	<u>64</u>
YTM = IRR = $5 + \frac{25.021}{25.021 + 3.564} \times (6 - 5)$					

= 5.89%

The YTM of 5.89% is a promised yield that may not be realised if:

- The investor does not receive the related cash flows as and when due;
- The bond is not held to maturity; and
- The coupons cannot be reinvested at the yield to maturity of 5.89%.

## b) i) Calculation of duration

Year	CF	PV at 5.89%		
(n)		(PV)	(PV) (n)	
1	75	70.828	70.828	
2	75	66.889	133.777	
3	1,075	<u>905.407</u>	<u>2,716.220</u>	
		1,043.124	2,920.825	

Duration = 2,920.825/1,043.124 = 2.80 years

Duration is a measure of the sensitivity of a bond to a change in interest rates. In general, the higher the duration, the higher the sensitivity, and the higher the price risk.

ii) When interest rates increase, prices of bond fall. Bonds with lower durations will suffer price drop the least. Therefore, I will select Bond A with lower duration in order to minimise loss in the value of my portfolio.

## Examiner's report

The question tests the candidates' knowledge of various aspects of bond, including:

- Valuation of coupon bonds using forward rates;
- Calculation of YTM; and
- Calculation and interpretation of bond duration, etc.

About seventy five percent of the candidates attempted the question. Large number of the candidates lost valuable marks due to the following factors:

- Wrong use of the given forward rates;
- Inability to differentiate between forward rates and spot rates; and
- Inability to calculate YTM, etc.

Based on those factors, the level of performance was far below average.

Future candidates are advised to cover the syllabus comprehensively.

## Marking guide

		Marks	Marks
a (í)	Calculation of bond price	3	
(ii)	Calculation of yield to maturity (YTM)	3	
	Explanation of why investor may not realise calculated YTM	<u>2</u>	8
b (i)	Calculation of duration of bond	3	
	Explanation of of duration of bond measures	1	
(ii)	Choice between bond A & B	<u>3</u>	<u>7</u>
	Total		<u>15</u>

## **SOLUTION 7**

It is true that management need to be concerned with all of 'stakeholders' in the business. This may mean that managers need to balance 'maximisation of shareholders' wealth' (MSW) with the objectives of others.

It can be argued that the welfare of other stakeholders is not inconsistent with MSW. Normally, unless other stakeholders are getting, at least, a fair deal from the business, this will be at odds with MSW. For example, if suppliers are being treated unfairly by the business, they will seek ways to avoid dealing with the business. This may not be open to them in the short-term, but in the longer-term it probably will be, and this will be to the disadvantage of shareholders.

Once MSW is accepted as the key objective, NPV is the only totally logical approach to business investment decision-making. This is because the NPV is the net increase in wealth caused by the investment.

Investments give rise to various outflows of cash that have the effect of reducing the shareholders' wealth and inflows, which have the opposite effect. Were all these flows to occur simultaneously, assessing investments would be simple; net inflows would represent an increase in wealth and net outflows the opposite. In practice, the various cash flows do not occur simultaneously but at various points in time, often at points wide apart. Since investors do not view **\mathfrac{1}1** receivable next year as being as valuable as **\mathfrac{1}1** receivable today, a direct comparison between total inflows and total outflows cannot be made.

Discounting enables the various effects on wealth to be assessed on a common basis. All of the cash flows are converted to their value at the same point in time, normally the present time, and the net effect on wealth assessed. None of the other popular investment appraisal techniques looks specially at wealth.

IRR is the average return on the investment over its lifetime, taking account of the fact that, typically, cash will be flowing into and out of the investment project at various times over its life.

The key weakness of IRR is that it is a rate of return and, as such, it is not directly concerned with wealth. It would always indicate that a large percentage return on a small investment is preferable to a smaller percentage return on a large investment, when it is quite possible for the latter to have a more favourable effect on shareholders' wealth. Thus using IRR does not necessarily lead to undertaking investments that make shareholders richer, though it should not make them poorer.

It is fair to say that IRR typically gives the same signals as NPV, so its use will tend to lead to wealth maximising investments, but NPV should always lead to the correct decision if MSW is accepted.

CAPM (capital asset pricing model) is a device for deriving investors' required returns from an investment. It says that the expected return is the risk-free rate plus a risk premium. The risk premium depends on the average risk premium for all risky investments and the level of risk of the investment under consideration, relative to the average.

Theory and evidence suggest that investors an only expect a premium relating to systematic risk, i.e. the risk arising from factors that tend to be common, though differentially severe, to most risky investments. Specific risk, because it can be, and in practice is, diversified away, does not attract a risk premium.

It would not be correct to ignore the risk of the particular investment under consideration, but it is logical to ignore the specific risk. Often when using CAPM to derive a discount rate for use with NPV, and average risk premium for businesses engaged exclusively in the activity of the particular investment is used. This is logical because all investments in a particular area of business can be expected to have a similar level of systematic risk.

WACC and CAPM are not in conflict. WACC simply takes account of the required returns of the various providers of a business's finance. CAPM is a means of deriving the cost of each of these elements. So logically WACC could use CAPM-derived required returns, averaging them according to how important they are, by value, to the business.

WACC, if it based on the business's own data, is an average rate of return for all the business's activities, some of which will be more risky than others. This may well provide an inappropriate rate for NPV discounting or comparison with the IRR.

In theory (Modigliani and Miller-ignoring taxes) shareholders' wealth is not affected by the approach taken to financing the business (equity or debt). Since debt is relatively

low risk, lenders expect lower returns than equity holders, but the existence of debt increases the shareholders' risk and the net effect on shareholders' wealth is nil.

This theory was revised by Modigliani and Miller who said that if account is taken of the fact that interest on debt is tax deductible, increasing amounts of debt reduce the average cost of capital and make shareholders wealthier.

In practice there is a limit to the amount of debt finance a business can take on because high levels of debt expose it to the risk of incurring the costs of financial distress (bankruptcy). In practice there seems to be some level of debt financing that balances the benefits of tax relief against the potential costs of bankruptcy. This will vary from business to business depending on such things as the nature of their commercial activities.

It does not cost anything to retain profit, in the sense of costs of making a share issue. In that sense loan stock issues are relatively cheap and share issues relatively expensive, particularly public issues.

Retained earnings certainly have cost in terms of returns required by the shareholders. These shareholders incur an opportunity cost if their profits are retained instead of being paid to them as dividends. Naturally they expect to be compensated for this cost. Since their funds are being invested in the same business as the original share capital, they expect similar returns.

## Examiner's report

Candidates were asked to comment on some statements made to them on corporate investment and financing by a person. The question, both implicitly and explicitly, made it plain that the person had little understanding of such matters. Most candidates were able to deal competently with the technical issues in the question and some were able to explain them in simple, everyday language. Unfortunately, most seemed unable to avoid using unexplained jargon and to make the points in simple language. To be able to do this is an extremely valuable skill for a professional accountant. It is also an area that provides the examiner with a helpful means of assessing whether candidates really understand the technical points – only those who really understand a point are able to explain it to others in simple language.

Surprisingly, therefore, the overall performance was just average. Once again, it is our recommendation that candidates need to practice past examination questions, when preparing for future examination.

## Marking guide

marking guide	Marks	Marks
Discussion on the issue of Maximisation of Shareholders Wealth (MSW)	3	
Discussion on NPV and IRR	4	
Discussion on CAPM and WACC	4	
Discussion on sources of raising new finance	4	<u>15</u>
Total		<u>15</u>

## THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA



## **PROFESSIONAL LEVEL EXAMINATION – MAY 2025**

## **ADVANCED AUDIT AND ASSURANCE**

## **EXAMINATION INSTRUCTIONS**

#### PLEASE READ THESE INSTRUCTIONS BEFORE THE COMMENCEMENT OF THE PAPER

- 1. Check your pockets, purse, mathematical set, etc. to ensure that you do not have prohibited items such as telephone handset, electronic storage device, programmable devices, wristwatches or any form of written material on you in the examination hall. You will be stopped from continuing with the examination and liable to further disciplinary actions including cancellation of examination result if caught.
- 2. Write your **EXAMINATION NUMBER** in the space provided above.
- 3. Do **NOT** write anything on your question paper **EXCEPT** your Examination number.
- 4. Do **NOT** write anything on your docket.
- 5. Read all instructions in each section of the question paper carefully before answering the questions.
- 6. Do **NOT** answer more than the number of questions required in each section, otherwise, you will be penalised.
- 7. All solutions should be written in **BLUE** or **BLACK INK**. Any solution written in **PENCIL** or any other **COLOUR OF INK** will not be marked.
- 8. You are required to attempt **Question ONE (compulsory), any TWO Questions in** Section B and any TWO Questions in Section C.
- 9. Check that you have collected the correct question paper for the examination you are writing.

#### WEDNESDAY, MAY 21, 2025

### DO NOT TURN OVER UNTIL YOU ARE TOLD TO DO SO

## THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

## **PROFESSIONAL LEVEL EXAMINATION – MAY 2025**

## ADVANCED AUDIT AND ASSURANCE

Time Allowed:  $3^{1}/_{4}$  hours (including 15 minutes reading time)

## INSTRUCTION: YOU ARE REQUIRED TO ATTEMPT FIVE OUT OF THE SEVEN QUESTIONS IN THIS PAPER

## SECTION A: COMPULSORY QUESTION (30 MARKS)

## **QUESTION 1**

The audit of the financial statements of Night Insurance Company Limited for the year 2024 was yet to be completed due to certain issues relating to going concern and liquidity considerations. A review of the draft financial statements revealed a negative shareholders' fund of \$18.7 billion (Audited 2023: negative \$14.5 billion). From the recent regulatory examination conducted on the company, the shareholders' fund is below the minimum regulatory capital required for insurance businesses, an indication that the entity had consistently not met the regulatory threshold for quite some time. To return the entity to a solvent position, the following action plans have been designed by the Board of Directors:

- (i) a rights issue with expected inflow of ₩2billion. The company has assurance from certain shareholders that they will take up their rights which would be concluded before the audit of the year ended December 31, 2024 is completed;
- (ii) transfer of certain properties of the company in closed branches to investment property to generate rental income in order to improve the liquidity position and also enhance its admissibility in calculating solvency margin. The company had the transfer of the properties in plan but this was not completed due to challenges such as the economic recession, unemployment, and inflation rate; and
- (iii) the company also has some subsidiaries in aviation and restaurant businesses which it hopes to dispose and realise the assets to boost liquidity.

It was further discovered that cashflow projections of the company on how to address the going concern situation have not been reliable from previous years' experience.

Although the company has negative operating cash flow and has been making persistent operational losses, the financial statements have been prepared on the going

concern basis of accounting, which assumes that the company will continue in operation for at least the next 12 months and discharge its liabilities and commitments in the normal course of business. During the course of the audit, the audit team noted nonaccrual of some claims, which were yet to be paid amounting to <del>N</del>3.2 billion, which they believe were material to the financial statements, but not pervasive. They were not pervasive because it did not affect all the elements of the financial statements.

It was also observed from the examination of the records that due to the poor cashflow situation of the company, the following were outstanding:

- (i) withholding tax deducted not remitted to relevant tax authority and payment of the company's income taxes;
- (ii) pension contributions to respective pension administrators;
- (iii) an amount of \$\mathbf{H}500\$ million relating to supply of goods and services for over nine months; and
- (iv) three months salaries.

Some bank account balances have not been reconciled as at the time of the audit.

The auditors are preparing for a discussion with management and those charged with governance as the Engagement Partner indicated that the firm is likely to express a modified opinion on the financial statements. As a member of the audit team, you are expected to be part of the meeting.

## **Required:**

- a. Evaluate the circumstances under which an auditor is expected to issue a modified audit opinion. (2 Marks)
- b. Discuss the factors that will determine each of the modified audit opinions that the firm might likely express. (11 Marks)
- c. Describe the expected form and contents of the Auditors' Report when the opinion is modified. (15 Marks)
- d. Discuss the reasons why communication with those charged with governance is necessary. (2 Marks)

## (Total 30 Marks)

## SECTION B:YOU ARE REQUIRED TO ATTEMPT TWO OUT OF THE THREE<br/>QUESTIONS IN THIS SECTION(40 MARKS)

## **QUESTION 2**

Awayewaserere Bakery Limited has been in business for over ten years. It has an internal control system in place, but it is not implemented as designed. The control lapses identified are indications that the company will find it difficult to cope with a rapidly changing business environment.

Despite computerisation of its operations, manual processing of transactions are still taking place. The employees have gate passes and tags that they should wear before entering the company premises. However, experience has shown that some of the tags are misplaced or stolen and used by unauthorised people to access the premises. Some of the directors are not committed and hardly do they meet the expected yearly number of times for which they are required to attend Board of directors' meeting.

Added to this, many of them bought goods from the company on credit and in most cases, did not pay back. A background check conducted on two of the Directors revealed that they engaged in unethical business practices, which had a negative impact on the image of the company and its market share.

A partner of the company's auditors is the younger brother of the company's Chairman. The auditors hardly issue any report on weaknesses identified in the internal control system of the company despite the indications of inclusion of material misstatements in the financial statements. The audit firm does not have capable staff. The Managing Director is very powerful to the extent that he can approve any amount of money or transaction. The supply of flour and other stock items are not subjected to competitive bidding, but by those nominated by the Managing Director and this sometimes led to over invoicing. Inventory count rarely takes place in the company, while impaired tangible assets are not identified.

The software available for processing transactions has not been updated since acquisition, and has been assessed unsuitable to support good financial reporting. Most of the staff of the organisation are poorly trained and the few experienced ones are not allowed to go on leave for fear of the inability of the inexperienced staff to perform when they are on vacation. Over-reliance on some staff and care-free attitude of the directors in performing their functions have made fraud to be perpetrated unnoticed.

The company's revenue has dwindled over time and has led to the inability to meet financial obligations as at when due. Some creditors had threatened not to supply goods, except all outstanding debts owed them are paid. There are receivables in the company's books of account that cannot be substantiated, hence they are as good as bad debts waiting to be written off. Payment of salaries and allowances of staff has become a problem and the relevant tax authority had threatened to prevent the company from operations if all statutory taxes are not paid. Due to the precarious financial situation of the company, a friend of the Chairman, who has been warning him about the business and other risks in the company, has suggested the need to look for a good investor that will inject fresh capital and introduce informed directors who are capable of turning the company around. He has also suggested the need to engage a new audit firm that will adopt a modern audit approach which is 'risk-based' that will lead to transparency and confidence in the financial reporting of the company.

The Chairman of the company learnt that you work for one of the reputable audit firms in the country and has invited you for a discussion to help him understand the position of his friend on the need to allow new investors into the company.

## **Required**:

- a. Evaluate the main audit risks that prospective auditors are expected to assess and manage effectively in the above situation, if engaged. (6 Marks)
- b. Discuss business risk and identify how it can be linked to the financial statements of Awayewaserere in the above scenario. (5 Marks)
- c. State the financial statements risks that will affect audit risks in the above scenario. (9 Marks)

(Total 20 Marks)

## **QUESTION 3**

Sleep Insurance Plc has been making consistent losses with no dividends paid to the shareholders for over five years. Aggrieved shareholders of the company made allegations against the management that there had been certain unusual transactions in the financial statements of the company over the years.

The shareholders further considered that management were incompetent and corrupt, therefore, they should resign to give way for efficient and reliable people who will manage the company effectively. The allegations of financial impropriety prompted the Financial Reporting Council (FRC) to conduct a field visit to the company. The on-site visit revealed material internal control weaknesses, such as:

- (i) improper review and reconciliation of branch expenditures;
- (ii) premiums collected from the insured, which were not completely remitted by marketing staff who deal directly with those customers;
- (iii) cash takings by cashiers which were in most cases not banked intact;
- (iv) expenditures of top management which were not reviewed before payment;
- (v) related party transactions, which were solely approved by the Managing Director were not subjected to internal audit review;
- (vi) some transactions, were not supported by invoices and receipts before payments were made;

- (vii) marketing staff collecting claims for jobs not done, and cases of outright cash suppression, which were common in the company;
- (viii) certain fraud committed by staff, which were treated as staff loans, to ameliorate the situations in which many staff had been sacked due to this infraction; and
- (ix) schedules for material account balances, which were not provided for review.

Upon receiving the preliminary report of the FRC team, the aggrieved shareholders believed they have been vindicated and were wondering why the external auditors of the company had not been able to detect these infractions over the years and communicate to them for immediate action. They threatened to take the external auditors to court for negligence and to ask for compensation from them for what they had lost over the years.

On enquiry by some of the aggrieved shareholders of the company, a partner in a reputable firm was of the opinion that most of the issues identified may not be detected by external auditors except if an investigation is conducted on the company's financial activities.

## **Required:**

- a. Discuss the peculiarities of external audit that may make most of the weaknesses undetectable. (10 Marks)
- b. Evaluate the factors your firm will likely consider before accepting an investigation assignment on Sleep Insurance Plc, if given the opportunity.

(4 Marks)

c. Discuss the form and content of an investigation report in case detailed in the above scenario. (6 Marks)

## (Total 20 Marks)

## **QUESTION 4**

The organisation and structure of companies and the related audit environment have been changing very rapidly in recent times, just as the regulatory framework is also changing. These impact significantly on the quality of governance, auditing, standards, and other guiding principles. An auditor is, therefore, expected to be conversant with these and be in a position to anticipate actions and motives of clients.

In a discussion with a client, some of the issues manifested. You were able to give some basic hints on the issues that the client raised, and proposed to go home and review some of them for detailed discussion later.

## **Required**:

- a. Prepare a brief statement on the IAASB's Clarity Project and the updates to the background of the project for discussion with the client. (8 Marks)
- b. Evaluate the duties and responsibilities of the Audit Committee as specified by the Nigerian Code of Corporate Governance 2018 and also give the objectives of the Committee. (12 Marks)

(Total 20 Marks)

## SECTION C:YOU ARE REQUIRED TO ATTEMPT ANY TWO OUT OF THE THREE<br/>QUESTIONS IN THIS SECTION(30 MARKS)

## QUESTION 5

To establish Godman Philip International High School and turn it to a world class institution, the Chief Operating Officer (COO) requires your services as an assurance service provider to report on five projected financial information obtained from professional services firms. Some of the details provided to the professional service firms include:

## Background Information

Godman Philip International High School is a proposed co-educational institution to be set up in one of the oil rich state capitals in the country. It is expected to be a boarding school for boys and girls. The students are expected to resume studies the next academic session, after obtaining approval from the government of the chosen state.

### Basis for the prospective financial information

The financial information will be used to raise capital to finance operations of the school and address other issues. The projection is expected to be part of a long term strategy to establish a world class institution with clear and achievable targets. The report to be obtained should be suitable to help in planning pre-operating budget and assess when the school will become profitable enough to give good returns to investors without compromising quality of education provided to the students, and expected facilities in the school. The financial information should be adequate to convince interested investors and lenders of the likely growth potential of the institution.

### Minimum content of the prospective financial information

Interested professional service firms will be expected to submit for review prospective financial information for the first four (4) years of business on likely:

- (i) startup expenses;
- (ii) payroll costs;
- (iii) revenue forecast;
- (iv) operating expenses;
- (v) cash flow statements;

- (vi) income statements;
- (vii) statement of financial position;
- (viii) break-even analysis;
- (ix) financial ratios;
- (x) amortisation and depreciation in the business; and
- (xi) likely risks.

## Professional services firms

The professional firms should be able to do a robust documentation of identified issues and should demonstrate ability to perform any outsourced service, like preparation of books of account or internal audit service (if required) after commencement.

The proposal should state expected fee, the profile of the firm and staff complement especially, if services are required for any of the outsourced services.

## Submission

The prospective financial information should be submitted on or before close of work on December 31, 2024. Only shortlisted professional service firm would be invited for presentation and interview.

## Assurance engagement

Your audit and assurance firm has been engaged to provide an assurance service to Godman Philip International, wherein you will report to the Chief Operating Officer (COO) after performing necessary procedures on the submissions of five professional service firms that submitted prospective financial information to the Chief Operating Officer (COO).

## **Required:**

a. Develop the procedures your firm should apply on this assurance engagement.

(6 Marks)

b. Evaluate and communicate what you will consider in deciding the nature, timing and extent of the procedures required to complete this assurance engagement

(3 Marks)

c. Disclose any **SIX** elements of the assurance report you believe should be included in the submission to the Chief Operating Officer (COO). (6 Marks)

### (Total 15 Marks)

## **QUESTION 6**

As part of the requirements of the International Standards on Auditing (IAS), before commencement of any statutory audit, Cole & Co (Chartered Accountants), the external auditor to Tanke Pharmaceutical has held a pre-audit meeting with the Audit Committee of the company on the scope, timing of the audit and communication of likely significant risks identified by the auditor during the risk assessment process. Tanke Pharmaceuticals has being experiencing theft of finished products in the previous year to the extent that some of its products were sold at cheaper prices outside the company's premises which created problem for distributors of the products leading to loss of revenue for the company. The marketing teams were also accused of collecting commissions and transport expenses which did not reflect in the sale proceeds achieved by them. There was increase in payables for inventory items purchased, which were in most cases not delivered. Added to the above, there was a huge suspense receivable account balance emanating from information technology update in the books of the company.

The members of the Audit Committee believe that if the auditors had done their work as expected, such issues would have been discovered earlier. A member of the Audit Committee doubted whether the new and revised standards issued by the International Auditing and Assurance Standards Board were being applied on the audit of the company or even whether expected audit strategies were followed. A suggestion was made that rather than increasing audit fee in line with inflationary pressure as requested by the auditors, the company should rather reduce audit fee to compensate for the loss due to their (auditors') negligence.

The members of the Audit Committee were supposed to meet at least five times in a year, but they met only three times and when they met, they hardly spent enough time to go through internal audit reports or review management accounts. Only one member of the Audit Committee is financially literate. The directors' meetings were rarely held, as most of them (directors) went on long overseas vacations, thus leaving the operational activities of the company totally to the discretion of management.

The member of the audit committee were of the opinion that the management letter issued by the external auditors should have provided detailed internal control weaknesses which they would have acted upon.

## **Required**:

- a. Evaluate the overall objectives of an auditor in the above scenario. (3 Marks)
- b. Analyse the responsibilities of those charged with governance.
- c. Explain why the auditors may not detect fraud.
- d. Develop the procedures to reduce the expectation gap identified. (5 Marks)

(Total 15 Marks)

(4 Marks)

(3 Marks)

## **QUESTION 7**

Messrs ABC Pharmaceuticals Limited is a business formed and started by three registered pharmacists who decided to run a chain of pharmaceutical outlets in different towns in the country. Discussions with them indicate that they are considering implementing a system which will be liberal, but still give them the opportunity to the kept informed of the operations at the different locations that the business are located. This involves the implementation of a level of computerisation.

At their last physical meeting in Lagos, before two of them departed to their respective locations, it was agreed that the audit firm you work for should be appointed as auditors to enable them get proper guidance on the accounting and IT processes from the early stages to avoid having undue technical hitches. They have also agreed to have another meeting via the Zoom application, which your firm will host because of the information to be presented.

Your partner, has therefore, directed that you will need to speak on the issues to be addressed and has asked you to make preparations necessary for this.

### **Required**:

- a. Make a presentation showcasing the benefits of applying Control Objectives for Information and Related Technologies (COBIT) in the client's business. (7 Marks)
- b. Evaluate the use of audit software and the importance of adopting it for business. (8 Marks)

(Total 15 Marks)

## **SOLUTION 1**

- a. ISA 705 *Modifications to the opinion in the independent auditor's report* requires the auditor to modify his opinion in the auditor's report in the following situations of:
  - i. **Material misstatement** This occurs when the auditor concludes that, based on the audit evidence obtained, the financial statements as a whole are 'not free from material misstatement'. In other words, the auditor considers that there is a material misstatement in the financial statements.
  - ii. Limitation on scope This occurs when the auditor is unable to obtain sufficient appropriate evidence to conclude that the financial statements as a whole are free from material misstatement. The auditor has been unable to obtain sufficient appropriate audit evidence to reach an opinion that the financial statements give a true and fair view, therefore, the financial statements may contain a material misstatement.
  - iii. **Going concern uncertainty** Significant doubts exist about the entity's ability to continue as a going concern, and the disclosures are either inadequate or the uncertainty is fundamental. The negative shareholders' funds, persistent losses, and inadequate cashflows for instance, raise going concern issues.
- b. For an opinion to be modified, the audit firm will issue any of the following:
  - i. a qualified opinion;
  - ii. an adverse opinion; and
  - iii. a disclaimer of opinion.

According to ISA 705, the auditor has to determine if the misstatement or limitation of scope is 'material but not pervasive' or 'material and pervasive' to determine what type of opinion to issue.

In the case of Night Insurance Company Ltd, the following material issues exist:

i. **Material uncertainty relating to the going concern** – Night Insurance Company Limited has prepared its financial statements in line with the going concern basis of accounting, despite the existence of material uncertainty relating to this and liquidity issues. Though the client has expressed confidence in its ability to continue as a going concern, the firm can issue an adverse opinion as this is material and pervasive.

- ii. However, if they are able to provide proof of positive actions taken to reverse this position, the firm may only issue a **'qualified opinion'** 
  - iii. Material uncertainty relating to liquidity Night Insurance has three months' unpaid salaries, unpaid withholding and Company income taxes, unpaid pension contributions and unaccrued claims pending for settlement. Although the company has provided plans to generate cash, the Audit firm could still issue a 'qualified opinion.' The qualified opinion is right as the issue is material but not pervasive;
  - iv. Failure to meet regulatory requirement Night Insurance has been unable to meet the regulatory capital requirement for its business for a few years. This creates a material uncertainty on the going concern, which can lead to a withdrawal of licence by the regulators. If Night Insurance Company Limited is unable to meet this regulation, it is expected to restate its financial statements in line with break-up basis. Its refusal to comply will lead to the auditor issuing an 'adverse opinion' as this is material and pervasive; and
  - v. Unreconciled bank statements The auditor's inability to reconcile with some banks, given the current liquidity challenges, creates a limitation of scope to the auditor. However, this is material but not pervasive since it is limited to just one element of the financial statements. The audit firm will likely issue a 'qualified opinion' as a result of this.

## c. The form and contents of the Auditor's report when the opinion is modified:

- i. **Opinion paragraph** The opinion paragraph at the start of the auditor's report must be headed 'Qualified opinion', 'Adverse opinion', or 'Disclaimer of opinion', as appropriate.
- Basis for modified opinion paragraph
  When a modified opinion is issued, ISA 705 requires the 'Basis for opinion' paragraph to be amended to 'Basis for qualified opinion', 'Basis for adverse opinion', or 'Basis for disclaimer of opinion', as appropriate.

This 'basis for modified opinion' paragraph must include the following:

- for a material misstatement relating to specific amounts a description and quantification of the impact on the financial statements (or a statement that quantification is not possible);
- for a material misstatement relating to narrative disclosures an explanation of how the disclosures are misstated;
- for a material misstatement relating to the non-disclosure of information that should have been disclosed the nature of the omitted information and, unless prohibited by law or regulation, the omitted disclosures; and
- if the modification results from an inability to obtain sufficient appropriate audit evidence the reasons for the inability.

For qualified or adverse opinions, the basis for the qualified/adverse (as appropriate) opinion paragraph will also state:

"We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our qualified/adverse (as appropriate) opinion".

- d. Reasons why communication with those charged with governance is necessary include:
  - i. **ISA 260:** communication with those charged with governance explicitly emphasises the importance of effective two-way communication between the auditor and those charged with governance. This fosters a constructive working relationship and ensures a shared understanding of matters related to the audit;
  - if the auditor identifies a material misstatement, discussing it with those charged with governance gives them the opportunity to correct the financial statements before the audit report is finalised. This is the primary desired outcome – for the financial statements to be presented fairly;
  - iii. if the issue is a limitation on the scope of the audit (for example, inability to obtain sufficient appropriate audit evidence), discussing it allows those charged with governance to potentially remove the limitation or provide alternative evidence;
  - iv. discussions allow the auditor to ensure they have a complete understanding of the facts and circumstances surrounding the issue that might lead to a modification. Those charged with governance may provide additional information or context that the auditor was not fully aware of;

- v. It is an opportunity for those charged with governance to explain their perspective or the rationale behind certain accounting treatments or decisions;
- vi. while the auditor must maintain independence and objectivity, the discussion helps them gain further insight into the entity's operations and the implications of the issues. This deeper understanding can refine the auditor's judgment regarding the nature and pervasiveness of the misstatement or scope limitation;
- vii. a discussion might reveal that a misstatement initially thought to be pervasive is actually confined to a specific element after further explanation from those charged with governance;
- viii. surprising those charged with governance with a modified opinion without prior discussion can lead to misunderstandings, disputes, and potential legal challenges. A professional dialogue can help manage expectations and clarify the auditor's reasoning;
  - ix. professional auditing standards (like ISAs) mandate this communication. Non-compliance could lead to sanctions for the auditor;
  - x. ethically, it promotes fairness and due process, giving the entity the chance to address the auditor's concerns; and
  - xi. professional obligation: ISA 260 requires auditors to communicate matters such as:
    - significant deficiencies in internal control;
    - uncorrected misstatements;
    - significant risks identified; and
- xii. corrective action opportunity: provides management and the board an opportunity to respond, correct errors, or provide additional evidence before finalising the opinion.

## Examiner's report

The question tests the candidates' knowledge of the modification of auditors' report and the circumstances necessitating the different forms of modification, and the reasons for communication with those charged with governance of an entity.

This being a compulsory question, all the candidates attempted it but the overall performance was poor.

The common pitfalls of the candidates were their lack of understanding of the basis for modification and the reasons for communication with those charged with governance.

Candidates are advised to acquaint themselves with various communication relating to engagements and also read the Institute's Study Text and Pathfinders which are freely available on the Institute's website.

## Marking guide

		Marks	Marks
a.	Circumstances under which an auditor is		
	expected to issue a modified opinion		
	(½ mark each for any 2 circumstances)	_1	
	(½ mark each for explanation on the 2		
	circumstances)	1	2
b <i>.</i>	Factors that determined modified opinion		
	(1 mark each for discussing any opinions subject to a		
	maximum of 3)	3	
	ISA 705 position on types of opinion and		
	material issues		
	(1 mark each for mentioning material issues)	4	
	(1 mark each for explaining material issues)	4	11
С.	Form and contents of auditors' report when		
	opinion is modified mentioning and discussions		
	of opinion Paragraph		
	(2½ marks for strategy opinion paragraph)	<b>2½</b>	
	Basis for modified opinion		
	(2½ marks for stating the basis of modified opinion)	<b>2½</b>	
	Additional points on basis of opinion		
	Mentioning and discussions material misstatement		
	relating to specific amount		
	(2 marks each for any 5 points)	10	
d.	Reasons why communication with those charged		
	with governance		
	(1 mark each for any 2 reasons)	2	2
	Total		30

## **SOLUTION 2**

- a. The main audit risks the prospective auditor will assess are:
  - i. **Inherent risk:** This is the risk that items may be misstated as a result of their inherent characteristics. Inherent risk may result from either:
    - the nature of the items themselves, for example, estimated items are inherently risky because their measurement depends on an estimate rather than a precise measure; or

- the nature of the entity and the industry in which it operates, for example, a company in the construction industry operates in a volatile and high-risk environment, and items in its financial statements are more likely to be misstated than items in the financial statements of companies in a more low risk environment, such as a manufacturer of food and drink. When inherent risk is high, this means that there is a high risk of misstatement of an item in the financial statements. Inherent risk operates independently of controls and therefore cannot be controlled. The auditor must accept that the risk exists and will not 'go away'.
- ii. Control risk: Control risk is the risk that a misstatement would not be prevented or detected by the internal control system that the client has in operation. In preparing an audit plan, the auditor needs to make an assessment of control risk for different areas of the audit. Evidence about control risk can be obtained through 'tests of control' for each of the major transaction cycles. The initial assumption should be that control risk is very high, and that existing internal controls are insufficient to prevent the risk of material misstatement. However, tests of controls may provide sufficient evidence to justify a reduction in control risk. for the purpose the estimated of audit planning. It is unlikely that control risk will be zero because of the inherent limitations of any internal control system.
- iii. **Detection risk:** The risk that the audit testing procedures will fail to detect a misstatement in a transaction or in an account balance. For example, if detection risk is 10%, this means that there is a 10% probability that the audit tests will fail to detect a material misstatement.

Detection risk can be lowered by carrying out more tests in the audit. For example, to reduce the detection risk from 10% to 5%, the auditor should carry out more tests.

In preparing an audit plan, the auditor will usually:

- set an overall level of audit risk which he judges to be acceptable for the particular audit; and
- assess the levels of inherent risk and control risk, and then adjust the level of detection risk in order to achieve the overall required level of risk in the audit.

In other words, the detection risk can be managed by the auditor in order to control the overall audit risk. Inherent risk cannot be controlled because it operates independently of controls. Control risk can be reduced by improving the quality of internal controls; however, recommendations to the client about improvements in its internal controls can only affect control risk in the future, not control risk for the financial period that is being audited. b. Audit risk can be reduced by increasing testing and reducing detection risk. Business risk is the threat that an event or development may adversely affect the ability of the entity to achieve its objectives. It is the risk of an adverse development that could have a major impact on the company's business, such as the loss of a major customer or an increase in the cost of a key commodity. An adverse business event is likely to affect the company's business significantly, and so should be expected to affect its financial statements.

Business risks are risks faced by the management of the client entity, which could have an impact on the financial statements (including the going concern assumption). In the case of Awayewaserere, the business is exposed to the following:

- i. **Regulatory/compliance risk** Awayewaserere Bakery Limited is at risk of cessation of operations as threatened by the tax authority; if adequate provisions have not been made, then the financial statements may be misstated;
- ii. Financial risk Awayewaserere Bakery Limited is struggling with poor liquidity, impacting its ability to meet its short-term cash needs. This threatens the going concern of the entity, and if this is not indicated or provided for in the financial statements, it increases the risk of a material misstatement;
- iii. **Reputational risk** The unethical actions of some of the directors, affects the company's goodwill and willingness of the customers to do business with them, and the reduction in market share could finally lead to a loss of capital investment; and
- iv. **operational risk** Over-reliance on a few key employees, which does not provide room for segregation of duties and controls, poor internal controls giving room for fraud, uncontrolled access to the company's premises and obsolete accounting software – these are some operational risks the Awayewaserere is exposed to.

# c. The financial statement risks that will affect audit risk in view scenario include:

(i) **Risk of over-statement of revenue or other income**. There may be some risk that revenue has not been recognised in accordance with the requirements of IFRS 15 Revenue from contracts with customers, and is over-stated. This risk will occur when customers make staged payments (for example staged payments for contract work) or pay deposits in advance (for example customer bookings for holidays): revenue should not be recognised until the performance obligation has been met, not when the payment is received.

- (ii) **Risk of over-statement of current assets.** For example, there may be some doubts about whether amounts receivable will actually be recovered. A company may fail to make a sufficient allowance for irrecoverable amounts, and when this happens receivables and profit will be over-stated. Another example may be the risk of over-statement of inventories, due to the timing of the physical inventory count or the procedures used in the inventory counting process.
- (iii)**Risk of over-statement of non-current assets**. There may be a risk that some noncurrent assets are over-stated in value, when there is some reason to suppose that impairment has occurred (for example impairment to a building due to fire or flood damage).
- (iv) **Risk of under-statement of liabilities**. There may be a risk that some liabilities are not fully stated, particularly provisions. There may be no provision in the financial statements when it would be appropriate to make one, and so reduce profit and increase liabilities.
- (v) **Risk of understatement of operating expenses.** As a general rule there is usually a fairly consistent ratio from one year to the next between elements of cost and sales revenue. For example the ratio of administrative expenses to revenue and the ratio of sales and distribution costs to revenue are often fairly consistent from one year to the next. Some changes may occur, but not usually large changes. So for example if sales revenue is increasing but the ratio of administrative costs to sales is falling sharply, this could indicate a risk of under-statement of operating expenses.
- (vi) **Risk from accounting estimates.** The auditor should check accounting estimates carefully. These rely on management judgment and when estimates are a material amount there will be a significant risk of misstatement.
- (vii) **Failure to comply with the requirements of specific accounting standards**. The risks of disclosure of misstatement or non-disclosure due to a failure to comply properly with the requirements of the accounting standard.

### Examiner's report

The question tests the candidates' knowledge of audit risks, business and other risks associated with financial statements, the identification of their characteristic and impact on the audit process.

The question was attempted by about 90% of the candidates but the performance was just average.

The commonest pitfall was the lack of understanding of the various risks that could be evaluated in audit and their impacts on the audit process.

Candidates are advised to pay close attention to the requirements of the question before attempting it. They are also advised to study properly the Institute's Study Text and Pathfinders.

## Marking guide

		Marks	Marks
a <i>.</i>	Main audit risks that the prospective		
	auditors are expected to assess:		
	Mentioning and discussing the nature of the		
	items		
	(½ mark each for mentioning any 3 risks)	11/2	
	(½ mark each for explanation of 3 risks)	11/2	
	Examples on detection of risk		
	(1 Mark each for any 3 examples of risks)	<u>3</u>	6
b <i>.</i>	Business risk and linkage to financial		
	statements		
	(1 mark each for mentioning and explanation of	2	
	any 2 rísks)		
	Consideration of risk and linkage to financial		
	statements		
	(1 mark each for any 3 points)	<u>3</u>	5
С.	Financial statement risk that will affect		
	audit risk		
	(1/2 mark each for every 6 points mentioned) and	3	
	(1 mark each for explanation of the 6 points)	<u>6</u>	9
	Total		20

## **SOLUTION 3**

## a. The peculiarities of external audit that may make weaknesses undetectable:

- i. Time is one of the most prominent limitations. Usually, both the auditors and the client agree to the timing of the audit. Due to some restrictions, however, the deadlines may not be met. Auditors may, therefore, need to reduce their audit review to meet the client's expectations. In these cases, the quality of external audits may be compromised. Sometimes, the client may not provide the necessary information in the required time. Either way, these may result in time constraints, which is a limitation of external audits.
- ii. There are threats that may exist to an auditor's independence and objectivity. These include self-review, self-interest, intimidation, advocacy, and familiarity threats. If any of these threats exists for any auditor or the audit firm, the external audit may be discredited. Threats to independence and objectivity are inherent

limitations of external audits.

- iii. The use of professional judgment can be critical for any audit process, and the same applies to external audits. Auditors may need to use their professional judgment anywhere necessary to make decisions. For example, auditors must use their professional judgment to determine whether the internal controls procedures of the client are adequate. The inadequacy may pose a limitation to the audit assignment.
- iv. Auditors need to use sampling in various areas where they cannot test the whole population. For example, it is prevalent in the test of controls and details. Auditors use sampling because of time and cost constraints. Most people expect auditors to test the whole population, which is not true. Instead, auditors only examine a specific number of transactions and balances to reach an opinion. This process also introduces sampling risk to an engagement.
- v. The nature of external audits enables auditors to provide only reasonable assurance to clients based on their findings during the engagement. Some clients or users may think of this assurance as absolute whereas auditors do not assure users of the financial viability of the client or its management's effectiveness.
- vi. A lack of adequate understanding of the client's business. External audit may not reveal all the inadequacies in a client's environment if the external auditor does not fully understand the nature of the client's business. This may make most of the weaknesses undetectable.
- vii. Auditors rely on management for certain information and explanations in form of management representation If management is collusive or intentionally misleading, fraud can be well concealed.
- viii. Audits provide reasonable assurance, not absolute assurance. Investigations are purpose-driven, detailed, and specifically designed to uncover fraud or mismanagement.
- b. The factors the firm will have to consider before accepting the investigation assignment on Sleep Insurance Plc.
  - i. Financial stability: Evaluate the client's financial stability and ability to pay for the services. This includes reviewing their financial statements, creditworthiness, and liquidity position.
- ii. Industry knowledge: Consider the firm's familiarity with the client's industry. Having prior experience in the industry can help the firm to understand the client's operations, risks, and regulatory requirements.
- iii. Independence: Ensure that the firm can maintain independence and objectivity while conducting the assignment. Evaluate any potential conflicts of interest, such as financial relationships or close personal ties with the client.
- iv. Expertise and resources: Assess the firm's expertise and resources to handle the client's specific needs. Consider factors such as the size of the investigating team, their experience with similar clients, and the availability of specialised skills.
- v. Time and resources: Evaluate the firm's capacity to complete the assignment within the required timeframe. Consider factors such as the availability of staff, workload, and any potential conflicts with other engagements.
- vi. Legal and regulatory requirements: Ensure compliance with legal and regulatory requirements. Assess any potential risks associated with the client's operations, such as legal or regulatory violations, pending litigation, or complex transactions.
- vii. Professional competence: Ensure the firm has forensic accounting and investigative expertise to handle the scope of work.
- viii. Clarity of terms of reference: The scope and objectives of the investigation must be clearly defined, for instance, in this circumstances to state what will be investigated, such as fraud, related party transactions, management misconduct, etc.
  - ix. Access to records and people: Confirm that investigators will have unrestricted access to company records, systems, and personnel.
  - x. Stakeholders' expectations: Align the objectives of the investigation with shareholders' expectations to prevent disputes later.
  - xi. Risk assessment: Assess reputational and litigation risks involved in accepting the assignment.

- c. The form and contents of an investigation report to be provided by the firm are given as follows:
  - i. addresse (client);
  - ii. caveat/limitation of the investigators;
  - iii. executive summary: A concise overview of the investigation's purpose, scope, and key findings;
  - iv. case details: Identifiers, referral source, key dates, and a brief summary of the case;
  - v. incident description: A detailed account of the event being investigated; respective responsibilities of the investigator and addressee (client);
  - vi. subject information: Relevant details about individuals or entities involved;
  - vii. description of the work performed;
  - viii. evidence: A comprehensive log of evidence collected and analysed;
    - ix. interviews: Summaries of interviews conducted, including notes, transcripts, and witness statements; and
    - x. findings: A detailed analysis of the evidence and its implications.
    - xi. recommendations: Specific actions or changes proposed based on the findings;
  - xii. conclusion: A summary of the investigation's results and the rationale for the recommendations;
  - xiii. appendices: Supporting documents like photos, surveillance reports, or expert opinions; and
  - xiv. disclaimer: Clarification that the report is not an audit opinion, and is based on available evidence.

## Examiner's report

The question tests the candidates' knowledge of the peculiarities of external audit as distinct from the features of investigation.

The question was attempted by less than 50% of the candidates and performance was less than average.

The commonest pitfall of some of the candidates was their inability to demonstrate understanding of the differences between audit and investigation and identify the peculiarities in their reporting

Candidates are advised to study and master the contents of the Institute's Study Text and Pathfinders to enhance their performance in future.

# Marking guide

		Marks	Marks
a,	The peculiarities that may make weaknesses		
	undetectable		
	(1 mark each for mentioning any 5 peculiarities)	5	
	(1 mark each for explanation on the 5 points)	5	10
b.	The factors that firm will likely consider before		
	accepting an investigation		
	(1/2 mark each for stating any 4 factors)	2	
	(½ mark each for explaining the 4 factors)	<u>2</u>	4
С.	Form and contents of investigation		
	(1½ mark each for any 4 contents)	6	6
	Total		20

#### **SOLUTION 4**

#### a. i. Background of the Clarity Project

The International Auditing and Assurance Standards Board (IAASB) initiated Clarity Project in response to feedback that International Standards on the Auditing (ISAs) were complex, inconsistent, and difficult to understand or implement uniformly across jurisdictions.

#### ii. Objective of the Clarity Project

to enhance the understandability, consistency, and application of the ISAs, and to ensure that ISAs are clearly written, appropriately structured, and understandable for auditors globally.

#### iii. IAASB Clarity Project Update

In October 2008, the IAASB issued a final *Clarity Project Update* – slightly ahead of the December 2008 date by which the last of the clarified ISAs were to be approved by the Public Interest Oversight Board. The clarified ISAs came into effect for audits of financial statements beginning on or after December 15, 2009.

Key points from this update, which give some background to the project, are as follows:

- i. the Clarity Project was the IAASB's 18-month programme to comprehensively review all of its ISAs and ISQCs to improve their clarity and therefore, the consistency of their application;
- ii. 36 clarified ISAs were issued, along with a clarified ISQC1;
- iii. 16 of the ISAs were substantially revised as well as redrafted and one new ISA (ISA 265) was issued. The other 19 ISAs were redrafted, but not revised;

All the clarified ISAs contain improvements, including:

- identifying the overall objectives of the auditor when conducting an audit in accordance with ISAs;
- setting an objective in each ISA;
- establishing an obligation on the auditor in relation to those objectives
- clarifying the obligations imposed on auditor by the requirements of the ISAs and the language used (using "shall" instead of "should");
- eliminating ambiguity about the requirements which an auditor needs to fulfil; and
- v. the ISAs have a new structure with Introductory Material, Objectives, Definitions, Requirements and Application and Other Explanatory Material presented in separate sections in the ISA.
- b. *The Code of Corporate Governance for Public Companies in Nigeria* states what the duties and responsibilities of the Audit Committee should be. The duties and responsibilities include:
  - i. assist in the oversight of the integrity of the company's financial statements, compliance with legal and other regulatory requirements, assessment of qualifications and independence of external auditor, and performance of the company's internal audit function as well as that of external auditors;
  - ii. establish an internal audit function and ensure that there are other means of obtaining sufficient assurance of regular review or appraisal of the system of internal controls in the company;
  - iii. ensure the development of a comprehensive internal control framework for the company, obtain assurance and report annually in the financial report, on the operating effectiveness of the company's internal control framework;
  - iv. oversee management's process for the identification of significant fraud risks across the company and ensure that adequate prevention, detection and reporting mechanisms are in place;
  - v. at least on an annual basis, obtain and review a report by the internal auditor describing the strength and quality of internal controls including any issues or recommendations for improvement, raised by the most recent internal control review of the company;
  - vi. discuss the annual audited financial statements and half yearly unaudited financial statements with management and external auditors;
  - vii. discuss policies and strategies with respect to risk assessment and management;

- viii. meet separately and periodically with management, internal auditors and external auditors;
  - ix. review and ensure that adequate whistle-blowing procedures are in place and that a summary of issues reported are highlighted to the chairman;
  - x. review, with the external auditor, any audit scope limitations or problems encountered and management's responses;
  - xi. review the independence of the external auditors and ensure that where nonaudit services are provided by the external auditors, there is no conflict of interest;
- xii. preserve auditor's independence, by setting clear hiring policies for employees or former employees of independent auditors;
- xiii. consider any related party transactions that may arise within the company or group;
- xiv. invoke its authority to investigate any matter within its terms of reference for which purpose the company must make available the resources to the internal auditors with which to carry out this function, including access to external advice where necessary; and
- xv. report regularly to the board.

## The objectives of the Audit Committee include, to:

- i. ascertain whether the accounting and reporting policies of the company are in accordance with legal requirements and agreed ethical practices;
- ii. review the scope and planning of audit requirements.
- iii. review the findings on management matters in conjunction with the external auditor and departmental responses thereon;
- iv. keep under review the effectiveness of the company's system of accounting and internal control;
- v. make recommendations to the Board in regard to the appointment, removal and remuneration of the external auditors of the company; and
- vi. authorise the internal auditor to carry out investigations into any activities of the company which may be of interest or concern to the committee.

#### Examiner's report

The question tests the candidates' knowledge of the IAASB's Clarity Project, the Audit Committee and the Nigerian Code of Corporate Governance.

The question was attempted by about 50% of the candidates and the performance was just average.

The common pitfalls were the candidates' inability to display understanding of the project and the concepts of the Nigerian Code of Corporate Governance.

Candidates are advised to be conversant with the Nigerian Code of Corporate Governance, read the Institute's Study Text and Pathfinders to enhance their performance in the future.

## Marking guide

		Marks	Marks
a,	A brief statement on the IAASB's clarity project		
	(1 mark each for any 3 points on brief statement		
	including the key points)	3	
	1 mark each for any two update on background)	2	
	(1 mark each for any 3 ISA's improvements)	3	8
b.	Code of corporate governance for public		
	companies for duties and responsibilities		
	(1 mark each for any 9 codes)	9	
	Objectives of audit committee		
	(1 mark each for any 3 objectives)	3	12
	Total		20

## **SOLUTION 5**

- a. The likely procedures to be applied on the assurance engagement
  - i. Where the audit firm has no previous knowledge of the entity, it should obtain sufficient knowledge of the entity and its environment. He should also understand the nature of the information to be examined.
  - ii. The nature of the assumptions that have been made by management (whether they are best estimate assumptions for a forecast, or hypothetical assumptions for the purpose of making a projection). If best estimate assumptions have been used in preparing the Prospective Financial Information (a forecast), the auditor should seek evidence to support these estimates.

- iii. If hypothetical assumptions have been used (to prepare a projection), the auditor should assess whether they are realistic and sensible, and whether the full implications of the hypothetical assumptions have been properly reflected in the Projected Financial Information.
- iv. The auditor should assess whether the Projected Financial Information contains all the relevant material items and that nothing of significance has been omitted.
- v. If part of the 'future period' in the forecast or projection has already passed, the auditor should review the actual results for that part of the period and compare actual results with the forecast or projection. The differences will help the auditor to assess the reliability of the forecast or accuracy of the projection.
- vi. The auditor should also check the arithmetical accuracy and consistency of the projected financial information that has been prepared.
- vii. The auditor should obtain representations from management on:
  - management's acceptance of responsibility for the information;
  - the intended use of the information; and
  - the completeness of the assumptions that were made to prepare the prospective financial information;
- viii. Establish whether the information will be for general distribution or limited distribution to a small number of users;
- ix. Confirm the time period covered by this information;
- x. Assess risk disclosures: Evaluate whether major business risks are appropriately identified and disclosed;
- xi. evaluate ethical and independence concerns: Confirm that the professional services firms are ethically sound and demonstrate competence.
- xii. Document and review: Properly document all procedures performed. Conduct internal review and quality control in line with ISQC 1/ISQM 1.
- b. When deciding the nature, timing and extent of the procedures required to complete this assurance engagement, the auditor should consider the following issues:
  - i. The likelihood of material misstatement in the forecast or projection;
  - ii. The knowledge that the auditor has obtained during any previous similar engagements;
  - iii. The competence of the client's management with regard to the preparation of prospective financial information;
  - iv. The extent to which the prospective financial information is affected by management's judgment (in other words, to what extent does the

prospective financial information depend on judgment about best estimates or hypotheses);

- v. The adequacy and reliability of the underlying data and assumptions that have been used as the basis for preparing the prospective financial information;
- vi. Complexity of operations: New educational institutions may have unpredictable variables, thus procedures must be more robust;
- vii. Intended use of the report: Since the report is for investors and lenders, a high level of assurance is expected;
- viii. Availability of evidence: The extent of available data and third-party corroborations (e.g., market studies) will shape the depth of review;
- ix. Risk assessment: Identify areas with high risk of material misstatement (e.g., unrealistic revenue forecasts, understated costs); and
- x. Deadline (Timing): Given the December 31, 2024, submission date, plan a staged review and prioritise higher-risk areas early.
- c. A report from the assurance firm on prospective financial information should contain the following elements:
  - i. title;
  - ii. addressee;
  - iii. identification of the prospective financial information (for example by page references to pages);
  - iv. a reference to the International Standards on Assurance Engagements.
  - v. a statement that management is responsible for the prospective financial information, including the assumptions on which it is based;
  - vi. a reference to the purpose of the prospective financial information and/or the restricted distribution of the report to a limited number of users;
  - vii. an statement of negative assurance as to whether the assumptions that management have made provide a reasonable basis for the prospective financial information;
  - viii. an opinion as to whether the prospective financial information is properly prepared on the basis of these assumptions, and whether the Prospective financial information is presented in accordance with the relevant financial reporting framework;
  - ix. the report should also contain warnings (caveats) that the prospective financial Information is a forecast or projection, and the results indicated by it might not be achieved; and
  - x. date, address and signature of the accountant/auditor.

## Examiner's report

The question tests the candidates' knowledge of assurance engagements and their reporting.

The question was attempted by about 60% of the candidates but the performance was below average.

The commonest pitfall was the candidates' inability to discuss assurance engagement and their specific reporting requirements.

Candidates are advised to cover the syllabus adequately and read the Institute's Study Text and Pathfinders when preparing for subsequent examinations.

## Marking guide

		Marks
a.	The procedures to be adopted or applied on	
	assurance engagement	
	(1 mark each for any 6 procedures)	6
b.	The nature, timing and extent of the	
	procedures required for assurance	
	engagement	
	(1 mark each for any 3 points mentioned)	3
С.	Elements of assurance reports	
	(1 mark each for any 6 points mentioned)	6
	Total	15

# **SOLUTION 6**

#### a. The objectives of the auditor as per ISA 200

- i. To obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error. This allows the auditor to give an opinion on whether or not the financial statements have been prepared in accordance with the applicable financial reporting framework.
- ii. To report on the financial statements, and communicate as required by the ISAs, in accordance with the auditor's findings. ISA 200 requires the auditor to:
  - comply with all ISAs relevant to the audit;
  - comply with relevant ethical requirements;
  - plan and perform an audit with professional skepticism; and

- exercise professional judgment in planning and performing an audit.
- iii. Obtain sufficient and appropriate audit evidence to allow him to obtain reasonable assurance.
- b. With respect to the audit and contrary to what many members of the public think, it is management and those charged with governance who are responsible for:
  - i. prevention and detection of fraud;
  - ii. preparation of the financial statements; and
  - iii. design and implementation of effective internal controls.

They are also responsible for:

- i. providing the auditor with:
  - access to information relevant to the preparation of the financial statements;
  - additional information relevant to the audit;
  - unrestricted access to persons whom the auditor needs access to in order to complete the audit; and
- ii. providing written representations to the auditor at the end of the audit.

# c. The reasons why auditors may not detect fraud

- i. Collusion among employees: Fraud involving collusion is harder to detect due to false evidence and cover-ups.
- ii. Management override of controls: Senior staff (eg marketing team or procurement) may override systems to conceal theft of fictitious expenses.
- iii. Inherent limitation of audit: Audits are designed to detect material misstatements, not guarantee fraud detection.
- iv. A desire not to know.
- v. Failure to brainstorm potential fraud schemes and scenarios (lack of proper risk assessment).
- vi. Personal relationships with clients.
- vii. Lack of experience.
- viii. Lack of awareness or recognition of an observable condition indicating fraud.
  - ix. Over reliance on client representations.

# d. The procedures to reduce expectation gap

- i. Users must understand that auditor can only provide reasonable assurance and not the absolute and what are inherent limitations of the audit.
- ii. Users must understand that general purpose financial statements are meant for general needs of users and even if they have been audited in a best way possible it does not mean audited financial statements can help in every decision making situation.
- iii. Users must realise that auditor's work is relative to circumstances that require use of judgment which may be wrong. Although auditor works diligently, it does not always mean if judgment is wrong then auditor is guilty of ignorance, rather it will be assessed based on what auditor could possibly do and what he actually did.
- iv. Although management is required to produce financial statements in a way that are easy to understand but, users are also expected to have certain degree of relevant knowledge on how to use and interpret financial statements. Financial statements are not for everyone to read and act upon;
- v. For auditors to understand users' expectations, workshops or seminars would have been arranged so that users at least feel that they have been heard. Auditor must not rule out everything on the basis of lack of knowledge on part of users.
- vi. Auditor must make audit reports easy to understand for the users and avoid to great extent any technical jargon that can .impair ordinary person's understanding who lack skillful insight of financial statements.
- vii. Auditor is already providing less than absolute assurance so he must not leave any effort undone to maintain reasonable level of assurance by complying with the requirements of relevant auditing standards. For example, proper planning, appropriate understanding of entity to design further audit procedures, maintaining skeptic attitude, reducing sampling risk to an appropriate level.
- viii. Incorporate risk-based auditing: Tailor the audit to focus more on areas of defalcation, receivables, and procurement based on past issues.

# Examiner's report

The question tests the candidates' knowledge of the objectives of audit, the responsibilities of those changed with governance, and expectation gap.

The question was attempted by most of the candidates because of the components in the question but the performance was average.

The commonest pitfall of the candidates was their inability to distinguish the respective responsibilities of the parties involved in the preparation and audit of the financial statements.

Candidates are advised to read relevant materials to enhance their performance in the future.

# Marking guide

		Marks
a.	Overall objectives of an auditor as per, ISA 200	
	(1 mark each for stating any 3 objectives)	3
b.	Responsibilities for those charged with	
	governance	
	(1 mark each for any 4 responsibilities)	4
С.	Reasons for auditors inability to detect fraud:	
	(1 mark each for any 3 reasons)	3
d.	The procedures to reduce the expectation gap	
	(1 mark each for any 5 points)	5
	Total	15

## **SOLUTION 7**

- a. The purpose of Control Objectives for Information and Related Technologies (COBIT) is to provide management and business process owners with an information technology (IT) governance model that helps in understanding and managing the risks associated with IT.
  - COBIT helps to bridge the gaps between business risks, control needs and technical issues. It is a control model to meet the needs of IT governance and ensure the integrity of information and information systems.
  - COBIT is all about doing the right things the right way in order to deliver benefits to the client including:
  - more effective management of IT ensuring that the client's business follows best practice;
  - ensuring the IT associated with growing or new areas of the business is effective;
  - enabling the client's business to be compliant with regulations; and
  - increasing the confidence of the client's suppliers and customers with regard to the security and quality of their data.

The benefits of applying COBIT include:

- i. increased reliability of IT operations and reduction of IT risks (e.g. hacking;
- ii. increased efficiency of audit as auditors have assurance over the IT systems;
- iii. helps to build strong controls around IT and financial systems, reducing the risk of fraud, errors, and system downtime; and
- iv. COBIT identifies, assesses, and mitigates IT-related risks, especially critical in pharmaceuticals where patient and drug data are sensitive.
- b. Audit software is a computer program used by the auditor to extract information from a client's computer-based information system, for use in the audit.

The main types of audit software include:

- i. Interrogation programs, to access the client's files and records, and extracting data for auditing;
- ii. interactive software, for use in interrogation of on-line computer systems; and
- iii. 'resident code' or 'embedded software', to monitor and review transactions as they are being processed by the client's programs. This type of software is called embedded audit facilities.

The importance of adopting audit software for business includes:

- i. to enable the auditors have an ability to test the completeness and accuracy of the electronic processing itself (the computer software), rather than relying only on testing the accuracy and completeness of inputs and outputs;
- ii. to give the auditor an ability to test a larger number of transactions in a relatively short amount of time: testing larger amounts of data reduces the overall audit risk;
- iii. to allow the auditor to test the effectiveness of controls that are programmed into the computer software;
- iv. real-time monitoring: Allows centralised monitoring of sales, purchases, inventory, and cash across all outlets;
- v. detection of anomalies and fraud: Flags unusual transactions, duplicate invoices, and unauthorised access to systems;
- vi. supports remote auditing: Especially useful since your outlets are in different towns-audit tasks can be performed without needing to be on-site;
- vii. better data analytics: Enables detailed trend analysis on for example drug sales, pricing, and supplier performance using visualisation and dashboard tools;
- viii. improved documentation and reporting: Produces automated audit trails, reports, and work papers that are easily retrievable and reviewable; and

ix. regulatory readiness: Helps maintain compliance with industry-specific audit and financial reporting requirements (e.g., IFRS, tax laws).

#### Examiner's report

The question tests the candidates' knowledge of the requirements of Control Objectives for Information and Related Technologies (COBIT), the use, and importance of adopting audit software.

About 50% of the candidates attempted the question but the performance was just average.

The commonest pitfall was the candidates' inability to discuss the relevant information technologies in the audit process.

The candidates are advised to be conversant with the Control Objectives for Information and Related Technologies (COBIT) and read the Institute's Study Text and Pathfinders.

## Marking guide

	yunut		1
		Marks	Marks
	resentation showcasing the benefits of polying COBIT		
	I mark each for explanation of any 4 points) I mark each for mentioning any 3 points on the	4	
b	enefits)	3	7
	he use of audit software and importance of		
a	dopting it.		
T	he main types of audit software		
(1	L mark each for mentioning 2 types of audit		
SC	oftware)	2	
	I mark each for mentioning any 6 points on		•
a	dvantages of audit software)	6	_8_
Τ	otal		<u>15</u>

# THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA



# **PROFESSIONAL LEVEL EXAMINATION – MAY 2025**

# CASE STUDY

# **EXAMINATION INSTRUCTIONS**

#### PLEASE READ THESE INSTRUCTIONS BEFORE THE COMMENCEMENT OF THE PAPER

- 1. Check your pockets, purse, mathematical set, etc. to ensure that you do not have prohibited items such as telephone handset, electronic storage device, programmable devices, wristwatches or any form of written material on you in the examination hall. You will be stopped from continuing with the examination and liable to further disciplinary actions including cancellation of examination result, if caught.
- 2. Write your **EXAMINATION NUMBER** in the space provided above.
- 3. Do **NOT** write anything on your question paper **EXCEPT** your Examination number.
- 4. Do **NOT** write anything on your docket.
- 5. Read all instructions in the question paper carefully before answering the questions.
- 6. All solutions should be written in **BLUE** or **BLACK INK**. Any solution written in **PENCIL** or **any other COLOUR OF INK** will not be marked.
- 7. Check that you have collected the correct question paper for the examination you are writing.

## THURSDAY, MAY 22, 2025

#### DO NOT TURN OVER UNTIL YOU ARE TOLD TO DO SO

# THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

# **PROFESSIONAL LEVEL EXAMINATION – MAY 2025**

# **CASE STUDY**

Time Allowed: 4 hours (including reading time)

# INSTRUCTION: YOU ARE TO USE CASE STUDY ANSWER BOOKLET FOR THIS PAPER

# **PRE-SEEN**

This material is issued prior to the examination date to enable you familiarise yourself with the case scenario so that you can undertake any research and analysis that you may deem fit. This pre-seen part of the Case Study examination is also published on the Institute's website: <u>www.ican.org/ican/students</u>.

You **MUST NOT** bring this material with you to the Examination Hall. Upon receipt of this material, you are required to spend the next few days to the examination date to familiarise yourself with the information provided, carry out any additional research and/or analysis about the industry, together with the relevant developments and analyse the financial results provided in preparation for the examination. You should note that the use of pre-seen part of the Case Study will not significantly help you in answering all the questions during the examination. It is essential that you carry out sufficient analysis on your own so that you can leverage the pre-seen part of the case scenario as appropriate during the examination.

At the start of the examination, you will receive the complete case scenario which will include both the pre-seen and the unseen which includes the questions to be answered. You must use the answer booklet provided by ICAN in the Examination Hall. Any solution presented on other papers **WILL NOT** be marked.

## Assessment of the Case Study

The marks in the Case Study examination are awarded for professional skills and are approximately allocated as follows:

	Assimilating and using information	20%
►	Structuring problems and solutions	20%
►	Applying judgement	20%
►	Drawing conclusions and making recommendations	20%
►	Demonstrating integrative and multidisciplinary skills	10%
▶	Presenting appropriate appendices	10%

Of the total marks available, 20% will be assigned to the executive summary section of your response and approximately 10% will be assigned to your proper consideration of ethical issues within your answer to the requirements. Although ethical issue is not specific requirements of this paper, as they have been tested in other subjects of the ICAN professional examination, They will be test within a requirement which may include any of the following areas:

- Lack of professional independence or objectivity;
- Conflicts of interest among stakeholders;
- > Doubtful accounting and or creative accounting practice;
- Unethical business/commercial practice; and
- Inappropriate pressure to achieve a reported result.

You should note that marks are not awarded for simply restating facts from the case scenario, but marks are awarded for demonstrating professional skills and technical depth. Therefore, to succeed, you are required to:

- > Show sufficient evidence of knowledge of the case scenario;
- Be able to carry out appropriate analysis of the issues involved and suggest feasible solutions to the problems identified;
- Demonstrate ability to make informed judgement on the basis of analysis carried out; and
- Generate reasoned conclusions upon which relevant recommendations are made.

Omission of any of the above will diminish your chance of success in the examination.

#### **Case Study: Defcon Manufacturing Limited (Defcon)**

# List of exhibits

- **Exhibit 1:** About you (Matthew Idemudia)
- **Exhibit 2:** The Nigerian economy
- **Exhibit 3:** The Nigerian diaper and sanitary pad industry
- **Exhibit 4:** Defcon Manufacturing Limited
- **Exhibit 5:** Defcon's response to environmental and sustainability concerns

# About you (Matthew Idemudía)

You are **Matthew Idemudia**, an accounting graduate, writing the Professional level of ICAN examination. You are employed as Finance and Business Analyst by Defcon Manufacturing Limited. You report to Tarfa Gambari, the company's Director of Finance.

Your responsibilities include:

- Preparing detailed financial analyses and reports on the performance of the company;
- Analysing company's financial statements to identify areas of weaknesses and proffering likely solutions to correct the anomalies;
- Assessing operational and strategic business proposals to see how each aligns with the company's strategic objectives and impact on business and financial risks;
- Assessing the company's financial and business forecasts together with the assumptions upon which they are based to form judgements, conclusions and recommendations in form of report to the board;
- Analysing the company's internal and external business environments and advising the board on the company's strengths and weaknesses compared to its competitors, and opportunities and threats prevalent in the environment;
- Advising the board and management on sustainability issues and assisting in the preparation of the company's annual sustainability report to stakeholders; and
- Drafting reports for your boss, based on the operational and strategic business analyses you have carried out.

Carrying out these responsibilities effectively demands that you keep yourself abreast with the developments in the accounting and taxation space, and the business environment, both nationally and internationally.

# The Nigerian economy

One key development since the 2023 national elections is the challenging economic situation in Nigeria. The challenges, in turn, have adversely affected the country's socio-economic landscape and macroeconomic performance. However, the new government started immediately with the implementation of various economic policies, such as floatation of the Naira, removal of petroleum subsidy, etc, to address the socio-economic challenges, optimise the country's potentials, and attain crucial developmental objectives. These reforms seem to have temporarily constrained the performance of the real sector, thus suppressing overall economic outcomes. Furthermore, the Russia-Ukraine crisis and the resulting disruptions in the global supply chain, alongside energy and food crises, accentuated economic vulnerability throughout the year. The hikes in the global policy rate in 2023 also had consequential impacts on investment and productivity in Nigeria; thus, impeding economic growth.

As a result of the above, Nigeria's economic growth remained fragile in 2023, marked by escalating inflationary pressures, exchange rate depreciation, and fiscal constraints. These factors hindered productivity, curtailed performance of the real sector, and diminished the positive impact of growth outcomes on the quality of life of Nigerians.

Though Nigeria has the potential to enhance local food and livestock production, the nation still relied heavily on imported agricultural goods to fulfill growing domestic demands, as a result of insecurity and terrorist activities that is impeding farming activities. This dependence not only strained available foreign exchange reserves but also contributed to an escalation of imported inflation due to the depreciation of the local currency. Imported food inflation has been stated to average 20.4 percent in 2023, up from 17.8 percent in 2022.

Also, as a result of the supply chain disruptions and impeded farming activities, food inflation has increased to 33.9 percent in 2023. The elimination of petrol subsidies also had direct effects on fuel and transportation costs, thus increasing both food and non-food prices, as evidenced by the upward trajectory of inflation indices.

In conjunction with global energy prices, the removal of petrol subsidies significantly increased production expenses for majority of Micro, Small, and Medium Enterprises (MSMEs) that heavily depend on petrol as a primary input. In prior periods, the expansion of the Central Bank of Nigeria's (CBN) Ways and Means mechanism contributed to inflation by enlarging the money supply, thereby intensifying pressure on the Naira's value and eroding the purchasing power of the populace.

#### Challenges in the economy

**Unemployment:** One of the most pressing concerns for Nigeria's economy is the high level of unemployment. The youth unemployment rate remains high, contributing to social unrest and instability. The government has made efforts to address this issue through various youth empowerment programmes and initiatives aimed at creating jobs.

**Inflation:** Inflation is another challenge to Nigeria's economy. Rising food stabilisation prices have put a strain on household budgets and contributed to social unrest in some parts of the country. The government has taken steps to address this issue by implementing monetary policies aimed at stabilising prices.

**Exchange rate volatility:** While inflation has been on the rise, eroding the purchasing power of Nigerians and making it difficult for businesses to plan and invest, the exchange rate has also been volatile, leading to uncertainty in the business environment. Addressing these issues will be crucial in restoring confidence in the economy.

**Infrastructure**: Infrastructure remains another key area of concern for Nigeria's economy. Decades of underinvestment have left the country with poor road networks, inadequate power supply, and limited access to clean water. This hampers economic growth and deters investment from both domestic and foreign sources.

#### **Opportunities in the economy**

**Agriculture:** The agricultural sector has shown resilience despite challenges such as climate change and insecurity in rural areas. There has been an increase in investment in agribusinesses and modern farming techniques which is expected to improve food security and boost economic growth.

**Industrial development**: Nigeria's tech industry continues to show great potential for driving economic growth. Startups are emerging across various sectors including fintech, e-commerce, healthtech and digital services that can drive innovation and improve efficiency, among others, which are attracting significant investment both locally and internationally.

**Renewable energy:** With abundant sunlight and wind resources, investing in solar and wind can boost power generation and reduce dependency on fossil fuels.

**Mining and solid minerals:** Nigeria has untapped mineral resources. Developing the mining sector can contribute to economic diversification.

#### **Business environment**

There are many government policies that affect the manufacturing sector, including the diaper and sanitary pad industry. These policies include import tariffs, tax incentives, and regulations that impact production and distribution. In addition, Government regulations regarding environmental pollution, emissions and waste disposal are becoming stricter and there is growing emphasis on sustainable and eco-friendly products. Therefore, manufacturers are increasingly adopting environmentally friendly practices and materials. Manufacturers are also required to comply with other laws and regulations, such as labour laws, health and safety regulations and standards.

The political landscape in Nigeria has been relatively stable, with seamless transition from one civilian government to another. This relative stability, together with growth in population, leads to investor confidence in the economy and friendly business environment.

However, the business environment has been challenged by a number of factors such as:

- Erosion in consumer purchasing power which results in low demand for manufactured products;
- High exchange rate resulting in high cost of manufacturing input;
- Interest rate has gone up astronomically which has led to low investment in the manufacturing sector;
- Removal of petroleum products' subsidy leading to high inflation and further reduction in demand for products;
- The insecurity due to terrorists' activities and clashes between herders and farmers leading to drop in the production of food items and a further worsening of inflation;
- The high unemployment rate and erosion of purchasing power occasioned by high inflation being experienced in the country;
- Inadequate energy supplies and high cost of diesel to power generators for continuous production of goods, which has led to some companies winding down their operations in the country and moving to other countries; and
- Deficit in infrastructure: Most of the roads are so bad that vehicles transporting goods from one location to another may spend days before arrival at their destinations. These, coupled with the risk of kidnapping by terrorists, have hampered business progress.

As a result of the preceding factors, manufacturers are finding it difficult to finance acquisition of modern technology to improve their manufacturing processes, like their counterparts in other climes. Therefore, innovation and sustainable production practices which can lead to more efficient production processes, new products, and higher-quality products continue to elude the sector.

## The Nigerian diaper and sanitary pad industry

A diaper or nappy is a type of underwear that allows one to pass stool or urine in a discreet manner. When diapers become soiled, they require changing. Diapers are primarily worn by babies. However, they can also be used by adults with incontinence or in certain circumstances where access to a toilet is unavailable.

These include the elderly, those with physical or mental disability, people with medical problems and people working in extreme conditions such as astronauts.

A diaper is made up of synthetic disposable materials or cloth whilst disposable diapers are made up of absorbent chemicals and are thrown away after use. Washable diapers are made of several layers of fabrics such as hemp, cotton and bamboo, and are washable and reusable. As a result of advancement in manufacturing technologies and advocacy for green manufacturing, there has been an improvement in the design, biodegradability and safety of diapers, therefore, its use has gained immense acceptance across Nigeria.

The global diaper market has been estimated to reach US\$ 69.5 billion in 2020 and this has been projected to reach US\$ 114.3 billion by 2027, exhibiting a compound annual growth rate (CAGR) of eight point one percent (8.1%) between 2022-2027.

Women Sanitary napkins, also known as sanitary pads, are made of absorbent items and are worn by women primarily for absorbing menstrual blood. They comprise numerous layers of quilted cotton fabric or other super absorbent polymers and plastics. They are manufactured in various shapes and sizes, with different absorption capabilities. The global sanitary pad market was put at a value of US\$ 23.63 billion in 2020 and it has been projected to grow at a compound annual growth rate (CAGR) of four point seven percent (4.7%) between 2021 – 2026.

Therefore, with an estimated population of about two hundred and twenty million (220,000,000) people and an estimated national population growth rate of five-point seven percent (5.7%) per annum, Nigeria has a large, growing and sustainable market for sanitary pads, baby and adult diapers.

Production of sanitary pads and diapers in Nigeria is estimated to be less than twenty percent (20%) of the demand and the rest are being imported into the country. Currently, over \$4 billion worth of diapers were being imported annually into the country, which is detrimental to the economy. The intention of the government is to stop importation and see how available local resources could be used, especially as the country has some companies that are into petrochemicals that can provide the needed raw materials for the sector.

According to a one time Permanent Secretary of the Federal Ministry of Industry, Trade and Investment, the Diapers, Sanitary pads, Napkins and Wipes industry is a strategic tool for national development, particularly in areas of job creation and economic growth. He further described the sector as a developing category with strong growth prospects considering the high fertility and birth rate of Nigerian women, estimated by the United Nations International Children Emergency Funds (UNICEF) to be 5.9 million babies annually.

The shortfall in supply is reversible, since sanitary pads and diapers production is one of the most viable industries that can be established in Nigeria. And with government plan to make the production of sanitary pads and diapers a national developmental issue, there is opportunity for investment in the industry. This is because all the raw and packaging material inputs can be sourced locally. Although the technology for the production of sanitary pads and diapers is imported, the production is not sophisticated. The technology can easily be transferred to experienced workforce in Nigeria.

#### Opportunities and challenges in the industry

The following are the opportunities and challenges that have been identified in the sanitary pad and diaper industry:

## **Opportunities**:

These include:

**High demand:** With a growing population and increasing awareness of hygiene, the demand for sanitary pads and diapers is on the rise. The high birth rate and other uses contribute to the increasing need for diapers;

**Local production potential:** There is a significant supply gap, with a substantial shortfall between demand and current local production of sanitary pads and diapers annually. This gap presents a lucrative opportunity for local manufacturers to meet the demand and reduce dependency on imports;

**Technological advancements:** Improvements in manufacturing technologies have enhanced the design, biodegradability, and safety of these products, making them more appealing to consumers; and

**Government support:** The Nigerian government has shown interest in supporting local production to reduce import dependency and boost the economy.

#### Threats:

These include:

**Economic challenges:** High inflation rates and the rising cost of living have made sanitary products less affordable for many Nigerians. This has led to the emergence of a "sachet economy" where products are sold in smaller, more affordable quantities;

**Competition from imports:** Despite the potential for local production, imported products still dominate the market. This can lead to price fluctuations and affect the profitability of local manufacturers;

**Raw material sourcing:** While many raw materials can be sourced locally, there are still challenges in ensuring consistent quality and supply, which can impact production; and

**Health and hygiene concerns:** The affordability issue has forced some women to resort to unsanitary alternatives like tissue paper and cloths, posing significant health risks.

# Defcon Manufacturing Limited

Defcon Manufacturing Limited was incorporated in February 2005 as a manufacturer of diapers and sanitary pads, and it started operations in March 2005. The company has various product lines, Luxury diapers and sanitary pads, Super diapers and sanitary pads, Simple diapers and sanitary pads and recently Economy diapers and sanitary pads.

Defcon has its factories in three locations across the country, Ikeja, Port Harcourt and Kaduna. However, it has depots in each state capital in the country, from where its distributors are serviced by the Depot Managers.

#### Production and marketing

The company imports about 70% of its raw materials from overseas while the balance 30% is sourced locally. Labour is sourced locally, where the factories are situated. However, the company has a technical director at the head office in Ikeja from where he oversees the production and technical issues.

The Marketing Director oversees sales and marketing activities of the company. Sales force and Depot Managers are controlled by the National Sales Manager, based in Ikeja. Sales promotion and advertisement activities are directed in the head office from the office of the marketing director. There are two Brand Managers, who manage all marketing activities of the two products, diaper and sanitary pads.

#### **Competition in the industry**

Competition is very high in the industry, with four major companies controlling 60% of the market share. These companies are Defcon Manufacturing Limited with 25% market share, Jameson Nigeria Limited with 15% market share, Denton Sanitary Products Nigeria Limited with 12% market share and Limson Products Nigeria Limited with 8% market share. Apart from these four companies, we have twenty other companies that control the balance 40% share of the market.

#### **Board and Management**

#### Board

The company is run by a board of six directors. These are:Chief Adeolu OluwasereChairmanMrs Titi ObadeleManaging directorMr. Andrew YoungTechnical directorMr. Tarfa GambariFinance directorDr. Dorcas AdetoroMarketing directorDr. Timothy ChukwuemekaNon-executive director

## Management

The management team is made up of:

Mrs Titi Obadele Mr. Andrew Young Mr. Tarfa Gambari Dr. Dorcas Adetoro Mr Abraham Ndufe Mr. Tolu Adekola Managing director Technical director Finance director Marketing director Human resources manager Supply chain manager

#### Defcon's response to environmental and sustainability concerns

The current global concern for environmental and sustainability issues in production has made the board to approve that management evolve strategies to embrace green production. Therefore, the management plans to introduce new products that will significantly reduce the adverse environmental impact of its products, while at the same time, providing effective and affordable products to its customers.

The following sustainable production methods for sanitary pads and diapers that focus on reducing adverse environmental impact, while maintaining product effectiveness are being considered:

**Biodegradable materials:** The use of biodegradable and compostable materials such as banana and bamboo fibres to produce sanitary pads and diapers. These materials decompose naturally and reduce plastic waste.

**Organic cotton:** Using organic cotton, grown without synthetic pesticides and fertilisers, to help reduce adverse environmental impact.

**Reusable pads**: Reusable cloth pads made from absorbent cotton materials can be washed and reused multiple times to significantly reduce waste.

**Design and durability:** These pads are designed for durability and comfort, by incorporating multiple layers for better absorbency.

#### **Eco-Friendly manufacturing processes:** Such as:

**Energy efficiency:** Implementing energy-efficient manufacturing processes to help reduce the carbon footprint of production.

**Water conservation:** Introduce techniques to minimise water usage during production.

**Sustainable packaging:** Introduction of compostable materials for packaging to reduce plastic waste and support overall sustainability goals of the company.

# UNSEEN

# Case Study: Defcon Manufacturing Limited

# List of Exhibits

The following exhibits are newly provided and did not form part of the material provided as Pre-seen:

- **Exhibit 6:** Email from Tarfa Gambari to Matthew Idemudia
- **Exhibit 7:** Defcon Manufacturing Limited: 2024 draft financial statements
- **Exhibit 8:** Defcon Manufacturing Limited: Explanatory notes on 2024 draft financial statements
- **Exhibit 9:** New products development

# **Exhibit 10**: Letter from Federal Consumers Protection Agency

# **Defcon Manufacturing Limited: Case Study requirement**

You are **Matthew Idemudia**, an accounting graduate, writing the Professional level of ICAN examination. You are employed as Finance and Business Analyst by Defcon Manufacturing Limited. You report to Tarfa Gambari, the company's Director of Finance.

#### Requirement

You are required to prepare a draft report, as set out in the email dated April 17, 2025 from Tarfa Gambari to you (**Exhibit 6**). Your report should comprise the following:

- a. An executive summary
- b. Responses to the four detailed requirements set out in Exhibit 6, including appropriate appendices.

State clearly any assumptions you have made. All workings should be attached to your answer.

The following time allocation is suggested:

Reading and planning	1 hour
Performing calculations and financial analysis	1 hour
Drafting report	2 hours

## Marks allocation

All of the marks in the Case Study are awarded for demonstration of professional skills, allocated broadly as follows:

Applied to the four elements of your report (as described above)	
Assimilating and using information	20%
Structuring problems and solutions	20%
▶ Applying judgement	20%
Drawing conclusions and making recommendations	<u>20%</u>
	80%
Applied to your report as a whole:	
Demonstrating integrative and multidisciplinary skills	10%
<ul> <li>Presenting appropriate appendices</li> </ul>	<u>10%</u>
	<u>100%</u>

Of the total marks available, 20% are awarded for the executive summary and approximately 10% for the relevant discussion of ethical issues within your answer to the requirements.

Ensure that you address the four requirements in your report or failure to address any requirement including not submitting an executive summary will adversely affect your chances of success. In addition, as indicated above, all four skills areas will be assessed under each of the four elements of your report. Accordingly, not demonstrating your judgement or failing to include appropriate conclusions and/or recommendations in your report will also adversely affect your chances of success.

# Email from Tarfa Gambari to Matthew Idemudia

From: Tarfa Gambari

**Sent:** 17 April 2025

**To:** Matthew Idemudia

**Subject:** Review of draft financial statements and products development

You are welcome back from your holiday, and I hope you found enough time to rest. As you know, we are now in our peak period in the office as we need to prepare for the board meeting coming up in May.

The company's draft financial statements have just been submitted to me and 1 will want you to carry out a review of the same, as this will form the basis of my report to the board. You will recollect that the company is currently on an expansion drive and have added some products to its line during the year. It has also taken some long- term loan to finance this expansion. I herewith supply you with few points that will be relevant when reviewing the financial statements. I have attached this as an appendix to the financial statements.

Also, as the company's response to environmental concerns and the green revolution, it is proposing to introduce two eco-friendly products, *Biodiap* and *Biopad*. The marketing director has provided details about this project which I am also attaching to this email. You are to evaluate the products and provide report on whether they have a positive contribution to the company's bottom line, after considering all relevant costs.

I want you to submit to me a report on the assignment in two weeks, ahead of the board meeting. Your report should include:

- a. A stance for inclusion in an advocacy paper, for the Board's review and subsequent approval, soliciting government's expansion of the National Development Policy to accommodate the sector, given its considerable potential contribution to the national economy, and while identifying the incentives that will bring about a realisation of the gains from the sector.
- b. A review of the draft financial statements, covering management's performance on profitability, liquidity and financial management, and operational efficiency. You are to take into consideration the explanatory notes on the financial statements attached to the draft financial statements.

- c. Evaluation of the two proposed products to show possible contributions towards the company's bottom line after taking cognisance of all relevant costs.
- d. An extract to be included in the company's annual sustainability report and your advice to the Board on how to address the potential challenges (considering Defcon's response to environmental and sustaininability concerns together with the letter from the Federal Consumer Protection Agency) from the perspective of Defcon's profitability and sustainability.

I attach herewith Exhibits 7 to 10 in connection with the assignment. Also, if you check your files, you will see details about the economy and Nigerian business environment, the Nigerian diaper and sanitary pad industry together with the company's response to environmental and sustainability concerns. All these should be able to assist you in drafting your report.

I look forward to receiving your report.

# Tarfa

# Defcon Manufacturing Limited Draft financial statements

# Statement of financial position as at December 31:

Assets	2024 ₩m	2023 №m
Non-current assets		
Property, plant and equipment	277	209
Investment in associate	70	0
Available for sale investments	150	140
	497	349
Current assets		
Inventories	145	65
Receivables	234	131
Cash and cash equivalents	<u>-</u>	<u>72</u>
	<u>379</u>	<u>268</u>
Total assets	<u>876</u>	<u>617</u>
Equity and Liabilities		
Equity		
Share capital (#1 equity shares)	150	100
Revaluation reserve	65	32
Other reserves	33	22
Retained earnings	<u>394</u>	<u>369</u>
Total equity	642	523
Non-current liabilities		
Long-term borrowings	100	30
Current liabilities		
Payables	99	64
Short-term borrowings (overdraft)	<u>35</u>	<u>-</u>
	<u>134</u>	<u>64</u>
Total liabilities	<u>234</u>	<u>94</u>
Total equity and liabilities	<u>876</u>	<u>617</u>
### Statement of comprehensive income for the year ended December 31:

	2024	2023
	₩m	₩m
Revenue	1,315	1,011
Cost of sales	<u>(1,029)</u>	<u>(752)</u>
Gross profit	286	259
Administrative expenses	(57)	(82)
Distribution costs	(144)	(101)
Finance costs	(10)	(3)
Share of profit of associate	<u>40</u>	<u>-</u>
Profit before tax	115	73
Income tax expense	<u>(35)</u>	<u>(32)</u>
Profit for the year	80	41
Other comprehensive income:		
Revaluation gain on property, plant and equipment	40	13
Gains on available for sale investments	16	6
Tax effects of other comprehensive income	<u>(12)</u>	<u>(8)</u>
Other comprehensive income for the year, net of tax	<u>44</u>	<u>11</u>
Total comprehensive income	<u>124</u>	<u>52</u>

#### Explanatory notes to the draft financial statements

# The following notes are background information regarding the draft financial report for 2024:

- 1. In October 2023, Defcon introduced new range of diaper and sanitary pads that are relatively cheaper models of the existing ones. This has increased the company's market share and created a more diversified customer base;
- 2. The board decided to outsource the company's payroll administration as a way of reducing its escalating fixed overheads. This has led to a significant reduction in administrative expenses;
- 3. The company is presently experiencing liquidity squeeze, hence the board has decided not to pay cash dividends in the year ending December 2024 to its shareholders. In lieu of cash dividend, the board decided to give a share bonus of 1 share for 2 shares to the company's shareholders in October 1, 2024; and
- 4. The management is contemplating a long-term borrowing to finance the company's proposed project.

#### New products development

The board has just approved the proposal of the management to introduce two eco- friendly products into the market, '*Biopad*', a sanitary pad model and '*Biodiap*', a diaper model. Both the *Biopad* and the *Biodiap* are eco-friendly products made from bamboo. The Biopad is reusable. Products in this category are normally referred to as biodegradable because bamboo is naturally antibacterial and highly absorbent. Bamboo pads are soft, breathable, and an excellent eco-friendly option.

Using reusable sanitary pads have several benefits, both for customers and the environment, these include:

**Cost-effectiveness:** Although the initial investment is higher, reusable pads can be used several times, saving money in the long run compared to disposable pads;

**Environmentally friendly:** Reusable pads significantly reduce waste. The average woman uses thousands of disposable pads in her lifetime, which end up in landfills. Reusable pads help minimise this environmental impact;

**Healthier option**: Reusable pads will be made from natural materials like bamboo, which are free from the chemicals and synthetic materials found in many disposable pads. This will reduce the risk of skin irritation and allergic reactions;

**Comfort:** Reusable pads are more comfortable than disposables. They are often softer and more breathable, which can be especially beneficial during long periods of wear;

**Support for Women in Need:** Reusable pads support social causes, such as providing menstrual products to women and girls in need; and

**Customisable:** Reusable pads will come in various sizes and absorbency levels, allowing users to choose the best fit for their needs. They will also be more discreet and quieter to change.

The rising cost of living and inflation in Nigeria have significantly impacted the prices of sanitary products. Despite the higher initial cost, eco-friendly options can be more economical over time and are better for the environment.

#### Selling price per pack

*Biopad* – A pack containing 12 pieces - №1,500; and *Biodiap* – A pack containing 12 pieces - №6,000

#### **Production cost**

#### Raw materials

The two products will be produced on the company's existing machineries. However, there will be need to buy a specialist machine to convert the bamboo into usable raw material for their production. The specialist machine will cost \$25m and will have a life span of 5 years with annual processing capacity of 60 tons of bamboo. A ton of Bamboo costs \$12,000. Each ton of processed bamboo will produce 12,000 pieces of *Biopad* or 3,000 pieces of *Biodiap*. The machine will have no residual value at the end of its life span. It is projected that the company will be able to sell all units produced per annum.

Other material costs for producing each of the two products are as follows:

	Bíopad	Bíodíap
	₦	₩
Other materials - per piece	15	150
Packaging materials - per piece	10	50

#### Marketing and distribution expenses

The company will incur additional marketing and distribution expenses of ₦1.2m, made up of 60% variable and 40% fixed. These expenses will be distributed equally between the two products.

It is expected that these two products will displace two other existing products currently being produced by the company, as follows:

*Biopad* will displace an existing sanitary pad that contributes N250 per pack; and *Biodiap* will displace an existing diaper that contributes N950 per pack.

The company does not currently hold any raw materials inventory for the two products that will be displaced.

#### Production and marketing of *Biopad* and *Biodiap*

The Marketing director has advised that the available annual tonnage of bamboo will be split 60% and 40% between *Biopad* and *Biodiap* respectively.

#### Letter from Federal Consumers Protection Agency

Plot 5, Cardoso Street Garki Abuja

September 15, 2024

Managing Director/CEO Defcon Manufacturing Limited 10 Kodesho Street Ikeja Industrial Estate Ikeja.

Dear sir,

#### Unhygienic products: Diaper and Sanitary pads

This is to bring to your attention the complaints we have recently received from consumers in respect of your products.

Consumers are experiencing itching after using some brands of your diaper and sanitary pads. These are the ones that your company introduced in the market two years ago, known as Economy diapers and sanitary pads.

You are to withdraw these products from the market immediately, otherwise the Agency will be left with no other choice than to commence action against your company.

We have also commenced a nationwide compilation of list of customers affected by these two products and documentation of their claims. As soon as we have enough evidence and claims, we shall open discussions with your company on the payment of compensation to the consumers concerned.

Accept the assurances of our highest esteem.

#### James Ibazebo Dírector General

## Defcon Manufacturing Limited Marking Key

First Marking

DATE CANDIDATE NO.

TIME

MARKER NUMBER

	Exc. Summary	Req 1	Req 2	Overall	TOTAL
SA					
CA					
BC					
NC					
V					
Total	5	8	8	4	25

#### **Executive Summary : Defcon Manufacturing Limited**

4							- 2. Conc	luciona	
1.	General				4. K	equiremen	t 2: Conc	lusions	
•	States the purpose States the summa States the assum States reservation	ary of the r ptions	requirements	5	<ul> <li>Concludes on the viability of the introduction on Eco-Friendly products in terms of the financial appraisal.</li> <li>Concludes that the production of the products will increase Defcon's bottom line</li> <li>Concludes that the company may need to engage in public relation activities to improve its reputation.</li> <li>Concludes that the company may be required to pay compensation</li> <li>Concludes on the need for further market research</li> <li>Concludes on the need for government to priotise the industry for national growth</li> </ul>			of the financial the products will eed to o improve e required market to	
V	NC	BC	СА	SA	v	NC	BC	CA	SA
2.	Requirement 1	: Conclusi	ons		5. Re	quirement	2: Recon	nmendatio	ns
•	growing cost of a Concludes that to borrowings. Concludes that the distribution costs Concludes that the	sales the company the company the company on payment	company should explore long term company needs to watch its e company may need to provide payment to consumers affected by			e two propentribution. Insider doing company's ke provision Insider carryi the products cure a long to bamboos neoducts	some pub reputation for possib ng out a n in the ma erm contr eded for t	lucts as the olic relation ole compens narket surve nrket. act to guara he productio	th the production of ley have a positive activities to enhance ation payment. by on the acceptance antee the supply on of the two tise the industry for
۷	NC	BC	CA	SA	V	NC	BC	CA	SA
3	. Requirement 1	: Recomm	endations						
•	Manage cost of s Explore long term Exercise effective Start making prov	n loan to op e control ov	er distributio	on costs.					
v	NC	BC	CA	SA					

### Requirement 1: Defcon Manufacturing Limited – Financial statements analyses USES DATA AND INFORMATION 3 USES ANALYTICAL SKILLS (material)

	1. USES D/ APPROP	ATA AND I PRIATELY	NFORMAT	ION		ES ANALY ts) writte	/TICAL SKI n report	LLS (mate	rial
• • • • • •	Uses informat Tarfa Gambar Uses informat notes to the o Uses informat statements. Uses informat diaper and sa Uses informat economy. Uses exhibit 1 Consumer Pro Uses informat Manufacturing	ri. tion in exhil draft financi tion on exhil nitary pad i tion on exhi tion on exhi tion age tion in exhil	bit 8 - Expla ial statemen ibit 7 - Draff bit 3 - The N industry. ibit 2 - The from the Feo ency.	natory hts. t financial Nigeria Nigerian deral	<ul> <li>Explains that distribution cos 2024, although this may be as</li> </ul>			nargin has r 5.70 %in 20 n costs wen be as a res new product dropped fro 024. Int of workin ny is low ge	nover has reduced 24. It up in sult of ts m 13.74% ng capital is eared and
v	NC	BC	CA	SA	v	NC	ВС	CA	SA
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V	NC	BC	CA	SA	v	NC	BC	CA	SA

5. APPLIES PROFESSIONAL SCEPTICISM AND ETHICS	7. CONCLUSIONS (Draws distinct conclusions under a heading)
<ul> <li>Recognises that the financial statements have not been audited and the figures therein may not be accurate.</li> <li>Recognises that the company may incur substantial loss, if the Federal Consumers Protection Agency make good their threat to demand compensation to consumers who have been affected by the company's products</li> <li>Recognises that there is no record that shows that the company's investments available for sale is generating any revenue.</li> </ul>	<ul> <li>Concludes that the company needs to manage its growing cost of sales</li> <li>Concludes that the company should explore long term borrowings.</li> <li>Concludes that the company needs to watch its distribution costs</li> <li>Concludes that the company may need to make provision for compensation as a result of threats from the Federal Consumers Protection Agency.</li> </ul>
V NC BC CA SA	V NC BC CA SA
<ul> <li>6. EVALUATIVE SKILLS AND JUDGEMENT</li> <li>Recognises that the company has not effectively made use of opportunities offered by long term borrowings.</li> <li>Recognises that inventories and receivables went up in 2024.</li> <li>Recognises that the company is effectively using its assets to generate revenue.</li> <li>Recognises that the company's investment in its associate is generating good returns.</li> </ul>	<ul> <li>8. RECOMMENDATIONS (commercial / relevant)</li> <li>Manage cost of sales so that gross profit will not be continuously eroded.</li> <li>Explore long term loan to optimise capital structure.</li> <li>Exercise effective control over distribution costs.</li> <li>Start making provision for likely compensation payment to customers according to the letter from the Federal Consumers Protection Agency.</li> </ul>
V NC BC CA SA	V NC BC CA SA

1. USES DATA AND INFORMATION APPROPRIATELY	3.USES ANALYTICAL SKILLS (material points) written report
<ul> <li>Uses information in exhibit 3 - The Nigeria diaper and sanitary pad industry</li> <li>Uses information on exhibit 2 - The Nigerian economy</li> <li>Uses exhibit 10 - Letter from the Federal Consumer Protection Agency.</li> <li>Uses information in exhibit 4 - Defcon Manufacturing Limited</li> <li>Uses information on exhibit 6 - Email from Tarfa Gambari</li> <li>Uses information in exhibit 5 - Defcon's response to environmental and sustainability concerns.</li> <li>Uses information in exhibit 9 - New product development.</li> </ul>	<ul> <li>Determines the total units of each of the two products to be produced from a ton of Bamboo processed.</li> <li>Determines the total annual production in units and in packs for each of the two products.</li> <li>Determines how the cost of the special machine will be allocated to the cost of production of the two products.</li> <li>Determines how to arrive at the cost of production per unit and per pack of each of the two products.</li> <li>Determines the contributions per unit and per pack of each of the two products.</li> <li>Determine whether the production of the two products will contribute to the bottom line of Defcon.</li> </ul>
V NC BC CA SA	V NC BC CA SA
<ul> <li>2. USES PROFESSIONAL TOOLS AND KNOWLEDGE</li> <li>Calculates how Bamboos will be allocated to the two products.</li> <li>Calculates the projected annual production quantities for the two products.</li> <li>Calculates the annual cost of the specialised machine to the two products</li> <li>Calculates cost of machine per unit/pack for the two products.</li> <li>Calculates the production costs per unit/pack for the two products.</li> <li>Calculates the contributions per unit/pack for the two products.</li> <li>Calculates the two products net contribution to Defcon's bottom line.</li> </ul>	<ol> <li>IDENTIFIES ISSUES AND OPTIONS</li> <li>Identifies that the introduction of the Eco- Friendly products may help the company to improve its profitability.</li> <li>Identifies that the company is low geared, so it can take advantage of long term borrowing to finance the production of the two products.</li> <li>Identifies that the introduction of Eco-Friendly product will project the company as one of the leading environmentally friendly companies.</li> <li>Identifies the need for the company to do a lot of public relation activities to reduce the impact of its products causing itches on the company's reputation.</li> <li>Identifies that the company may need to pay compensation to consumers who were affected by the company's products that are causing itches.</li> <li>Identifies that the new-renewable Eco-Friendly products may not be acceptable by majority based on hygiene.</li> <li>Identifies that there might not be continuous availability of raw materials for the new products.</li> </ol>
V NC BC CA SA	V NC BC CA SA

5. APPLIES PROFESSIONAL SCEPTICISM	7. CONCLUSIONS			
<ul> <li>5. APPLIES PROFESSIONAL SCEPTICISM AND ETHICS</li> <li>Discusses the need for the company to carry out a research on the proposed Eco-Friendly products to determine its acceptance in the market.</li> <li>Discusses the effect the two products causing itching are likely to have on the performance of the two proposed new products in the market.</li> <li>Discusses the possibility of other companies introducing the same types of products which may likely erode the company's projected sales quantities.</li> <li>Discusses the negative effect of the letter from the Federal Consumers Protection Agency on the company's reputation as an environmentally friendly company.</li> </ul>	<ul> <li>7. CONCLUSIONS (Draws distinct conclusions under a heading)</li> <li>Concludes on the viability of the introduction of Eco-Friendly products in terms of the financial appraisal.</li> <li>Concludes that the production of the products will increase Defcon's bottom line</li> <li>Concludes that the company may need to engage in public relation for its reputation.</li> <li>Concludes that the company may need to provide for compensation payment to consumers affected by its two products causing itches</li> <li>Concludes on need for further market research.</li> <li>Concludes on the need to leverage on influential members of the Board for the Government to make the industry strategic for</li> </ul>			
<ul> <li>Discusses the accuracy of the projected cost of production.</li> <li>Discusses the accuracy of the calculated expected revenue from the two products.</li> <li>V NC BC CA SA</li> </ul>	v NC BC CA SA			
<ul><li>6. EVALUATIVE SKILLS AND JUDGEMENT</li><li>Recognises that the company should not have</li></ul>	8. RECOMMENDATIONS (commercial/ relevant)			
problem taking a long term loan to finance the production of the two products because it is low geared.	<ul> <li>Recommends that the company should go ahead with the production of the two proposed products as they have a positive contribution</li> </ul>			
<ul> <li>Recognises that if the two products are successful, they will improve the company's bottom line significantly.</li> </ul>	<ul> <li>Recommends that the company should reconsider doing some public relation activities to enhance its reputation.</li> </ul>			
<ul> <li>Recognises that the company needs to secure suppliers for Bamboo all the year round, so it may need to enter into a long term contract</li> </ul>	<ul> <li>Recommends that the company should make provisions for compensation payment in its books.</li> </ul>			
<ul> <li>with suppliers.</li> <li>Recognises that the company needs to carry out public relation activities to douse the impact of the letter from the Federal</li> </ul>	• Recommends that the company should secure a long term contract to guarantee the supply of bamboos needed for the production of the two products.			
<ul><li>with suppliers.</li><li>Recognises that the company needs to carry out public relation activities to douse the</li></ul>	• Recommends that the company should secure a long term contract to guarantee the supply of bamboos needed for the			

Appendices	Main report	
R1 Appendices	Report: Structure	
<ul> <li>Shows gross profit margin</li> <li>Shows operating profit margin</li> <li>Shows the return on capital employed.</li> <li>Shows net profit margin.</li> <li>Shows net working capital ratio.</li> <li>Shows leverage (gearing) total liabilities to total assets ratio.</li> <li>Shows acid test ratio</li> <li>Shows acid test ratio</li> <li>Shows interest cover</li> <li>Shows debit/equity ratio</li> <li>Shows receivable days</li> <li>Shows inventories turnover days</li> <li>Shows Non-current assets turnover</li> <li>Shows total assets turnover</li> <li>Prepares extract of sustainability report</li> </ul>	<ul> <li>Sufficient appropriate headings</li> <li>Appropriate use of paragraphs / sentences</li> <li>Legible/clear hand writing</li> <li>Correctly numbered pages</li> </ul>	
V NC BC CA S	V NC BC CA SA	
R2 Appendices	Report: Style and language	
<ul> <li>Shows how Bamboos will be allocated to the two products.</li> <li>Shows the projected annual production quantities for the two products.</li> <li>Shows the annual cost of the specialised machine to the two products</li> <li>Shows cost of machine per unit and per pa for the two products.</li> <li>Shows the production costs per unit and per pack for the two products.</li> <li>Shows the contributions per unit and per pa for the two products.</li> <li>Shows the two products.</li> <li>Shows the two products net contribution to Defcon's bottom line.</li> </ul>	<ul> <li>Suitable language for the board</li> <li>Tactful/ethical comments</li> <li>Acceptable spelling and punctuation</li> </ul>	
V NC BC CA S	V NC BC CA SA	

<b>Appendix 1</b> Defcon Manufacturing Limited Financial statements analyses Profitability	2024	2023
Gross profit margin		
(GP/Revenue X 100)	286/1,315 X 100 21.75%	259/1011 X 100 25.62%
Operating profit margin	21.7570	25.0270
(Profit before associate and finance cost)	85/1,315 X 100%	76/1011 X 100%
Not profit marcin	6.46%	7.52%
Net profit margin (Profit before tax exp/Revenue X 100)	75/1315 X 100	73/1011 X 100
Deturn on conital amplexed	5.70%	7.22%
Return on capital employed ROCE/Capital employed X 100)	95 /742 V 100	76/FF2 X 100
	85/742 X 100 11.46%	76/553 X 100 13.74%
Position	11.40%	13.74%
Current ratio		
(Current assets/Current liabilities)	379/134	268/64
	2.83:1	4.19:1.00
Quick ratio - Acid test		
(CA - Inventories/Current liabilities)	234/134	203/64
	1.75 1.00	3.17:1.00
Gearing		
Total assets/Total Liabilities		
(Total liabilities/Total assets X 100)	234/876 X 100	94/617 X 100
	26.71%	15.24%
Debit/Equity ratio		
(Debit/Equity X 100)	100/642 X 100	30/523 X 100
Not interact cover	15.58%	5.74%
Net interest cover (Profit before tax exp/Finance cost)	125/10 12.5 times	76/3 25.3 times
Management efficiency		25.5 (11105
Non-current assets turnover	1,315/277	1,011/209
(Revenue/PPE X 100)	4.75 times	4.84 times
Total Assets turnover	1,315/656	1,011/477
(Revenue/Total assets)	2.0 times	2.1 times
Inventories turnover	145/1,029 X 365	65/752 X 365
(Inventories/Cost of sales X 365)	51 days	32 days

Receivable days	234/1,315 X 365	131/1,011 X 365
(Receivables/Revenue X 365)	65 days	47 days
Payables days		
Payables/Cost of sales X 365	99/1,029 X 365	64/752 X 365
	35 days	31 days
Inventory turnover	1000	
Cost of sales	<u>1029</u> 7.10	75.2
inventory	145 = 71 times	65 = 11.57 times
Receiver Turnover	1315	1011
Revenue/Recoverably	234	131 = 7.72 times
	= 5.61 times	
Payable Turnover	1029	_752
cost of sales/payables	99	64
	= 10.39 times	= 11.75 times

#### Appendix 2 Defcon Manufacturing Limited Evaluation of Biopad and Biodiap

Allocation of bamboo	Tons
allocated: - Biopad (60 X 60%)	36
Biodiap (60 X 40%)	24
	60

Proposed Production quantity	Tons	Units per ton	Total units	Unit per pack total pack	Total packs
Biopad	36	12,000	432,000	12	36,000
Biodiap	24	3,000	72,000	12	6,000
Allocation of cost of machine processing					·
Cost of machine	25,000,000.00				
Life of machine	5 years				
Annual cost (25,000,000/5)	5,000,000				
Allocation to products:					
Biopad (5,000,000 X 60%)	3,000,000				
Biodiap (5,000,000 X 40%)	2,000,000				
Cost of special machine per unit and					
pack	Unit (₦)	Pack	(₩)		
Biopad (3,000,000/12,000)	6.944	6.944 >	(12 83.33)		
Biodiap (2,000,000/3,000)	27.777	27.777	(12 333.33		
Cost of Bamboo	Per Unit (₦)	Per Pack (₦)			
Biopad (36 X 12,000/432,000)	1	1 X 12	12		
Biodiap (24 X 12,000/72,000)	4	4 X 12	48		
Production cost per pack	Biopad (₦)		Biodiap (₦)		
Bamboo	12		48		
Other materials (15 X 12)	180	150 X 12	1,800		
Packaging (10 X 12)	120	50 X 12	600		
Bamboo processing (6.944 x 12)	83.33	666.67 X 12	<u>333.33</u>		
	395.33		2,781.33		
Loss of contribution from products displaced	250		, 950		
		-		-	
	645.33		3731.33		
	198		5/51.55		
	170				

#### Total relevant cost

Selling price	1500		6,000	
Additional contribution	854.67	=	2,268.67	:
<b>Calculation of net additional</b> <b>contribution</b> Additional contribution per annum (854.67 X 36,000) Less Additional marketing and distribution exp	Biopad (₦000) 30,768.1	Biodiap (₦000) 2,268.67 X 6,000	13,612	Total (₦000) 4,4380.1 (1,200) <b>43,180.1</b>

#### Examiner's report

The case scenario is on Defcon Manufacturing Limited, a company manufacturing and distributing diapers and sanitary pads. The Pre-seen case scenario includes: Details about the Nigerian economy and business environment; The Nigerian diaper and sanitary pad industry; Defcon Manufacturing Limited – production and marketing, competition in the industry and management and board. While the Unseen introduces Defcon Manufacturing Limited's 2024 draft financial statements; Explanatory notes to the draft financial statements; New products development; and Letter from the Federal Consumers Protection Agency.

Candidates are required to address the following requirements:

- A stance for inclusion in an advocacy paper for the Board's review and subsequent approval soliciting government's expansion of the National Development Policy to accommodate the sector, given its considerable potential contribution to the national economy, and while identifying the incentives that will bring about a realisation of the gains from the sector;
- A review of the draft financial statements, covering management's performance on profitability, financial engineering and efficiency. You are to take into consideration the explanatory notes on the financial statements attached to the draft financial statements;
- Evaluation of the two proposed products to see whether they will result in additional contributions towards the company's bottom line after taking cognisance of all relevant costs; and
- An extract to be included in the company's annual sustainability report and your advice to the Board on how to address the potential challenges (considering Defcon's response to environmental and sustainability concerns together with the letter from the Federal Consumer Protection Agency) from the perspective of Defcon's profitability and sustainability.

To perform very well in this Case Study, candidates must prepare the following appendices:

#### <u>Requirement 1</u>:

Appendix 1: Ratio Analyses appraising the company's profitability, liquidity and financial management, and operational efficiency;

#### Requirement 2:

Appendix 2: Evaluation of the two proposed products – *Biopad* and *Biodiap*, using relevant costs concept.

The candidates' performance was woeful, as only very few of them scored up to 50%.

The common pitfalls of the candidates are:

- Most of the candidates did not respond appropriately to requirement 2, possibly because they did not understand how to calculate the two products' contribution to the company's bottom line after taking into consideration all the relevant costs.
- Lack of understanding of how to write a formal report with appropriate headings and subheadings to address issues required; and
- Inability to write a good executive summary.

Candidates are advised to practise and perfect the art of report writing, learn to address specific requirements of each Case Study and ensure they bring to bear the knowledge they have gained in other subjects of the professional examination, especially Performance Management and Strategic Financial Management, when preparing for future examinations.