



**THE INSTITUTE OF CHARTERED
ACCOUNTANTS OF NIGERIA**

PATHFINDER

MAY 2026 DIET

SKILLS LEVEL EXAMINATIONS

Question Papers

Suggested Solutions

Examiners' Reports and

Marking Guides

FOREWORD

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 of 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.

NOTES

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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INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA
SKILLS LEVEL EXAMINATION – MAY 2026

FINANCIAL REPORTING

Time Allowed: 3¼ hours (including 15 minutes reading time)

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

SECTION A: COMPULSORY QUESTION (30 MARKS)

QUESTION 1

The following is the trial balance extracted from the books of Fete Renovations Plc on July 31, 2025, the company is engaged in building, renovation and interior decorations.

	N'000	N'000
Retained earnings Aug. 1, 2024		1,212
Ordinary dividend paid	188	
6% Loan notes (issued March 1, 2025)		1,600
Fair value reserve		112
Share premium		2,800
Ordinary shares of 50k each		1,600
Income tax	32	
Trade payables		368
Cash and bank	704	
Inventory at July 31, 2025	496	
Trade receivables	552	
Financial assets	672	
Investment property	2,560	
Revenue		4,816
Accum dep Aug 1, 2024 - plant and equipment		2,480
Plant and equipment at cost	5,200	
Revaluation surplus Aug 1, 2024		480
Accum dep Aug 1, 2024 - Land and buildings		160
Land and buildings (including land N 480,000)	3,200	
Provision for warranty claim		240
Admin expenses	240	
Distribution costs	488	
Cost of sales	1,536	
Total	15,868	15,868

Additional information:

- (i) ~~N~~800,000 was raised on July 31, 2025 through the issue of ordinary shares. This was correctly accounted for by crediting ~~N~~320,000 to ordinary share capital and ~~N~~480,000 to share premium.

- (ii) The loan notes were issued during the year, interest is payable annually in arrears. No interest has been provided for or paid as at July 31, 2025
- (iii) Income tax for the year was estimated at ₦440,000. The balance in the trial balance is a residual amount following the payment of the income tax for the year ended July 31, 2024 and its offset against the provision made that year.
- (iv) The figures for financial assets represent the fair value of equities held at August 1, 2024 plus the costs of equity purchased during the year. As permitted by IFRS 9 "*Financial Assets*" an election was made at the date of purchase to account for any fair value gains or losses on all these financial assets (equity investments) through 'other comprehensive income'. Fete Renovations Plc takes such gains and losses to a separate component of equity. The fair value of the financial assets (equity investments) at July 31, 2025 was ₦500,000.
- (v) Investment properties are accounted for under the fair value model of IAS 40 "*Investment property*". The figure included in the trial balance above represents the fair value of these properties at August 1, 2024. The fair value of these properties at July 31, 2025 was ₦2,800,000.
- (vi) Plant and equipment is being depreciated through cost of sales at 20% per annum on reducing balance basis. On July 31, 2025 a plant which cost ₦800,000 on August 1, 2023 was sold for ₦440,000. The only entries made to record this transaction were to debit cash and credit sales revenue with ₦440,000.
- (vii) Land and building are carried under the revaluation model as permitted under IAS 16 "*Property, Plant and Equipment*". The most recent valuation took place on July 31, 2023, resulting in the values included in the trial balance above. The revaluation surplus of ₦480,000 resulted solely from these land and buildings. The buildings were estimated to have a useful economic life of 17 years as at that date and zero residual value. On July 31, 2025, the land was revalued to ₦400,000 and the buildings to ₦1,800,000. There was no change to the useful life estimates of the buildings. Depreciation is recognised on straight-line basis through costs of sales and no depreciation has yet been charged for the year ended July 31, 2025.
- (viii) Fete Renovations Plc maintains a provision for warranty claims expected to arise in the future for renovation items sold. At the reporting date this provision was carried at ₦240,000. It has been agreed that this provision should be increased to ₦350,000.

You are required to prepare:

- a. Statement of profit or loss and other comprehensive income for the year ended July 31, 2025. (10 Marks)
- b. Statement of changes in equity for the year ended July 31, 2025. (6 Marks)
- c. Statement of financial position as at July 31, 2025 (12 Marks)
- d. Calculate the basic earnings per share for the year. (2 Marks)

(Total 30 Marks)

SECTION B: YOU ARE REQUIRED TO ATTEMPT TWO OUT OF THREE QUESTIONS IN THIS SECTION (40 MARKS)

QUESTION 2

- a. Describe Contract under IFRS 15 *“Revenue from Contract with Customers”*. (1 Mark)
- b. Identify **THREE** criteria under IFRS 15 when entities can recognise contract revenues. (3 Marks)
- c. Explain the following terms under IFRS 15:
 - (i) Repurchase agreement (3 Marks)
 - (ii) Bill and hold arrangements (3 Marks)
- d. Explain the difference between the cost and revaluation model of valuation of Property, Plant and Equipment (PPE) in accordance with IAS 16. (3 Marks)
- e. IAS 16 on Property, Plant and Equipment (PPE) requires an asset to be recognised at original cost in the statement of financial position of an entity. The table below consists of costs to be treated as capital and revenue expenditures in the financial statements.

	₦'000
Clearance of the site prior to the commencement of a property	21,000
Professional surveyors to manage construction	50,000
Administration cost based on time spent	60,000
Staff wages for time spent on construction	30,000
Preoperative expenses	12,000
Import duties on construction materials	20,000
Initial operating losses	4,000
Handling cost on construction materials	18,000

Required:

- (i) Determine the cost of the PPE in accordance with the provision of IAS 16 on Property, Plant and Equipment. (4 Marks)
- (ii) Calculate the amount to be written off to statement of profit or loss. (3 Marks)

(Total 20 Marks)

QUESTION 3

The following is an extract from the financial records of Mandela Nigeria Plc who is currently offering on the Nigerian Exchange (NGX), additional ordinary shares of 50 kobo each at ₦1.50 kobo per share.

Mandela Nigeria Plc
Financial records for the year ended December 31,

	2024	2023	2022	2021
	₦'000	₦'000	₦'000	₦'000
Assets:				
Non-current assets	422,100	346,500	270,900	217,350
Net current assets	230,400	153,600	96,000	80,000
	<u>652,500</u>	<u>500,100</u>	<u>366,900</u>	<u>297,350</u>
Capital and reserves:				
50k ordinary share capital	195,000	96,000	96,000	63,000
Share premium	93,000	93,000	96,000	93,000
General reserve	364,500	311,100	174,900	141,350
	<u>652,500</u>	<u>500,100</u>	<u>366,900</u>	<u>297,350</u>
Revenue and profit:				
Revenue	<u>1,595,750</u>	<u>1,280,500</u>	<u>991,250</u>	<u>705,250</u>
Profit before tax	455,000	338,000	283,250	237,250
Taxation	(146,250)	(74,750)	(97,500)	(94,250)
Profit for the year	308,750	263,250	185,750	143,000
Dividend	(126,000)	(117,000)	(87,000)	(78,000)
Retained earnings	<u>182,750</u>	<u>146,250</u>	<u>98,750</u>	<u>65,000</u>

Required:

- a. Calculate the following ratios for the relevant four years:
- i. Return on capital employed (ROCE) (where capital employed (CE) equal to equity)
 - ii. Earnings per share
 - iii. Dividend per share
 - iv. Dividend cover
 - v. Asset turnover
- (5 Marks)
- b. As a financial consultant, advise a potential investor on the viability of the company and whether or not to subscribe to the company's issue of ordinary shares.
- (4 Marks)
- c. Some analysts have argued that Earnings Per Share and Return on Capital Employed are the best ratios for analysing financial performance of any entity.
- State **FOUR** limitations of each of these ratios as a tool for financial analysis.
- (8 Marks)
- d. Management may use various forms of creative accounting to manipulate the view given by the financial statements while complying with all applicable accounting standards and regulations.
- State **SIX** techniques of creative accounting.
- (3 Marks)

(Total 20 Marks)

QUESTION 4

On April 1, 2024, Blessings Plc acquired 80% of Jigawa Limited's ordinary shares when retained earnings were ₦20 million. The considerations consist of cash of ₦45 million paid on April 1, 2024 and an additional cash payment of ₦22 million payable April 1, 2025. No accounting entries have been made in respect of deferred cash payment. Blessings Limited has a cost of capital of 10%.

The summarised statement of financial position of the two companies as at March 31, 2025 are presented below:

	Blessings Plc ₦'000	Jigawa Ltd ₦'000
Assets:		
Non-current assets:		
Properties	56,000	21,000
Plant	400,000	20,000
Equipment	900	3,800
Investments	60,000	-
	<u>516,900</u>	<u>44,800</u>
Current assets:		
Inventories	24,000	18,000
Trade receivables	38,000	12,000
Bank	5,100	4,200
	<u>67,100</u>	<u>34,200</u>
Total assets	<u>584,000</u>	<u>79,000</u>
Equity and liabilities:		
Ordinary shares of ₦1 each	240,000	30,000
Retained earnings	286,000	28,000
	<u>526,000</u>	<u>58,000</u>
Trade payables	45,000	17,000
Other payables	13,000	4,000
	<u>58,000</u>	<u>21,000</u>
Total equity and liabilities	<u>584,000</u>	<u>79,000</u>

Additional information:

- (i) Blessings Plc values non-controlling interests (NCI) at fair value at the date of acquisition. The fair value of non-controlling interests of Jigawa Limited on April 1, 2024 was estimated at ₦15 million.
- (ii) The fair value of Jigawa's Ltd items of non-current assets, liabilities and contingent liabilities at April 1, 2024 were equal to carrying amount with the exception of plant, which have a fair value of ₦12 million in excess of its

carrying amount. The plant had a ten (10) years remaining useful life on April 1, 2024.

- (iii) On December 2024, Jigawa Limited sold goods to Blessings Plc for ₦8.4 million, earning a gross profit mark-up of 20% on the sale. Blessings Plc still hold ₦5.8 million of those goods in its inventories at March 31, 2025.
- (iv) Jigawa Limited still had full value of ₦8.4million in its trade receivables at March 31, 2025. Blessings Plc's payable only showed ₦3.8million as it made a payment of ₦4.6million which was not recorded by Jigawa Limited until April 3, 2025.

Required:

- a. Prepare the consolidated statement of financial position for Blessings group as at March 31, 2025. (16 Marks)
- b. In the context of IFRS 10 "*Consolidated Financial Statements*", discuss the conditions in which a parent is exempted from preparing consolidated financial statements. (4 Marks)

(Total 20 Marks)

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

QUESTION 5

The Financial Reporting Council of Nigeria (FRC) is structured into a series of directorates to allow it to fulfil its many responsibilities.

Required:

- a. Discuss **FIVE** responsibilities of Directorate of Accounting Standard of FRC. (5 Marks)
- b. Companies and Allied Matter Act (CAMA) 2020 as amended states that every company shall cause accounting records to be kept. The accounting records shall be sufficient to show and explain the transactions of the company. Explain what the accounting records must contain. (4 Marks)
- c. Is there alternative to conceptual framework? Discuss the purpose of conceptual framework and explain its alternative. (6 Marks)

(Total 15 Marks)

QUESTION 6

The International Sustainability Standards Board (ISSB) issued IFRS S1 and S2 to address and provide guidance on general requirements, concepts and disclosures on sustainability compliance in financial statements.

Required:

Within the context of these standards, discuss any **FIVE** of the following sustainability concepts:

- a. Value created, eroded or preserved for others. (3 Marks)
- b. Reasonable and supportable information. (3 Marks)

- c. Connected information. (3 Marks)
- d. Fair presentation. (3 Marks)
- e. Reporting entity. (3 Marks)
- f. Risk management. (3 Marks)

(Total 15 Marks)

QUESTION 7

- a. Jamolaya Nigeria Ltd is a company that deals with exclusive furniture and fittings. The company has carried out its inventory take at the end of its financial year. Included in the company's inventory are the following items:
- (i) A wardrobe that cost the company ₦1,080,000 and normally sells for ₦1,492,500 was damaged and will cost approximately ₦180,000 to repair at which point it can be sold for ₦1,125,000.
 - (ii) A dressing table that was made to a customer's own specifications and cost the company ₦2,748,000 to make, could not be delivered because the customer died. However, due to its unusual design, the dressing table was not easy to sell. After the year-end, the company sold the dressing table for ₦3,375,000, but incurred commission costs on sale of ₦157,500 and delivery costs of ₦237,000.

Required:

Calculate the value that each of the above items will be included in the company's year-end inventory. (5 Marks)

- b. You have been the finance director of Jamolaya Nigeria Ltd for ten years and you are finalising the year-end accounts. You have been advised by the warehouse manager of significant level of slow-moving inventories which are more than nine months old and would normally have been written down some months previously.

The shareholders of Jamolaya Nigeria Ltd are trying to sell the company. The managing director and majority shareholder, Dr. Jamolaya has told you that it is not necessary to write-down the inventory in the year-end financial statements. You are sure that Dr. Jamolaya wants the financial statements to carry an inflated inventory valuation because he has found a prospective buyer.

The managing director (Dr Jamolaya) has indicated to you that, if the proposed deal is successful, all employees will keep their jobs and you will receive a higher remuneration.

Required:

- (i) Identify and explain **FOUR** ethical considerations that might affect you as the finance director. (4 Marks)
- (ii) State the possible course of action that you should take under this situation. (6 Marks)

(Total 15 Marks)

Solution 1

a) **Fete Renovations Plc**
Statement of profit or loss and other comprehensive income for the year ended July 31, 2025

	₦'000
Revenue (4816- 440)	4,376
Cost of sales (1536+160+544)(w2)	<u>(2,240)</u>
Gross profit	2,136
Distribution cost	(488)
Admin expenses (240+ 110) (W3)	(350)
Finance costs (W7)	(40)
Loss on disposal of plant (W2)	(72)
Loss on revaluation of land and building (W1)	(200)
Gain on revaluation of investment properties (W4)	<u>240</u>
Profit before tax	1,226
Income tax (440 + 32) (W6)	<u>(472)</u>
Profit for the year	<u>754</u>
Other comprehensive income (OCI):	
Loss on revaluation of land and building	(480)
Loss on revaluation of financial assets (W5)	<u>(172)</u>
Other comprehensive income for the year	<u>(652)</u>
Total comprehensive income for the year	<u>102</u>

b) **Fete Renovations Plc**
Statements of changes in equity for the year ended July 31, 2025

	Share capital	Share premium	Revaluatio n surplus	Fair value reserve	Retained earnings	Total
	₦'000	₦'000	₦'000	₦'000	₦'000	₦'000
Bal. Aug 1, 2024	1280	2320	480	112	1212	5404
Profit for the year	-	-	-	-	754	754
OCI	-	-	(480)	(172)	-	(652)
Issue of shares	320	480	-	-	-	800
Dividend paid	-	-	-	-	(188)	(188)
Bal July 31, 2025	<u>1600</u>	<u>2800</u>	<u>-</u>	<u>(60)</u>	<u>1778</u>	<u>6118</u>

c)

Fete Renovations Plc
Statement of financial position as at July 31, 2025

	₦'000
Non-current assets :	
Land and building (3,200-1,000)-(160+160-320)	2,200
Plant and equipt.(5,200-800) -(2,480 + 544-288)	1,664
Investment properties (2560+ 240)	2,800
Financial assets (672- 172) W5	<u>500</u>
Total non-current assets	7,164
Current assets:	
Inventory	496
Trade receivables	552
Cash and bank	<u>704</u>
Total current assets	<u>1,752</u>
Total assets	<u>8,916</u>
 Equity and liabilities:	
Ordinary share capital	1,600
Share premium	2,800
Fair value reserve	(60)
Retained earnings	<u>1,778</u>
Total equity	<u>6,118</u>
Non-current liabilities:	
6% loan notes	<u>1,600</u>
Current liabilities :	
Trade payables	368
Provisions for warranty claims (240+110) (W3)	350
Income tax payable (472-32) (W6)	440
Accrued 6% loan notes interest (W7)	<u>40</u>
Total current liabilities	<u>1,198</u>
Total equity and liabilities	<u>8,916</u>

d) **Basic earnings per share (EPS)**

Profit for the year is ₦754,000

Number of shares attributable to calculation of EPS is total number of shares less shares issued at the end of year

$$= (1,600,000 \times 2) - (320,000 \times 2) = 2,560,000$$

$$\text{Basic EPS} = \frac{\text{₦}754,000}{2,560,000} \times 100 = 29.45\text{K}$$

Working notes:

W1(a) Land and buildings

Depreciation for the year ended July 31, 2025 must be charged. As the revaluation occurs on the last day of the year, depreciation for the year is based on the carrying amount pre-valuation.

Building amount = ₦3,200,000 - ₦480,000 = ₦2,720,000 at the last date of revaluation

Useful economic life = 17 years

Annual depreciation is ₦2,720,000/17 = ₦160,000 (This should be charged to cost of sales and added to accm. depreciation.)

W1(b) Revaluation as at July 31, 2025:

	Land ₦'000	Building ₦'000
Carrying value July 31, 2025	480	2,400
Revalued amount July 31, 2025	<u>400</u>	<u>1,800</u>
Revaluation loss	<u>80</u>	<u>600</u>

The total revaluation loss of ₦680,000 exceeds the balance in the revaluation reserve (₦480,000). Hence, the reserve is written off through OCI and the additional loss of ₦200,000 is charged to profit or loss. Accumulated depreciation will be zero.

W2 (a) Plant and equipment

Cost	₦'000 5,200
Accumulated dep August1,2024	(2,480)
Carrying amount	<u>2,720</u>
Therefore, depreciation at 20% (2720 x 0.2)	<u>544</u>

₦ 544,000 should be charged to cost of sales

Note: Depreciation for the year include depreciation on plant disposed of as it was use for the full year.

W2(b) Gain or loss on disposal:

	₦'000	₦'000
Proceeds		440
Carrying amount	800	
Deprn year 1 (to Aug 31, 2024)	(160)	
Less: depr yr2 (current year 20% x (800-160))	<u>(128)</u>	<u>(512)</u>
Loss on disposal		<u>(72)</u>

W3 Provision for warranty claims

Increase in provision is (₦350,000 - ₦240,000) = ₦110,000

W4 Investment properties	₦'000
Value as at July 31, 2025	2,800
Balance per trial balance (T/B)	<u>2,560</u>
Gain on revaluation of investment properties	<u>240</u>

W5 Financial assets	₦'000
Value as at July 31, 2025	₦500
Balance per trial balance	<u>(672)</u>
Loss on revaluation of financial assets	<u>(172)</u>

W6 Income tax	₦'000
Current year estimate	440
Under provision in 2024 per T/B	<u>32</u>
Charged to profit or loss	<u>472</u>

W7 -Interest on loan notes

The loan notes were issued on March 1, 2025. Therefore, 5 months interest should be provided for, $₦1,600,000 \times 6\% \times 5/12 =$ ₦40,000

Examiner's report

The question tests candidates' knowledge of the preparation of final accounts of a limited liability company in the following areas:

- Preparation of statement of profit or loss and other comprehensive income;
- Statement of changes in equity;
- Statement of financial position; and
- Computation of basic earnings per shares (EPS)

Most of the candidates attempted the question and performance was below average

The common pitfalls are:

- In ability to recognise the amount of income tax underprovisions which was provided in the trial balance;
- Some candidates could not correctly treat the excess deficit arising from revaluation of land and buildings; and
- Others could not determine the total number of shares required to calculate the basic EPS of the company.

Candidates are advised to pay more attention to this area of the syllabus as it is a recurring area that the examiner will always test candidates' knowledge at this level of the institute's examination. They should therefore practice past questions and make use of the institute's study text and pathfinder.

Marking guide

Marks Marks

(a)	Preparation of statement of profit or loss		
	Determination of revenue	$\frac{3}{4}$	
	Calculation of cost of sales	1	
	Stating the gross profit	$\frac{1}{4}$	
	Stating distribution costs	$\frac{1}{4}$	
	Determination of admin expenses	$\frac{1}{2}$	
	Calculation of finance costs	$\frac{3}{4}$	
	Calculation and stating loss on disposal of plant	$1\frac{3}{4}$	
	Calculation and stating loss on revaluation of land and building	$1\frac{3}{4}$	
	Calculation and stating gain on revaluation of investment property	1	
	Stating the profit before tax	$\frac{1}{4}$	
	Adjusting and stating income tax	$\frac{3}{4}$	
	Stating components of other comprehensive income	$\frac{3}{4}$	
	Stating total comprehensive income	<u>$\frac{1}{4}$</u>	
			10
(b)	Preparation of statement of changes in equity		
	Stating headings of the components of equity	$1\frac{1}{2}$	
	Stating the opening balances of components of equity	1	
	Stating profit for the year	$\frac{1}{2}$	
	Stating other comprehensive income	$\frac{3}{4}$	
	Stating proceeds from issue of shares at a premium	$\frac{3}{4}$	
	Stating the dividend paid	$\frac{1}{2}$	
	Stating closing balances of components of equity	<u>1</u>	
			6
(c)	Preparation of statement of financial position		
	Non-current assets		
	Determination and stating the value of land and buildings	3	
	Determination and stating the value of plant and equipment	$2\frac{3}{4}$	
	Adjusting and stating the value of an investment property	$\frac{3}{4}$	
	Adjusting and stating the value of financial assets	$\frac{3}{4}$	
	Stating the total non-current assets	$\frac{1}{4}$	
	Current assets		
	Stating the inventory	$\frac{1}{4}$	
	Stating the trade receivables	$\frac{1}{4}$	
	Stating the cash and bank	$\frac{1}{4}$	
	Stating total current assets	$\frac{1}{4}$	
	Stating total assets	$\frac{1}{4}$	
	Equity:		
	Stating the ordinary share capital	$\frac{1}{4}$	
	Stating the share premium	$\frac{1}{4}$	
	Stating the fair value reserve	$\frac{1}{4}$	
	Stating the retained earnings	$\frac{1}{4}$	
	Stating total equity	$\frac{1}{4}$	
	Liabilities:		
	Stating the 6% loan notes	$\frac{1}{4}$	

	Stating the trade payables	1/4	
	Adjusting and stating the provisions for warranty claims	3/4	
	Stating accrued 6% loan note interest	1/4	
	Stating total current liabilities	1/4	
	Stating total equity and liabilities	<u>1/4</u>	12
d	Calculation of basic earnings per share		
	Stating profit for the year	1/2	
	Determination of total number of shares in issue	1/2	
	Calculation of basic EPS	1	<u>2</u>
	Total		<u>30</u>

Solution 2

(a) Explanation of contract under IFRS 15 on revenue.

- A contract is an agreement between two or more parties which create enforceable rights and obligations.
- It may be agreed in writing, orally, or through other customary business practices

(b) Conditions under IFRS (15) when entities can recognise contract revenues.

- The parties to the contract have approved the contract and are committed to perform their respective obligations.
- The entity can determine each party's rights regarding the goods or services transferred.
- The entity can identify the payment terms for the goods or services to be transferred.
- The contract has commercial substance.
- It is likely that entity will collect consideration to which it is entitled in exchange for the goods or services to be transferred to the customer.

(c) i) Repurchase agreement

A repurchase agreement occurs where an entity sells an asset and promises or has the right to repurchase the asset.

- It is not recognised as a sale, but either as a lease or secured loan against the asset.
- It comes as obligation to purchase, right to purchase or obligation to repurchase.
- If an entity has obligation or a right to repurchase asset, the customer does not have control of the asset.
- An obligation to repurchase is accounted for either as a lease where the purchase price is smaller than original selling price.
- In financing arrangement, if the repurchase price is more than the original selling price.

ii) **Bill-and-hold arrangement**

- A bill-and-hold arrangement is a contract under which an entity bills a customer for a product but the entity retains physical possession of the product until it is transferred to the customer at a future time.
- To be treated as a revenue, the customer must have control of the asset despite the fact that it is physically remaining with the entity.
- There may be a custodial service fee where the entity recognises a fee for holding the goods on behalf of the customer.
- The performance obligation would be satisfied over time and revenue recognised on this basis.
- The customer must have requested the arrangement.
- The product must be seen as belonging to the customer.
- The product must be ready for physical transfer to the customer.
- The entity cannot have the ability to use the product or sell it to someone else.

(d) **Difference between Cost and Revaluation model**

Cost model	Revaluation model
• PPE is carried at cost less accumulated depreciation and impairment losses.	• PPE is carried at fair value less subsequent depreciation and impairment losses.
• Asset value remains based on historical cost.	• Asset value is updated periodically to reflect current market value.
• Simpler and more objective	• May result in revaluation surplus or deficit.

(e)

i) **Determination of cost of PPE in accordance with provisions of IAS 16**

Items	₹'000
Clearance of site prior to construction	21,000
Professional surveyors to manage construction	50,000
Administration cost based on time spent	60,000
Staff wages on construction	30,000
Import duties on materials	20,000
Handling cost on materials	<u>18,000</u>
Cost of PPE (capitalised)	<u>199,000</u>

ii) **Amount written off to statement of profit or loss**

	₹'000
Pre-operative expenses	12,000
Initial operating losses	<u>4,000</u>

Examiner's report

The question tests candidates' knowledge of the provisions of IFRS 15-Revenue from contract with customers and IAS 16- Property plant and equipment (PPE). The question requests them to explain the criteria for recognition of contract revenue and discuss the concept of repurchase agreement and bill-and-hold arrangement (under IFRS 15). While they should differentiate between cost and revaluation model of valuation of PPE.

Most candidate attempted the question and performance was below average.

The common pitfalls include:

-inability of the candidates to correctly explain repurchase agreement and bills-and-hold arrangement in accordance with the provisions of IFRS 15. While others could not identify the criteria for recognition of revenue as stipulated by the standard.

Candidates are advised to pay attention to all relevant accounting standards at this level of the institute's examination for better performance in future examinations.

Marking guide	Marks	Marks
(a) Description of the term "Contract" under IFRS 15 Correct description of the term contract		1
(b) Criteria for recognition of contract under IFRS 15 Any three correct criteria		3
(c) (i) Explanation of repurchase agreement Any three correct points on explanation of repurchase arrangements		3
(ii) Explanation of bill-and-hold arrangements Any three correct points on explanation of bill-and-hold arrangements		3
(d) Explanation of cost and revaluation model under IAS 16 Any three correct points on explanation of cost model	1½	
Any three correct points on explanation of revaluation model	<u>1½</u>	
		3
(e) i. Determination of the cost of a PPE under IAS 16 Correct listing of relevant cost items	3	
Stating of title of calculation	½	
Stating correct total of PPE cost capitalised	½	
		<u>4</u>
ii. Calculation of amount to be written off to statement		

of profit or loss		
Stating of pre-operative expenses	1	
Stating initial operating losses	1	
Stating total amount to be expensed to profit or loss		
	<u>1</u>	<u>3</u>
Total		<u><u>20</u></u>

Solution 3

a) Calculation of relevant ratios

i) ROCE	2024	2023	2022	2021
$\frac{\text{PBT} \times 100}{\text{CE}}$	$\frac{455,000 \times 100}{652,500}$	$\frac{338,000 \times 100}{500,100}$	$\frac{283,250 \times 100}{366,900}$	$\frac{237,250 \times 100}{297,350}$
	69.7%	67.6%	77.2%	79.8%
ii) Earning per share				
$\frac{\text{profit for the year}}{\text{numbers of shares issued}}$	$\frac{\text{₦}308,750}{390,000}$	$\frac{\text{₦}263,250}{192,000}$	$\frac{\text{₦}185,750}{192,000}$	$\frac{\text{₦}143,000}{126,000}$
	=79.2 kobo	137.1 kobo	96.7 kobo	113.5 kobo
iii) Dividend per share				
$\frac{\text{Dividend}}{\text{Number of shares issued}}$	$\frac{\text{₦}126,000}{390,000}$	$\frac{\text{₦}117,000}{192,000}$	$\frac{\text{₦}87,000}{192,000}$	$\frac{\text{₦}78,000}{126,000}$
	=32.3 kobo	60.9 kobo	45.3 kobo	61.9 kobo
iv) Dividend cover				
$\frac{\text{Earnings per share}}{\text{Dividend per share}}$	$\frac{79.2 \text{ kobo}}{32.3 \text{ kobo}}$	$\frac{137.1 \text{ kobo}}{60.9 \text{ Kobo}}$	$\frac{96.7 \text{ kobo}}{45.3 \text{ kobo}}$	$\frac{113.5 \text{ kobo}}{61.9 \text{ kobo}}$
OR				
$\frac{\text{Earnings}}{\text{Dividend}}$	$\frac{308,750}{126,000}$	$\frac{263,250}{117,000}$	$\frac{185,750}{87,000}$	$\frac{143,000}{78,000}$
	=2.45 times	2.25 times	2.14 times	1.82 times
v) Asset turnover				
$\frac{\text{Revenue}}{\text{Net assets capital employed}}$	$\frac{1,595,750}{652,500}$	$\frac{1,280,500}{500,100}$	$\frac{991,250}{366,900}$	$\frac{705,250}{297,350}$
	=2.45 times	2.56 times	2.7 times	2.37 times

b) Report to a potential investor on the financial viability of Mandela Nigeria Plc

Introduction

This report evaluates the financial performance and investment viability of Mandela Nigeria Plc based on the ratio analysis for the years 2021 to 2024. The analysis focuses on profitability, shareholders' returns, dividend policy and operational efficiency with the objective of advising a potential investor on whether to subscribe to the company's ordinary shares.

Financial performance analysis

- **Profitability**
The company recorded reasonable profitability over the four-year period. However, the ROCE declined from 79.8% in 2021 to 69.9% in 2024. The ratios are still reasonable, but there is a reduction of about 10% in ROCE in the last three years.
 - **Earnings performance**
The Earnings Per Share (EPS) declined from 113.5 kobo in 2021 to 79.2 kobo in 2024. The proposed issue of new ordinary shares will further dilute the EPS as the profits for the year appears not to be growing at a commensurate rate.
 - **Dividend policy and shareholder returns**
The company has consistently paid dividends over the period. However, the dividend per share declined by about 50% from 62.9 kobo in 2021 to 32.3 kobo in year 2024. Although, there is a slight increase in dividend cover, this indicates that the company is a low dividend paying entity. The slight increase in dividend cover indicates that profits are available to sustain dividend payments and future business expansion.
 - **Operational efficiency**
The asset turnover ratio assesses how effectively the company uses its assets to generate returns. However, there was only a slight increase in asset turnover of the company over the period.
- Recommendations**
- Based on the above analysis, it is recommended that a potential investor should consider not subscribing to the ordinary shares of Mandela Nigeria Plc, due to poor expected returns in terms of profitability, earnings and dividend payments. However, if the investor reviewed other qualitative factors and considers them as favourable for future growth and expansion of the company, he might decide to invest in the company.

c) Limitations of the use of EPS and ROCE as tool for financial analysis.

Earnings per share (EPS):

Earnings per share can have serious limitations which include:

- i) Accounting policies**
Not all entities use the same accounting policies. It may not always be possible to make meaningful comparisons between the EPS of different entities.
- ii) Ignores inflation**
Earnings per share does not take account of inflation, so that growth in EPS over time might be misleading.

iii) Ignores cash flows

Earnings per share measures an entity's profitability, but this is only part of an entity's overall performance. An entity's cash flow can be just as important as its profit (and more essential to its immediate survival).

iv) Prediction of future earnings

Diluted EPS is often described as an early warning to investors that the return on their investment may fall sometime in the future. However, diluted EPS is based on current earnings, not forecast earnings. This means that it may not be a reliable predictor of future EPS.

v) Encourage creative accounting

The use of EPS as the main measure of entity's performance encourages management to make decisions which increase EPS in the short run but damage the entity in the longer term. That is, encouraging creative accounting.

vi) No consideration for capital employed

EPS does not show efficiency of the company's use of its resources.

Return on Capital Employed (ROCE)

Limitations of Return on Capital Employed (ROCE) include the following:

i) Problem of definition

Definitions of capital employed vary, and confusion may arise when return on capital employed is discussed unless terms are rationalised.

ii) Based on historical cost

The return on capital employed is a misleading guide to efficiency unless assets are valued at current prices. Profits are accounted in terms of current prices, so it will be misleading if they are compared with capital computed on a historic basis.

iii) Accounting policies

Comparison of efficiency between firms by means of return on capital employed will be difficult if they are not truly comparable businesses, for example, one business may lease its plant, and another may have new plant while another may work with old-fashioned plant. Any device to reduce these differences to a common figure will introduce an element of unreality into the comparison.

iv) Ignores risk factors

The ROCE does not take risk into account. Thus a business may appear to be making a high return, but the fact that a high return is necessary to compensate for risks is not taken into account.

v) Encourage short term decisions

Capital investment is a long-term phenomenon and often a low return is experienced in the early years of a long-term project. It is therefore necessary that the returns on the project over its full life, is considered, not just part of its life, if a correct decision about its profitability is to be reached.

- c) **Techniques of creative accounting**
- i. Window dressing
 - ii. Off balance sheet finance
 - iii. Changes to accounting policies or accounting estimates
 - iv. Profit smoothing
 - v. Aggressive earnings management
 - vi. Capitalising expenses
 - vii. Early revenue recognition
 - viii. Overvaluation of inventory
 - ix. Big bath accounting
 - x. Overstating of assets
 - xi. Understating of liabilities

Examiner's report

The question tests candidates' knowledge of the computation and interpretation of ratios. Candidates are also required to highlight the limitations of ratios as a tool for financial analysis and to state techniques of creative accounting.

Most of the candidates attempted the questions and performance was above average.

Although candidates performance was above average, it was however noted that most of them could not correctly apply and interpret the ratios computed as required by the examiner.

Computation and interpretation of ratios is a regular feature at the skills level of the institute's examinations. Candidates are therefore advised to pay more attention to this area of the syllabus and also practice past questions and answers in the pathfinder for better performance in future.

Marking guide	Marks	Marks
(a) Calculation of relevant ratios		
Correct calculation of return on capital employed (ROCE)	1	
Correct calculation of earnings per share (EPS)	1	
Correct calculation of dividend per share	1	
Correct calculation of dividend cover	1	
Correct calculation of assets turnover	<u>1</u>	5

(b)	Financial viability, analysis report and advise to potential investor		
	Comment on profitability position	1	
	Comment on earnings performance	1	
	Comment on dividend policy and shareholders returns	1	
	Recommendation/advise on investment decisions	<u>1</u>	4
(c)	Limitations of the use of EPS and ROCE as tool for financial analysis		
	Four limitations of earnings per share (EPS)	4	
	Four limitations of return on capital employed (ROCE)	<u>4</u>	8
(d)	Techniques of creative accounting		
	Any six (6) correct techniques	<u>3</u>	
	Total		<u>20</u>

Solution 4

Blessing group

Consolidated statement of financial position as at March 31, 2025

Non-current assets:		₦'000
Properties	(56,000 + 21,000)	77,000
Plant	(400,000 + 20,000 + 12,000 1,200)	430,800
Equipment	(900 + 3,800)	4,700
Investments	(60,000 - 45,000)	15,000
Goodwill		<u>18,000</u>
		545,500
Current assets:		
Inventory	(24,000 + 18,000 - 967)	41,033
Trade receivables	(38,000 + 12,000 - 4,600 - 3,800)	41,600
Bank	(5,100 + 4,200 + 4,600)	<u>13,900</u>
		<u>642,033</u>
Equity and liabilities:		
Ordinary share capital		240,000
Consolidated retained earnings		<u>288,666</u>
		528,666
Non-controlling interests		16, 167
Current liabilities:		
Trade payables	(45,000 + 17,000 - 3,800)	58,200
Other payables	(13,000 + 4,000)	17,000
Deferred consideration	(20,000 + 2,000)	<u>22,000</u>
		<u>642,033</u>

Working Notes:

W1	Blessings Plc	80%	Date of acquisition	4/1/2024
	Jigawa Ltd	NCI = 20%	Date of consolidation	3/31/2025

W2

Purchase consideration		₦'000
Cash		45,000
Deferred consideration	(₦22M × 0.909)	<u>20,000</u>
		<u>65,000</u>

W3i

Fair value adjustment (Surplus)		₦'000
Plant		<u>12,000</u>

ii	Under depreciation	(₦12m/10 Years × 1)	<u>1,200</u>
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W4

Unrealised profit (Jigawa – Blessings)		₦'000
(20/120 × ₦5.8m)		<u>967</u>

W5

Discount Unwound		₦'000
10% × ₦20m		<u>2,000</u>

W6

Net asset summary –Jigawa Ltd

	Date of acquisition (DOA)	Date of consolidation (DOC)	Post acquisition earnings (PAE)
	₦'000	₦'000	₦'000
Ord. share capital	30,000	30,000	-
Retained earnings	20,000	28,000	8,000
Fair value gain	12,000	12,000	-
Under depreciation	-	(1,200)	(1,200)
Unrealised profit (URP)	-	<u>(967)</u>	<u>(967)</u>
	<u>62,000</u>	<u>67,833</u>	<u>5,833</u>

W7

Goodwill	₦'000
Purchase consideration	65,000
NCI at fair value	15,000
Less FV of net assets	<u>(62,000)</u>
	<u>18,000</u>

W8

Non controlling interest (NCI)	₦'000
Value at acquisition	15,000
Share of PAE (20% × ₦5,833)	<u>1,167</u>
	<u>16,167</u>

W9

	₦'000
Consolidated retained earnings	286,000
Blessing's retained earnings	4,666
Share of PAE (80% × ₦5,833)	<u>(2,000)</u>
Discount unwound	<u>288,666</u>

(b) Exemptions from preparing consolidated financial statements

Under IFRS 10 'consolidated financial statements', a parent is exempted from preparing consolidated financial statements if all of the following conditions are met:

- i. The parent is itself a wholly-owned subsidiary, or is a partially-owned subsidiary of another entity and its other owners, including those not otherwise entitled to vote, have been informed about it, and do not object to, the parent not presenting consolidated financial statements;
- ii. The parent's debt or equity instruments are not traded in a public market;
- iii. The parent did not file, nor is it in the process of filing, its financial statements with a securities commission or other regulatory organisation for the purpose of issuing any class of instruments in a public market; and
- iv. The ultimate or any intermediate parent of the parent produces consolidated financial statements available for public use that comply with International Financial Reporting Standards (IFRS).

Examiner's report

The question tests candidates' knowledge of preparation of consolidated statement of financial position in accordance with the provisions IFRS 10 – Consolidated Financial Statements. Candidates are also required to state the conditions in which a parent is exempted from preparing consolidated financial statements.

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

Some of the candidates could not correctly compute the following:

- Non- controlling interests;
- Consolidated retained earnings;
- Deferred consideration; and
- Net assets of the subsidiary at the date of consolidation

Candidates are advised to pay more attention to group accounts, particularly the areas that requires necessary adjustments of the parent and subsidiary accounts before the final consolidation.

Marking guide	Marks	Marks
a) Preparation of consolidated statement of financial position		
Stating the title of the financial statement	1/4	
Stating the consolidated properties	3/4	
Stating the consolidated plant	1	
Stating the consolidated equipments	1/2	
Stating the consolidated investments	1/2	
Calculation and stating goodwill on acquisition	2	
Stating consolidated total non-current assets	1/4	
Adjusting and stating the consolidated inventory	1 1/4	
Stating consolidated trade receivables	1	
Stating consolidated bank balance	1	
Stating total consolidated current assets	1/4	
Stating consolidated total assets	1/4	
Stating the share capital	1/4	
Calculation and stating consolidated retained earnings	3	
Calculation and stating non-controlling interest	1	
Stating the consolidated trade payables	1	
Stating the consolidated other payables	1/2	
Calculating and stating the deferred consideration	1	
Stating consolidated total equity and liabilities	1/4	
		16
b) Exemptions from preparing consolidated financial statements under IFRS 10		
Four exceptions stated		4
Total		<u>20</u>

Solution 5

(a) Responsibilities of the directorate of accounting standards of FRC Nigeria

The directorate of accounting standards of the Financial Reporting Council of Nigeria (FRC) is responsible for ensuring high-quality financial reporting in Nigeria. Its responsibilities include:

i. Development and issuance of accounting standards

The directorate develops, adopts and issues accounting and financial reporting standards to be complied with by entities in Nigeria;

- ii. **Promotion of compliance with standards**
It ensures that public and private entities comply with approved accounting standards such as IFRS and other reporting regulations;
 - iii. **Monitoring and enforcement**
The directorate monitors financial statements of entities and enforces compliance with accounting standards and reporting requirements;
 - iv. **Review and update of standards**
It reviews existing accounting standards periodically and updates them in line with international best practices and economic realities; and
 - v. **Provision of guidance and interpretation**
The directorate provides technical guidance, clarification and interpretation on accounting standards to preparers and users of financial statements.
- (b) **Contents of accounting records under CAMA 2020**
Under the Companies and Allied Matters Act (CAMA) 2020, accounting records must contain sufficient information to show and explain the transactions of the company. The records must include:
- i. **Daily records of cash received and paid**
Records showing all money received and expended by the company and the matters to which they relate;
 - ii. **Record of assets and liabilities**
Proper details of the assets owned and liabilities incurred by the company;
 - iii. **Statement of goods bought and sold**
Where the business involves trading in goods, records of all purchases and sales must be maintained; and
 - iv. **Inventory records**
Statements of inventory held at the end of each financial year and inventory-taking records from which such statements are prepared.
- (c) **Alternative to conceptual framework.**
Yes, there are alternatives to conceptual framework.

Alternatives

i. Rules-based system

Rather than principles derived from a framework, a rule-based system provides detailed, specific rules for each transaction. This reduces professional judgement but can create loopholes. The US GAAP system historically was more of rule-based system.

ii. **Industry-specific standards**

Some argue that instead of a general conceptual framework, industry-specific standards provide more relevant guidance (for example, banks, insurance companies, or extractive industries). BOFIA, Insurance Act, CBN Prudential Guidelines, Stock Exchange Acts and industry-specific rules are alternative to the framework.

iii. **Government/tax-based accounting**

Some jurisdictions base financial reporting on tax regulations rather than on a neutral conceptual framework, though this often results in poor decision-making and useful information for investors.

Conclusion:

The prevailing view is that while no alternative fully replaces the Conceptual Framework, it is not perfect. The framework itself acknowledges that it is not a standard and cannot override any specific IFRS. Its greatest value lies in providing consistency and direction for standard-setters.

Examiner's report

The question tests candidates' knowledge of financial and regulatory frameworks in the following areas:

- Responsibilities of the directorate of accounting standards of Financial Reporting Council of Nigeria (FRC);
- Accounting records that must be maintained by every company in accordance with the provisions of CAMA 2020 as amended; and
- Conceptual Framework.

Most of the candidates attempted the question and performance was good

Despite the good performance, some candidates could not ascertain that there are alternatives to conceptual framework, while others find it difficult to explain its purpose.

Candidates are advised to cover all sections of the syllabus when preparing for examinations. As failure to have good knowledge of conceptual frame work implies that basic requirements of financial and corporate reporting are being ignored, hence candidate should ensure that this section of the skills level syllabus should be given adequate attention.

Marking guide

- (a) **Responsibilities of the directorate of accounting standards of financial reporting council (FRC) Nigeria**
Correctly stating five (5) responsibilities
- (b) **Contents of accounting records under CAMA 2020**

Marks Marks

5

	Daily records of cash received and paid	1	
	Records of assets and liabilities	1	
	Statement of goods bought and sold	1	
	Inventory records	1	
	Correct explanation of the above four (4) records		<u>4</u>
(c)	Alternative to conceptual framework		
	Recognition of existence of alternative to framework	½	
	Identifying three alternatives	1½	
	Explanation of three identified alternatives	3	
	Conclusion	1	<u>6</u>
	Total		<u>15</u>

Solution 6

International Sustainability Standards Board (ISSB) – IFRS S1 and IFRS S2

IFRS S1 and IFRS S2 provide guidance on sustainability-related financial disclosures to ensure that entities provide relevant, reliable and decision-useful information to investors and stakeholders.

a) Value created, eroded or preserved for others

This concept explains how an entity's activities affect stakeholders, society and the environment either positively or negatively.

- Value created occurs when the activities of an entity improve economic, social or environmental conditions. Examples are job creation, innovation and environmental protection.
- Value preserved occurs when an entity maintains existing economic or environmental benefits over time through sustainable practices.
- Value eroded occurs when business activities damage the environment, society or stakeholder interests. Examples are pollution, poor labour practices or environmental degradation.
- Under IFRS Sustainability Standards, entities are expected to disclose how their activities create, preserve or erode value over the short, medium and long-term.

b) Reasonable and supportable information

Reasonable and supportable information refers to sustainability information that is reliable, verifiable and based on sound assumptions and evidence available at the reporting date.

Such information should:

- Be obtainable without undue cost or effort;
- Be based on credible data and assumptions; and
- Support users in making economic decisions.

For example, climate risk disclosures should be supported with measurable data, forecasts and documented assumptions rather than speculation.

c) Connected information

Means that sustainability-related disclosures should be linked and consistent with other financial and non-financial information presented by the entity.

The information should show the relationship between:

- sustainability risks and opportunities;
 - governance;
 - strategy;
 - risk management; and
 - financial performance.
-
- For example, climate risks disclosed under IFRS S2 should align with the figures and assumptions used in the financial statements.
 - This enhances transparency and helps users understand how sustainability issues affect the entity's overall financial position and performance.

d) Fair presentation

- Fair presentation means that sustainability disclosures must faithfully represent the sustainability-related risks and opportunities affecting the entity.
- To achieve fair presentation, information should be: complete, neutral, and free from material error.
- The disclosures should not be misleading or biased and must reflect the true sustainability position of the entity.
- Fair presentation also requires adequate disclosure of significant assumptions, estimates and uncertainties.

e) Reporting entity

A reporting entity is the organisation that prepares and presents sustainability-related financial disclosures.

Under IFRS S1 and S2:

- The reporting entity for sustainability disclosures should generally be the same as that used in the financial statements; this ensures consistency and comparability between sustainability reports and financial reports.

The reporting entity may be a single company, a group of companies, or another economic entity required to prepare reports.

f) Risk management

- Risk management refers to the processes and procedures used by an entity to

identify, assess, monitor and manage sustainability-related risks and opportunities.

Under IFRS S1 and IFRS S2, entities should disclose:

- how sustainability risks are identified;
- how such risks are assessed and prioritised;
- the controls and policies used to manage the risks; and
- how the risk management process is integrated into the entity's overall risk

Examples of sustainability-related risks include:

- climate change risks;
 - environmental risks;
 - social risks; and
 - governance risks.
- Effective risk management helps entities achieve long-term sustainability and business continuity

Examiner's report

The question tests candidates' knowledge of basic sustainability concepts under the provisions of International Sustainability Reporting Standards IFRS S1 and S2.

Most candidates did not attempt the question and the few that did performed poorly.

Candidates could not correctly define and explain the basic sustainability concepts and they also find it difficult to relate it to financial reporting.

Sustainability reporting is a new area of financial reporting syllabus and candidates are advised to pay special attention to its basic concepts and its applications for better performance in future examinations.

Marking guide

	Marks	Marks
Discussion on sustainability concepts		
(a) Value created, eroded or preserved for others Any three correct points raised in the discussion	3	
(b) Reasonable and supportable information Any three correct points raised in the discussion	3	
(c) Connected information Any three correct points highlighted	3	
(d) Fair presentation Any three correct points raised in the discussion	3	
(e) Reporting entity Any three correct points highlighted	3	
(f) Risk management		

Any three correct points stated	<u>3</u>	<u>15</u>
Any five (5) concepts correctly discussed		
Total		<u>15</u>

Solution 7

Jamolaya Nigeria Ltd

- (a) Valuation of inventory in accordance with IAS 2 – Inventories
Under IAS 2, inventories are valued at the lower of cost and net realisable value (NRV).
NRV = Estimated selling price less costs to complete less costs to sell

- (i) **Wardrobe**
Calculation of NRV

	₦
Estimated selling price after repair	1,125,000
Less: Repair cost	<u>(180,000)</u>
Net realisable value (NRV)	<u>945,000</u>
Comparison with Cost	
Cost	1,080,00
NRV	945,000

Since inventory is measured at the **lower of cost and NRV**, the wardrobe will be included in inventory at = ~~₦~~945,000

- (ii) **Dressing table**
Calculation of NRV

	₦
Selling price	3,375,000
Less: Commission on sale	(157,500)
Less: Delivery cost	<u>(237,000)</u>
Net realisable value (NRV)	<u>2,980,500</u>

Comparison with cost:

	₦
Cost	2,748,000
NRV	2,980,500

Since the cost is lower than NRV, the dressing table will be included in inventory at ~~₦~~2,748,000

(b) (i) **Ethical considerations**

- **Integrity**

As finance director, you have a fundamental duty to be straightforward and honest in professional relationships. Knowingly allowing inventory to be overstated in the financial statements is a breach of integrity. The inventory must be written down in accordance with provision of IAS 2 regardless of management's preference.

- **Objectivity/self-interest threat**

Dr. Jamolaya's offer of higher remuneration if the deal succeeds creates a self-interest threat. You are being indirectly incentivised to produce favourable financial statements, which compromises your objectivity. A reasonable observer would conclude that your judgement may be compromised.

- **Professional competence and due care**

You are professionally obligated to apply IAS 2 correctly, which requires write-down of slow-moving inventories. Failing to do so would be a dereliction of professional duty and could expose you to disciplinary action by ICAN.

- **Confidentiality/whistleblowing**

You are aware of a deliberate attempt to mislead a prospective buyer through inflated financial statements. There is a potential conflict between the duty of confidentiality to your employer and the wider duty not to be associated with false or misleading information.

- **Professional behaviour**

Any misconduct ranging from subjecting to pressure of the superior, allowing self-interest to becloud our judgement, failure to write down inventory in line with the provision of IFRS, could bring the institute to a disrepute and spoil the image of the profession. Exhibiting excellent professional behaviour involves refraining from those act that could disgrace the profession

(b) ii. **Course of Action**

- **Step 1 - Documentation**

Document your professional assessment that the slow-moving inventories must be written down in accordance with IAS 2. Prepare written technical memoranda explaining the basis for the write-down.

- **Step 2 - Report internally**

Bring the matter formally to the attention of the Board of Directors or Audit Committee (if one exists), separate from the Managing Director. This escalation should be done in writing.

- **Step 3 - Refuse to comply**
Formally decline to approve financial statements that do not include the required inventory write-downs. Explain in writing that this would be a departure from IAS 2 and would mislead the prospective buyer. Also, encourage the MD to seek expert opinion in investing.
- **Step 4 - Seek advice**
Consult your professional body (ICAN) ethics helpline or legal counsel for guidance on your obligations. The Institute's Code of Professional Conduct provides clear guidance on situations where pressure is applied to produce misleading statements.
- **Step 5 - Disclosure obligation**
If the board refuses to correct the financial statements, you may have an obligation under applicable law or your professional code to make disclosures to the relevant regulatory authority (For example, FRC Nigeria or ICAN) – consistent with whistleblowing provisions. You may also inform the company external auditors.
- **Step 6 -Resignation**
As a last resort, if the situation is unresolved and you are being pressured to sign off on fraudulent financial statements, you should consider resignation to avoid being associated with deliberate misrepresentation, protecting your professional reputation and avoiding legal liability.

Note: The promise of higher remuneration must not influence your professional judgement. The prospective buyer is entitled to financial statements that accurately reflect the company's financial position.

Examiner's report

The question tests candidates' knowledge of valuation of inventories under IAS 2 - Inventories and application of professional ethics

Most candidates attempted the question and their performance was below average.

Candidates were able to provide correct answer to part (a) of the question on valuation of inventories however, they could not correctly state the possible course of action to mitigate the ethical considerations in the part (b) of the question.

Professional ethics is an important part of financial reporting syllabus at the skills level of the institute's examination, candidates are therefore advised to pay more attention to it, for better performance in future examinations.

Marking guide		Marks	Marks
(a)	Calculation of value of inventory		
	i. Wardrobe		
	Calculation of net realisable value (NRV)	2½	
	ii. Dressing table		
	Calculation of net realisable value (NRV)	<u>2½</u>	5
(b)	i. Ethical considerations for the Finance Director		
	Stating Four (4) correct ethical issues	2	
	Explanation of ethical Issues	2	
	ii. Possible course of actions/steps against ethical issues		
	Stating Six (6) correct steps	3	
	Explanation of the steps	<u>3</u>	<u>10</u>
	Total		<u>15</u>

DO NOT TURN OVER UNTIL YOU ARE TOLD TO DO SO
INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA
SKILLS LEVEL EXAMINATION – MAY 2026
TAXATION

Time Allowed: 3¼ hours (including 15 minutes reading time)

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

SECTION A: COMPULSORY QUESTION (30 MARKS)

QUESTION 1

Bluechips Nigeria Limited is a limited liability company incorporated in Nigeria in 2020 and has been in business for so many years. The following information has been extracted from the company's records for the year ended December 31, 2024:

	₦
Sales	150,000,000
Direct cost	<u>(22,500,000)</u>
Gross profit	127,500,000
Other income	<u>30,375,000</u>
	157,875,000
Administrative and other expenses	<u>(112,091,250)</u>
Profit before tax	<u><u>45,783,750</u></u>

Additional information:

	₦
(i) Other income included:	
Dividend (net)	5,650,540
Rent (net)	3,460,000
Interest on government securities	7,550,000
Interest on foreign placement	11,256,500
Gains on foreign exchange - Translation of domiciliary account balance	1,480,500
80% of the interest on foreign placement was repatriated through a government - approved channel.	
(ii) Administrative expenses included:	
Depreciation	1,850,000
Audit fees	2,150,000
Directors' remuneration	7,500,000
Legal expenses	5,570,050
Other operating expenses	15,800,850
(iii) Legal expenses comprised:	
Commission paid for debt collection	250,000
Legal cost of a tax appeal made by the company to the FIRS	1,750,000

	Share issue expenses	1,070,050
	Retainership fee	2,500,000
(iv)	Other operating expenses included:	₦
	Value added tax on computer hardware	120,000
	Rent paid in respect of accommodation rented for a management staff of the company whose basic salary was ₦2,400,000 per annum	3,600,000
	Misappropriated funds by the Director of Finance	2,500,000
	Defalcations by the Sales Clerk out of which, the company recovered a sum of ₦200,000 under fidelity insurance	525,000
	Loss on property, plant and equipment	150,000
	Loss on foreign exchange on payment for importation of inventory	500,000
(v)	The company made donations to the following entities:	₦
	Van Leer Nigerian Educational Trust	250,000
	Kewa Limited	300,000
	Paterson Zochonis Nigerian Technical Education Trust Fund	200,000
	The Christian Church of Nigeria	100,000
	AFP Foundation Limited	500,000
(vi)	Total marketing expenses of ₦3,000,000 included:	₦
	Corporate/promotional gift items	1,000,000
	Corporate adverts	1,200,000
	Facilitation of port operations when importing the inventories for the company	<u>800,000</u>
		<u>3,000,000</u>
(vii)	Unrelieved loss brought forward	10,345,000
(viii)	Agreed claimable capital allowance	2,850,000

Required:

Compute the income tax liabilities payable by the company for the relevant year of assessment. **(30 Marks)**

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

QUESTION 2

Chief Bamidele Lawrence, a renowned industrialist/business mogul, established a trust, Bamidele Lawrence Trust Foundation. The beneficiaries of the trust are his only child, Josephine and his two grandchildren - Abel and Abigail. The trustee, DAOL Legal Practitioners, is to apply the income accruing to the trust as specifically stated in the trust deed.

The records of the trustee show the following information for the year ended December 31, 2023:

Income:	₦
Trading income	100,000,000
Rental income (Net)	480,420,000
Miscellaneous income	10,000,000

The operating expenses for the year amounted to ₦48,850,000.
Capital allowance claimable for the year was ₦19,300,000.

Additional information:

- (i) The trust annual distributable income is to be shared as follows:

Josephine	1/20
Abel	1/20
Abigail	1/20
- (ii) The trustee could make discretionary payment to Josephine and her children anytime during the year. The trust made discretionary payment of ₦2,500,000 during the year to Josephine.

- (iii) Fixed annuity is given annually to the three beneficiaries.

	₦
Josephine	10,000,000
Abel	5,000,000
Abigail	3,500,000

- (iv) Trustee's remuneration:

Fixed remuneration	₦1,000,000
Variable remuneration	0.5% of the gross income

Required:

For the relevant year of assessment, compute:

- (a) The taxable income of the trustee (10 Marks)
 - (b) The assessable income in the hands of the beneficiaries (5 Marks)
 - (c) The income tax liabilities of the beneficiaries (assuming that this is their only source of income) (5 Marks)
- (Total 20 Marks)**

QUESTION 3

Mr. Ade, a property investor, executed a deed of assignment for the transfer of his land located in Lagos. The deed was submitted to the Commissioner of Stamp Duties for adjudication to determine the appropriate duty payable.

Required:

With reference to the Stamp Duties Act:

- (a) Explain the process of adjudication by the Commissioner of Stamp Duties. (5 Marks)
- (b) Explain the benefits of adjudication. (4 Marks)
- (c) Explain the limitations of the adjudication process. (3 Marks)
- (d) Explain the appeal procedure available where a taxpayer is dissatisfied with the Commissioner's adjudication. (8 Marks)

(Total 20 Marks)

QUESTION 4

The Nigeria Startup Act 2022, was signed into law on October 19, 2022, to foster innovation, attract investment, and create a favourable business climate for tech-enabled startups in Nigeria. The Act provides a legal and institutional framework for the development of startups, with the goal of positioning Nigeria as a leading digital technology hub in Africa.

Mr. Akin, a young entrepreneur in Lagos, was considering registering his fintech company under the Nigeria Startup Act to obtain the startup label. He sought your professional advice as a Tax Consultant.

Required:

With reference to the provisions of the Nigeria Startup Act 2022:

- (a) Explain the eligibility criteria for a company to qualify as a labelled startup. (5 Marks)
- (b) Explain **SIX** tax and fiscal incentives available to labelled startups. (12 Marks)
- (c) Explain **THREE** incentives or reliefs available to investors who invest in labelled startups. (3 Marks)

(Total 20 Marks)

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

QUESTION 5

- (a) You applied for the position of a Tax Officer in a company. During the interview, a panel member asked you to explain some basic concepts of taxation to demonstrate your understanding of the subject.

Required:

Explain the following:

- i. Tax yield (1½ Marks)
- ii. Tax rate (1½ Marks)
- iii. Tax effect (1½ Marks)
- iv. Tax impact (1½ Marks)
- v. Tax shift (1½ Marks)

(b) Taxation in Nigeria is primarily statute-based. The practice and administration of taxation have evolved over time and have gone through transformation from the days of our forefathers to what we have today.

You have been invited to a conference on tax matters where you are required to explain the sources of Nigerian tax laws.

Required:

Identify and explain **FIVE** sources of Nigerian tax laws (7½ Marks)

(Total 15 Marks)

QUESTION 6

(a) The Local Government Revenue Committee (LGRC) for each local government area of a State was established by Section 90 of the Personal Income Tax Act, 2004 (as amended).

Required:

i. Identify **THREE** members of the Local Government Revenue Committee (LGRC). (4 Marks)

ii. Explain the **TWO** functions of the Local Government Revenue Committee (LGRC). (3 Marks)

(b) You have just been engaged as a Tax Consultant to a company that operates in Nigeria with headquarters in Abuja. During a strategy session, the Managing Director asked you to brief the Board on the tax jurisdictions and the authorities empowered to administer taxes at different levels of government in Nigeria. He also requested that you highlight specific examples of the types of taxes or levies collectible by each level of government.

Required:

Identify and explain **EIGHT** taxes and levies collectible by state governments.

(8 Marks)

(Total 15 Marks)

QUESTION 7

- (a) The Nigeria Customs Service (NCS) is one of the major revenue-generating agencies of the Federal Government. The Nigeria Customs Service Act, 2023 repealed the Customs and Excise Management Act, Cap. C45, Laws of the Federation of Nigeria, 2004, and other related legislations.

Required:

- i. Explain **THREE** functions of the Nigeria Customs Service. (4½ Marks)
 - ii. Identify **THREE** members of the Nigeria Customs Service Board. (4½ Marks)
- (b) Technology has significantly transformed tax administration in Nigeria. The Federal Inland Revenue Service (FIRS) has introduced a tax management solution known as TaxProMax to improve efficiency, transparency, and compliance.

Required:

Identify and explain **SIX** aspects of tax administration that can be handled by the TaxProMax. (6 Marks)

(Total 15 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	Nil
Public Transportation Motor Vehicle	95	Nil
Ranching and Plantation Expenditure	30	50
Plantation Equipment Expenditure	95	Nil
Research and Development Expenditure	95	Nil
Housing Estate Expenditure	50	25
Motor Vehicle Expenditure	50	25
Agricultural Plant Expenditure	95	Nil
Furniture and Fittings Expenditure	25	20

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.

4. COMPANIES INCOME TAX RATE: Finance Act 2019 specifies:

30% (Large Company)

20% (Medium-Sized Company)

0% (Small Company)

5. TERTIARY EDUCATION TAX: 2% of assessable profit (up to December 31, 2021) 2.5% of assessable profit (with effect from January 1, 2022) and 3% of assessable profit, with effect from September 1, 2023 (Finance Act 2023)

6. CAPITAL GAINS TAX 10%

7. VALUE ADDED TAX 7.5%

8. HYDROCARBON TAX 15% (Petroleum prospecting Licence and Marginal Fields Companies) 30% (Petroleum Mining Lease Companies)

SOLUTION 1

**Bluechips Nigeria Limited
Computation of income tax liabilities
For 2025 assessment year**

	₦	₦	₦
Profit before tax			45,783,750
Add: disallowable expenses:			
Depreciation		1,850,000	
Legal expenses:			
Cost of tax appeal	1,750,000		
Share issue expenses	<u>1,070,050</u>	2,820,050	
VAT on computer hardware		120,000	
Rent for staff (₦3.6m – ₦2.4m)		1,200,000	
Misappropriated funds by the Director of Finance		2,500,000	
Defalcations by Sales Clerk (Amount recovered under fidelity insurance)		200,000	
Loss on property, plant and equipment		150,000	
Donations:			
Kewa Limited		300,000	
Christian Church of Nigeria		100,000	
AFP foundation Limited		500,000	
Facilitation of port operations		<u>800,000</u>	<u>10,540,050</u>
			56,323,800
Add: taxable income omitted:			
Rent (WHT) ($\frac{10}{90} \times 3,460,000$)			384,444
Less: Non taxable income:			
Dividend (net)		5,650,540	
Interest on government securities		7,550,000	
Interest on foreign placement (80% of ₦11,256,500)		9,005,200	
Unrealised foreign exchange gain		<u>1,480,500</u>	<u>(23,686,240)</u>
Adjusted profit			33,022,004
Less: Loss brought forward			<u>(10,345,000)</u>
			22,677,004
Deduct: Capital allowances			<u>(2,850,000)</u>
Total profit			<u>19,827,004</u>
Companies income tax (CIT) (30% of total profit)	=		5,948,101.20
Less: WHT on rent			<u>(384,444)</u>
Net companies income tax payable			<u>5,563,657.20</u>
Minimum tax computation			
0.5% of ₦180,375,000	=		₦901,875

Tertiary education tax payable
 3% of adjusted profit = ₦990,660.12

Notes:

- (i) When a company pays rent on behalf of its employees, the deduction to be allowed for tax purposes is limited to a maximum cap of 100% of the employee’s basic salary.
- (ii) Embezzlement of cash or inventory (defalcation) committed by a junior staff or officer is an allowable deduction under CITA.

If a part of the defalcation by junior staff is recovered under an insurance policy, only the unrecovered (net) loss is as allowable deduction. Put differently, amount recovered from an insurance company in respect of defalcation by junior staff is not allowable as a deduction for tax purposes.

- (ii) Given the fact that the minimum tax liability is less than the CIT as computed above, the net CIT payable is ₦5,563,657.20.

Examiner’s Report

The question tests the candidates’ knowledge of allowable and disallowable expenses, rules relating to donations, and the computation of companies income tax liabilities.

This being a compulsory question, all the candidates attempted the question but their performance was average.

The common pitfalls of the candidates were their inability to differentiate between allowable and disallowable expenses. Additionally, some of the candidates commenced their computations from gross profit, whilst others omitted the relevant assessment year.

The question provided an opportunity for well-prepared candidates to earn substantial marks, however, inadequate practical understanding and poor application of statutory provisions of CITA, limited performance. Candidates are advised to read widely and be conversant with the provisions of the Nigeria Tax Act, 2025 and other relevant tax Acts, before sitting for subsequent examinations to enhance performance.

Marking Guide

	Marks
Heading	1/2
Computation of income tax liabilities	1/4
For assessment year 2025	1/4
Profit before tax	1
Add: Disallowable expenses:	
Depreciation	1
Legal expenses:	
Cost of tax appeal	1

Share issue expenses	1
VAT on computer hardware	1
Rent for staff (₦3.6m – ₦2.4m)	1
Misappropriated funds by director	1
Defalcation by junior staff	1
Loss on property, plant & equipment	1
Donations:	
Kewa Limited	1
Christian Church of Nigeria	1
AFP foundation	1
Facilitation of port operations	1
Add: Taxable income omitted – WHT on rent	1
Less: Non-taxable income:	
Dividend (Net)	1
Interest on government securities	1
Interest on foreign placement	1
Unrealised foreign exchange gain	1
Adjusted profit	1
Less: Loss brought forward	1
Deduct: Capital allowances	1
Total profit	2
Companies income tax (CIT) 30% of total profit	1
Less: WHT on rent	1
Net companies income tax payable	2
Minimum tax computation	1
Tertiary education tax payable – 3% of adjusted profit	<u>1</u>
Total	<u>30</u>

SOLUTION 2

(a)

Chief Bamidele Lawrence
Computation of taxable income of the trustee
For 2024 assessment year

Income	₦	₦
Trading income	100,000,000	
Less capital allowance	<u>(19,300,000)</u>	80,700,000
Rental income (gross) (₦480,420,000 /0.9)		533,800,000
Miscellaneous income		<u>10,000,000</u>
Gross income		624,500,000
Less authorised payments:		
Operating expenses	48,850,000	
 Fixed annuity:		
Josephine	10,000,000	
Abel	5,000,000	

Abigail	3,500,000	
Trustee remuneration:		
Fixed	1,000,000	
Variable- (0.5% x ₦624,500,000)	<u>3,122,500</u>	<u>(71,472,500)</u>
Computed income		553,027,500
Less discretionary payment – Josephine		<u>(2,500,000)</u>
Net computed income		550,527,500
Distribution to beneficiaries:		
Josephine (1/20)	27,526,375	
Abel (1/20)	27,526,375	
Abigail (1/20)	<u>27,526,375</u>	
Total distribution		<u>(82,579,125)</u>
Taxable income of the trustee		<u>467,948,375</u>

(b)

Chief Bamidele Lawrence
Computation of assessable income in the hands of the beneficiaries

	Josephine	Abel	Abigail
	₦	₦	₦
Share of distributable income	27,526,375.00	27,526,375.00	27,526,375.00
Fixed annuity	10,000,000.00	5,000,000.00	3,500,000.00
Discretionary payment	<u>2,500,000.00</u>		
Gross income	<u>40,026,375.00</u>	<u>32,526,375.00</u>	<u>31,026,375.00</u>

(c)

Chief Bamidele Lawrence
Computation of tax liabilities of the beneficiaries

	Josephine	Abel	Abigail
	₦	₦	₦
Gross income	40,026,375.00	32,526,375.00	31,026,375.00
Less CRA	<u>(8,405,539.00)</u>	<u>(6,830,539.00)</u>	<u>(6,515,539.00)</u>
Chargeable income	<u>31,620,836.00</u>	<u>25,695,836.00</u>	<u>24,510,836.00</u>
Tax liability:			
Ist ₦300,000 @ 7%	(21,000.00)	21,000.00	21,000.00
Next ₦300,000 @ 11%	33,000.00	33,000.00	33,000.00
Next ₦500,000 @ 15%	75,000.00	75,000.00	75,000.00
Next ₦500,000 @ 19%	95,000.00	95,000.00	95,000.00
Next ₦1,600,000 @ 21%	336,000.00	336,000.00	336,000.00
Next ₦28,420,836 @ 24%	6,821,000.64		
Next ₦22,495,836 @ 24%		5,399,000.64	

Next ₦21,310,836 @ 24%			<u>5,114,600.64</u>
Tax payable	<u>7,381,000.64</u>	<u>5,959,000.64</u>	<u>5,674,600.64</u>

Workings: 1

CRA	Josephine	Abel	Abigail
	₦	₦	₦
1% of gross income	400,263.75	325,263.75	310,263.75
20% of gross income	<u>8,005,275.00</u>	<u>6,505,275.00</u>	<u>6,205,275.00</u>
	<u>8,405,538.75</u>	<u>6,830,538.75</u>	<u>6,515,538.75</u>

Examiner's Report

The question tests the candidates' knowledge of the ascertainment of the computed income of a trustee and the computation of the income tax liabilities of the beneficiaries.

About 50% of the candidates attempted the question and the performance was fair.

Some of the candidates could not differentiate between a trustee and the trust entity, thereby resulting in inappropriate presentation and headings.

Candidates are advised to read relevant texts on taxation, ICAN Pathfinders, and Study Text when preparing for future examinations.

Marking Guide

	Marks	Marks
a. i. Heading	1/2	
Computation of taxable income of the trustees	1/4	
For 2022 assessment year	1/4	
Trading income	1/2	
Less: Capital allowance	1/2	
Rental income	1/2	
Miscellaneous	1/2	
Gross income	1/2	
Less: Authorised payments:		
Operating expenses	1/2	
Fixed annuity:		
Josephine	1/2	
Abel	1/2	
Abigail	1/2	
Trustee remuneration		
Fixed	1/2	
Variable	1/2	
Computed income		
Less: discretionary payment – Josephine	1/2	
Net computed income	1/2	
Distribution to beneficiaries	1/2	

Josephine	$\frac{1}{2}$	
Abel	$\frac{1}{2}$	
Abigail	$\frac{1}{2}$	
Taxable income of the trustee	<u>$\frac{1}{2}$</u>	10
b. Share of distributable income		
Josephine	$\frac{1}{2}$	
Abel	$\frac{1}{2}$	
Abigail	$\frac{1}{2}$	
Fixed annuity		
Josephine	1	
Abel	1	
Abigail	1	
Discretionary payment - Josephine	<u>$\frac{1}{2}$</u>	5
c. Computation of tax liabilities		
i. Consolidated relief allowance		
Josephine	$\frac{1}{4}$	
Abel	$\frac{1}{4}$	
Abigail	$\frac{1}{4}$	
ii. Application of tax rates ($\frac{1}{4}$ mark for each entry):		
Josephine	$\frac{1}{4} \times 6 = 1\frac{1}{2}$	
Abel	$\frac{1}{4} \times 6 = 1\frac{1}{2}$	
Abigail	$\frac{1}{4} \times 5 = 1\frac{1}{4}$	
	<u>$4\frac{1}{4}$</u>	<u>5</u>
Total		<u>20</u>

SOLUTION 3

a. The adjudication process by the Commissioner of Stamp Duties is as follows:

i. Submission of application

An application submitted is requesting the Commissioner's opinion on the amount of duty chargeable. The original or hard copy of the instrument, along with a full disclosure of all facts and circumstances affecting the transaction must be provided. The application and the supporting documents should be submitted to the relevant tax authority that is, the Nigeria Revenue Service (formerly Federal Inland Revenue Service) in case of companies or State Boards of Internal Revenue in respect to individuals.

ii. Request for evidence

The Commissioner has the legal authority to call for or refuse to proceed with the assessment until satisfactory evidence, affidavits, or declarations are provided to prove the facts stated in the instrument.

iii. **Assessment and stamping**

Once the Commissioner reviews the instrument, assessment of the duty will be issued and any late penalties are raised. If the instrument was not stamped within statutory execution periods, such as 30 to 40 days.

Upon payment of the assessed amount and any applicable adjudication fees, the Commissioner will impress or attach an official adjudication stamp to the document.

If the instrument is deemed exempt or not liable to duty, a "zero duty" or adjudication stamp is impressed, making it legally admissible in Court.

b. **Benefits of adjudication**

- i. It is the first step in disputing the views of stamp duties office of the correct amount of duty.
- ii. It shows the document is genuine.
- iii. It satisfies the statutory requirement.
- iv. It makes instrument once adjudicated, admissible for all purposes, notwithstanding any objection as to the duty to be paid.

c. **Limitations of the adjudication process**

- i. Where a court has ruled that an instrument has not been duly stamped, subsequent adjudications cannot retrospectively make it duly stamped.
- ii. The process cannot prejudice rights that have been asserted before adjudication.
- iii. Strict statutory time limits: Documents must be presented for adjudication and stamping within strictly defined periods to avoid penalties or outright rejection in court, for example, documents executed outside Nigeria generally must be presented within 10 to 30 days of being received in the country.
- iv. Demand for discretionary evidence: The Commissioner has the legal right to call for and refuse to proceed with the adjudication until sufficient evidence or affidavits proving the facts and circumstances of the transaction are provided.
- v. High admission penalties: While adjudication determines the correct duty, parties attempting to rely on an unstamped document in court or arbitration face harsh evidentiary penalties. To admit an unstamped or improperly stamped instrument, parties usually must pay a significant statutory penalty in addition to the unpaid duty.

d. **Appeals procedure where a taxpayer is dissatisfied with the Commissioner's adjudication**

This is a judicial review of the adjudication process. Where any person is aggrieved by an assessment of the Commissioners of Stamp Duties, an appeal lies to the High Court by way of case stated but only after the adjudication and payment of duty.

Any aggrieved person may within twenty days after the date of the assessment and on the payment of the duty, appeal against the assessment to the High Court of the State in which the assessment was made.

He may require the Commissioner to state and sign a case setting forth the question upon which his opinion was required and the assessment made by him. The Commissioner shall then state and sign a case and deliver such to the aggrieved person. Such a person then files this within seven days in the High Court to enable the Court to hear the case.

Upon hearing the case, the Court shall determine the question submitted and if the instrument in question is in the opinion of the Court chargeable with any duty, the Court shall assess such a duty.

If it is decided by the Court that the assessment of the Commissioner is wrong, the Court shall assess the correct amount of duty, and:

- i. if the amount assessed is less than the duty already paid, the Court shall order a refund of the excess amount together with any penalty or fine which might have been paid, with or without cost; and
- ii. if the amount assessed is more than the duty already paid, the shortfall, together with any fine or penalty shall be paid with or without costs immediately or within such a time that the court may permit.

Note that the Revenue may not sue to recover the shortfall of any higher duty assessed by the court because the instrument, in such circumstance, is simply treated as not duly stamped until the shortfall is paid.

Examiner's Report

Candidates are required to explain the process of adjudication in relation to stamp duties, its benefits and limitations. Additionally, they are expected to explain the appeal procedure available where a taxpayer is dissatisfied with the Commissioner's adjudication.

About 40% of the candidates attempted the question and the performance was poor.

The common pitfalls of the candidates were their inability to explain limitations of the adjudication process and the appeals procedure where a taxpayer is dissatisfied with the Commissioner's adjudication.

Candidates are advised to read the provisions of Nigeria Tax Act, 2025, Institute's Pathfinder, and Study Text in their preparations for subsequent examinations.

Marking Guide

	Marks	Marks
a i Explanation of how to submit application		
- Heading	$\frac{1}{2}$	
- Explanation	$1\frac{1}{2}$	
ii. Request for evidence		
- Heading	$\frac{1}{2}$	
- Explanation	$\frac{1}{2}$	
iii. Explanation of assessment and stamping		
- Heading	$\frac{1}{2}$	
- Explanation	<u>$1\frac{1}{2}$</u>	5
b. Explanation of benefits of adjudication (2 marks for each benefit, subject to a maximum of two points)		4
c. Explanation of the limitation of the adjudication (1 mark for each limitation, subject to a maximum of 3 points)		3
d. Explanation of the appeal procedure where a taxpayer is dissatisfied with the commissioner's adjudication (2 marks for each aspect of the appeal procedure, subject to a maximum of 4 points)		<u>8</u>
Total		<u>20</u>

SOLUTION 4

- a. i. A startup is eligible for labeling in line with Startup Act, 2022, where:
- it is registered as a limited liability company under the Companies and Allied Matters Act, and has been in existence for a period not more than 10 years from the date of incorporation;
 - its objects are innovation, development, production, improvement, and commercialisation of a digital technology innovative product or process;

- it is a holder or repository of a product or process of digital technology, or the owner or author of a registered software;
 - it has at least one-third local shareholding held by one or more Nigerians as founder or co-founder of the startup; and
 - In the case of a sole proprietorship or partnership, it satisfies the conditions set out in the penultimate bullets above.
- ii. This Act shall not apply to an organisation which is a holding company or subsidiary of an existing company which is not registered as a startup.
 - iii. A sole proprietorship or partnership referred to in (i), bullet five, above shall be granted a pre-label status for a period of six months to enable the sole proprietorship or partnership comply with the requirements set out in the first four bullets in (i) above.
 - iv. A sole proprietorship or partnership which fails to comply with (iii) above, shall lose the pre-label status granted to it.
 - v. A labelled startup shall be granted access to the incentives provided under this Act.
- b. **Tax and fiscal incentives available to labelled startups**
- i. A labelled startup which falls within industries captured under the extant Pioneer Status Incentives (PSI) Scheme, or economic development tax incentives, may upon application through the Secretariat, receive expeditious approval from the Nigerian Investment Promotion Commission (NIPC) for the grant of the tax reliefs and incentives under the PSI Scheme.
 - ii. Notwithstanding the provisions of any other law, the Federal Government may, through the Federal Ministry responsible for Finance or any other relevant MDA, simplify the requirements for a startup to benefit from existing fiscal incentives.
 - iii. A labelled startup may be entitled to exemption from the payment of income tax or any other tax chargeable on its income or revenue for a period of three years and an additional two years if still within the period of a labelled startup, provided that the commencement date of the tax relief shall be the date of the issuance of the startup label.
 - iv. A labelled startup shall enjoy full deduction of any expenses on research and development which are wholly incurred in Nigeria and the restrictions placed by the relevant tax laws shall not apply to a labelled startup.

- v. Non-resident companies that provide technical, consulting, professional or management services to a labelled startup shall be subjected to a five percent withholding tax on income derived from the provision of such services, provided that the payment of the withholding tax, shall be the final tax to be paid by such non -resident companies.
 - vi. A labelled startup shall be exempted from contributions to the Industrial Training Fund where it provides in-house training to its employees for the period where it is designated as a labelled startup.
 - vii. The Secretariat shall ensure that a labelled startup involved in the exportation of products and services, which are deemed eligible under the Export (Incentives and Miscellaneous Provisions) Act, is entitled to export incentives and financial assistance from the Export Development Fund, Export Expansion Grant and the Export Adjustment Scheme Fund.
 - viii. The Secretariat shall ensure that a labelled startup has access to grants and loan facilities administered by the CBN, the Bank of Industry or other bodies statutorily empowered to assist small and medium scale enterprises and entrepreneurs.
 - ix. Credit guarantee scheme: The Secretariat shall establish a Credit Guarantee Scheme (in the Act referred to as “the Scheme”) for the development and growth of a labelled startup under this Act.
- c. **Incentives and reliefs for investors investing in a labelled startup**
- i. The Federal Government, through the Federal Ministry responsible for Finance and other MDAs, shall develop and implement a national policy for incentives for individuals, impact investors, angel investors, companies, venture capitalists, private equity funds, accelerators or incubators which invest in a labelled startup or in the startup ecosystem to enjoy tax credits on their investment.
 - ii. Notwithstanding the provisions of the relevant tax laws or Nigeria Tax Act, 2025, an angel investor, venture capitalist, private equity fund, accelerators or incubators which invests in a labelled startup shall be entitled to an investment tax credit equivalent to 30% of the investment in the labelled startup provided that such credit shall be applied on any gains on investment which are subject to tax.
 - iii. Capital gains that accrue from the disposal of assets by an angel investor, venture capitalist, private equity fund, accelerators or incubators with respect to a labelled startup shall not be subject to tax, provided the assets have been held in Nigeria for a minimum of 24 months.

Examiner's Report

Part (a) of the question tests the candidates' knowledge of the provisions of the Nigeria Startup Act 2022, relating to eligibility criteria to qualify as a labelled startup. Part (b) requires the candidates to explain tax and fiscal incentives to labelled startups, whilst part (c) relates to incentives or reliefs available to investors who invest in labelled startups.

About 40% of the candidates attempted the question and performance was poor.

Many candidates avoided this question like a plague. Those who attempted the question displayed poor knowledge of the provisions of the Nigeria Startup Act, 2022, as evidenced in their explanations of the requirements of the questions.

Candidates should be conversant with the provisions of the Act, and also ensure that they cover the syllabus adequately when preparing for subsequent examinations.

Marking Guide

	Marks	Marks
a. Identification and explanation of eligibility criteria for a company to qualify as a labelled startup (1 mark for each criterion, subject to a maximum of 5 points)		5
b. Explanation of the tax and fiscal incentives available to labelled start-ups (2 marks for each point, subject to a maximum of 6 points)		12
c. Explanation of incentives or reliefs available to investors who invest in a labelled start-ups (1 mark for each point)		<u>3</u>
Total		<u>20</u>

SOLUTION 5

a. **Basic concepts in taxation include:**

i. **Tax yield**

This is a total revenue a government collects from a specific tax or all taxes combined from the administration of tax on taxpayers. Tax yield is a product of tax rate and tax base.

ii. **Tax rate**

It describes the burden ratio (usually expressed as a percentage) at which a business or person is taxed, for example, the value added tax rate is 7.5% on vatiable goods and services.

- iii. **Tax effect**
This is a general term that describes the consequences of a specific tax scenario with respect to a particular tax-paying entity.
- iv. **Tax impact**
This is the effect of a tax on the production or consumption of a product being taxed, for example, the tax impact of raising the levy on tobacco might be a reduction in tobacco sales.
- v. **Tax shift**
This is also referred to as tax swap. It is a change in taxation that eliminates or reduces one or several taxes and establishes or increases others keeping the overall revenue the same.

b. **Sources of Nigerian tax laws**

i. **Statutes laws**

These are tax legislations passed by:

- Acts of the National and State Assemblies, and
- Bye-laws by Local government Authorities under a democratic government; or
- Decrees/Edicts under a military government

These legislations confer powers on the tax authorities to impose and collect taxes from individuals, companies, trusts, settlements, etc.

ii. **Case laws**

This is based on the doctrine of stare decisis (judicial precedents). Judgments pronounced by superior courts of record namely the High Courts, Court of Appeal, and the Supreme Court on principles of tax law and interpretations of tax statutes are binding on lower courts. Since Nigerian tax laws have their origin in English tax laws, principles of English common law as pronounced by English judges also form another source of Nigerian tax law, particularly where statutory expressions and terms are substantially the same.

Illustrative Case:

Aderawos Timbers Trading Co. Limited v. Federal Board of Inland Revenue Service (1966) LL.R 195; (1969) ALL NLR 247.

The court held that decisions of English courts may be invoked to interpret Nigerian tax statutes where expressions and terms are similar.

iii. **Customary laws**

These are the native laws and customs, governing the taxation of income, goods and properties of persons or communities within an ethnic group. Included under this heading, is the Islamic law, which is

the basis of moslem laws that are usually applicable in the Northern part of Nigeria.

Examples of taxes collected under customary laws include:

- Isakole - Payable in Yoruba land to titular heads of communities or Obas.
- Tax on the produce from farmland.
- Osusu-nkwu - Applicable in the Eastern part of Nigeria.
- Zakkat - Payable by adherents of the Islamic faith on their wealth held for a full year (including money, properties, etc.).

The Islamic law provides the basis for determining the amount of tax payable and to whom it is payable

- iv. Circulars issued by and practices of the Inland Revenue.
- v. Opinions of tax experts and authors in so far as the courts take judicial notice of them.
- vi. Budgets and pronouncements of relevant ministries.
- vii. The Constitution of the Federal Republic of Nigeria.

Examiner's Report

The question tests the candidates' knowledge of some basic concepts of taxation and sources of Nigerian tax laws.

About 80% of the candidates attempted the question and performance was good.

The common pitfalls of some of the candidates were their inability to explain the basic concepts taxation and sources of Nigerian tax laws.

Candidates are advised to be conversant with the basic concepts of taxation and should be able to identify and explain the sources of Nigerian tax laws at all times.

Marking Guide

	Marks	Marks
a. Explanation of the basic concepts in taxation		
- Heading ($\frac{1}{2} \times 5$)	2½	
- Explanation of each concept (1 mark for each concept)	<u>5</u>	7½
b. Identification and explanation of the sources of Nigeria tax laws		
- Heading ($\frac{1}{2} \times 5$)	2½	
- Identification and explanation of each source (1 mark for each source, subject to a maximum of 5 sources)	<u>5</u>	<u>7½</u>
Total		<u>15</u>

SOLUTION 6

- a. i. **Members of the Local Government Revenue Committee (LGRC)**
The Revenue Committee (LGRC) shall comprise of:
- the Supervisor for Finance as Chairman;
 - three local government councillors as members; and
 - two other persons experienced in revenue matters to be nominated
by the Chairman of the local governments on their personal merits
- ii. **Functions**
- The committee shall be responsible for the assessment and collection of all taxes, fines and rates, under its jurisdiction and shall account for all amounts so collected, in a manner to be prescribed by the chairman of the local government.
 - The committee shall be autonomous of the local government treasury department and shall be responsible for the day-to-day administration of the department, which forms its operational arm.
- b. **Taxes to be collected by State Governments include:**
- i. personal income tax in respect of
 - Pay as you earn (PAYE); and
 - Direct taxation (self-assessment)
 - ii. withholding tax on individuals;
 - iii. stamp duties on investments executed by individuals;
 - iv. pools betting, lotteries, gaming and casino taxes;
 - v. road taxes; and
 - vi. business premises registration fees, for:
 - Urban areas - as defined by each state:
 - ₦10,000.00 (maximum) for registration
 - ₦5,000.00 for annual renewal of registration.
 - Rural areas as defined by each state:
 - ₦2,000.00 for registration; and
 - ₦1,000 for annual renewal of registration.
 - vii. development levy (individuals only), not more than N100.00 per annum on all taxable individuals;
 - viii. naming of street registration fees in state capital;
 - ix. right of occupancy fees on lands owned by the state in urban cities of the state;
 - x. market taxes and levies where state finance is involved;
 - xi. Capital gains of individuals.

Examiner's Report

Part (a) of the question tests the candidates' knowledge of the composition and functions of the Local Government Revenue Committee, whilst part (b) requires them to explain the taxes and levies collectible by state governments.

About 75% of the candidates attempted the question but performance was average.

The common pitfalls of some of the candidates were their display of poor knowledge of the composition of the Local Government Revenue Committee and inability to differentiate between taxes collectible by State Governments and Federal Government.

Candidates are advised to familiarise themselves with the composition and functions of the organs of tax administration and tax jurisdiction in Nigeria.

Marking Guide

	Marks	Marks
a i. Identification of members of the Local Government Revenue Committee (LGRC)		
- Supervisor for Finance	2	
- Government Councillors	1	
- Persons experienced in revenue matters	<u>1</u>	4
ii. Explanation of the functions of LGRC (1½ marks for each function)		3
iii. Identification of taxes and levies collectible by state governments (1 mark for each point, subject to a maximum of 8 points)		<u>8</u>
Total		<u>15</u>

SOLUTION 7

a. **Functions of the Nigeria Custom Service are to:**

- i. administer, direct, manage and enforce the provisions of this Act and the customs and excise laws;
- ii. collect and account for revenue from customs duties, excise duties, charges, fees and special assignments as may be assigned to it by the government;
- iii. administer trade and fiscal policies of the government as it relates to the Act;
- iv. promote trade facilitation in line with international conventions agreements as it relates to customs administration;
- v. prevent smuggling, customs fraud and all other violations under

- vi. carry out all border enforcement and regulatory activities required by law in collaboration with relevant agencies;
- vii. collate and publish accurate trade statistics and other relevant data as they relate to customs and excise;
- viii. engage in regular consultations with individual traders, trade associations and other relevant stakeholders to promote industrial harmony;
- ix. approve and licence customs agents, who shall be citizens of Nigeria; and
- x. do such other things as are necessary for or incidental to the performance of its functions and discharge of its duties under this Act and the laws of Nigeria.

ii. Nigeria Custom Service

The Board shall comprise of:

- a Chairman, who shall be the Minister of Finance,
- the Comptroller-General, who shall be the Deputy Chairman;
- all the Deputy Comptrollers-General of the Service;
- the Legal Adviser to the Service, who shall also head the Legal Department to be appointed from the Office of the Attorney General of the Federation; and
- a representative not below the rank of a director, from the following Federal Ministries:
 - Industry;
 - Trade and Investment;
 - Transport;
 - Aviation;
 - Foreign Affairs;
 - the Executive Chairman of the Federal Inland Revenue Service; and
 - two members representing the organised private sector for a term of four years renewable for another term of four years and no more.

- b. The Nigeria Revenue Service (formerly Federal Inland Revenue Service) adopted and deployed a locally developed tax management solution known as TAXPROMAX. This system has the capacity to handle different aspects of tax administration, including:

i. E-registration

Deployment and use of a robust and integrated tax management software makes it possible for accurate taxpayers' data to be captured by the tax authority. Each taxpayer enrolled is assigned a unique tax identification number (TIN) and it is now possible for taxpayers to do self-enrolment through a web application service.

- ii. **E-assessment**
When taxpayers file returns electronically, it is possible for their tax liabilities to be computed and assessment notice generated automatically and sent to their email accounts.
- iii. **E-payments**
Technology has made it possible for taxpayers to make payments through several electronic channels, such as point of sale (POS); internet banking; bank transfers; unstructured supplementary service data (USSD) or even using their credit/debit cards from the comfort of their homes.
- iv. **E- filing**
Most integrated tax management solutions come along with a module that facilitates electronic filing. This enables taxpayers to file their returns from their offices without the stress of going to the tax office which might be several kilometers away. For instance, the FIRS has been encouraging taxpayers to make use of the recently deployed TaxPro solution to file their periodic tax returns, including VAT and CIT returns.
- v. **E-tax calculator**
Modern tax authorities develop and deploy this tool on their websites to enable taxpayers and their consultants to compute the accurate amount of taxes to be paid. This function has been part of the FIRS website (www.firs.gov.ng) in the last few years.
- vi. **E-TCC**
Many individual and corporate taxpayers require their tax authorities to issue tax clearance certificates (TCCs) to them on yearly basis. Through the use of appropriate technology, taxpayers can apply for their TCCs electronically and get them sent to their email accounts, if the conditions are met.
- vii. **E-reporting**
Each tax authority requires various performance reports to be generated on a periodic basis. These reports can be generated within seconds at the click of a button.
- viii. **E-tax audit**
Technology has made it possible for the entire process of tax audit to be carried out without the tax auditors visiting the premises of the taxpayer and vice versa. For instance, all the pre and post-audit meetings can be held using video conferencing tools and documents exchanged electronically through emails.

Examiner's Report

Part (a) of the question tests the candidates' knowledge of the provisions of the Nigeria Customs Service Act, 2023, with emphasis on functions of the Nigeria Customs Service and the composition of the Nigeria Customs Service Board. Part (b) requires the candidates to identify and explain aspects of tax administration that can be handled by TaxProMax.

About 70% of the candidates attempted the question but the performance was poor. Many of the candidates displayed poor knowledge of the functions of the Nigeria Customs Service and composition of the Nigeria Customs Service Board. Additionally, some of the candidates could not explain functionalities of the TaxProMax and its contributions to efficient tax administration.

Candidates are advised to be conversant with the provisions of the Nigeria Customs Service Act, 2023, and the application of technology in taxation.

Marking Guide

	Marks
a i. Explanation of the functions of the Nigeria customs services (NCS) (1½ marks for each function, subject to a maximum of 3 points)	4½
ii. Identification of members of NCS Board (1½ marks for any member, subject to a maximum of 3 members)	4½
b. Identification and explanation of aspects of tax administration that can be handled by the TaxProMax (1 mark for each aspect, subject to a maximum of 6 aspects)	6
Total	<u>15</u>

INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

SKILLS LEVEL EXAMINATION – MAY 2026

PERFORMANCE MANAGEMENT

Time Allowed: 3¼ 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

Okohia Ugo Manufacturing Company limited manufactures four types of fans named, Exclusive, Premium, Deluxe, and Standard with the following codes: E, P, D and S. The Financial Controller, with the approval of the Board, wants to review the profitability of the Company's four products and the effect of several proposals for varying the product mix. The net profit margin of 25% profitability target for each product is desired. The following information are available for 2023.

Particulars	E	P	D	S	Total
Units Produced/Sold	20,000	24,000	36,000	40,000	
Materials	₦4,400,000	₦5,200,000	₦7,600,000	₦8,400,000	₦25,600,000
	0	0		0	0
Labour	₦2,000,000	₦2,360,000	₦3,440,000	₦3,800,000	₦11,600,000
	0	0		0	0
Overheads	₦1,600,000	₦1,840,000	₦2,560,000	₦2,800,000	₦8,800,000
	0	0		0	

The products use the same materials, labour and overheads.

The possible unit selling prices of individual products are given below:

Particulars	E		P		D		S	
	Amount	Pr	Amount	Pr	Amount	Pr	Amount	Pr
Selling Price	₦800	0.5	₦500	0.3	₦900	0.2	₦850	0.5
	₦700	0.3	₦540	0.5	₦800	0.3	₦750	0.3
	₦600	0.2	₦600	0.2	₦700	0.5	₦650	0.2

The company considers specific fixed costs for each products and general fixed cost attributable to the company. The specific fixed costs are attributable to individual products while the company fixed cost is considered to be ₦21,665,000 per period.

Required:

- Determine the expected selling price for each product. (3 Marks)
 - Determine the unit variable cost of each product. (3 Marks)
- Prepare a profit statement based on marginal costing approach for each product and the company, stating the company's net profit or loss as well as stating which product(s) achieved the 25% profit margin target. (5 Marks)
- Determine the effect on the company's net profit if:
 - Product D is discontinued due to legislative provisions. (3 Marks)

- (ii) Product D is discontinued and this resulted in a consequent loss of customers, causing a decrease of 4,000 units in sales of Product P. (3 Marks)
 - (iii) Product D's selling price is increased to ₦860 with a resultant decrease in quantity produced and sold to be 30,000 units, with no effects on other products. (3 Marks)
 - (iv) Product E is increased by 10,000 units to be sold at ₦500 each by adding a second shift in which higher wages must be paid which increases the direct labour cost per unit to ₦60 for each additional unit. (3 Marks)
 - (v) Production of product E is reduced to 10,000 units which will be sold at a selling price of ₦800 each, and if production of Product S is increased to 50,000 units to be sold at ₦700 each. Part of the plant in which Product E is produced can easily be adapted to produce Product S. (4 Marks)
- d. State **THREE** limitations of sensitivity analysis. (3 Marks)
- (Total 30 Marks)**

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

QUESTION 2

Viana Nig. Oil palm processing Plant is planning annual turnaround maintenance of the facility that will require facility shut down every three months. The plant management has decided to engage an expert maintenance outfit that will carry out the routine inspection and maintenance every three months. During the first year's operation, the costs of shut-down have been as follows:

Quarter	Shut-Down Cost
1	₦720,000
2	₦576,000
3	₦540,000
4	₦540,000

The management accountant attempts to forecast maintenance costs for the coming year and on examining the above data, it appears that these costs have been steadily decreasing. The plant engineers have suggested that this is probably due to the fact that the maintenance engineers are becoming more used to the procedures involved and also the fact that the plant itself is gradually settling down, after initial operational problems. If this is the case, an appropriate learning curve could explain the situation which has been observed.

Required:

- a. Explain the concept of learning curve. (4 Marks)
- b. Estimate the rate of learning which is inherent in the data. Explain the meaning of the value you have calculated. (4 Marks)
- c. Using the learning rate that you have determined, forecast the total cost of shut down for routine maintenance during the coming year. (4 Marks)
- d. Assume that learning ceases at the end of the second year, forecast the total cost of shut-down for routine maintenance during the third year. (4 Marks)
- e. State **TWO** specific reasons why this forecast may be wrong. (4 Marks)

(Total 20 Marks)

QUESTION 3

- a. Explain the **FOUR** classifications of cost of quality with examples of each. (6 Marks)
- b. Okorie Ufondu is the management accountant of Jorex Plc. Mr. Ufondu realises that the present performance reporting system does not highlight quality costs.

The reports contain the information below, but he wants this to be reported in an appropriate format. The following information is available in respect of the year ended August 31, 2025.

(i) **Production Data:**

Units requiring rework	3,000
Units requiring warranty repair service	3,600
Design engineering hours	132,000
Inspection hours (manufacturing)	432,000

(ii) **Cost Data:**

Design engineering cost per hour	₦1,500
Inspection cost per hour (manufacturing)	800
Rework cost per heating system unit reworked (manufacturing)	60,000
Customer support cost per repaired unit (marketing)	4,000
Transportation costs per repaired unit (distribution)	4,800
Warranty repair costs per repaired unit	64,000

- (iii) Staff training costs ₦6,000,000
Product testing costs ₦1,960,000

- (iv) The marketing director has estimated that sales of 2,800 units were lost as a result of bad publicity in trade journals. The average contribution per heating system unit is estimated at ₦240,000.

Required:

Prepare a cost of quality report for Jorex Plc. that shows its costs of quality (using appropriate headings) for the year ended August 31, 2025.

(14 Marks)

(Total 20 Marks)

QUESTION 4

Oforma Nigeria Limited has two operating divisions, Lagos division and Enugu division that are treated as profit centres for the purpose of performance reporting. Lagos division makes two products, Gat-R and Mat-R. Gat-R is sold to external customers for ₦620 per unit. Mat-R is a part-finished item that is sold only to Enugu division.

Enugu division can obtain the part-finished item from either Lagos division or from an external supplier. The external supplier charges a price of ₦550 per unit.

The production capacity of Lagos division is measured in total units of output of Gat-R and Mat-R. Each unit requires the same direct labour time. The costs of production in Lagos division are as follows:

	Gat- R	Mat-R
	₦	₦
Variable cost	460	480
Fixed cost	190	190
Full cost	650	670

Required:

- What is an optimal transfer price? (4 Marks)
- What would be the optimal transfer price for Mat-R if there is spare production capacity in Lagos division? (4 Marks)
- What would be the optimal transfer price for Mat-R if Lagos division is operating at full capacity due to a limited availability of direct labour, and there is unsatisfied external demand for Gat-R? (7 Marks)
- Discuss two methods that can be used to evaluate performance of divisions that operate as investment centres. (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

Acop Nigeria Limited manufactures four products which are initially processed together at Process 1 before further processing using different processes. The four products are Pat, Pet, Pan and Pea. Pat is further processed in Process 2, Pet in Process 3, Pan in Process 4 and Pea in Process 5.

Process 1 has a 10% loss whereas no process loss is expected from Processes 2 to 5. Process 1 scraps are sold at ₦50 per kg. Process 1 total costs are apportioned to the products based on the quantities of each product at spilt off point. Production overhead is absorbed as a percentage of direct wages.

Data in respect of the company's December 2025 operations are as follows:

Process	1	2	3	4	5	Total
	₦'000	₦'000	₦'000	₦'000	₦'000	
Direct materials at ₦125 per kg	10,000					10,000
Direct wages	4,800	1,200	800	400	1,600	8,800
Production overhead						660
		Pat	Pet	Pan	Pea	
		Kgs	Kgs	Kgs	Kgs	
Output		22,000	20,000	10,000	18,000	
		₦	₦	₦	₦	
Selling price		400	300	200	500	
Estimated sales value at end of Process 1		250	280	120	300	

The following additional information is provided:

- Process 1 output cannot be varied.
- Wages in processes 2 to 5 could be avoided if the products are not processed further.
- Production overhead is to be regarded as fixed.

Required:

Evaluate and advise an alternative production strategy which would optimise the company's profit for the month. (15 Marks)

QUESTION 6

Abayomi Plc produces and sells two major products, A and B. The budgeted income statement for the year to December 31, 2022 is given below:

Products	A N'000	B N'000	Total N'000
Sales	8,400	25,200	33,600
Production costs:			
Materials	(2,240)	(5,040)	(7,280)
Direct labour	(1,120)	(3,360)	(4,480)
Variable overheads	(1,120)	(2,240)	(3,360)
Fixed overheads	(560)	(1,680)	(2,240)
Total cost	<u>(5,040)</u>	<u>(12,320)</u>	<u>17,360</u>
Gross Profit	<u>3,360</u>	<u>12,880</u>	16,240
Fixed selling and Adm.			<u>(8,320)</u>
Net profit before tax			<u><u>7,920</u></u>

The budgeted selling prices of the products are:

- A N120
B N180

Required:

- Determine the breakeven sales in units for the company, using the budgeted data. (3 Marks)
- Now assume that the following changes are made to the budget:
 - Unit selling price of product B is reduced to N160.
 - Direct material cost is expected to drop by 10% for product A and 20% product B.
 - Direct labour costs for each product will increase by 10%.
 - Additional N456,000 will be spent on advertising.
 - 80% of total revenue will be derived from product B.

Determine the break even sales in units and values for the company. (4 Marks)

- Assuming all the facts in (b) (i) – (v) above are applicable, calculate how much sales revenue must be made by the company to earn an after tax rate of return of 12% of the revenue? Assume tax rate of 40%. (8 Marks)

(Total 15 Marks)

QUESTION 7

- a. Explain the following concepts:
- i. Economic value added;
 - ii. Investment centre; and
 - iii. Return on Investment (ROI). (6 Marks)

- b. Nwakaego and Sons Nigeria limited has four operating divisions which are spread in four cities in Nigeria: Lagos, Kano, Gombe and Enugu. These divisions are treated as investment centres for the purpose of performance reporting. The following information is available:

	Lagos	Kano	Gombe	Enugu	
	₦'000	₦'000	₦'000	₦'000	
Sales revenue	1200	2600	2,200	2,780	The
Variable costs	700	1,300	1,050	1,500	comp
Investment costs	2,500	3,000	2,800	2,700	any's annua

A fixed cost is ₦1,300,000 which is apportioned to the divisions on the basis of sales. The cost of capital for Nwakaego and Sons Nigeria Limited is 7.5%.

Ignore taxation.

Required:

- i. Evaluate the performance of the divisions using:
 - ROI method. (3 Marks)
 - Residual income method. (3 Marks)
- ii. Re-evaluate the residual income situation of the company given that the cost of capital is 10%. (3 Marks)

(Total 15 Marks)

Formulae

Learning curve

$$Y = ax^b$$

Where Y = cumulative average time per unit to produce x units

a = the time taken for the first unit of output

x = the cumulative number of units produced

b = the index of learning ($\log LR / \log 2$)

LR = the learning rate as a decimal

Demand curve

$$P = a - bQ$$

$$b = \frac{\text{change in price}}{\text{change in quantity}}$$

a = price when Q = 0

$$MR = a - 2bQ$$

The linear regression equation of Y on X is given by:

$$\begin{aligned} Y &= a + bX \\ \text{where } b &= \frac{n \sum XY - (\sum X)(\sum Y)}{n \sum X^2 - (\sum X)^2} \\ a &= \frac{\sum y}{n} - \frac{b \sum x}{n} \end{aligned}$$

Coefficient of determination (r^2)

$$r^2 = \frac{(n \sum XY - \sum x \sum Y)^2}{(n \sum X^2 - (\sum X)^2)(n \sum Y^2 - (\sum Y)^2)}$$

The Miller-Orr Model

$$Spread = 3 \times \left(\frac{\frac{3}{4} \times \text{Transaction Cost} \times \text{Variance of Cash flows}}{\text{Interest rate (as a proportion)}} \right)^{\frac{1}{3}}$$

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

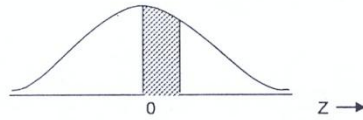
Discount rate (r)

Periods

(n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	1
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	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	4.100	3.993	3.890	3.791	5
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	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	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335	8
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	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	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495	11
12	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814	12
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103	13
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367	14
15	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.061	7.606	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	0.840	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	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106	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	2.991	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	3.605	7
8	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837	8
9	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031	9
10	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192	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	4.611	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	4.876	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.



$Z = \frac{(x - \mu)}{\sigma}$	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	.1480	.1517
0.4	.1554	.1591	.1628	.1664	.1700	.1736	.1772	.1808	.1844	.1879
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
2.8	.4974	.4975	.4976	.4977	.4977	.4978	.4979	.4980	.4980	.4981
2.9	.4981	.4982	.4983	.4983	.4984	.4984	.4985	.4985	.4986	.4986
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									

SECTION A

SOLUTION 1

ai. Determination of expected selling price for each product

Product E			Product P			Product D			Product S		
Amt	Pr	EV	Amt	Pr	EV	Amt	Pr	EV	Amt	Pr	EV
800	0.5	400	500	0.3	150	900	0.2	180	850	0.5	425
700	0.3	210	540	0.5	270	800	0.3	240	750	0.3	225
600	0.2	120	600	0.2	120	700	0.5	350	650	0.2	130
Selling Price =			Selling Price =			Selling Price =			Selling Price =		
₹730			₹540			₹770			₹780		

ii. Determine the unit variable cost of each product

Since the Products use the same materials, Labour and overheads Computing the variable cost Using High – Low method:

Cost Item	Cost of Highest Quantity	Cost of Lowest Quantity	Cost Difference	Difference between High and Low quantities	Variable cost = Cost Difference / Difference in Quantity
Material	8,400,000	4,400,000	4,000,000	40,000	₹200
Labour	3,800,000	2,000,000	1,800,000	40,000	₹90
Overhead	2,800,000	1,600,000	1,200,000	40,000	₹60

Variable costs for each Product

Cost Element	Product E	Product P	Product D	Product S
	₹	₹	₹	₹
Material	200	200	200	200
Labour	90	90	90	90
Overhead	60	60	60	60
Total unit Variable cost	350	350	350	350

b. Profit Statement (Marginal Costing Approach)

Particulars	Product E	Product P	Product D	Product S	Total
Units	20,000	24,000	36,000	40,000	
Sales	14,600,000	12,960,000	27,720,000	31,200,000	86,480,000
Variable	7,000,000	8,400,000	12,600,000	14,000,000	<u>42,000,000</u>

cost					
Contribution	7,600,000	4,560,000	15,120,000	17,200,000	44,480,000
Fixed					
Overhead	1,000,000	1,000,000	1,000,000	1,000,000	<u>4,000,000</u>
Attributable					
Profit	6,600,000	3,560,000	14,120,000	16,200,000	40,480,000
Profit margin	45.20%	27.469%	50.94%	58.441%	
General					
Fixed					
overhead					<u>21,665,000</u>
Net Profit					<u><u>18,815,000</u></u>

All the 4 products achieved 25% profit margin or more benchmark.
Computation of fixed costs

		₦
Material:	Total cost @ 20,000 units =	4,400,000
	Variable cost (N200 x 20,000)	4,000,000
	Material Fixed cost	400,000
Labour:	Total cost @ 20,000 units =	2,000,000
	Variable cost (N90 x 20,000)	1,800,000
	Labour Fixed cost	200,000
Overhead:	Total cost @ 20,000 units =	1,600,000
	Variable cost (N60 x 20,000)	1,200,000
	Overhead Fixed cost	400,000
Total Fixed Overhead		1,000,000

c. Effect on Company's Net Profit:

i. If Product D is discontinued:

Particulars	Product E	Product P	Product S	Total
Units	20,000	24,000	40,000	
Sales	14,600,000	12,960,000	31,200,000	58,760,000
Variable cost	7,000,000	8,400,000	14,000,000	<u>29,400,000</u>
Contribution	7,600,000	4,560,000	17,200,000	29,360,000
Fixed Overhead	1,000,000	1,000,000	1,000,000	<u>3,000,000</u>
Attributable Profit	6,600,000	3,560,000	16,200,000	26,360,000
Less General fixed cost				<u>21,665,000</u>
Net Profit				<u><u>4,695,000</u></u>

ii. If D is discontinued and P sales decreased by 4,000 units:

Particulars	Product E	Product P	Product S	Total
Units	20,000	20,000	40,000	
Sales	14,600,000	10,800,000	31,200,000	56,600,000
Variable cost	7,000,000	7,000,000	14,000,000	<u>28,000,000</u>

Contribution	7,600,000	3,800,000	17,200,000	28,600,000
Fixed Overhead Attributable	1,000,000	1,000,000	1,000,000	<u>3,000,000</u>
Profit	6,600,000	2,800,000	16,200,000	25,600,000
Less General fixed cost				<u>21,665,000</u>
Net Profit				<u>3,935,000</u>

- iii. Where Product D selling Price increased to N860 and quantity decreased to 30,000 units:

Particulars	Product E	Product P	Product D	Product S	Total
Units	20,000	24,000	30,000	40,000	
Selling Price	N730	N540	N860	N780	
Sales	14,600,000	12,960,000	25,800,000	31,200,000	84,560,000
Variable cost	7,000,000	8,400,000	10,500,000	14,000,000	<u>39,900,000</u>
Contribution	7,600,000	4,560,000	15,300,000	17,200,000	44,660,000
Fixed Overhead Attributable	1,000,000	1,000,000	1,000,000	1,000,000	<u>4,000,000</u>
Profit	6,600,000	3,560,000	14,300,000	16,200,000	40,660,000
Less General Fixed Cost					<u>21,665,000</u>
Net Profit					<u>18,995,000</u>

- iv. Where Product E is increased by 10,000 units to be sold at ~~N500~~ each and additional Labour cost at ~~N60~~ for each additional unit.

Particulars	Product E	Product P	Product D	Product S	Total
Units	20,000	24,000	36,000	40,000	
Selling Price	N730	N540	N770	N780	
Sales	14,600,000	12,960,000	27,720,000	31,200,000	86,480,000
Variable cost	7,000,000	8,400,000	12,600,000	14,000,000	<u>42,000,000</u>
Contribution	7,600,000	4,560,000	15,120,000	17,200,000	44,480,000
Fixed Overhead Attributable	<u>1,000,000</u>	<u>1,000,000</u>	<u>1,000,000</u>	<u>1,000,000</u>	<u>4,000,000</u>
Profit	6,600,000	3,560,000	14,120,000	16,200,000	40,480,000
Net Returns on Additional Units revenue (N500 N410)	900,000				900,000
	7,500,000	3,560,000	14,120,000	16,200,000	41,380,000

Less	
General	
fixed cost	<u>21,665,000</u>
Net Profit	<u>19,715,000</u>

- v. If Product E is reduced to 10,000 units and sold at ₦800 each and Product S is increased to 50,000 units and sold at ₦700 per unit

Particulars	Product E	Product P	Product D	Product S	Total
Units	10,000	24,000	36,000	50,000	
Selling					
Price	₦800	₦540	₦770	₦700	
Sales	8,000,000	12,960,000	27,720,000	35,000,000	83,680,000
Variable					
cost	<u>3,500,000</u>	<u>8,400,000</u>	<u>12,600,000</u>	<u>17,500,000</u>	<u>42,000,000</u>
Contribution	4,500,000	4,560,000	15,120,000	17,500,000	41,680,000
Fixed					
Overhead	<u>1,000,000</u>	<u>1,000,000</u>	<u>1,000,000</u>	<u>1,000,000</u>	<u>4,000,000</u>
Attributable					
Profit	3,500,000	3,560,000	14,120,000	16,500,000	37,680,000
Less					
General					
Fixed cost					<u>21,665,000</u>
Net Profit					<u>16,015,000</u>

- d. Limitations of sensitivity analysis:

- No probability insight or probability of likely occurrence;
- Variables are static and may be misleading;
- Ignores variability interaction hence one variable focused;
- Oversimplifies extreme risk; and
- Sustains garbage in Garbage out in cost.

Examiner's report

This is a compulsory question under the new syllabus which test candidates' ability in using marginal costing approach in preparing profit statement. It also dwells on expected value computation for selling prices, use of high-low methods in cost separation into variable and fixed costs, and application of sensitivity analysis in decision making.

The question was well attempted and the candidates' performance was however average.

The major pitfall was the candidates' inability to decipher the sensitivity issues in part (c) iii to v.

It is hereby recommended that candidates use ICAN Study Text and other Performance Management text books in preparing for future Institute's examinations.

Marking guide

Sect.	Description	Marks	Marks	Marks
ai.	4 ticks = 3 marks	3		
ii.	3 ticks = 3 marks	<u>3</u>	6	
b.	35 ticks = 5 marks		5	
ci.	3 ticks = 3 marks	3		
ii.	3 ticks = 3 marks	3		
iii.	3 ticks = 3 marks	3		
iv.	3 ticks = 3 marks	3		
v.	4 ticks = 4 marks	<u>4</u>	16	
d.	3 ticks = 3 marks		<u>3</u>	30

SOLUTION 2

Viana Nig. Oil palm Processing Plant

- a. The basic concept of a learning curve is that the more a particular task is performed the more proficient the individual becomes and, as a consequence, the time taken decreases.

In the initial stages, the learning effect is substantial leading to marked decreases in time. In latter stages, however, the individual becomes more familiar with the task and the rate of learning slows down.

This effect is captured in a relationship between the average time taken per unit and the cumulative number of units produced (or task repetitions). The form of this relationship is usually taken to be geometric (or logarithmic) as given by: $Y = ax^b$

where Y = average labour hours for the output level desired $X = B = 83$.

- b. **Estimation of Rate of Learning:**

From the data, the cumulative number of shut-downs (x) and the average cost of shut down (y) are as follows:

Quarter	Shut-Down Cost (₦)
1	720,000
2	576,000
3	540,000
4	540,000

Cumulative Number	Cumulative Costs (₦) (X)	Average Costs (₦) (Y)
1	720,000	720,000
2	1,296,000	648,000

3	1,836,000	612,000
4	2,376,000	594,000

When X, doubles from 1 to 2, then y decreases by a factor $648,000/720,000 = 0.90$.

When X again doubles from 2 to 4, Y decreases by $594,000/648,000 = 0.9167$. It is therefore clear that the learning rate is about 90.8%.

c. Forecast of total cost in the coming year:

At the end of the second year, the plant would have been shut-down 8 times (8 quarters).

Qtr 4 average cost is ₦594,000

	₦
∴ Qtr 8 average cost = 90.8% of ₦594,000 =	539,352
Total costs over 8 quarters = $539,352 \times 8 =$	4,314,816
Less: Total cost during first year =	2,376,000
Total costs during second year	1,938,816

d. Forecast of total cost of shut down after cessation of learning in the 3rd Year:

If learning ceases at the end of quarter 8, the cost applicable for quarter 8 (not the average cost after 8 shut-downs) will apply in all subsequent quarters.

* Determine the total costs after 8 shut-downs - determined in (c) above as ₦4,314,816

* Determine the total costs after 7 shut-downs:

** Average costs after 7 shut-downs by formula: $Y = 720,000 (1) \text{Log}0.908/\text{Log} 2$

$$Y = 720,000(7)^{-0.1392} = \text{₦}549,155$$

** Total costs after 7 shut-downs = $7 \times 549,155 = \text{₦}3,844,084$

* Cost for quarter 8 is $\text{₦}4,314,816 - 3,844,084 = \text{₦}470,732$

This is the cost that will apply per quarter subsequently in the absence of learning.

Thus the cost of shut-down during the third year will be: 4 quarters x ₦470,732 = ₦1,882,928.

e. Two specific problems are:

- i. No allowance seems to have been made for inflation; and
- ii. As the plant gets older, maintenance costs would be expected to rise. This factor has not been taken into account.

Examiner's report

The question test candidates' understanding of learning curve theory and computation of associated shut down costs, especially where the fourth quarter cost is the same as the third quarter cost.

The question was averagely attempted, however, the performance of candidates was below average.

The major pitfall observed was inability of candidates to understand fully that irrespective of the figures presented in the cost data, the learning curve principles must be used to compute the required solutions as stated in the question.

It is hereby recommended that candidates use ICAN Study Text and other approved text books on Performance Management when preparing for future Institute's examinations.

Marking guide

Section	Description	Marks	Marks
a.	Explanation of learning curve concept	4	
b.	Rate of Learning = 4 ticks = 4 marks	4	
c.	Total cost of shut down for coming year (4 Quarters)	4	
d.	Total shutdown cost for 3 rd year.	4	
e.	2 specific reasons why this forecast may be wrong (2 ticks = 4 marks)	4	20

SOLUTION 3

- a. The costs of quality fall into four categories
- i. **Prevention costs** – costs incurred to preclude the production of products that do not conform to specifications. Examples include:
 - Quality training;
 - Testing of new materials;
 - Supplier evaluation;
 - Preventive equipment maintenance;
 - Extra purchase price of higher quality materials;
 - Design engineering; and
 - Process engineering
 - ii. **Appraisal costs** – costs incurred to detect which of the individual units of products do not conform to specifications. Examples include:
 - Inspection of goods received;

- Product testing;
 - Inspection of part-finished production, i.e. work-in-progress; and
 - Inspection of finished output.
- iii. **Internal failure costs** – costs incurred on defective products before they are shipped to customers. Examples include:
- Spoilage;
 - Rework;
 - Scrap; and
 - Staff waiting time and machine downtime due to disruption of workflows caused by defective materials and part-finished products.
- iv. **External failure costs** – costs incurred on defective products after they are shipped to customers. Examples include:
- Warranty repair costs;
 - Liability claims;
 - The replacement of failed products;
 - The cost of handling complaints; and
 - Additional transport costs

Appraisal and prevention costs are sometimes known as the cost of conformance (for goods) or the costs of compliance (for services). Internal and external failure costs are the costs of non-conformance or non-compliance.

b. Cost of quality report for the year ended 31 August 2024

S/n	Particulars	Quantity	Rate (₦)	Amount ₦'000	%
a.	Preventive Costs				
	Design Engineering	132,000	1,500	198,000	11.89
	Training			6,000	0.36
	Sub-total			204,000	12.25
b.	Appraisal Cost				
	Inspection (Manufacturing)	432,000	800	345,600	20.75
	Product Testing			1,960	0.12
	Sub-total			347,560	20.87
c.	Internal Failures				
	Rework (Manufacturing)	3,000	60,000	180,000	10.80
	Sub-total			180,000	10.80
d.	External failures				
	Customer support (Marketing)	3,600	4,000	14,400	0.87
	Transportation (Distribution)	3,600	4,800	17,280	1.04

Warranty repairs	3,600	64,000	230,400	13.83
Publicity costs	2,800	240,000	672,000	40.34
Sub-Total			934,080	56.08
Grand Total costs			1,665,640	100%

Examiner's report

This question tests candidates' knowledge of classification of cost of quality and its computation.

The question was well attempted and performance was above average.

The major pitfall observed was candidates' inability to compute cost of quality using appropriate sub-headings.

It is hereby recommended that candidates use ICAN Study Text on Performance Management when preparing for future Institute's examinations.

Marking guide

Section	Description	Marks	Marks
a.	4 classification = 6 marks	6	
b.	42 ticks = 14 marks	14	20

SOLUTION 4

Oforma Nigeria Limited

a. Optimal transfer price or price range for product B

Since the only consumer of Mat-R is Enugu Division, the minimum transfer price should be set at marginal cost less any cost savings due to internal sales.

The variable cost per unit of product Mat-R is ~~₦480~~, hence the minimum transfer price should be set at ~~₦480~~ per unit of Mat-R.

The maximum transfer price per unit for Mat-R would be the price that the external supplier charges Enugu Division, which is ~~₦550~~.

Hence, the optimal transfer price per unit would lie between a minimum of ~~₦480~~, and a maximum of ~~₦550~~.

b. Optimal transfer price for product b if there is spare capacity

If Lagos Division has spare production capacity, then the units of product Mat-R have no opportunity cost and should be transferred to Enugu Division at variable cost less any cost savings due to internal sales. The transfer price would therefore be ~~₦480~~ per unit.

c. **Optimal transfer price for product mat-R if Lagos division operates at full capacity**

If Lagos Division is at full capacity and would forego sales of product Gat-R to supply product Mat-R to Enugu Division, then the units of product Mat-R would have to be transferred at marginal cost less any cost savings plus the contribution forgone on sales of product Gat-R. The contribution per unit of Gat-R is ₦160 (i.e. ₦620 – ₦460). Thus, the optimal transfer price would be ₦480 + ₦160 = ₦640.

d. **Method of Divisional Performance Appraisal**

Methods for divisional performance appraisal include Return on Investment (ROI), Residual Income (RI), and absolute divisional profit. These methods measure a division's profitability by relating its operating profit (often controllable profit) to the capital it employs (investment) or a target percentage of capital. Other factors, such as profit to sales ratio and value based management metrics, most often referred to economic added value (EVA) can also be used to assess divisional performance. These can further be explained thus:

Return on Investment (ROI): This method calculates the division's profit as a percentage of the capital it uses. This is calculated as follows: (Net Profit divided by capital employed) x 100%.

It provides a standardised measure for comparing divisions, even those of different sizes.

Residual Income (RI): This method measures the profit remaining after charging an imputed interest or capital cost on the capital employed. This is calculated thus: Residual Income = Net Profit – (Imputed Interest Rate x Capital Employed). It encourages investments that yield a positive residual income, leading to a more comprehensive assessment of divisional profitability beyond just ROI.

Absolute Divisional Profit: This method focuses solely on the total profit generated by the division, often after considering controllable costs.

Economic value added (EVA):

EVA (Economic Value Added) is a measure of a company's true economic profit, calculated by subtracting the cost of all capital (debt and equity) from its after-tax operating profit. It serves as a performance metric for a company to evaluate management's effectiveness, a tool for strategic decision making to identify value-creating investments, and a way to communicate value creation to investors and shareholders.

Examiner's report

The question tests candidates' understanding of transfer pricing issues in operating divisions under situations where spare production capacity is available and also where divisions operate at full capacity, even though there exist limited resources like direct labour.

The question was well attempted and performance was above average.

The major pitfall observed was candidates' inability to decipher the transfer pricing implication in a situation where there is limited availability of direct labour and generating its implication on unsatisfied external demand for Gat-R.

It is hereby advised that candidates use ICAN Study Text on Performance Management when preparing for future Institute's examinations.

Marking guide

Section	Description	Marks	Marks
a.	Optimal transfer price	4	
b.	2 ticks = 4 marks	4	
c.	3 ticks = 7 marks	7	
d.	Two methods of divisional performance evaluation	5	20

SOLUTION 5

Particulars	Process 1	Process 2	Process 3	Process 4	Process 5
Input	80,000				
Total	80,000				
Output (To Processes 2,3,4,5)	70,000	22,000	20,000	10,000	18,000
Normal Loss (10%)	8,000				
Abnormal loss	2,000				
Output	80,000	22,000	20,000	10,000	18,000

Computation of Process 1 costs:

Input:	Qty	Unit cost	Total cost (₦)
Material	80,000	125	10,000,000
Labour			4,800,000
Prod. Overhead			360,000 (4,800,000 /8,800,000) x 660,000
Total	80,000		15,160,000

Input:	Qty	Total cost (₦)
Normal Loss	8,000	400,000
Abnormal loss	2,000	410,000
Process 2 Pat	22,000	4,510,000
Process 3 Pet	20,000	4,100,000
Process 4 Pan	10,000	2,050,000
Process 5 Pea	18,000	3,690,000
Total	80,000	15,160,000

Computation of cost of good units/Abnormal Loss:

$$\text{Cost Per good unit} = (15,160,000 - 400,000) / (80,000 - 8000) = \frac{\text{N}14,760,000}{72,000}$$

$$= \text{N}205/\text{Kg}$$

1st Production and Sales strategy: Sales at Split off point:

Product	Quantity	Cost at Split-off		Sales value at Split-Off Point (Sales)		Net Profit N'000
		Unit S.P	Costs N'000	Unit	Sales N'000	
Pat	22,000	205	4,510	250	5,500	990
Pet	20,000	205	4,100	280	5,600	1,500
Pan	10,000	205	2,050	120	1,200	(850)
Pea	18,000	205	3,690	300	5,400	1,710
Total			14,350		17,700	<u>3,350</u>
Less Prod. Costs (Bal.)						300
Net Profit						3,050

2nd Production and Sales Strategy : If Products are Processed further :

Particulars	PAT	PET	PAN	PEA	TOTAL (N)
Quantity	22,000	20,000	10,000	18,000	
Total Sales	8,800,000	6,000,000	2,000,000	9,000,000	<u>25,800,000</u>
Material Pro.1	4,510,000	4,100,000	2,050,000	3,690,000	14,350,000
Direct wages	1,200,000	800,000	400,000	1,600,000	4,000,000
Prod. OH (Bal.)	90,000	60,000	30,000	120,000	<u>300,000</u>
Total cost	5,800,000	4,960,000	2,480,000	5,410,000	<u>18,650,000</u>
Net Profit	3,000,000	1,040,000	(480,000)	3,590,000	<u>7,150,000</u>

NOTE: The Abnormal loss cost will include N10,000 Production cost.

$2000/72000 \times \text{N}360,000 = \text{N}10,000$. That is the difference between Prod. OH cost of N660,000 and N650,000.

Comparative appraisal of two alternative Production Strategies

Alternative Production Strategy	PAT	PET	PAN	PEA	Prod. OH	Total net Profit (N)
Profit at Sales at Split off Point	990,000	1,500,000	(850,000)	1,710,000	300,000	3,050,000
Profit after further Processing	3,000,000	1,040,000	(480,000)	3,590,000	-	7,150,000

Though the two strategies have individual effect on product profitability but Sales at split off point generated ₦3,050,000 which is lower than profit of ₦7,150,000 generated after further processing. Hence it might be advisable for sale after further processing.

Examiner's report

The question test candidates' ability to provide solutions on issues relating to advanced process costing, and associated profitability impact on alternative production strategies such as:

- selling of process products at point of split-off; and
- after further processing of such products.

The question was averagely attempted and performance was average.

The observed pitfalls were:

- the candidates were unable to determine the quantity of input material from where the normal loss of 10% was computed;
- the candidates' inability to treat abnormal loss appropriately;
- the candidates' inability to determine the total cost of process 1 outputs (Pat, Pet, Pan and Pea) which must take into account the revenue derived from the scrap value of sale of normal loss; and
- the failure on the part of candidates to highlight in comparative manner the profitability of the products and company under the two production strategies.

It is hereby advised that candidates use ICAN Study Text on Performance Management when preparing for future Institute's examinations.

Marking guide

Description	Marks
60 ticks = 15 marks	15

SOLUTION 6

ABAYOMI PLC

a) When dealing with multi-products, the breakeven point in units is given by:

$$\text{BEP (Units)} = \frac{\text{Fixed cost}}{\text{Weighted Contribution}} = \frac{\text{FC}}{\text{WC}}$$

Where WC = Weighted Contribution per unit and FC = Total fixed costs
The WC is calculated using units sold and not sales revenue. The budgeted sales in units are 690:

Units Ratio

Product A:	₦8,400,000 ÷ ₦120 = 70,000 = 1
B:	₦25,200,000 ÷ ₦180 = 140,000 = 2
	210,000 = 3

This weighted contribution per unit is computed as follows:

	A		B
	₦		₦
Selling price	120		180
Less variable costs	64		76
Contribution per unit	56		104
Weight by quantities	1/3		2/3
Weighted Contribution/unit	= (56 × 1)	+	(104 × 2)
	= 56	+	208 = 264/3 = ₦88

Fixed costs:	₦
Production overheads	2,240,000
Selling and adm. Overheads	<u>8,320,000</u>
Total fixed costs (FC)	<u>10,560,000</u>
BEP (units) = $\frac{FC}{\text{Weighted Contribution}}$	

$$\begin{aligned} \text{Weighted Contribution} &= \text{Total fixed costs/ Weighted contribution per unit} \\ &= 10,560,000 / \text{₦88} \\ &= 120,000 \text{ units, made up of:} \end{aligned}$$

$$\begin{aligned} \text{Product A} &= \frac{1}{3} \times 120,000 &&= 40,000 \text{ units} \\ \text{Product B} &= \frac{2}{3} \times 120,000 &&= 80,000 \text{ units} \end{aligned}$$

bi. We first determine the revised weighted contribution margin ratio (WCMR)

	A	B
	₦	₦
Direct materials*	28.80	28.80
Direct labour	17.60	26.40
Variable overheads	16.00	16.00
Total variable costs per unit	62.40	71.20
Selling price	120.00	160.00
Contribution per unit	57.60	88.80
Contribution margin ratio	0.48	0.555

$$\begin{aligned} \text{Sales A} &= \text{₦8,400,000} = 20\% \\ \text{Sales B} &= \text{₦8,400,000} \times 0.8/0.2 = \text{₦33,600,000} = 80\% \\ \text{Total Sales} &= \text{₦42,000,000} \end{aligned}$$

Sales in Units:

$$\begin{aligned} \text{A: } & \text{₦8,400,000} / \text{₦120} = 70,000 \text{ units} = 25\% \\ \text{B: } & \text{₦33,600,000} / \text{₦160} = 210,000 \text{ units} = 75\% \end{aligned}$$

$$\text{Weighted contribution per unit } (.25 \times 57.60) + (0.75 \times 88.80) = 14.4 + 66.6 = \text{₦81}$$

$$\text{BEP (units)} = \frac{\text{Fixed Overhead}}{\text{Weighted Contribution per unit}} = \frac{2,240,000 + 8,320,000 + 456,000}{\text{₦81}} = 136,000 \text{ units}$$

$$\begin{aligned} \text{A: } & 0.25 \times 136,000 = 34,000 \text{ units} \\ \text{B: } & 0.75 \times 136,000 = 102,000 \text{ units} \end{aligned}$$

ii.

WCMR

The weighted contribution margin ratio (WCMR = weighted contribution margin ratio) (WCMR) must be based on sales revenue as detailed below:

Product A

Sales Revenue:

$$A: \text{₦}8,400,000 / \text{₦}120 = 70,000 \text{ units} = 25\%$$

$$B: \text{₦}33,600,000 / \text{₦}160 = 210,000 \text{ units} = 75\%$$

WCMR =

Contribution margin ratio =

$$A: 57.6/120 = 0.48$$

$$B = 88.80/160 = 0.555$$

$$\text{BEP (₦)} = \text{₦}10,560,000 + \text{₦}456,000 = \text{₦}11,016,000 / =$$

$$A: \text{Sales } \text{₦}8,400,000 = 0.2$$

$$B: \text{Sales } \text{₦}33,600,000 = 0.8$$

$$\text{Weighted contribution margin using the Sales revenue} = (0.48 \times 0.2) + (0.555 \times 0.8) = 0.096 + 0.444 = 0.54$$

$$\text{Company Sales at BEP} = \text{₦}11,016,000 / 0.54 = \text{₦}20,400,000$$

$$\text{Shared: } A = 0.2 \times 20,400,000 = \text{₦}4,080,000$$

$$B = 0.8 \times 20,400,000 = \text{₦}16,320,000$$

c. Profit after tax, as a percentage of revenue = ?

Let $\text{₦}x$ = the required revenue.

$$\text{Profit after Tax} = 0.12x = 1 - 0.40 = 0.60$$

$$\text{Profit Before Tax} = 0.12x \text{ divided by } 0.60 = 0.20 \text{ or } 20\%$$

$$\text{Total contribution} = \text{Fixed overhead} + \text{Profit before tax}$$

New sales to achieve the returns after tax =

$$\frac{\text{Fixed Cost} + \text{PBT}}{X} = 0.54$$

X

Using:

$$\text{Sales (₦)} = \text{Total fixed cost} + \text{Profit}$$

$$\text{WCMR, or } x = \frac{11,016,000 + 0.20x}{0.54}$$

$$0.54x = 11,016,000 + 0.20x$$

$$0.34x = 11,016,000$$

$$x = \text{₦}32,400,000$$

$$\text{Product } A = 20\% \text{ of } \text{₦}32,400,000 = \text{₦}6,480,000$$

$$B = 80\% \text{ of } \text{₦}32,400,000 = \text{₦}25,920,000$$

$$\text{Total Sales} \quad \quad \quad \text{₦}32,400,000$$

Check

$$\text{Company Sales} \quad \text{₦}32,400,000 \quad 1.00$$

$$\text{Variable cost} \quad 14,904,000 \quad 0.46$$

Contribution	17,496,000	0.54
Fixed	11,016,000	
Profit before Tax	6,480,000	
Tax (0.4)	2,592,000	
Profit after tax	3,888,000 = 12% of Sales	

Examiner's report

The question test candidates' ability to determine the breakeven points in sales value and quantities in multi-product situation. It also tests candidates' ability to compute the breakeven points when sensitivity issues are involved.

The question was well attempted and performance was above average.

The major pitfall observed was candidates' inability to compute the ratio required for the determination of breakeven points in sales value for multi-products situation.

It is hereby advised that candidates use ICAN Study Text on Performance Management when preparing for future Institute's examinations.

Marking guide

Section	Description	Marks	Marks
a.	Breakeven point for the company in units (18 ticks = 3 marks)	3	
b.	Breakeven point for the company in units and value (36 ticks = 4 marks)	4	
c.	Computation of revenue to earn an after tax return of 12% (16 ticks = 8 marks)	<u>8</u>	15

SOLUTION 7

ai. Economic value added (EVA):

EVA (Economic value added) is a measure of a company's true economic profit, calculated by subtracting the cost of all capital (debt and equity) from its after-tax operating profit. It serves as a performance metric for a company to evaluate management's effectiveness, a tool for strategic decision making to identify value-creating investments, and a way to communicate value creation to investors and shareholders.

- ii. An **investment centre** is a division within a company responsible for its own revenues, expenses, and the assets it controls to generate profits. Unlike a profit center, which focuses only on revenues and expenses, an investment center's performance is evaluated on its ability to earn a return on the assets it

has invested in. Common metrics for, assessing investment centers include return on investment (ROI) and residual income (RI), which measure how effectively the division uses capital to produce profits.

- iii. **Return on investment (ROI)** is a profitability ratio that measures the gain or loss generated from an investment relative to its cost, typically expressed as a percentage. The basic formula is (Net profit / Cost of investment) x 100. A higher ROI indicates a more efficient and profitable investment, making it a key tool for evaluating investment performance, comparing different opportunities, and making informed financial decisions.

bi. **Nwakaego and Sons Limited ₦**

	Lagos	Kano	Gombe	Enugu	Total
	₦'000	₦'000	₦'000	₦'000	₦'000
Sales revenue	1,200	2,600	2,200	2,780	8,780
Variable costs	700	1,300	1,050	1,500	4,550
Contribution	500	1,300	1,150	1,280	4,230
Fixed cost	178	385	326	411	1,300
Net profit	322	915	824	869	2,930
Return on investment	12.88%	30.50%	29.43%	32.19%	26.64%
Investment costs	2,500	3,000	2,800	2,700	11,000

Using the return on investment (ROI) as a basis of appraisal shows that the profit in relation to the investment of the centres, Enugu centre achieved a higher ROI than other centres while Lagos centre achieved the lowest ROI.

Residual income

	Lagos	Kano	Gombe	Enugu	Total
	₦'000	₦'000	₦'000	₦'000	₦'000
Investment Capital	2,500	3,000	2,800	2,700	11,000
Net profit	322	915	824	869	2,930
imputed cost	187.5	225	210	202.5	825
Residual Income	134.5	690	614	666.5	2,105

Using the residual income (RI) basis, which is the operating income less imputed cost on investment capital, Kano achieved a higher Residual income while Lagos got the lowest residual income.

- ii. Re-evaluate the residual income situation of the company given that the cost of capital is 10%.

	₦
Total investment capital for the company	11,000,000
Total profit of the company	2,930,000
Imputed cost on investment @ 10%	1,100,000
Residual Income	1,830,000

There is a diminution in the company's residual income by ₦275,000 (₦2,105,000 less ₦1,830,000) due to increase in imputed cost on company investment from 7.5% to 10%. This reduction will not throw any of the divisions into negative residual income as that will result in the following:

	Lagos ₦'000	Kano ₦'000	Gombe ₦'000	Enugu ₦'000	Total ₦'000
Investment capital	2,500	3,000	2,800	2,700	11,000
Net profit	322	915	824	869	2,930
imputed cost (10%)	250	300	280	270	1,100
Residual income	72	615	544	599	1,830

Kano division sustained leadership on the residual income basis.

Examiner's report

The question test candidates' ability to determine the breakeven points in sales value and quantities in multi-product situation. It also tests candidates' ability to compute the breakeven points when sensitivity issues are involved.

The question was well attempted and performance was above average.

The major pitfall observed was candidates' inability to compute the ratio required for the determination of breakeven points in sales value for multi-products situation.

It is hereby advised that candidates use ICAN Study Text on Performance Management when preparing for future Institute's examinations.

Marking guide

Section	Description	Marks	Marks	Marks
ai.	Economic value added	2		
ii.	Investment centre	2		
iii.	Return on investment (ROI)	<u>2</u>	6	
bi.	Performance of the divisions using ROI (24 tick = 3 marks)	3		
ii.	Performance of the divisions using Residual Income (24 tick = 3 marks)	3		
lii	Reevaluation the company performance at capital cost of 10% using the residual income method. (12 ticks = 3 marks)	<u>3</u>	<u>9</u>	15

SKILLS LEVEL EXAMINATION – MAY 2026

AUDIT, ASSURANCE AND FORENSICS

Time Allowed: 3¹/₄ 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

New Breath Bank Plc. is a listed Nigerian Deposit Money bank, audited by Zamia Bolus & Co. (Chartered Accountants).

The following observations were recorded during the 2024 audit engagement:

- i. management had previously delayed salary payments due to the difficulties in linking NIN to staff bank accounts;
- ii. internal audit department existed, but performed only compliance reviews; there were no strong risk management processes;
- iii. the external auditors discovered irregular loan approvals and significant non-performing loans;
- iv. management insisted there were no going concern issues, despite heavy losses and regulatory sanctions;
- v. the bank recently adopted blockchain technology for loan disbursement records, but auditors were unsure of how to validate its accuracy;
- vi. a whistle-blower alleged that the Finance Director diverted funds and hid assets under names of family members; and
- vii. the Audit Partner was offered expensive gifts by management during the audit.

Required:

- (a) Explain the objectives of an external audit and evaluate the possible audit expectation gap between New Breath's shareholders and Zamia Bolus & Co. (6 Marks)
- (b) Assess New Breath Bank's internal control weaknesses, explaining the responsibilities of management and auditors in instituting and assessing internal control (ISA 315 Revised). (6 Marks)

- (c) State the types and sources of audit evidence required in this case (ISA 500 and ISA 580), and advise how forensic techniques may be used to investigate the whistle-blower's allegation of hidden assets. (6 Marks)
- (d) Assess the ethical threats and conflicts arising in this engagement (gift offer, whistleblowing, governance concerns), and propose safeguards in line with IFAC and ICAN codes. (6 Marks)
- (e) Explain how technology (blockchain validation, statistical analysis, AI tools) may be applied by the auditor to strengthen assurance in the audit of New Breath. (6 Marks)
- (Total 30 Marks)**

SECTION B: YOU ARE REQUIRED TO ATTEMPT TWO OUT OF THREE QUESTIONS IN THIS SECTION (40 MARKS)

QUESTION 2

During the routine supervisory visit of staff of Central Bank of Nigeria (CBN) to Ninalowo Microfinance Bank Limited, many internal control deficiencies, including the following, were discovered:

- i. not meeting capital adequacy and regulatory ratios;
- ii. non-deactivation of former employees from access to financial systems;
- iii. title documents to property, plant and equipment were not in the name of the company, but in name of certain directors;
- iv. non-retirement of staff advances;
- v. the same individual has been responsible for both the preparation and approval of vendor payments;
- vi. no rigid procedures around insider-related credits;
- vii. performance bonuses were paid to staff without structured procedures for allocation; and
- viii. procurement procedures were not followed.

In addition to the above, the bank's financial statements revealed consistent losses for the last five years.

The Board of Directors of Ninalowo is concerned that the internal audit function may not be operating as intended.

Required:

Explain:

- (a) The differences between audit, assurance, and attestation services. (6 Marks)

- (b) Explain the justification for Ninalowo needing an external audit under the Companies and Allied Matters Act (CAMA) 2020. (6 Marks)
- (c) The roles of external auditors, internal auditors, and audit committee in this case, highlighting how they interact to strengthen corporate governance. (8 Marks)
- (Total 20 Marks)**

QUESTION 3

Mount Pisgah Supermarkets Limited is a fast-growing retail chain operating across Nigeria. The company has recently computerised its accounting system and now uses a point-of-sale (POS) and enterprise resource planning (ERP) system for sales, purchases, assets, and inventory management.

During the preliminary review, the external auditors noted that:

- (i) cashiers had access to both the cash register and system records without segregation of duties;
- (ii) there was no regular reconciliation between POS records and bank deposits;
- (iii) the IT department controlled access rights but passwords were sometimes shared among staff; and
- (iv) Internal audit existed, but only performed periodic inventory counts.

Required:

- (a) Explain the objectives and main components of internal controls. (10 Marks)
- (b) Identify and explain **TWO** internal control weaknesses in Mount Pisgah Supermarkets' computerised environment and recommend appropriate information security measures. (4 Marks)
- (c) Explain how Mount Pisgah Supermarkets can strengthen its internal control system. (6 Marks)
- (Total 20 Marks)**

QUESTION 4

BlueBird Airlines Plc., a Nigerian listed company, is audited by Lily Prime & Co. (Chartered Accountants). The company recently faced some financial difficulties due to rising operating costs and a downturn in passenger traffic.

During the audit:

- i. the management could not provide clear evidence of certain aircraft maintenance expenses;
- ii. some revenue contracts were only confirmed verbally, without written agreements;
- iii. the management provided a written representation regarding the completeness of liabilities; and
- iv. the auditor noted potential going concern issues due to recurring losses and heavy loan obligations.

Required:

- (a) Justify the need for maintaining audit documentation and explain its role in supporting conclusions and audit opinion. (7 Marks)
- (b) Identify circumstances where written representations (ISA 580) and discussions with senior audit team members (ISA 450) would be required, and explain how these should be documented. (6 Marks)
- (c) Draft the appropriate section of the audit report (ISA 570 Revised), distinguishing between a going concern paragraph and a qualified opinion, if the auditor concludes that there is a material uncertainty relating to going concern. (7 Marks)

(Total 20 Marks)

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

QUESTION 5

Bright Pharmaceuticals Limited suspected that its Procurement Manager had been inflating suppliers' invoices and diverting funds. The company engaged forensic accountants to investigate the matter.

During the investigation:

- i. it was noted that some invoices were falsified with forged electronic signatures;
- ii. a whistle-blower claimed that the manager had hidden assets especially properties registered under relatives' names; and
- iii. the company is considering litigation to recover losses and seeks to produce expert evidence in court.

Required:

- (a) Explain forensic accounting and state its objectives. (5 Marks)
 - (b) Explain the process of investigating procurement/employee fraud and itemise how the forensic accountant may trace hidden assets of the manager. (6 Marks)
 - (c) Outline the essential contents of the expert report to be presented in court for Bright Pharmaceuticals Limited. (4 Marks)
- (Total 15 Marks)**

QUESTION 6

Royal Bank Plc is being audited by Apex Beta & Co. (Chartered Accountants). During the audit, the following issues arose:

- i. the audit Engagement Partner was offered a free holiday trip by the bank's Managing Director;
- ii. a whistle-blower within the bank revealed that some loan transactions were approved without proper documentation, breaching regulations; and
- iii. the auditors had identified inappropriate loan approval issues for escalation to regulators, though management insisted it be kept confidential and engagement team was debating whether this created a conflict with their duty to act in the public interest.

Required:

- (a) Explain the importance of professional ethics in maintaining auditors' credibility and protecting the public interest in this case. (4 Marks)
 - (b) Identify the ethical threat to independence created by the holiday gift offer, and suggest appropriate safeguards. (3 Marks)
 - (c) Explain how Non-Compliance with Laws and Regulations (NOCLAR) applies in this case and the auditor's procedures for reporting the irregularities. (6 Marks)
 - (d) Explain **FOUR** of the fundamental principles of professional ethics. (2 Marks)
- (Total 15 Marks)**

QUESTION 7

Channel Retail Plc. operates a chain of supermarkets across Nigeria. The company uses advanced accounting software for sales and inventory management. During the external audit, it was noted that the:

- (i) auditors suspected the manipulation of sales figures, but needed to identify the unusual transactions;
- (ii) company's enterprise resource planning (ERP) system had complex modules, and the audit team must understand its configuration;
- (iii) company recently adopted blockchain technology to record supplier payments; and
- (iv) auditors were considering whether Artificial Intelligence (AI) and Robotic Process Automation (RPA) tools can help automate parts of the audit process.

Required:

Explain:

- (a) How statistical analysis can be applied to detect outliers in Channel Retail's sales records. (6 Marks)
- (b) Why it is necessary for the auditors to interrogate the client's accounting software system. (6 Marks)
- (c) The audit procedures for interrogating client's enterprise resource planning (ERP) systems. (3 Marks)

(Total 15 Marks)

SECTION A: COMPULSORY QUESTION – AUDIT, ASSURANCE & FORENSICS MAY 2026

Solution 1: New Breath Bank Plc.

a. Objectives of external audit (ISA 200, CAMA 2020) include,

- i. obtaining reasonable assurance that the financial statements are free from material misstatement;
- ii. expressing an independent opinion on the financial statements; and
- iii. enhancing credibility of financial statements to shareholders, regulators, creditors, and the public.

Audit expectation gap: The possible audit expectation gap include:

- i. **Reasonableness gap:** Users expect auditors to detect all frauds and guarantee solvency. This is unreasonable and it is borne out of ignorance of the objectives of an audit.

- ii. **Performance gap:** Performance gap exists when the audit fails to comply with standards.

In this case: Shareholders would expect auditors to detect fraudulent loan approvals by management, prevent losses and avoid going concern issues, however, the auditors' role is limited to reasonable assurance.

b. Internal control weaknesses and responsibilities at New Breath Bank

(i) weaknesses

- Irregular loan approvals (the credit risk management is weak)
- Ineffective internal audit (it focusses only on compliance reviews)
- No proper monitoring of non-performing loans.

(ii) Responsibilities

- Management should design, implement, and maintain effective internal controls.

- Internal auditors should evaluate control effectiveness and risk management in the Bank.

- The external auditor should assess internal control design and effectiveness for audit planning (ISA 315), but the external auditor is not responsible for internal control implementation.

c. Audit evidence and forensic techniques

Evidence needed in the scenario (ISA 500)

- i. Loan agreements and approval documents

- ii. External confirmations from borrowers (ISA 505)
- iii. Bank reconciliations
- iv. Reports of regulators
- v. Written representations obtained from management (ISA 580) to confirm completeness

Forensic techniques:

- i. Investigate related-party transactions.
- ii. Use computer forensics to trace hidden assets of Finance Director
- iii. U lifestyle audit to detect unexplained wealth.
- iv. Search at property and company registries to trace assets.
- v. Apply machine learning by identifying potential assets and transactions using algorithms.
- vi. Make third party search involving reviewing any third-party vendors or experts like attorneys, accountants to identify potential and hidden assets.

d. Ethical threats and safeguards

Threats

- i. Gift from management. This poses self-interest and familiarity threats
- ii. Pressure to conceal whistle-blower report. This poses intimidation threat
- iii. Weak governance. This poses advocacy threat.

Safeguards

- i. Refuse the gift, and disclose the gift offer to the Board/Audit Committee.
- ii. Escalate whistle-blower findings to regulators like Board of Directors, Central Bank of Nigeria (CBN), Nigeria Deposit Insurance Corporation (NDIC), Financial Reporting Council (FRC) and Economic and Financial Crimes Commission (EFCC).
- iii. Maintain professional skepticism throughout the course of the audit.
- iv. Document all ethical decisions in accordance with IFAC and ICAN Codes.

e. Application of technology in audit

i. Blockchain validation

Banks are adopting blockchain technology in areas like interbank settlements, trade finance and digital assets. Auditors can use blockchain validation to:

- **Confirm transaction integrity:** Since blockchain entries are fundamentally immutable, auditors can verify the authenticity and accuracy of recorded transactions without relying heavily on third-party confirmations.
- **Enhance transparency:** Real-time access to blockchain records provides auditors with an auditable trail of banking transactions, reducing the risk of hidden adjustments or backdated entries.
- **Support compliance testing:** Smart contracts embedded in blockchain can automatically enforce and document compliance

with lending terms or settlement rules, which auditors can review to confirm adherence.

ii. Statistical analysis

Given the volume of transactions processed daily by banks, auditors cannot check everything manually. Statistical analysis helps them focus on areas of greatest risk. Key applications include:

- **Sampling and testing:** Using stratified or random sampling, auditors can select representative transactions and assess whether the control environment is working effectively.
- **Trend and variance analysis:** By comparing current-year performance with prior years or industry norms, auditors can spot anomalies such as unusual movement in loan income or unexpected expense spikes.
- **Risk modeling:** Statistical methods can be applied to loan portfolios to estimate the likelihood of default and test whether provisions for credit losses are reasonable/adequate.

iii. AI Tools

Artificial Intelligence (AI) tools expand auditors' capabilities by analysing large data sets quickly and uncovering patterns that may not be visible through traditional methods. Practical uses include:

- **Transaction monitoring:** AI algorithms can scan millions of banking transactions to highlight unusual or suspicious activities, improving fraud detection.
- **Document review:** Natural language processing tools can examine loan agreements, contracts, and compliance reports to identify inconsistencies or missing disclosures.
- **Continuous auditing:** Instead of reviewing data only at year-end, AI-driven systems can monitor transactions throughout the year, giving auditors real-time assurance.
- **Automation of routine tasks:** Robotic process automation (RPA) can handle reconciliations and routine checks, allowing auditors to spend more time on areas that require professional judgment.

Examiner's report

The question tests the candidates' knowledge of objects of external audit, internal control, audit evidence ethical threats, and technology in audit.

Being a compulsory question, 100% of the candidates attempted the question, but the performance was just average.

The commonest pitfall was the candidates' inability to relate their answers to the contents and peculiarities of the real-life scenarios, thereby giving answers out of context.

Candidates are advised to learn the process of applying their knowledge and scholarship to practical scenarios. They should also cover the syllabus adequately,

especially the contemporary audit areas like application of Information Technology (IT).

Marking guide

a.	Explanation of the objectives of an external auditor and possible expectation gap		
	Objectives of an audit. (1 mark each for 3 correct points)	3	
	Audit expectation gap: (1 mark each for 3 correct points)	<u>3</u>	6
b.	Internal control weaknesses and responsibilities of management and external auditors		
	Internal Control weaknesses: (1 mark each for 3 correct points)	3	
	Responsibilities of Management and External Auditors: (1 mark each for 3 correct point)	<u>3</u>	6
c.	Types and sources of audit evidence and forensic techniques to be used to investigate		
	(1 mark each subject to a maximum of 6 correct points)		6
d.	Ethical threats and conflicts in a given scenario and applicable safeguards		
	(1 mark each subject to a maximum of 6 correct points)		6
e.	Application of technology in audit		
	(2 marks each for correct point explained for 3 correct points)		<u>6</u>
TOTAL			<u>30</u>

Solution 2

- a. **Differences between audit, assurance, and attestation services:**
Though closely related, **audit, assurance, and attestation** are not the same. They differ in scope, purpose, and application.
- i. **Audit Services**
- **Definition:** An audit is an independent examination of financial statements, usually conducted in accordance with auditing standards and relevant legislations to express an opinion on whether the financial statements present a *true and fair view* (or are fairly stated in all material respects)
 - **Scope:** Primarily focused on historical financial statements of an entity.

- **Objective:** To provide a high level of assurance to stakeholders that the financial statements are free from material misstatement, whether due to fraud or error.
- **Example:** The annual statutory audit of a company's financial statements under CAMA 2020.

ii. **Assurance services**

- **Definition:** Assurance is a broader concept that refers to any independent professional service that improves the quality of information for decision-making.
- **Scope:** Not limited to financial statements—it can cover non-financial information such as compliance, sustainability reports, internal controls, or risk management.
- **Objective:** To enhance the reliability and relevance of information provided to stakeholders, thereby building trust and confidence.
- **Example:** An assurance engagement to review a bank's internal control system or to evaluate a company's sustainability reporting.

iii. **Attestation Services**

- **Definition:** In attestation, a professional accountant or auditor is engaged to issue a report on a subject matter—or an assertion about a subject matter—that is, the responsibility of another party.
- **Scope:** Narrower than assurance, but broader than audit. It includes examinations, reviews, and agreed-upon procedures on financial and non-financial information.
- **Objective:** To attest or confirm the reliability of the information presented by management.
- **Example:**
 - Reviewing the effectiveness of internal controls over financial reporting (ICFR).
 - Attesting to compliance with regulatory requirements.
 - Verifying management's claim that a company meets certain environmental or social standards.

**The alternative presentation is the following table
Summary of Differences**

Feature	Audit	Assurance	Attestation
Focus	Historical financial statements	Financial and non-financial information	Assertions or subject matter presented by management
Scope	Narrow, statutory, compliance-driven	Broad (any information decision-makers rely on)	Middle ground – focused on validating management's assertions
Objective	Give an opinion on fairness of financial statements	Improve quality and credibility of information	Provide a conclusion on reliability of subject matter

Feature	Audit	Assurance	Attestation
Example	Annual statutory audit	Review of sustainability report	Attestation on internal controls or compliance claims

b. Need for audit:

Ninalowo requires an external audit under

The **Companies and Allied Matters Act (CAMA) 2020** in Nigeria which makes it mandatory for a limited company to undergo an **external audit**. This requirement exists because of the special nature of public interest entities, their accountability to a wide range of stakeholders, and the need to protect the investing public

Key reasons include:

i. Protection of shareholders and Investors

- Public interest entities raise capital from a broad base of investing public, many of whom are not involved in day-to-day management.
- An external audit provides independent assurance that the financial statements present a true and fair view and protect investors from misleading or fraudulent reporting.

ii. Public interest obligation

- Unlike private companies, public interest entities operate in the public domain and often handle large pools of funds.
- Because their operations affect the economy and public confidence, CAMA 2020 requires an audit to ensure transparency and accountability.

iii. Corporate governance and oversight

- An external audit enhances governance by serving as an independent check on management's activities.
- It reduces the risk of management bias, errors and fraud, thereby strengthening confidence in the integrity of the company's financial reporting.

iv. Regulatory compliance

- Under CAMA 2020, all public interest entities must file audited financial statements with the **Corporate Affairs Commission (CAC)**.
- These audited financial statements are also relevant for regulators such as the Securities and Exchange Commission (SEC), the Nigerian Exchange Limited (NGX), and the Financial Reporting Council (FRC) ensuring compliance with listing and disclosure requirements.

v. Creditworthiness and investor confidence

- External audits increase the credibility of financial statements, which is vital for attracting new investors, securing loans, and maintaining market confidence.
- Without audited financial statements, it would be difficult for stakeholders to make informed decisions about investing or lending.

c. Roles of external auditors, internal auditors, and audit committee and their contributions to corporate governance:

i. External auditors

Roles

- Provide an **independent opinion** on whether the company's financial statements give a true and fair view of its financial position.
- Assess whether accounting policies comply with relevant standards and regulations.
- Identify material misstatements caused by fraud or error.
- Report on matters that affect shareholders and regulators.

Contributions to corporate governance

- Enhance the **credibility** of financial reporting.
- Provide assurance to shareholders, creditors, and the public that management's financial statements can be trusted.
- Act as an external check on management's stewardship of resources.

ii. Internal auditors

Roles

- Operate as part of the company, but with independence from highest level of management.
- Review and test internal controls, risk management, and governance processes.
- Ensure operational efficiency, compliance with laws, regulations and company policies, and safeguarding of assets.
- Provide continuous monitoring rather than just an annual review.

Contributions to corporate governance

- Strengthen internal control systems and reduce operational and financial risks.
- Provide management and the audit committee with insight into weaknesses before they become major problems.
- Help promote a culture of accountability and ethical conduct.

iii. Audit committee

Roles

- Composed mainly of non-executive directors and shareholders' representatives.

- Provide oversight of financial reporting, risk management, and audit processes.
- Recommend the appointment and remuneration of external auditors.
- Review audit findings and ensure that management implements recommendations.
- Serve as a link between management, auditors, and shareholders.
- Authorise investigations into any activity of the company.

Contributions to corporate governance

- Act as a **watchdog** ensuring management does not override controls.
- Facilitate effective communication between internal and external auditors.
- Ensure that the audit function remains objective and independent.

Interaction among the Three

- i. Internal auditors and audit committee**
 - Internal auditors report their findings to the audit committee.
 - The committee uses these reports to oversee risk management and ensure that corrective actions are taken.
- ii. External auditors and audit committee**
 - External auditors communicate audit findings, material weaknesses, and independence matters to the audit committee.
 - The audit committee evaluates external auditors' performance and independence.
- iii. External and internal auditors**
 - They may coordinate work to avoid duplication and ensure coverage of all risk areas.
 - External auditors may rely on the work of internal auditors where appropriate.

In summary: External auditors give independent assurance to shareholders, internal auditors provide continuous monitoring of controls and risks, and audit committee ensures oversight and coordination between the two. Together, they form a triangular defence system that reinforces corporate governance.

Examiner's report

The question tests the candidates' knowledge of audit assurance, attestation services, the roles of external auditors, internal auditors, and the audit committee, highlighting how they strengthen corporate governance.

About 90% of the candidates attempted the question, but the performance was generally poor.

The commonest pitfall was their inability to interpret the requirements of the question, thereby giving wrong or vague solution to it, especially the part asking

candidates to explain the relationship of external auditors, internal auditors and the audit committee to strengthen corporate governance. Candidates are advised to understand the requirements of a question and provide answers accordingly.

Marking guide

a.	Differences between audit, assurance and attestation services (2 marks each for defining and explanation for the 3 services)	6
b.	Why Ninalowo MFB Ltd requires an external audit (2 marks each subject to a maximum of 3 correct explanation)	6
c.	Roles of External Auditors Internal Auditors and audit committee and the interaction between them.	
	Roles and contributions of external auditors (1 mark each for 2 points)	2
	Roles and contributions of internal auditors (1 mark each for 2 points)	2
	Roles and contributions of audit committee (1 mark each for 2 points)	2
	(1 mark each for 2 correct points on interaction amongst external auditors, internal auditors and the audit committee)	<u>2</u>
		<u>8</u>
	TOTAL	<u><u>20</u></u>

Solution 3: Mount Pisgah Supermarkets Limited

a. Objectives and main components of internal control

Objectives of internal control

Internal control is a system of policies, procedures, and practices designed to ensure that an organisation achieves its goals effectively and efficiently. The key objectives are:

- i. **Reliability of financial reporting** – Ensure that accounting records and financial statements are accurate, complete, and timely.
- ii. **Safeguarding of assets** – Protect cash, inventory, and other resources against theft, misuse, or loss.
- iii. **Compliance with laws and regulations** – Ensure that operations follow legal requirements and organisational policies, legal and regulatory requirement.

- iv. **Operational efficiency and effectiveness** – Promote the economical and efficient use of resources in delivering services or products.
- v. **Prevention and detection of fraud and errors** – Reduce opportunities for mismanagement, intentional fraud, or inadvertent mistakes.

Main components of internal control (based on the committee of sponsoring organisation of the Treadway Commission (COSO) framework

i. **Control Environment**

- The overall culture, values, and ethical tone set by management.
- Integrity, competence, and oversight by the board.

ii. **Risk assessment**

- Identifying and analysing risks that could affect achievement of objectives (e.g., theft of inventory, errors in sales recording).

iii. **Control activities**

- The policies and procedures designed to mitigate identified risks. examples-authorization of sales discounts, segregation of duties, reconciliations.

iv. **Information and communication**

- Systems that capture and share relevant information in a timely manner.
- Reporting channels for staff to raise concerns about irregularities.

v. **Monitoring**

- Regular review of controls to ensure they are effective.
- Monitoring can involve internal audits, surprise checks, or performance reviews.

b. Weaknesses in Mount Pisgah computerised environment and mitigating security measures

Identified weaknesses:

- i. The Cashiers control both cash handling and its records. This shows evidence of lack of segregation of duties.
- ii. Password sharing among staff is a major weakness in access control.

Mitigating security measures:

- i. Institute, mandate and enforce segregation of duties.
- ii. Enforce unique user IDs/passwords, and institute regular password changes.
- iii. Do a regular review of audit trail logs.

c. Strengthening internal control in Mount Pisgah Supermarkets

Supermarkets handle large volumes of cash, credit transactions and fast-moving inventory. Weak controls can lead to losses from theft, fraud or errors.

The ways mount Pisgah can strengthen its internal control include:

i. Cash Handling Controls

- Use **point-of-sale (POS) systems** that automatically record transactions.
 - Separate responsibilities for cash collection, recording, and reconciliation.
 - Perform daily cash counts and bank reconciliations.
- ii. **Inventory management controls**
- Install electronic inventory systems with barcode scanning to track inventory.
 - Carry out regular inventory checks, counts and reconcile with records.
 - Restrict warehouse and storeroom access to authorised staff only.
- iii. **Segregation of duties**
- No single employee should be responsible for sales, recording, and cash deposits, for example, the cashier collects cash, while another staff member verifies deposits.
- iv. **Authorisation and approval**
- Require manager's approval for discounts, returns, and voided sales.
 - Ensure purchase orders are authorised before suppliers deliver goods.
- v. **Use of technology**
- CCTV surveillance in cash points, storerooms, and entrances.
 - POS systems integrated with accounting software to reduce manual errors
- vi. **Compliance and training**
- Train staff on fraud awareness, ethical behaviour, and customer service.
 - Enforce compliance with policies through employee handbooks and disciplinary measures.
- vii. **Monitoring and Review**
- Regular internal audit checks of sales, inventories, and cash balances.
 - Surprise inspections by supervisors to detect irregularities and act as deterrents.
 - Use of key performance indicators (for example shrinkage ratios, cash discrepancies) to monitor efficiency.

Examiner's report

The question tests the candidates' knowledge of internal control.

This being a popular area in auditing, about 97% of the candidates attempted the question, but the performance was fair.

The commonest pitfall of the candidates was their inability to explain internal control as it relates to a computerised environment.

Candidates are enjoined to acquire adequate knowledge in auditing as it relates to computer environment.

Marking guide

a.	Objectives and main components of Internal control (1 mark for a key objective, subject to a maximum of 4)	4	
	Component of internal control (1½ marks for each component, subject to a maximum of 4)	<u>6</u>	10
b.	Internal control weaknesses and mitigating security measures (1 mark for each weakness and security measure subject to a maximum of 4 points)	4	
c.	Strengthening internal control system in Pisgah (1½ marks each, subject to a maximising of 4 correct points)	<u>6</u>	<u>10</u>
	TOTAL		<u>20</u>

Solution 4: Bluebird Airlines Plc.

- a. **Need for maintaining audit documentation**
- (i) **Definition:** Audit documentation is the standardised term for all records of audit procedures carried out, audit evidence obtained, and conclusions reached.
- (ii) **Justification**
- It provides support for auditor's opinion (ISA 230).
 - It is the evidence of compliance with ISAs and regulatory frameworks.
 - It assists supervision and review of audit work.
 - It facilitates planning for future audits.
 - It provides basis for legal defence in case of litigation.
 - In Blue bird Airlines Plc., it is clear that documentation is crucial since there are going concern problems and there are missing evidence on expenses.

- Audit documentation ensures traceability, compliance and quality control to support conclusions and audit opinion.
- (iii) **Role of audit documentation in supporting conclusions and audit opinion**
- Audit documentation shows traceability-the nature, timing and extent of the audit work
 - Provision of written proof of every major decision
 - It enables the understanding of the reason why the audit teams arrive at a definite conclusion.
 - Compliance with professional guidelines (ISA 230)
 - Serving as a legal shield in the case of litigation
 - Ensuring quality control to support conclusion and audit opinion.
- b. (i) **Written representations (ISA 580):** Letter of Representation should be obtained from client management when other evidence cannot be obtained or are insufficient such as completeness of liabilities in this case Blue Bird Airlines Plc.
- (ii) **Discussions with senior audit team members (ISA 450):** Required for significant misstatements or judgement areas, such as
- aircraft maintenance expense issues; and
 - going concern risks.

Matters discussed with these senior audit team members must be recorded in working papers with management's responses.

c. **Material Uncertainty Related to Going Concern**

Material uncertainty related to going concern (ISA 570 Revised):

- i. If the uncertainty is adequately disclosed by management, then include a "Material Uncertainty Related to Going Concern" paragraph (not a qualification).
- ii. If disclosure is inadequate, then issue a **qualified or adverse opinion**

**AUDIT REPORT TO THE MEMBE OF
BLUEBIRD AIRLINES PLC (extract)**

We draw attention to Note X in the financial statements which indicates that the company has incurred recurring losses and is dependent on bank financing. These events indicate a material uncertainty which may cast significant doubt on the company's ability to continue as a going concern. Our opinion is not modified in respect of this matter."

Examiner's report

The question tests the candidates' knowledge of audit documentation; written representation and audit report.

About 25% of the candidates attempted the question and their performance was poor.

Candidate commonest pitfalls were their exhibition of poor knowledge of written representation and their inability to draft an audit report.

Candidates are advised to study well for examinations and make good use of the Study Texts and other relevant Institute's publications.

Marking guide

a. Need for maintaining audit documentation

(1 mark for definition)	1	
(1 mark each for justification subject to maximum of 4 correct points)	4	
(1 mark each for 2 roles in supporting conclusions and audit opening)	<u>2</u>	7

b. Written representation and discussions with senior

Audit team

members (ISA 450)

Written representation	2	
Discussion with senior manager	3	
Documentation	<u>1</u>	6
	4	

Reporting going concern issues material/uncertainty

c. Draft audit report on going concern status	<u>3</u>	7
TOTAL		<u>20</u>

SOLUTION 5:

Bright Pharmaceuticals Limited

a. Meaning of Forensic Accounting

Forensic accounting can be referred to as the preparation of financial information to be used as evidence in court proceedings and it is divided into forensic investigation and forensic auditing.

Objectives of Forensic Accounting

- i. Detect fraud. Where fraud is suspected, it is the objective of forensic accounting to dig into the matter to unearth all that transpired and obtain evidence that can be tendered in court to recover stolen assets.
- ii. Quantify damages. Forensic accounting possesses the skills and tools to assess the economic damages suffered by the concerned entity.
- iii. Provide litigation support. Forensic accounting would be available to help the client scale through all the processes so that the lost assets can be recovered.

- iv. Give expert testimony. The forensic accountant has the skills to make presentations in court in support of his/her client and assist in resolving disputes involving financial matters.

b.(i) Investigating procurement/employee fraud

Step	Title	What to Do
	Allegation	<ul style="list-style-type: none"> • Obtain this from the whistle blower, management or law enforcing organisation
	Initial assessment	<ul style="list-style-type: none"> • Ascertain the credibility of the allegation • Assess the potential impact of the fraud on the organisation
	Planning and Preparation	<ul style="list-style-type: none"> • Understand the client's needs and the nature of the suspected issue. • Define the objectives, scope, and methodology.
	Evidence Collection	<ul style="list-style-type: none"> • Obtain relevant documents (e.g., accounting records, emails, contracts). • Use interviews, surveillance, and other investigative techniques.
	Data Analysis	<ul style="list-style-type: none"> • Analyze financial data for irregularities or patterns of fraud. • Use forensic technology tools for data mining and reconstruction.
	Reporting	<ul style="list-style-type: none"> • Document findings clearly and factually. • Prepare reports suitable for submission in court.
	Court Proceedings	<ul style="list-style-type: none"> • Present findings as an expert witness. • Respond to cross-examination and scrutiny.

(ii) Methods of Tracing hidden assets:

- Bank account analysis.
- Property records search.
- Related-party transactions.
- Lifestyle audit (matching income with expenditure).
- Digital or financial analysis to identify and track assets.
- Using algorithms to identify potential assets.
- Using legal tools and court orders to assess undisclosed assets.

c. Expert report contents

- i. Introduction and terms of reference.
- ii. Methodology used.
- iii. Findings of fraud investigation.
- iv. Financial impact quantified.
- v. Conclusions and expert opinion.
- vi. Declaration of independence.

Examiner's report

The question tests the candidates' knowledge of forensic accounting.

About 85% of the candidates attempted the question and the performance was fair. The commonest pitfall was the candidates inability to apply current development in auditing to requirements of the question.

Candidates should prepare well for future examinations and cover all areas of the syllabus.

Marking guide

a.	Explanation of forensic accounting and its objectives		
	Meaning of forensic accounting	2	
	Objectives of forensic accounting		
	1 mark for each correct point subject to a maximum of 3 points	<u>3</u>	5
b.	Process of Investigating procurement/employee fraud		
	1 mark for each correct point subject to maximum of 4 points.	4	
	Tracing of hidden assets		
	½ mark for each correct point subject to a maximum of 4 points	<u>2</u>	6
c.	Contents of expert report		
	1 mark for each correct point subject to a maximum of 4 points		<u>4</u>
	TOTAL		<u>15</u>

SOLUTION 6: Royal Bank Plc.

- a. **Importance of professional ethics in maintaining Credibility and Independence**
- Ethical compliance ensures that audit opinions are perceived as objective and trustworthy.
 - In banking, credibility affects not just the firm's reputation but also financial stability and depositors' confidence in the bank.
- ii. **Importance of professional ethics in protecting the Public Interest**
- Refusing inducements and reporting irregularities, auditors prevent concealment of systemic risks that could harm depositors, investors, and the wider economy.

- Ethical oriented auditors act as a line of defence against corruption and financial mismanagement in the financial system.
- Ensuring credibility of audit opinion.
- Protecting public interest (shareholders, depositors, regulators).
- Ensuring trust in financial reporting and the profession.

b. Ethical threat from holiday gift

Types of threat:

Self-interest and familiarity threat.

Appropriate Safeguards

- The audit partner's acceptance or even consideration of a free holiday trip from the bank's managing director threatens independence and objectivity.
- It constitutes a self-interest and familiarity threat under the IFAC and ICAN Codes, as it could compromise impartial judgment or create the perception of bias.
- Such gifts should be **declined and reported** to the firm's ethics partner, and safeguards such as reassignment of the engagement partner may be necessary.
- Rotate audit partner in line with regulatory requirements.
- Reinforce firm's independence policy.
- Involve the Audit committee.

c. Whistleblowing (NOCLAR) responsibilities

ISA 250 and the IFAC Code state that all Non-Compliance with Laws and Regulations (NOCLAR) must be reported.

- If the NOCLAR, in this case, is material, intentional, or affects public interest, the auditor may be legally or ethically obliged to report the matter to an appropriate authority such as the Central Bank of Nigeria (CBN), the Nigerian Deposit Insurance Corporation (NDIC), or other financial regulators (e.g. FRC or even EFCC).
- This external reporting should occur **even if management refuses consent**, provided it is allowed or required under applicable laws and regulations.

Audit procedures in this Case

Step	Action	Purpose
1. Identify and verify	Confirm the validity of the whistle-blower's claims through audit evidence	To establish whether NOCLAR has occurred
2. Communicate internally	Discuss findings with senior audit partner and ethics committee	To ensure appropriate escalation
3. Engage with Those Charged With	Report issue to the audit committee and board for due	To give management an opportunity to act

Step	Action	Purpose
Governance(TCWG)	response	
4. Assess impact	Determine if non-compliance affects the financial statements or going concern	To decide audit opinion implications
5. Report externally	If material or un-remedied, report to CBN or NDIC or appropriate legal and regulatory authority.	To protect public interest and comply with laws
6. Document thoroughly	Record all steps, judgments, and communications	To demonstrate compliance with professional standards

d. The five fundamental ethical principles

Professional ethics provide the moral and regulatory foundation for the auditor's work.

They ensure that audit judgments are not influenced by personal gain or pressure from clients.

The five fundamental ethical principles (as per the IFAC Code) are:

- i. **Integrity** – being straightforward and honest in all professional relationships.
- ii. **Objectivity** – avoiding bias, conflicts of interest, or undue influence.
- iii. **Professional competence and due care** – maintaining the required knowledge and skill.
- iv. **Confidentiality** – respecting information obtained but not concealing wrongdoing.
- v. **Professional behaviour** – complying with laws and regulations to avoid actions that discredit the profession.

Examiner's report

The question tests the candidates' knowledge of professional ethics as it relates to auditors and non compliance with laws and regulations (NOCLAR).

Almost all the candidates attempted this question because it is a fundamental auditing topic but the performance was fair.

The commonest pitfall was the inability of the candidates to relate the answers to professional ethics and NOCLAR to the scenario given.

Candidates are advised to cultivate the wherewithal to relate theoretical auditing to practical scenario or real-time situations.

Marking guide

a.	Importance of professional ethics		
	2 marks for each of the 2 points explained		4
	Identification of ethical threats to independence created by holiday gift and safeguards	1	
	Ethical threat Safeguards to ethical threats		
	½ mark for each correct point subject to a maximum of 4 points	<u>2</u>	3
	Responsibilities of NOCLAR and audit procedures responsibilities		
	1 mark each for 2 correct 2 points	2	
	Audit procedure		
	1 mark each for each correct point subject to maximum of 4 procedures	<u>4</u>	6
b.	Five fundamental ethical principles		
	½ mark for each principle subject to maximum of 4		<u>2</u>
	TOTAL		<u>15</u>

SOLUTION 7: Channel Retail Plc.

a. Statistical analysis for outliers

Statistical analysis helps auditors identify unusual or inconsistent sales transactions that may indicate fraud, manipulation, or error in the accounting records. By applying statistical tools, auditors can focus attention on high-risk items rather than testing all transactions manually.

In the case of Channel Retail Plc., where manipulation of sales figures is suspected, statistical analysis can reveal outliers-transactions that deviate significantly from the normal sales pattern.

Outliers identified through statistical analysis are not basically or automatically fraudulent, but they highlight transactions requiring further audit procedures, such as:

- i. Verifying supporting documents (invoices, receipts),
- ii. Confirming with customers or suppliers.

Common statistical techniques for outliers include:

Method	Description	Use in Channel Retail Plc.
Z-Score Analysis	Calculates how far each transaction is from the mean in standard deviation units.	Identify stores or dates with Z-scores > 3, suggesting abnormal sales.
Regression Analysis	Predicts expected sales based on factors (e.g., store size, location,	Detect stores whose sales are inconsistent with predicted

Method	Description	Use in Channel Retail Plc.
	seasonality) and flags significant deviations.	patterns.
Benford's Law	Analyses the frequency of leading digits in sales amounts; abnormal distributions suggest manipulation.	Identify fabricated or rounded sales figures.
Time-Series Analysis	Examines trends and seasonal patterns in sales data over time.	Detect sudden spikes or drops in daily sales inconsistent with normal cycles.
Cluster Analysis	Groups transactions with similar characteristics and flags those that don't fit any group.	Detect sales that differ sharply from normal patterns in similar branches and dispensation.

In checking for outliers:

- i. Check for system overrides or manual adjustments,
- ii. Review the timing of revenue recognition.

b. Interrogating accounting software

Modern organisations, including retailers, rely heavily on **computerised accounting systems like ERP platforms** to process, record, and report financial transactions. For auditors, it is essential to **interrogate, understand, test, and evaluate** these systems because:

i. Reliability of Financial Information

Auditors depend on the accounting system's data to form an opinion on the financial statements. If the system is flawed, incomplete, or susceptible to manipulation, the financial statements may be materially misstated. Therefore, auditors must assess whether the software accurately records and summarizes transactions.

ii. Assessment of Internal Controls (ISA 315)

An ERP system automates key controls—authorisation, segregation of duties, and access rights. Interrogating the system helps auditors:

- Understand control design and configuration;
- Evaluate whether automated controls are effective;
- Identify weaknesses such as unauthorised access or override of controls.

This determines the **extent of reliance** auditors can place on system-generated data.

iii. Detection of Fraud and Irregularities

Manipulation can occur within digital environments—for example, through backdated entries or system overrides.

By examining system logs, audit trails, and configuration settings, auditors can detect:

- Unusual system activities;
- Unauthorized changes to master files or accounting rules;

- Suspicious user accounts or deleted transactions.

iv. **Completeness and Accuracy of Electronic Records**

In electronic environments, source documents like invoices, receipts, purchase orders are often digital. Auditors must ensure that all transactions recorded in the system are complete, accurate, and properly classified - particularly where no paper trail exists.

v. **Integration with Other Systems**

For a large organisation like Channel Retail Plc, accounting software is often linked to:

- Inventory management,
- Point-of-sale (POS) systems,
- Supplier payment (possibly blockchain-based) modules.

Interrogation helps confirm whether these modules interface correctly, preventing errors such as **double counting, omission, or inconsistent postings**.

c. ***Procedures for Interrogating the Client's Accounting Software System***

Auditors follow a structured process in line with ISA 315(Understanding the Entity and Its Environment) and ISA 330 (Responses to Assessed Risks).

Interrogating the client's accounting software is **not optional** - it is vital for ensuring audit reliability in a technology-driven environment.

By following a structured approach - understanding, testing, analysing, and evaluating system controls - auditors can:

- Reduce audit risk,
- Strengthen reliance on electronic data, and
- Provide more credible assurance on the financial statements.

The eight steps are:

Step 1: Preliminary Understanding

- Obtain documentation on the accounting system (user manuals, data flow diagrams, system architecture).
- Identify major modules like sales, purchases, inventory, general ledger.
- Determine system ownership, version, and vendor support.

Purpose: Gain an overview of how transactions are initiated, authorized, recorded, and reported.

Step 2: Walkthrough and System Mapping

- Trace a few sample transactions (e.g., a sale from POS to ledger posting) through the system.
- Observe how data moves across different modules.
- Identify key control points (authorization, review, reconciliation).

Purpose: Confirm understanding of the process flow and verify that controls are operating as designed.

Step 3: Review of Access and Security Controls

- i. Obtain a list of all user accounts and assigned roles.
- ii. Evaluate whether segregation of duties is enforced (such as no user can both approve and record payments).
- iii. Inspect password and access management policies.
- iv. Review audit trails for unauthorized access or system overrides.

Purpose: Ensure system security and data integrity.

Step 4: Configuration and Parameter Testing

- i. Examine key system settings:
 - Accounting period lockouts,
 - Revenue recognition rules,
 - Automatic journal posting controls,
 - Tax and discount settings.
- ii. Confirm that configurations align with company policies and accounting standards (e.g., IFRS).

Purpose: Detect misconfigurations that could cause material misstatements.

Step 5: Data Analytics and Computer-Assisted Audit Techniques (CAATs)

- i. Use audit software to **extract and analyse data** from the accounting system.
- ii. Apply filters and tests (e.g., duplicate invoices, unusual journal entries, gaps in document numbering).
- iii. Compare system-generated reports with independent records.

Purpose: Identify anomalies or trends that require further investigation.

Step 6: Testing of Automated Controls

- i. Test system-enforced approvals, thresholds, and reconciliations.
- ii. Attempt dummy entries (in a test environment) to confirm the system rejects invalid or unauthorized transactions.

Purpose: Verify that embedded controls function as intended.

Step 7: Evaluation of Interface and Backup Systems

- i. Examine interfaces with other applications (POS, payroll, blockchain payment systems).
- ii. Review data backup and recovery procedures.
- iii. Confirm data integrity during transfer between systems.

Purpose: Ensure completeness, reliability, and recoverability of accounting information.

Step 8: Documentation and Reporting

- i. Document all procedures performed, findings, and implications for audit risk.
- ii. If weaknesses are identified, recommend improvements or compensating manual controls.

Purpose: To ensure that integrity of documentation and reporting is maintained.

Examiner’s report

The question tests the candidates’ knowledge of application of current development in auditing like enterprise resource planning (ERP), block chain technology, and other IT related auditing areas to simulated business operations.

About 15% of the candidates attempted the question and the performance was poor. The commonest pitfall was the candidates’ display a poor knowledge of IT and other contemporary issues on auditing.

Candidates are advised to make it an absolute necessity to be well grounded in IT and current development areas in auditing.

Marking guide

a.	Application of statistical analysis to deficit outliers		
	- 1 mark each for techniques subject to maximum of 4	4	
	- Procedures for checking for outliers		
	1 mark for each procedure for 2 points	2	6
b.	Need to Interrogate softwares		
	2 marks each for correct procedure subject to a maximum of 3 points		6
c.	Audit procedures for interrogating client’s enterprise resource planning (ERP)		
	1 mark for a correct procedure subject to a maximum of 3 points		<u>3</u>
		TOTAL	<u>15</u>

INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

SKILLS LEVEL EXAMINATION – MAY 2026

PUBLIC SECTOR ACCOUNTING & FINANCE

Time Allowed: 3¹/₄ hours (including 15 minutes reading time)

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

SECTION A: COMPULSORY QUESTION (30 MARKS)

QUESTION 1

- (a) The following information was obtained from the records of the Office of the Accountant General for the Federal Republic of Obudu for the year ended December 31, 2024.

	₦'000
Value added receipts	22,950,000
Miscellaneous revenue	3,750,000
Direct tax	105,000,000
Allocation for collection costs to FIRS and custom	30,750,000
Personnel costs	72,000,000
Share of statutory allocation	135,000,000
CRF charges	22,500,000
Grants and subvention from foreign donors	750,000
Rent of federal government properties	2,850,000
Overhead charges	15,000,000
Subvention to parastatals	18,000,000
Sales of federal government properties	3,750,000
Repayment of loans	8,700,000
Purchases and construction of non-current assets	25,000,000
Proceeds from sales of federal government properties	10,500,000
Purchases of marketable securities	5,000,000
Cash and cash equivalent Jan. 1, 2024	37,500,000
Proceeds from loans and other borrowings	30,000,000
Cash and cash equivalent Dec. 31, 2024	216,600,000

Required:

Prepare a statement of cash flows for the year ended December 31, 2024 using direct method. (14 Marks)

- (b) In order to play her role as a foremost accounting body in Nigeria, ICAN came up with ICAN-Accountability Index (ICAN-AI) to confront the challenges of accountability and transparency in Nigerian public finance. The Institute's Accountability Index assesses public finance management and governance through five pillars, each with specific indicators and dimensions.

Required:

Briefly explain the Pillar 1 of ICAN-Accountability Index on “policy-based fiscal strategy and budgeting” and explain any **FOUR** indicators for the measurement. (10 Marks)

- (c) The objective of IPSAS 41-*Financial Instruments* is to establish principles for the financial reporting of financial assets and financial liabilities that will present relevant and useful information to users of financial statements for their assessment of the amounts, timing and uncertainty of an entity’s future cash flows.

Required:

Identify any **SIX** events where financial assets are measured at fair value through net assets. (6 Marks)

(Total 30 Marks)

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

QUESTION 2

- (a) The main objective of IPSAS 11- *Accounting for Construction and Contract* is to prescribe and ascertain the relevant treatment of costs and revenue associated with a contract.

Required:

Identify **FOUR** costs that cannot be attributed to a contract. (4 Marks)

- (b) When the outcome of a construction contract can be estimated reliably, contract revenue and costs associated with the construction contract should recognise revenue and expenses respectively by reference to the stage of completion of the contract at the reporting date.

Required:

Highlight the conditions that have to be satisfied in order to estimate the following types of construction contract reliably:

- i) Fixed price contract (3 Marks)
- ii) Cost based contract (2 Marks)
- iii) Percentage of completion contract (3 Marks)

- (c) A procurement plan is a strategic document that outlines how an organisation will acquire the goods, services or works needed to achieve its goals. It details the what, when and how procurement should be carried out to ensure that it aligns with organisational objectives and budget constraints.

Essentially, it is a roadmap for acquiring necessary resources efficiently and effectively.

Required:

Identify and explain **FOUR** key components and **FOUR** benefits of procurement plan.

(8 Marks)

(Total 20 Marks)

QUESTION 3

- (a) In carrying out its oversight functions regarding the finances of Wellbeing Republic, the Senate Committee on Finance and Appropriations received the proposed budget of the Ministry of Interior for 2026. The Ministry included the actual revenues and expenditures for 2025 as follows:

	Actual 2025 N'000	Proposed 2026 N'000
Revenue:		
Ministry's share of FAAC (statutory revenue)	50,330,000	58,500,000
Aids and grants	1,300,000	2,250,000
Expatriate quota fees	3,500,000	4,750,100
Marriage services	2,460,300	2,020,500
Citizenship processing	460,350	805,000
Business registration	1,250,000	1,980,000
Other revenues	<u>132,200</u>	<u>200,500</u>
Total revenue	<u>59,432,850</u>	<u>70,506,100</u>
Expenditure:		
Recurrent expenditure:		
Personnel costs	26,450,000	30,300,000
Grants and contributions	1,200,000	2,020,000
Overhead expenditure	1,100,000	1,320,000
Depreciation charges	230,000	400,500
Impairment charges	57,500	55,000
Security expenses on properties	1,200,000	2,250,000
Procurement: Consumables and services	<u>31,200</u>	<u>25,800</u>
Total recurrent expenditures	<u>30,268,700</u>	<u>36,371,300</u>
Capital expenditure:		
Investment on buildings	3,450,000	6,500,000
Investment on machinery and equipment	4,500,000	7,200,000
Investment on technology	3,500,000	4,200,500
Investment on aircraft for surveillance	<u>9,300,000</u>	<u>15,500,000</u>
Total capital expenditure	<u>20,750,000</u>	<u>33,400,500</u>
Total expenditure	<u>51,018,700</u>	<u>69,771,800</u>
Budget surplus/(Deficit)	<u>8,414,150</u>	<u>734,300</u>

Required:

Calculate the variance of each revenue and expenditure, total recurrent expenditures, total capital expenditures, showing the percentage increase or decrease in each case. (12 Marks)

- (b) The classification code forms the basis for budgeting and budgetary control mechanism. Therefore, for a country, state or local government to achieve a reasonable level of success in accountability, transparency, performance evaluation and adherence to Appropriation Act, the application of unified chart of accounts is paramount.

Required:

Explain the term “National Chart of Accounts (NCOA)”. Identify and discuss any **FOUR** structures for budgeting with national chart of accounts.

(8 Marks)

(Total 20 Marks)

QUESTION 4

- (a) Both the public and private goods produced are for certain purposes, but there is a clear distinction between the two different goods.

Required:

Identify and explain any **TWO** subdivisions of public goods and **THREE** characteristics each of public and private goods. (10 Marks)

- (b) “The need for government intervention in the economy is justified on the basis of market failure and public goods provisions.”

Required:

(i) Explain the concept of market failure and public goods. (2 Marks)

(ii) What conclusions can you draw from the foregoing statement in the context of a developing nation like Nigeria? (3 Marks)

- (c) The Government Integrated Financial Management Information System (GIFMIS) is an IT based system for budget management and accounting that is being implemented by the Federal Government of Nigeria to improve public expenditure management processes, enhance greater accountability and transparency across ministries, departments and agencies.

Required:

Identify and explain **FIVE** types of fraud that can be perpetrated in a computerised system like GIFMIS. (5Marks)

(Total 20 Marks)

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

QUESTION 5

- (a) It is common knowledge that government may borrow from time to time, in order to execute its budget figures.

Required:

Highlight **FIVE** advantages and **FIVE** disadvantages of borrowing to government. (10 Marks)

- (b) Sustainable development refers to an approach to development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Its significance lies in fostering long-term economic growth while ensuring social well-being and environmental protection.

Required:

Identify **FIVE** key aspects of sustainable development goals on education. (5 Marks)

(Total 15 Marks)

QUESTION 6

Kosofe State Government is contemplating executing a road project, with a special allocation received from Wasobia Federal Government. The project finance management committee set up has received two proposals from State Ministry of Works for the project execution. The first proposal is on executing the project by direct labour, while the second is through the award of contract.

Option A - Direct labour

The direct labour option which expects the project to be completed within six months from commencement, involves the following:

	₦'000
i. Cost of direct materials	340,000
ii. Cost of hired supplementary labour	120,000
iii. Cost of fuel, lubricants and stationery specially for the project	60,000
iv. Estimated cost of repairs of vehicles, plants and equipments to execute the project	240,000
v. Estimated incidental costs (job specification. bill of quantity etc.)	<u>40,000</u>
Total anticipated costs	<u>800,000</u>

If the project is executed by direct labour, some materials worth ~~₦90~~million would be conserved. The engineers have estimated the un-expired vehicle repair cost as ~~₦96~~million, at the end of the project execution.

Option B – Contract award:

The contract award fee is ₦780million.

Other relevant costs are:

	₦'000
i. Cost of job specification, bill of quantity etc. to be paid for separately by the State	40,000
ii. Cost of advertisement inviting public tenders	<u>20,000</u>
Total	<u>60,000</u>

The contractor has agreed to finance and complete the project within five months of commencement and allow delayed payment up to three months.

If the project is executed through contract award, the state government can invest the estimated savings under direct labour option in a short-term deposit account at an annual rate of 15% up to the time the contract payment is due. The costs of job specification, bill of quantities and advertisement as in option A remain constant.

Required:

- a. Advise the committee on the option to accept. (10 Marks)
- b. Identify **FIVE** factors that the state government should consider before a final decision is taken. (5 Marks)

(Total 15 Marks)

QUESTION 7

- (a) Ogogo Orientals Primary Health Care is a small community health organization considering how to spend the available budget of the World Health Organisation (WHO) to maximise gains in Quality-Adjusted Life-Years (QALYs). You are provided with the following table of alternative treatment programmes and their expected total costs and benefits.

Programme	Cost (₦)	Effect (Gains in QALYs)
Physical exercise programme (A)	500,000	40
Mental health programme (B)	700,000	200
State of the art imaging (C)	1,800,000	400
Cancer treatment centre (D)	5,000,000	625

Assume you can fund any combination of these programmes and the programmes are infinitely divisible (that is you can fund parts of a programme, at proportional costs and QALY gains).

Required:

Select the combination of the programme you would choose to implement if your operating budget was ₦5,000,000 and how many QALYs you would gain. (7½ Marks)

- (b) Public sector sustainability reporting discusses disclosures on environmental, social and governance aspects, along with progress towards ensuring sustainability goals.

Required:

Highlight **FIVE** key elements of public sector sustainability reporting.

(7½ Marks)

(Total 15 Marks)

SOLUTION 1

a)

Federal Republic of Obudu
Statement of cash flow for the year ended December 3,2024

₦'000

Receipts:

Share of statutory allocation	135,000,000
Value added tax	22,950,000
Personal income tax - Direct tax	105,000,000
Allocation for collection cost	30,750,000
Grants and subvention received	750,000.
Miscellaneous revenue	<u>3,750,000</u>
Total receipts	<u>298,200,000</u>

Payments:

Personnel costs	72,000,000
Consolidated revenue charges	22,500,000
Overhead charges	15,000,000
Subvention to parastatals	<u>18,000,000</u>
Total payments	<u>127,500,000</u>

Net cash inflows from operating activities

170,700,000

Cash flows from investing activities:

Sales of federal government properties	10,500,000
Purchases and construction of non-current assets	(25,000,000)
Purchases of marketable securities	(5,000,000.00)
Sales of government property	3,750,000
Rent of government property	<u>2,850,000</u>
Net cash outflows from investing activities	<u>(12,900,000)</u>

Cash flows from financing activities:

Proceeds from loans and other borrowing	30,000,000
Repayment of loan	<u>(8,700,000)</u>
Net cash outflows from financing activities	<u>21,300,000</u>

Net increase in cash and cash equivalents for the year

179,100,000

Cash and cash equivalents January 1,2024

37,500,000

Cash and cash equivalents December 31, 2024

216,600,000

b) **Pillar 1- Policy-based fiscal strategy and budgeting**

A fiscal strategy clearly articulates governments medium term financial objectives to the legislature and the public. It covers policies in the medium term relating to taxation, recurrent (non-debt) expenditure, debt expenditure, capital expenditure, borrowings and other liabilities, lending and investment, its strategic economic, social and developmental priorities for the next three

financial years. It also explains how the financial objectives, strategic, economic, social and developmental priorities and fiscal measures set out relates to the economic objectives set out in Section 16 of Nigerian Constitution.

- i) **Macroeconomic and fiscal forecasting:** This indicator measures the ability of governments to develop robust macroeconomic and fiscal forecasts, which are crucial to developing a sustainable fiscal strategy and ensuring greater predictability of budget allocations. It also assesses the government's capacity to estimate the fiscal impact of potential changes in economic circumstances.
 - ii) **Fiscal strategy:** This indicator provides an analysis of the capacity to develop and implement a clear fiscal strategy. It also measures the ability to develop and assess the fiscal impact of revenue and expenditure policy proposals that support the achievement of the government's fiscal goals.
 - iii) **Medium-term perspective in expenditure budgeting:** This indicator examines the extent to which expenditure budgets are developed for the medium term within explicit medium-term budget expenditure ceilings. It also examines the extent to which annual budgets are derived from medium-term estimates and the degree of alignment between medium-term budget estimates and strategic plans.
 - iv) **Budget preparation process:** This indicator measures the effectiveness of participation by relevant stakeholders in the budget preparation process, including political leadership, and whether that participation is orderly and timely. It contains two dimensions and uses the average method for aggregating dimension scores.
 - v) **Legislative scrutiny of budgets:** This indicator assesses the nature and extent of legislative scrutiny of the annual budget. It considers the extent to which the legislature scrutinises, debates and approves the annual budget, including the extent to which the legislature's procedures for scrutiny are well established and adhered to. It contains three dimensions and uses the weakest link method for aggregating dimension scores.
- c) **Events in which financial assets are measured at fair value through net assets.**
- i) When a public sector entity (PSE) uses its surplus cash to purchase short-term investments, the investments are classified at initial recognition as financial assets fair value through net assets.
 - ii) Available-for-sale financial assets are included in a non-current asset where a PSE intends to dispose off the investment in a period exceeding 12 months from the reporting date.

- iii) Regular purchases and sales of financial assets are recognised at fair value on a trade-date (the date in which the entity commits to purchase or sell the assets) and subsequently at fair value with any resultant fair value gains or losses recognised in the statement of net assets.
- iv) Realised gains or losses on financial assets fair value through net assets are recognised in the consolidated statement of financial performance as income or expense from the financial assets at fair value through net assets securities.
- v) Impairment losses on financial assets fair value through net assets is calculated using the effective interest method and is recognised in the consolidated statement of financial performance as part of expenses.
- vi) The fair values of quoted investments are based on current bid prices. If the market for a financial asset is not active, the entity shall establish fair value in the valuation techniques.
- vii) Entity shall ascertain at the date of preparation of each statement of financial report, whether there is objective evidence that a financial asset or group of financial assets is impaired.
- viii) In the case of equity securities classified as available financial assets fair value through net assets, a significant or prolonged decline in the fair value of the security below its cost is considered as an indicator that the securities have been impaired.
- ix) If any such evidence exists for financial assets fair value through net assets, the cumulative loss measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognised is presented in the statement of financial performance.

Examiners' report

The question is in three parts. Part (a) of the question tests candidates' knowledge on the preparation of statement of cash flows using direct method, while part (b) tests candidates' knowledge of the Pillar 1 of ICAN-Accountability Index (ICAN-AI) on policy based fiscal strategy and budgeting including indicators of measurement. Part (c) requires candidates to explain the events where financial assets are measured at fair value through net assets under IPSAS 41 on financial instruments.

All the candidates attempted the question and their performance was average.

The common pitfalls were the inability of the candidates to explain the Pillar 1 of ICAN-Accountability Index (ICAN-AI) on policy based fiscal strategy and budgeting and identify events where financial assets are measured at fair value through net assets under IPSAS 41 on Financial Instruments.

Candidates are advised to have adequate knowledge of the relevant provisions of the syllabus and to make use of the Pathfinder and the Institute's study text of the Institute for better performance in the Institute's future examinations.

Marking guide

	Marks	Marks
1a Preparation of cash flows		
Title	1	
Calculation of net cash inflows from operating activities	6 ½	
Calculation of net cash inflows from investing activities	3	
Calculation of net cash inflows from financing activities	1½	
Calculation of net increase in cash and cash equivalents for the year	1	
Calculation of net increase in cash and cash equivalents as at December 31 2024	<u>1</u>	14
b Pillar 1- Policy-based fiscal strategy and budgeting		
Explanation	2	
Identification any four indicators	2	
Explanation of any four identified indicators	<u>6</u>	10
c. Events in which financial assets are measured at fair value through net assets.		
Identification any six events		<u>6</u>
Total		<u>30</u>

Section B Solution 2

a) Costs that cannot be attributed to contract activities.

- i) General administration costs for which reimbursement is not specified in the contract.
- ii) Selling and marketing costs.
- iii) Research and development costs for which reimbursement is not specified in contract.
- iv) Depreciation and maintenance costs of idle plant and equipment that is not used on a particular contract.
- v) Costs associated with wasted materials, excessive labour or other resources that were not initially reflected in the contract price.
- vi) Any cost that relate to previous satisfied performance obligations.

b) Recognition of contract revenue and expenses

- i) **Fixed contract price**

The outcome of a construction contract can be estimated reliably when the following conditions are satisfied:

- Total contract revenue, if any, can be measured reliably.
- It is probable that the economic benefits or service potential associated with the contract will flow to the entity.
- Both the costs to complete the contract and the stage of completion at the reporting date can be measured reliably.
- The contract costs attributable to the contract can be clearly identified and measured reliably so that actual contract costs incurred can be compared with prior estimates.

ii) Cost-based contracts

The outcome of a construction contract can be estimated reliably if all the following conditions are met:

- It is probable that the economic benefits or service potential associated with the contract will flow to the entity.
- The costs attributable to the contract, whether or not specifically reimbursed, can be clearly identified and measured reliably.

iii) Percentage of completion method

- Contract revenue is matched with contract costs incurred in reaching the stage of completion, resulting in reporting of revenue, reporting of expenses and surplus or deficit that can be attributed to the proportion of work completed.
- When the outcome of the construction contract cannot be estimated reliably, revenue should be recognised only to the extent of the contract costs incurred that it is probable will be recoverable and contract costs should be recognised as expenses in the period in which they are incurred.
- However, where it is intended at inception of the contract that contract costs are to be fully recovered from the parties to the construction contract, any expected excess of total contract costs over total contract revenue for the contract is recognised as an expense immediately.

c) Key components and benefits of a procurement plan.

i) Key components of a procurement plan

- **Requirements definition:** Clearly outlining what goods, services, or works are needed, including specifications, quantities, and quality standards.
- **Procurement method:** Determining the most appropriate procurement method (e.g., competitive bidding, negotiation) based on the nature of the requirements.

- **Timeline and schedule:** Establishing a realistic timeline for each stage of the procurement process, from identifying potential suppliers to contract award and delivery.
- **Budget allocation:** Detailing the budget allocated for each procurement activity and ensuring it aligns with the overall project or organisational budget.
- **Supplier selection:** Outlining the process for identifying, evaluating, and selecting suitable suppliers, including criteria for evaluating bids and proposals.
- **Contract management:** Defining the terms and conditions of the contract, including payment terms, delivery schedules and performance metrics.
- **Risk management:** Identifying potential risks associated with the procurement process and outlining mitigation strategies.
- **Performance monitoring:** Establishing mechanisms for monitoring supplier performance and contract compliance.

ii) Benefits of a procurement plan:

- **Cost savings:** By planning strategically, organisations can identify opportunities for cost reduction and achieve better value for money.
- **Improved efficiency:** A well-defined procurement plan streamlines the procurement process, leading to faster turnaround times and increased efficiency.
- **Reduced risk:** By identifying and mitigating potential risks upfront, organisations can minimise disruptions and ensure smooth procurement operations.
- **Enhanced transparency and accountability:** A procurement plan provides a clear framework for procurement activities, promoting transparency and accountability.
- **Alignment with organisational goals:** Ensuring that procurement activities are aligned with the overall objectives and strategies of the organisation.
- **Time efficiency:** Lead time management, fewer delays, materials and services arrive when needed, reducing idle labour and equipment, streamlined process, pre-defined methods, approval paths and cut-off procedures.
- **Quality and performance:** Clear specifications, defined quality, standards, and acceptance criteria, better supplier selection, evaluation criteria are set before bids come in, reducing favoritism, performance monitoring and contract compliance.

- **Operational benefits:** Avoids stock outs and overstocking, by aligning inventory with project schedule optimising, resource use and storage.
- **Strategic value:** Supports market engagement, to test prices and supplier capacity which enables selection of contract strategy which help to decide whether to use framework agreements lump sum to improve forecasting, finance and reliable cash flows and expenditure forecasts.

Examiners' report

The question is in three parts. Part (a) of the question requires the candidates to identify costs that cannot be attributed to a contract under IPSAS 11 on "Accounting for Construction and Contract", while Part (b) of the question tests candidates' knowledge of the conditions that have to be satisfied in order to estimate reliably the construction contract under fixed price contract; cost-based contract; and percentage of completion contract. Part (c) of the question requires the candidates to identify and explain the key components and benefits of procurement plan.

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

The commonest pitfall was the inability of the candidates to properly understand the requirement of the question.

Candidates are advised to make use of ICAN Pathfinders and the study text for better performance in the Institute's future examinations.

Marking guide

	Marks	Marks
a. Costs that cannot be attributed to contract activity		
Identification of four costs that cannot be attributed to contract activity		4
b. Recognition of contract revenue and expenses		
Highlighting three conditions for fixed price contract	3	
Highlighting two conditions for cost-based contract	2	
Highlighting three conditions for percentage of completion contract	<u>3</u>	8
c. Key components and benefits of a procurement plan		
Key components of a procurement plan		
Identification of four components.	2	
Explanation of key components identified	<u>2</u>	
Key benefits of a procurement plan		
Identification of four benefits	2	

Solution 3

a) **Wellbeing Republic**
Calculation of budget variances and percentage of variances for 2026

	Actual 2025 N'000	Proposed 2026 N'000	Variance N'000	% Variance
Revenue:				
Ministry's share of FAAC (Statutory Revenue)	50,330,000	58,500,000	8,170,000	16.23
Aids and grants	1,300,000	2,250,000	950,000	73.08
Expatriate quota fees	3,500,000	4,750,100	1,250,100	35.72
Marriage services	2,460,300	2,020,500	(439,800)	(17.88)
Citizenship processing	460,350	805,000	344,650	74.87
Business registration	1,250,000	1,980,000	730,000	58.40
Other revenue	<u>132,200</u>	<u>200,500</u>	<u>68,300</u>	<u>51.66</u>
Total revenue	<u>59,432,850</u>	<u>70,506,100</u>	<u>11,073,250</u>	<u>18.63</u>
Expenditure:				
Recurrent expenditure:				
Personnel costs	26,450,000	30,300,000	3,850,000	14.56
Grants and contributions	1,200,000	2,020,000	820,000	68.33
Overhead expenditure	1,100,000	1,320,000	220,000	20.00
Depreciation charges	230,000	400,500	170,500	74.13
Impairment charges	57,500	55,000	(2,500)	(4.35)
Security expenses on properties	1,200,000	2,250,000	1,050,000	87.50
Procurement: Consumables and services	<u>31,200</u>	<u>25,800</u>	<u>(5,400)</u>	<u>(17.31)</u>
Total recurrent expenditure	<u>30,268,700</u>	<u>36,371,300</u>	<u>6,102,600</u>	<u>20.16</u>
Capital expenditure:				
Investment on buildings	3,450,000	6,500,000	3,050,000	88.41
Investment on machinery and equipment	4,500,000	7,200,000	2,700,000	60.00
Investment on technology	3,500,000	4,200,500	700,500	20.01
Investment on aircraft for surveillance	<u>9,300,000</u>	<u>15,500,000</u>	<u>6,200,000</u>	<u>66.67</u>
Total capital expenditure	<u>20,750,000</u>	<u>33,400,500</u>	<u>12,650,500</u>	<u>60.97</u>
Total expenditure	<u>51,018,700</u>	<u>69,771,800</u>	<u>18,753,100</u>	<u>36.76</u>
Budget surplus/(deficit)	<u>8,414,150</u>	<u>734,300</u>	<u>(7,679,850)</u>	<u>(91.27)</u>

a) **National Chart of Accounts (NCOA)**

The National Chart of Accounts (NCOA) may be defined as a complete list of budget and accounting items where each item is uniquely represented by a code and

grouped into tables of related data for the purposes of tracking, managing and reporting budgetary and accounting items in an orderly, efficient and transparent manner. It is also a created list of codes which can be represented by numeric, alphabetic or alphanumeric symbols. This is to enable the entity to define each item of revenue, expenditure, asset, liability, location and other parameters in order to give interested parties a better understanding of the entity.

National chart of accounts structure for budgeting

- i) **Administrative segment:** The administrative classification identifies the entity that is responsible for the public funds projection, such as the Ministry of Education, Health and Women Affairs or, at a lower level, schools and hospitals.
- ii) **Economic segment** - The economic classification identifies the type of revenue and expenditure budgeted in a particular period, examples are salaries, goods and services, transfer and interest due.
- iii) **Functional segment** - The functional classification or classification by functions of government is a detailed classification of the functions or socio-economic objectives, that general government unit aims to achieve through various outlays. It therefore, organises government activities according to their broad objectives or purposes.
- iv) **Programme segment-** The programme classification identifies various set of activities to meet specific policy objectives of the government. For example, pre-primary education, poverty alleviation and food security.
- v) **Funds segment** - The fund classification identifies the sources of funding government activities.
- vi) **Geographical segment** - The geographical classification is used to identify the geographical location of an entity (MDAs) or a project so that an analysis of government budget along various states and local government areas in the country can be done.

Examiners' report

The question is in two parts. Part (a) of the question examines candidates' knowledge of the calculation of the variance of each revenue and expenditure, total recurrent expenditure, total capital expenditure, showing the percentage increase or decrease in each case. Part (b) of the question requires the candidates to explain the term "National Chart of Account (NCOA) and also, identify and explain the structures for budgeting with national chart of accounts.

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

The commonest pitfall was the inability of the candidates to properly identify and explain the structures for budgeting with national chart of accounts.

Candidates are advised to read widely and ensure they have adequate knowledge of the relevant sections of the syllabus. They should also make use of Pathfinders and the study text of the Institute and other relevant learning materials on this aspect of the syllabus for better performance in future examinations

Marking guide

	Marks	Marks
a. Budget variances and percentage of variances		
Title	1/2	
Calculation of total revenue variance	2	
Calculation of total revenue percentage variance	2	
Calculation of total recurrent expenditure variance	2	
Calculation of total recurrent expenditure percentage variance	2	
Calculation of total capital expenditure variance	1 1/4	
Calculation of total capital expenditure percentage variance	1 1/4	
Calculation of total expenditure variance	1/4	
Calculation of total expenditure percentage variance	1/4	
Calculation of budget surplus/(deficit) variance	1/4	
Calculation of budget surplus/(deficit) percentage variance	<u>1/4</u>	12
b. Explanation and steps for budgeting with national chart of accounts		
Explanation of National Chart of Accounts (NCOA)	2	
Identification of any four structures for budgeting with NCOA	<u>2</u>	
Discussion of any four structures identified	<u>4</u>	<u>8</u>
Total		<u>20</u>

Solution 4

(a) **Sub-division of public goods**

Public goods can also be subdivided into the following:

- i. **Pure public goods:** They are goods that are perfectly non-rival in consumption and non-excludable. Defense and street lightings are good examples of pure public goods.

- ii. **Quasi-public goods:** These are goods that possess some characteristics of both private and public goods. They are partially non-rivalrous and partially non-excludable. Examples include roads, tunnels and bridges. Markets for these goods are considered to be inefficient. For example, private enterprise could provide some bridges, roads and tunnels if a charging system could be applied which solves the free rider problem.

- iii. **Merit goods:** The concept was introduced in economics by Richard Musgrave as a commodity which is judged to be of immense value to an individual or society and one should have on the basis of need, rather than ability and willingness to pay. Merit goods are those goods and services that the government believes people will under-consume and which ought to be subsidised or provided free at the point of use so that consumption does not depend primarily on the ability to pay for the goods or services. Education and healthcare are good examples of merit goods.
- iv. **Common-pool resources/Common goods:** Overuse of common goods depletes the resource and it is hard to prevent people from using it. For example Fisheries, grazing land, public parks, clean water in a river, internet bandwidth.
- v. **Club goods / Toll goods:** Many people can use it without reducing other users' benefit. For example cable TV, toll roads, libraries with membership, paywalled databases, private parks.

The characteristics of public goods

- i. **Non-rival consumption:** Generally, public goods refer to those goods whose consumption is not in rival relationship. This implies that consumption by one individual will not cause a decline in the benefit that will accrue to other consumers of the same goods. For example, government policy of providing street lightings on roads, defence and adequate policing to make the society crime-free will become beneficial to everyone. It does not matter whether or not everybody is a tax payer. Therefore, consumption of public goods is not competitive.
- ii. **Non-excludability:** Another remarkable feature of public goods is the non-applicability of exclusion principle. Since everyone consumes from the same source of supply, once provided for one individual, the same quantity and quality becomes available to everyone. Divisibility of output into smaller units to meet individual's demand is not desirable even if it were feasible. Therefore, consumption of public goods is not dependent upon payment, thereby giving room for 'free riders'. The non-excludability condition makes provision of public goods through the market mechanism impossible.
- iii. **Zero marginal cost:** Public goods are characterised by the existence of zero or near zero marginal cost. This means that increase in demand may not necessarily force government to increase supply at least in the short run. Hence, there is no extra cost incurred by the additional demand. For example, increase in the number of vehicles plying a road may not necessitate immediate expansion of the road. Similarly, additional vehicle passing over a bridge is without any additional cost to the society.

- iv. **Equality of sum of marginal benefits with marginal cost:** The marginal cost is usually a measure of benefit (utility/satisfaction) derived by consumers from consumption. In the case of public goods, it is the sum of the marginal benefits derived by each individual that should equal marginal cost. This is so since all consumers consume from the same source of supply.
- v. **Market provision is efficient:** Because of non-rivalry and non-excludability, the price mechanism works. Consumers reveal their preferences by buying, producers respond by supplying. Profit and loss signals guide resource allocation without needing government intervention. This is why we do not have the government selling you shoes or bread. The private market does it better.

Characteristics of private goods

In the case of private goods produced by the private sector, the characteristics are complete opposite of those of public goods.

- i. **Rivalrous consumption**
This is a major feature of private goods. It means that consumption of a particular private good makes it unavailable for another person. Hence, consumption of private goods is competitive. For example, a pair of shoe or glasses worn by the class coordinator is not available to his/her assistant.
- ii. **Excludability**
It is a peculiar characteristic of private goods. There are specific conditions that must be satisfied before consumers can enjoy the benefit of private goods. Payment must be made, otherwise market will fail to function efficiently in the production and supply of private goods. Where it is impossible to limit the supply of goods to a particular consumer (exclusion), it will be impossible to charge price and where price cannot be charged or introduced, market fails. The principle of excludability is prevalent when discussing private goods and nothing will be lost while much will be gained when consumers are prevented from consumption unless they pay.
- iii. **Positive marginal cost.**
The marginal cost of private goods is positive. Addition to the number of consumers for a particular good will necessitate increase in output which will not be possible without additional cost – marginal cost. Increase in output will be necessary because of the urge to make extra income by the producers of the good in question.
- iv. **Equality of marginal benefit with marginal cost**
In the case of private goods, efficiency requires equality of marginal benefit derived by each consumer with marginal cost. The reason being

that each individual consumer will pay the same unit price but purchase different quantity.

v. **Divisibility:**

The good can be broken into units and sold to individual consumers. You can buy 1kg of rice, one liter of fuel or one phone. You do not have to buy the whole factory output. Divisibility lets the market match supply to individual demand and willingness to pay.

vi. **Market provision is efficient:**

Because of rivalry and excludability, the price mechanism works. Consumers reveal their preferences by buying, producers respond by supplying. Profit and loss signals guide resource allocation without needing government intervention. This is why we do not have the government selling you shoes or bread.

(b) **i. Concept of market failure and public goods**

Market failure

This is the concept used to describe the situation in which the market is no longer efficient in its allocation of resources, while public goods which are collectively consumed, non-rival in consumption and not subject to the exclusion principle. For example, roads, national defence etc.

ii. Validity of the statement

- A developing economy like Nigeria has a market structure that is grossly imperfect. That is, a market structure that cannot guarantee optimal social allocation condition.
- There are many situations which lead to market failure in developing economies. For example, externalities not taken into account by the market systems, cases of imperfect knowledge and immobility of factors of production.
- Public goods, characteristically, give rise to some externalities, both positive and negative, which tend to undermine the efficiency of the market mechanism. For example, negative externalities which include, noise, litter or pollution. On the positive side are the spillover effects of education, health expenditure, road construction projects etc.
- Income distribution obtained via the market is in many cases unequal, especially in developing nations, such as Nigeria. Governmental action is therefore required to redress the gaps between incomes.

(c) **Types of fraud in a computer system**

- i) **Manipulation of computer time/access:** This is where computer operating time is manipulated with the intention to use the computer

for personal advantage at the expense of the organisation. Data in the computer memory may be altered or certain unauthorised operations carried out.

- ii) **Alteration of master file:** Master file may be altered to help unauthorised person achieve his purpose. This is mainly done when there is existing standing order. Detection may be difficult since copy of master file is often kept in off locations.
- iii) **Alteration to software package:** This is an unauthorised amendment or alteration which is made to the software programme to perpetuate fraudulent act. It is one of the most common methods in computer programme-based frauds and sabotage, where instructions in the programme are altered so that the computer will perform unauthorised functions.
- iv) **Programme patching:** This is where attachment is made to the computer programme so that it can jump function or perform unauthorised functions, which the unauthorised person wants it to perform to his own advantage.
- v) **Interception of transactions:** Computer operations can be intercepted between manual and central processing unit. This could happen where on-line system is in operation. Though rare and sophisticated, it is a high form of computer fraud.
- vi) **Manipulation of input:** The input data may be altered or corrupted with a view to altering computer records and may be with an intention to defraud the organisation. This is also known as “data diddling”. It is one of the most common and simplest computer fraud. It involves changing data before or during their input to the computer. This can be done by anybody with access to the computer, for example an operator.
- vii) **Simulation and modelling:** A computer can be used as a tool or instrument of crime planning and execution. Complex white-collar crimes are often perpetrated by using computer system, because of its sophisticated capabilities. An existing process can be simulated on a computer or a planned method for carrying out a crime could be modelled to determine its possible outcome.

Examiners’ report

The question is in three parts. Part (a) of the question requires candidates to identify and explain the two subdivisions of public goods and characteristics of public and private goods. Part (b) is in two sections. Section (i) requires candidates to explain the concept of market failure and public goods, while section (ii) requires the candidates to give an opinion whether the statement that ‘ the need for

government intervention in the economy is justified on the basis of market failure and public goods in the context of a developing nation like Nigeria'. Part (c) of the question requires the candidates to identify and explain types of fraud that can be perpetrated in a computerised system like Government Integrated Financial Management System (GIFMIS).

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

The common pitfalls were the inability of the candidates to justify the validity of the need for government intervention in the economy in relation to market failure and public goods.

Candidates are advised to read widely and ensure they have adequate knowledge of relevant regulations relating to public sector accounting for better performance in the Institute's future examinations.

Marking guide

	Marks	Marks
a. Public and private goods		
Identification of two sub divisions of public goods	1	
Explanation of sub divisions identified	3	
Identification of three characteristics of public goods	1½	
Explanation of characteristics identified	1½	
Identification of three characteristics of private goods	1½	
Explanation of characteristics identified	<u>1½</u>	10
b. Concept of market failure and public goods		
Explanation of concept of market failure and public goods	2	
Explanation of three valid justifications of the statement	<u>3</u>	5
c. Types of fraud in a computer system		
Identification five types of fraud	2½	
Explanation of five steps identified	<u>2½</u>	<u>5</u>
Total		<u>20</u>

Section C

Solution 5

a) Advantages of borrowing

- i) Rapid economic growth and welfare improvement would be achieved if borrowed funds are utilised to finance economically and socially viable projects.

- ii) The confidence of local and foreign investors in the economy would be boosted, if public debt is used to control inflation.
- iii) New and additional investment would lead to creation of new jobs and greater output of welfare enhancing goods and services. If borrowed funds are spent on public works, standards of living will improve, especially via creation of new jobs and the transformation of the environment.
- iv) Public debt reduces income inequalities, if it is spent on social, security and projects that are of more benefit to the lower income groups.
- v) Those who lend money to government by purchasing government securities, instead of keeping idle savings, will become richer as they acquire additional assets to boost their wealth portfolio.
- vi) During recessions, government can borrow and increase public spending to stimulate demand, prevent economic collapse and repaying the debt during periods of economic boom.
- vii) It prevents immediate, drastic cuts to public services or civil servant salaries during periods when tax collections fall short of expected revenue.
- viii) Rather than imposing sudden, heavy tax burdens on citizens to fund emergencies or wars, borrowing spreads the fiscal cost over multiple generations who will also benefit from the expenditures. It provides immediate funds for “disaster relief” during national emergencies, such as pandemics or natural disasters, where immediate spending is critical.
- ix) Borrowing allows governments to fund essential long-term investments and maintain public services without immediate tax hikes.
- x) It enables “automatic fiscal stabilisers” like unemployment benefits to function even when tax revenue drops.

Disadvantages of borrowing

- i) Excessive government borrowing within the economy tends to crowd out private investments. That is, government competes with private companies in the financial market and deprive them loanable funds they need to grow their activities.
- ii) Tax burden on future generation: Public debt imposes unfair tax obligation on future generation especially when borrowed funds are deployed to fund consumption rather than investment programmes or when such funds are diverted to non-self-liquidating projects or projects that are poorly designed, thereby making execution impossible.

- iii) Funding excessive interest rate on public debt in stable foreign currency deprives the nation of foreign exchange needed to procure critical inputs, especially in a country like Nigeria that is highly dependent on import with respect to raw materials required in the industrial sector. This leads to declining industrial capacity utilisation and loss of industrial jobs.
 - iv) Borrowing comes with conditionalities that may become too stringent for the debtor nation(s), like trade liberalisation, withdrawal of subsidies on essential products, expenditure reduction, non-increase of salary of public servants and other stiff conditions that might have great consequence on living standards of the people.
 - v) It is an ineffective way of controlling inflation. As a matter of fact, debt servicing may create inflationary effects at a time of full-employment. Specifically, the financing of domestic debt usually causes aggregate demand to increase when creditors bring the income generated through their investment in government securities into circulation.
 - vi) Debt-servicing problem is aggravated when short and medium-term loans are committed to long-term projects with amortisation becoming due before projects are completed.
 - vii) Borrowing tends to widen the level of income inequalities, since it is the rich only that can invest in government securities or lend to government and hence benefit from high interest payment.
- (b) **Key aspects of Sustainable Development Goals (SDG 4) on education:**
- i) **Inclusive and equitable education:** SDG (4) strives to ensure that all individuals, regardless of their background or circumstances, have access to quality education.
 - ii) **Lifelong learning:** The goal recognises the importance of continuous learning and development throughout life, not just in formal schooling.
 - iii) **Early childhood development:** SDG (4) emphasises the need for quality early childhood development and pre-primary education to prepare children for primary school.
 - iv) **Skills for employment:** It aims to equip youth and adults with the skills they need to participate in the workforce, including technical, vocational and entrepreneurial skills.
 - v) **Reduced inequalities:** SDG (4) focuses on eliminating gender disparities and ensuring equal access to education for vulnerable groups such as persons with disabilities and those in vulnerable situations.

- vi) **Quality of education:** It emphasises the need for quality learning environments, qualified teachers and effective learning outcomes.
- vii) **Financing for education:** SDG (4) highlights the importance of adequate and targeted financing to support education initiatives, particularly in developing countries and for marginalised populations.
- viii) **Safe learning facilities:** Building and upgrading learning facilities that are child disability and gender-sensitive, providing safe, non-violent and inclusive learning environments.

Examiners' report

The question is in two parts. Part (a) of the question requires the candidates to highlight the advantages and disadvantages of borrowing to government. Part (b) of the question requires candidates to identify the key aspects of sustainable development goals on education.

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

The common pitfalls were the inability of the candidates to identify the key aspects of sustainable development goals on education.

Candidates are advised to make use of Pathfinders and the Study Text of the Institute for better performance in the Institute's future examinations.

Marking guide

	Marks	Marks
a. Advantages and disadvantages of borrowing		
Highlighting five advantages	5	
Highlighting five disadvantages	<u>5</u>	10
b. Key aspects of SDGs on education		
Identification of any five key aspects		<u>5</u>
Total		<u>15</u>

Solution 6

a)

Kosofe State Government			
Computation of the costs of proposed road project			
Option A – Direct labour			
		₦'000	₦'000
Cost of direct materials			340,000

Cost of hired supplementary labour		120,000
Cost of fuel, lubricants and stationery specially for the project		60,000
Estimated cost of repairs of vehicles, plants and equipment to execute the project		240,000
Estimated incidental costs (Note i.)		<u>40,000</u>
Total anticipated costs		800,000
Less:		
Cost of materials conserved	90,000	
Unexpired vehicle repair cost	<u>96,000</u>	<u>186,000</u>
Effective cost of option A		<u>614,000</u>

Option B – Contract

	₦'000	₦'000
Contract award fee		780,000
Add:		
Estimated incidental costs (job specification, bill of quantity etc.)	40,000	
Cost of advertisement inviting public tenders	<u>20,000</u>	<u>60,000</u>
		840,000
Less:		
Interest earned due to money saved in option A (15% X 8/12 ₦800million) Note ii.		<u>80,000</u>
Effective cost of option B		<u>760,000</u>

Notes:

The costs of job specification, bill of quantity, etc. represent the estimated incidental costs in the total anticipated costs for option A

The estimated savings to be invested if the contract award (option B) was adopted is the anticipated cost of ₦800million for a period of 8 months, that is, contract duration and delay period in payment.

Decision:

The State Government is advised to execute the job through direct labour, since the effective cost of that option of ₦614million is less than the contract option of ₦760million

- a) Other factors that the state government should consider before a final decision is taken are;
- i. Whether or not the quality of work through direct labour will match that of an experienced contractor.
 - ii. The social effect of the possibility of the contractor being out of job as a result of lack of the State Government's patronage.
 - iii. The tax payable to the government by the contractor on his earnings which have taken into consideration in the cost of computation above.
 - iv. The possibility of cost escalation due to inflation.
 - v. The reliability of the estimated figures used in the comparative studies.
 - vi. The supervisory costs of the direct labour option which are not in the original estimate.

- vii. The state should consider all necessary laws concerning project implementation, such as procurement laws and other financial regulations.

Examiners' report

These questions tests candidates' understanding of committee decision-making evaluating execution option and the key factors government must consider before awarding a contract for a public road project.

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

The common pitfall was the inability of candidates to define the factors that the state government should consider before a final decision is taken.

Candidates are advised to make use of Pathfinders and the study text of the Institute for better performance in the future examinations.

Marking guide

	Marks	Marks
a. Computation of the costs of proposed road project		
Title	$\frac{1}{2}$	
Computation of the costs of proposed road project for option A	5	
Computation of the costs of proposed road project for option B	$3\frac{1}{2}$	
Correct decision	<u>1</u>	10
b. Other factors to be considered before a final decision is taken		
Five other factors to be considered		<u>5</u>
Total		<u>15</u>

Solution 7

Ogogo Orientals Primary Health Care

Programme	Cost (₦)	Effect (Gains in QALYs)	Cost Effectiveness(CE) (₦)	Ranking
Physical exercise programme (A)	500,000	40	$500,000/40 = 12,500$	4 th
Mental health program (B)	700,000	200	$700,000/200 = 3,500$	1 st
State of the art imaging (C)	1,800,000	400	$1,800,000/400 = 4,500$	2 nd
Cancer treatment centre (D)	5,000,000	625	$5,000,000/625 = 8,000$	3 rd

The solution starts by implementing the programme with the lowest cost per QALY, and so on. This means choice B will be first made, then C, then D and finally A. However, with a limited budget of ₦5,000,000 the choice will be the following:

- i) First implement program B at a cost of ₦700,000 – there will still be ₦4,300,000 left from the budget.
- ii) Second, implement program C at a cost of ₦1,800,000 – there will still be ₦2,500,000 left from the budget.
- iii) The next program to prioritise is D – however, program D costs ₦5,000,000 and as such only 50% of program D can be afforded and implemented since only ₦2,500,000 is left of the budgeted amount.

The resulting QALY gains associated with implementing programs B, C and 50% of D, are:

- (i) Program B QALYs = 200
- (ii) Program C QALYs = 400
- (iii) Program D QALYs = $625 \times 0.50 = 312.5$

Total QALY gains = $200 + 400 + 312.5 = 912.5$

Key elements of public sector sustainability reporting

- i. **Environmental:** Reporting on the environmental impacts of public sector activities, including resource consumption, emissions, waste management and climate change adaptation and mitigation efforts.
- ii. **Social:** Disclosing the social impacts of public sector actions, such as access to education, healthcare, housing and social inclusion initiatives, alongside addressing potential social inequalities.
- iii. **Economic:** Communicating the economic impact of public sector activities, including fiscal sustainability, job creation and economic growth, along with strategies for long-term financial stability.
- iv. **Governance:** Clearly outlining the governance structure and processes related to sustainability reporting, including stakeholder engagement, oversight mechanisms, and accountability structures.
- v. **Management approach:** Describing the public sector body's approach to managing sustainability, including policies, procedures, and organisational structures.
- vi. **Strategy:** Presenting the public sector body's sustainability strategy, including its vision, goals and key priorities.

- vii. **Performance and targets:** Providing data on the performance of the public sector body in achieving its sustainability goals, including key performance indicators (KPIs) and progress towards targets.
- viii. **Materiality assessment:** Identifying and addressing the most relevant sustainability issues for the public sector body and its stakeholders.
- ix. **Stakeholder engagement:** Involving stakeholders in the sustainability reporting process and ensuring their input is considered.
- x. **Transparency and accountability:** Ensuring that sustainability reports are clear, concise and accessible to the public, and that the public sector body is accountable for its actions.
- xi. **Financial disclosures:** Integrating sustainability reporting with financial reporting, including disclosures on climate-related financial impacts and other relevant financial information.
- xii. **Contextualisation:** Aligning the sustainability reporting framework to the specific context of the public sector body, including its mission, objectives and the needs of its stakeholders.

Examiners' report

The questions tests candidates' understanding of ranking of projects, selection under limited funds and decision-making under capital rationing and the five elements of public sector sustainability reporting.

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

The commonest pitfall was the inability of many candidates to highlight key elements of public sector sustainability reporting. Candidates wrote generic sustainability element without linking to public sector framework like IPSAS Global Reporting Initiative (GRI) for public sector and service performance.

Candidates are advised to make use of Pathfinders and the study text of the Institute for better performance in the Institute's future examination

Marking guide

	Marks	Marks
a. Ogogo Orientals Primary Health Care		
Title	1/2	
Calculation of Cost Effectiveness (CE) for the four programmes	4	

	Selection of the combination of the programmes	1½	
	Calculation of total Quality-Adjusted Life-Years (QALYs)	<u>1½</u>	7½
b	Key elements of public sector sustainability		
	Identification of five key elements	2½	
	Explanation of key elements identified	<u>5</u>	<u>7½</u>
	Total		<u>15</u>

INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA
SKILLS LEVEL EXAMINATION – MAY 2026

FINANCIAL MANAGEMENT

Time Allowed: 3¼ 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

Kay Ltd (KL) manufactures and sells specialised aluminum scooters. The company has been very successful, with sales growing rapidly in recent years. A number of new retail outlets have been opened to extend the company's geographical coverage and cope with the rapid increase in demand. Each retail outlet holds a wide range of available stock.

Despite profits increasing over the past few years, the company's overdraft has risen significantly to the point where it is approaching the limit of its overdraft facility, which is currently ₦5.5 million.

Extracts from KL's accounts for the last two years shows the following:

Statement of financial position at 30 September

	2024	2025		
	₦000	₦000	₦000	₦000
Non-current assets			10,600	
Current assets:				
Inventory		2,400		
Trade receivables		<u>3,300</u>		
		5,700		
Current liabilities:				
Overdraft	5,200			2,700
Trade payables	<u>1,000</u>			<u>500</u>
		<u>(6,200)</u>		
Net current (liabilities)/assets			(500)	
Bank loan			<u>(5,000)</u>	
Net assets			<u>5,100</u>	
Share capital			1,000	
Profit or loss account			<u>4,100</u>	
Shareholder's equity			<u>5,100</u>	

Profit or loss account extracts for the years to 30 September

	2025	2024
	₦000	₦000
Sales	12,000	8,000
Cost of sales	<u>(6,000)</u>	<u>(4,000)</u>
Gross profit	6,000	4,000
Other costs	<u>(4,500)</u>	<u>(3,000)</u>
Profit for the financial year	<u>1,500</u>	<u>1,000</u>

ADDITIONAL INFORMATION

- i. The company's policy is to maintain a high level of inventory in order to provide a variety of choices to customers. Thus, the level of inventory has increased in proportion to sales.
- ii. Credit is taken by all customers. The terms of credit vary depending on the value of the sale, but normally take the form of paying in a number of equal installments. KL is considering doubling the credit period available to customers in order to compete more effectively with rival companies.
- iii. Sales tend to vary significantly from month to month with the peak months being July, August and September.
- iv. The cost of sales comprises approximately 50% labour costs and 50% material and other production costs.

Required:

- a. Calculate the following ratios for KL for the years ended 30 September, 2024 and 30 September, 2025:
 - (i) Inventory turnover period (in days).
 - (ii) Receivables' turnover period (that is, the number of days credit taken by customers).
 - (iii) Payables' turnover period (that is, the number of days credit given by suppliers).

In calculating the above ratios, use the year-end figures for inventory, receivables and payables.

In each case, state any relevant assumptions and critically appraise the usefulness of the ratios in assessing working capital policy in KL's particular circumstances. (Ignore taxation). (15 Marks)

- b. Write a memorandum to the directors of KL Ltd explaining alternative methods (other than ratio analysis) that KL could use to manage the company's working capital position more efficiently. No further calculations are necessary. (15 Marks)

(Total 30 Marks)

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

QUESTION 2

Feli Plc. operates a low-cost road transportation business and the company is listed. By comparison to its major competitors, Feli Plc is relatively small, but it has expanded significantly in recent years. The shares are held mainly by large financial institutions.

The following are extracts from Feli Plc.'s budgeted statement of financial position at May 31, 2025:

	₦m
Ordinary shares of ₦1	100
Reserves	50
9% bonds 2028 (at nominal value)	<u>200</u>
	<u>350</u>

Dividends have grown in the past at 3% a year, resulting in an expected dividend of ₦1 per share to be declared on May 31, 2025. (Assume for simplicity that the dividend will also be paid on this date). Due to expansion, dividends are expected to grow at 4% a year from 1 June, 2025 for the foreseeable future. The price per share is currently ₦10.40 ex div and this is not expected to change before May 31, 2025.

The existing bonds are due to be redeemed at par on May 31, 2025. The market value of these bonds at 1 June, 2025 is expected to be ₦100.84 (ex interest) per ₦100 nominal. Interest is payable annually in arrears on May 31 and is allowable for tax purposes. The tax rate for the foreseeable future is 30%. Assume taxation is payable at the end of the year in which the taxable profits arise.

New finance

The company has now decided to purchase three additional vehicles at a cost of ₦10 million each. The Board has decided that the new vehicles will be financed in full by an 8% bank loan on June 1, 2025.

Required

- a. Calculate the expected weighted average cost of capital (WACC) of Feli Plc. at May 31, 2025. (7 Marks)
- b. Without further calculations, explain the impact of the new bank loan on Feli Plc.'s
 - (i) Cost of equity;
 - (ii) Cost of debt; and
 - (iii) Weighted average cost of capital (WACC), (using the traditional model). (9 Marks)
- c. Explain each and distinguish between
 - (i) bonds; and
 - (ii) a bank loan.

In so doing, explain why, in the circumstances of Feli Plc, the cost of debt may be different for the two types of security. (4 Marks)

(Total 20 Marks)

QUESTION 3

Emeka Ltd is considering investment proposals for each of its three divisions: Light Engineering; Food Retailing; and Luxury Goods. The company's board previously used a single WACC of 17% for all project evaluations. However, the finance team recently determined division-specific WACC rates as follows:

Division	Risk-Adjusted WACC
Light Engineering	16.5%
Food Retailing	15.3%
Luxury Goods	18.9%

Each division has proposed a major capital project for the next investment cycle:

Project	Division	Initial Investment (₦m)	Expected IRR (%)
A	Light Engineering	₦500m	16%
B	Food	₦700m	16%
C	Luxury Goods	₦800m	18%

Required:

- a. (i) Using the correct risk-adjusted WACC for each division, determine which projects should be accepted or rejected.
(ii) If Emeka Ltd still applied the single company-wide WACC of 17%, would the investment decisions change and how? Explain.
(iii) What are the key risks of using a single WACC for project evaluations in a diversified company like Emeka Ltd?
(iv) How can the company improve its risk assessment to make more accurate capital budgeting decisions? (10 Marks)
- b. Explain and illustrate the following:
(i) Systematic business risk;
(ii) Unsystematic financial risk; and
(iii) Systematic financial risk. (10 Marks)

(Total 20 Marks)

QUESTION 4

You are a proprietary trader at a major Nigerian bank's international finance desk, tasked with identifying risk-free arbitrage opportunities. You have gathered the following current market data:

Current spot exchange rate	₦1,200/\$1
1 – Year forward exchange rate	₦1,300/\$1
1 – Year US risk-free Interest rate	2%
1 – Year Nigerian risk-free interest rate	10%

The dealer is authorised to buy or sell up to US\$ 500,000 per transaction.

Required:

- a. Briefly explain the concept of interest rate parity theorem (5 Marks)
b. Show whether covered interest parity (CIP) hold in the data given (4 Marks)

- c. If there is an arbitrage opportunity, calculate the profit available to the dealer, at maturity. Show all calculations. (7 Marks)
- d. Why is the profit in (c), if any, considered risk-free? (4 Marks)
- (Total 20 Marks)**

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

QUESTION 5

Omega Industries Ltd is a large Nigerian manufacturing company that has been privately owned for over 15 years. The company has achieved strong profitability and has expanded into neighbouring West African countries.

Recently, the board of directors has been debating whether to seek a full listing on the Nigerian Exchange Group (NGX). The managing director believes listing will help the company raise funds for expansion into the renewable energy market, while some existing shareholders are concerned about losing control and facing excessive compliance costs.

The finance director has asked you, a financial consultant, to advise the board on two key issues:

- (i) The likely advantages and disadvantages to Omega Industries and its shareholders of obtaining a full stock exchange listing.
- (ii) The factors that should be taken into account when determining the issue price of new equity shares, if the company proceeds with the listing.

Required:

- a. Discuss the potential advantages and disadvantages of obtaining a full stock exchange listing. (10 Marks)
- b. Analyse the key factors that should be considered when setting an issue price for new equity shares in a flotation. (5 Marks)

(Total 15 Marks)

QUESTION 6

- a. Assume a company issues a 15% bond with maturity of five years, which matches the life of a new project. The fund raised will be used exclusively to finance the new project.

Required:

- (i) Provide reasons why a company may decide to finance a new project with the issue of a new bond. (5 Marks)
- (ii) Explain with adequate justification whether the project should be appraised using cost of capital of 15% (the coupon rate of the bond). (5 Marks)

- c. You are a French investor holding some US bonds. Over the month, the value of your bond portfolio goes from \$1,000,000 to \$1,050,000. The exchange rates move from €1 per dollar to €1.02 per dollar.

Required:

- (i) What is the investor's rate of return in Dollar?
(ii) What is his rate of return in Euros?
(iii) Is the difference exactly equal to the percentage movement in exchange rate? If not, why? (5 Marks)

(Total 15 Marks)

QUESTION 7

A Nigerian company ABC has issued convertible bonds with face value of ₦1,000, coupon rate of 4%, paid annually and maturity of 5 years. The conversion ratio is fixed at 10:1.

Required:

- a. If during the tenure, up to maturity of the bond, the stock (shares) of company ABC undergoes a stock split of 2:1; would this affect the conversion ratio of the convertible bonds issued? If yes, what would be the new conversion ratio? If no, explain why. (1½ Marks)
- b. After the stock split, what will be the conversion price of the convertible bond issued? (1½ Marks)
- c. Where the stock of ABC (after the split) is currently trading at ₦52 in the spot market. What will be the conversion value of the convertible bond? (1½ Marks)
- d. Define the straight value of a convertible bond. Given that another bond trading in the market similar in all characteristics to that of the convertible bond exists yielding 5%, what will be the straight value of the convertible bond? (2½ Marks)
- e. Define conversion premium of a convertible bond. For the given convertible bond, what is the conversion premium if it is trading at 110 in the market? (2 Marks)
- f. What is the minimum value of a convertible bond? What is the minimum value of the given bond? (2 Marks)
- g. Why do convertible bonds usually have a lower rating as compared to non-convertible bonds with similar characteristics? (2 Marks)
- h. Now consider that a rating agency has lowered the rating of the convertible bond after one year of issue. What impact will this lowering of rating have on the price of the bond? Explain. (2 Marks)

(Total 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

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

Cash Management

- i) Optimal sale of securities, Baumol model:

Optimal sale

$$= \sqrt{\frac{2 \times \text{Annual cash disbursements} \times \text{Cost per sale of securities}}{\text{interest rate}}}$$

- ii) Spread between upper and lower cash balance limits, Miller-Orr model:

$$\text{Spread} = 3 \left[\frac{\frac{3}{4} \times \text{transaction cost} \times \text{variance of cash flows}}{\text{interest rate}} \right]^{\frac{1}{3}}$$

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

Periods (n)		Discount rate (r)									
		1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	1
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	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	4.100	3.993	3.890	3.791	5
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	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	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335	8
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	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	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495	11
12	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814	12
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103	13
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367	14
15	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.061	7.606	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	0.840	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	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106	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	2.991	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	3.605	7
8	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837	8
9	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031	9
10	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192	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	4.611	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	4.876	4.675	15

Solution 1

(a)

	2025	2024
i) Inventory days = $\frac{\text{Inventory}}{\text{Cost of sales}} \times 365$	$= \frac{2,400}{6,000} \times 365$ = 146 days	$\frac{1,600}{4,000} \times 365$ 146 days
ii) Receivables days = $\frac{\text{Receivables}}{\text{Credit sales}} \times 365$	$= \frac{3,300}{12,000} \times 365$ = 100 days	$\frac{2,200}{8,000} \times 365$ 100 days
iii) Payables days = $\frac{\text{Payables}}{\text{Cost of Sales}} \times 365$	$= \frac{1,000}{6,000} \times 365$ = 61 days	$\frac{500}{4,000} \times 365$ 46 days

Alternative calculation of payables days

Cost of sales for a manufacturing company includes production wages which are unlikely to have any significant credit period. Trade payables thus relate to only part of the cost of sales figure – around 50% in this case. On this basis, the ratios would be

$$\text{Payable days} = \frac{\text{Payables}}{\text{Cost of Sales}} \times 365 = \frac{1,000}{3,000} \times 365 = \frac{500}{2,000} \times 365$$

= 122 days 91 days

Assumptions Made

- (i) Year-end balances are representative of average balances.
- (ii) All purchases are assumed to be on credit.
- (iii) Cost of sales is used as an approximation for credit purchases.
- (iv) A 365-day year is assumed

Critical appraisal

Inventory turnover

The inventory turnover ratio indicates the average number of days it would take to sell the existing level of inventories. At 146 days (that is almost five months) the levels of inventory are high, but stable.

This ratio, however, has a number of weaknesses:

- Sales and inventories are growing, thus the average level of sales for the year is not representative as the sales at the year-end (on which inventory is probably based) are likely to be higher than the beginning of the year;
- Similarly, if sales are seasonal, then the level of inventory at 30 September should be related to sales in October/November, rather than the average for the year; and
- The year-end inventory figure may have been adjusted by creative accounting procedures to make accounting ratios look more acceptable.

Receivables' turnover

The receivables turnover figure shows the average number of days credit taken by customers. In this case at 100 days (that is over three months) it is relatively high, but stable. This ratio, however, has a number of weaknesses these include:

- The receivables' figure is related to the sales in the months immediately preceding 30 September year-ends, rather than the average sales for the year. The sales in these months are likely to be higher than the average due to (i) high seasonal trade and (ii) the underlying growth rate of the business. The receivables' days are thus likely to be overstated;
- While the figure is stable, it gives no indication of the receivables turnover that could be achieved, nor the implications for additional sales of a longer credit period;
- The circumstances are unusual in granting credit on the basis of payment by installments financed by the company itself; and
- The year-end receivables figure may have been adjusted by creative accounting procedures to make accounting ratios look more acceptable.

Payables turnover

The payables' turnover figure shows the average number of days credit given by suppliers. Using the alternative calculations (adjusted for labour costs) at 107 days, it is high and increasing. This may indicate that payables are already being used to manage liquidity. This ratio, however, has a number of weaknesses, these include:

- In the case of a manufacturing company, the link between payables and cost of sales is unclear as many elements of cost of sales (for example labour costs) are irrelevant to trade payables;
- The above points regarding the months around the year end being unrepresentative of the average due to growth and seasonal trading also apply in this case; and
- The year-end payables figure may have been adjusted by creative accounting procedures to make accounting ratios look more acceptable.

(b) Memorandum

To: The Directors **From:** Management Accountant

Subject: Working Capital Management **Date:** November 20, 2025

Assessment of working capital position

The primary problem of working capital depletion appears to arise from over-trading. This is where a business enters into commitments in excess of its short-term resources. It can arise for a number of reasons, but in this case it appears to be

caused by a rapid expansion of non-current assets that has not been matched by long term financing. Thus, non-current assets have increased by ₦4.6 million, whereas long term financing has only increased by ₦2 million. As a result, the overdraft has increased to ₦5.2 million and is thus financing non-current assets. Overdrafts are repayable on demand and if it is recalled by the bank this may create significant difficulties.

Managing working capital

General

Taking into account the movement outlined in Appendix A (requirement (a)) there are at the year-end net current liabilities.

Cash

Given that over-expansion appears to be the root cause of the liquidity problem, it may be wise in the short term not to open any further retail outlets, notwithstanding that these appear to be profitable.

Conversion of a significant part of the overdraft into longer-term finance would appear to be appropriate given that it is financing long term assets. This is considered below in more detail under financing.

Inventories

The supply of inventories appears to be excessive at almost five months of sales. Inventories appear to increase in direct proportion to sales, whereas models such as the EOQ would predict that, while inventory would rise with sales, they would increase at a lower rate. Consideration could perhaps be given to the following:

- IT based information on inventory and sales;
- Making to order rather than selling from inventory. This would depend on the length of the production cycle;
- Suppliers of raw material could be encouraged to move towards a just in time system depending on the circumstances; and
- Central supply of scooters could be considered to save holding large inventories at each retail outlet.

Much will depend upon the estimated impact on sales of not holding comprehensive inventories at all retail outlets.

Receivables

Given that the company is considering extending the credit terms the task of managing receivables becomes more important. In this context, the following points may be relevant.

- There is no mention of bad debts, but consideration may need to be given to this if receivables terms are extended;
- Factoring of debts may produce increased cash, but may be costly. Such a procedure would improve liquidity, but would not actually reduce working capital;
- Similarly, the credit terms offered by the company could be managed via an outside finance company which would extend its own credit terms. This would

again have a cost, but would improve liquidity. If all the receivables were sold at the statement of financial position value, this would reduce the overdraft from ₦5.2 to ₦1.9 million; and

- Discounts for cash settlement or reduced credit terms may be offered.

Payables

Payables are high and increasing. The absolute increase is due to the expansion of the business and consequent expansion of production costs. The payables turnover ratio indicates that there is a further increase in payables even after allowing for expansion. This may be due to the company extending its credit period to improve liquidity, but there are limits on the extent to which this can be done.

Also, there may have been large purchases of goods just before the year-end. Suppliers may have extended the credit period offered. If they have not, then may be extended credit terms could be negotiated with suppliers.

Signed: Management Accountant

Examiner's report

This compulsory question tests candidates' knowledge of working capital management. The (a) part requires candidates to calculate the inventory, receivables and payables ratios. While the (b) part of the question requires candidates to provide alternative methods of managing working capital.

Virtually all the candidates attempted this question and performance was slightly below average, as only about a third of the candidates scored up to 50% of the marks allotted.

The commonest pitfall was the inability of many of the candidates to provide alternative methods of managing working capital.

Candidates are admonished to study to comprehend the application of principles and computations to practical situations.

Candidates at this level of the examination must develop analytical skills that will enable them apply concepts and principles to simple practical situations, as this is the distinction between Skills and Foundation levels of the examination.

Marking guide

		Marks	
a	i	Inventory turnover period (in days)	2½ marks
	ii	Receivables' turnover period	2½ marks
	iii	Payables' turnover period	2½ marks
		Assumptions	1½ marks
		Critical Appraisal	6 marks
b		Memorandum	15 marks
		Total	30 marks

Solution 2

(a)

i) **Cost of equity (K_E)**

$$K_E = \frac{1 \times 1.04}{10.4} + 0.04 = 14\%$$

Total value of equity = 100m shares \times ₦10.40 = ₦1,040m

ii) **Cost of bonds**

The bonds are redeemable and the cost of capital is the IRR of the related after-tax cash flows. Taking face value of ₦100:

Current price (P) = ₦100.84

Annual interest, net of tax (I) = ₦9(1 - 0.30) = ₦6.30

Redemption value (R) = ₦100

Years to redemption (n) = 3

$$\begin{aligned} \text{Approximate IRR} &= \left(I + \frac{R-P}{n} \right) \div \frac{R+P}{2} \\ &= \left(6.30 + \frac{100 - 100.84}{3} \right) \div \frac{100 + 100.84}{2} = 6\% \end{aligned}$$

So, try 6%

$$\text{NPV} = -100.84 + 6.30(2.673^*) + 100(0.840) = -\text{₦}0.006$$

The IRR is approximately 6%

(* Annuity at 6% years 1-3)

Total value of bonds = ₦200m \times 100.84/100 = ₦201.68m

$$\text{WACC} = \frac{1040 \times 14\%}{1040 + 201.64} + \frac{201.64 \times 6\%}{1040 + 201.64} = 12.7\%$$

(b)

i) **Cost of equity**

The new bank loan will increase the level of gearing of the company, this will, in turn, increase the required return on equity as it becomes riskier. Investors, being risk averse, thus demand a higher rate of return.

The primary reason for the increased risk on equity is that interest costs must be paid before dividends. As the residual claimants, the returns on equity become more volatile and thus riskier.

Additionally, debt also ranks in front of equity on liquidation. As a result, the possibility of equity holders gaining a share of the funds from liquidated assets is reduced as debt increases. Also, as interest must be paid, the probability of liquidation (and thus bankruptcy costs) increases as debt increases.

ii) **Cost of debt**

The level of gearing is initially low in market value terms, but the issue of new debt will increase it. One concern, however, is that if the company is liquidated, there may be insufficient assets to repay the debt. In the draft statement of financial position, capital and reserves are ₦150 million. As a result, book net assets are also ₦150 million. This is lower than the initial

nominal value of debt of ₦200 million, and significantly below the new nominal value of debt of ₦230 million, it may be that the statement of financial position reflects the historic cost of assets, and their revalued amount may be greater. This is possible with land and buildings, but unlikely with aircraft. Moreover, the sale of assets under distress conditions of liquidation may yield proceeds below their historic cost. Thus, the new debt is likely to cause the overall cost of debt to rise as:

- the possibility of full payment on liquidation is reduced; and
- the probability of liquidation is increased given the greater interest payments.

iii) **Weighted average cost of capital**

There are two factors with opposite effects on WACC as the amount of debt increases.

- Both the cost of equity and the cost of debt increase because of increased risk for the reasons noted above.
- Debt is lower risk and, therefore, cheaper than equity. Increasing debt increases the proportion of this lower cost source of capital in the financing structure.

It is uncertain as to which effect is greater, and thus whether WACC increases or decreases. The traditional theory argues that as debt increases from a zero level of gearing, WACC will initially fall as the perceived risk to equity is small. It continues to fall until it reaches its optimum point, then begins to increase as the perception of risk increases. The impact on Feli Plc's WACC will, therefore, depend on whether the existing level of gearing is below or above the optimal point.

(c)

- i) A bond is a secured debt usually backed by specific assets or collateral. If the issuer defaults, bondholders can claim those assets. For example, a Mortgage bond backed by property and has a lower risk.
- ii) In contrast, a bank loan is usually with a single bank and is not normally traded. However, large corporate loans can be made by a syndicate of banks or other institutions.

Cost of debt differences

The cost of debt may differ on the two types of debt as:

- (i) They cover different periods, thus market interest rates may have changed as might the perception of the company's risk. Thus, the 9% nominal rate on the existing debt may have been the prevailing rate some time ago;
- (ii) The existing debt may also have been issued at a premium or a discount;

- (iii) The terms of the debt may differ. Thus, if one security has more covenants to protect the lender and reduce risk, then a lower rate of interest may be acceptable;
- (iv) The debentures are marketable, while the bank loan is unlikely to be. A lower rate of interest may, therefore, be available on debentures to compensate for lower liquidity risk;
- (v) The yield, calculated in requirement (a), of 6% is after tax, while the nominal on rate on the bank loan of 8% is before tax; and
- (vi) Bonds require public disclosure, while bank loan is private.

Examiner's report

This question is in three parts. The first two parts test the candidates' understanding of cost of equity, cost of debt and weighted average cost of capital (WACC). The last part requires candidates to distinguish between two types of medium/long term sources of finance, namely bonds and bank loans.

About 60% of the candidates attempted this question, however performance was poor as less than 30% of them scored up to 50% of the marks allotted to the question.

The commonest pitfall was the inability of many candidates to articulate the impact of a new loan on the cost of equity, cost of debt and weighted average cost of capital (WACC). This is a reflection of candidates' inability to apply concepts to practical situations.

Candidates at this level of the examination must develop analytical skills that will enable them apply concepts and principles to simple practical situations, as this is the distinction between Skills and Foundation levels of the examination.

		Marks
Marking guide		
2	a To calculate the Weighted Average Cost of Capital (WACC) of Feli Plc	7 marks
	b To calculate the impact of the new bank loan on Feli Plc's:	
	i) Cost of Equity	
	ii) Cost of Debt and	
	iii) WACC (using the traditional model)	9 marks
	c To explain each and distinguish between:	
	i) bonds	
	ii) a bank loan	4 marks
	Total	20 marks

Solution 3

(a)

i) **Compare IRR to Division-Specific WACC**

A project is accepted if $IRR > WACC$ for its respective division.

Project	Division	IRR (%)	Division-Specific WACC(%)	Decision
A	Light Engineering	16%	16.5%	Reject ($IRR < WACC$)
B	Food Retailing	16%	15.3%	Accept ($IRR > WACC$)
C	Luxury Goods	18%	18.9%	Reject ($IRR < WACC$)

ii) **What Happens with a Single WACC of 17%?**

If Kolawole Ltd applies a uniform WACC of 17%:

Project	Division	IRR (%)	Division-Specific WACC(%)	Decision
A	Light Engineering	16%	17%	Reject ($IRR < WACC$)
B	Food Retailing	16%	17%	Reject ($IRR < WACC$)
C	Luxury Goods	18%	17%	Accept ($IRR > WACC$)

Observations and risks

- Using risk-adjusted WACC, only Project B (Food Retailing) is viable.
- Using the single WACC (17%), the company rejects a good investment (Project B) and accepts a risky one (Project C).
- This misallocation of capital arises because a single WACC ignores division-specific risks.

iii) **Key risks of using a single WACC**

Underinvestment in low-risk divisions

- Project B (Food Retailing) has an IRR of 16%, which is higher than its actual risk-adjusted WACC (15.3%) but lower than the company-wide WACC (17%).
- This means good, low-risk investments may be unfairly rejected.

Overinvestment in high-risk Divisions

- Project C (Luxury Goods) is approved under the single WACC, even though its risk-adjusted WACC is higher.

- This means high-risk projects may be accepted when they should not be.

Incorrect capital allocation

Applying a single WACC assumes all divisions have the same risk, leading to poor capital budgeting decisions.

iv) Improving risk assessment for better decisions

- Use division-specific WACC for investment decisions.
- Adjust project discount rates based on business and financial risks.
- Apply the pure-play method to determine more accurate betas for each division.
- Regularly update WACC to reflect changes in capital structure and market conditions.

(b)

i) Systematic business risk

This is the part of a company's **operating** risk that comes from general economic or industry-wide factors that affect all firms in that sector. It cannot be eliminated by diversification.

Examples:

- During the COVID-19 pandemic, airlines like British Airways and Delta saw a collapse in passenger demand. This was not unique to one airline but a systematic business risk affecting the whole aviation industry.
- An oil price crash (e.g., 2014) reduced revenues for virtually all oil exploration companies (Shell, Exxon, Total). The downturn was industry-wide, not firm specific.

ii) Unsystematic financial risk

This is firm-specific risk linked to how a particular company **finances its activities**. It arises from events or arrangements unique to that firm, and it can be diversified away by investors.

Examples:

- In 2008, Lehman Brothers had unusually high reliance on short-term repo financing. When that market froze, Lehman collapsed. Other banks with different funding structures did not fail immediately. This was unsystematic financial risk because it was tied to Lehman's own financing choices.
- A Nigerian manufacturing company that borrows heavily in US dollars without hedging exposes itself to FX losses if the naira devalues. Another Nigerian firm with naira-based loans would not

face the same problem. That FX mismatch is a firm-specific (unsystematic) financial risk.

- A company with strict loan covenants (e.g., “must keep debt-to-equity below 1.5”) could face default if it breaches them, while another firm in the same industry with looser covenants would not.

iii) **Systematic financial risk**

This is the market-wide financial risk created by **financial leverage**. When a company uses debt, it amplifies how its equity returns move with the overall market. It is non-diversifiable because it changes the firm’s exposure to the market as a whole.

Examples:

- In the 2008 financial crisis, banks such as Citigroup and RBS had very high leverage. When the market fell, their equity values collapsed far more than the average stock because debt magnified their losses. The extra volatility in their shares was systematic financial risk.
- A real estate investment trust (REIT) that finances properties 80% with debt will see its equity value swing much more with property market cycles than another REIT with only 30% debt. Investors cannot diversify that away – the high leverage permanently makes the stock more sensitive to market swings.
- In Nigeria, if Dangote Cement were to double its borrowings, its equity would become more sensitive to downturns in the Nigerian economy or stock market. That additional sensitivity is systematic financial risk.

Examiner’s report

This question is in two parts. The first part tests candidates’ understanding of capital budgeting decisions with emphasis on internal rate of return (IRR), risk assessment, and risk-adjusted WACC, while part (b) tests candidates’ understanding of systematic and unsystematic risks.

About 70% of the candidates attempted this question. Performance was just average, as only half of them scored more than 50% of the marks allotted.

A good number of the candidates could not arrive at the right decisions as they could not apply the correct rates.

Candidates at this level of the examination must develop analytical skills that will enable them apply concepts and principles to simple practical situations, as this is the distinction between Skills and Foundation levels of the examination.

Marking guide		Marks	
3a	i	To determine which projects should be accepted or rejected using the correct risk-adjusted WACC	3 marks
	ii	To explain how the investment decision would change if Emeka Ltd still applied the simple company-wide WACC of 17%.	3 marks
	iii	To highlight the key risks of using a single WACC for project evaluations in a diversified company like Emeka Ltd	2 marks
	iv	To explain how the company can improve its risk assessment to make more accurate capital budgeting decisions.	2 marks
b	i	To explain and illustrate Systematic Business Risk	3 marks
	ii	To explain and illustrate Unsystematic financial Risk	3 marks
	iii	To explain and illustrate Systematic financial Risk	4 marks
	Total		20 marks

Solution 4

- a) The Interest Rate Parity (IRP) theorem is a fundamental concept in international finance that establishes the relationship between the spot exchange rate (S), the forward exchange rate (F), and the interest rates of two countries (domestic and foreign).

Concept and no-arbitrage condition

IRP is essentially a no-arbitrage condition that suggests that the returns from investing in two different countries, when hedged against foreign exchange risk, should be equal when expressed in a common currency.

In simpler terms: An investor should be indifferent between investing domestically or investing abroad and covering the currency risk.

The core equation

The theorem states that any differential between the interest rates of two countries must be offset by the difference between the spot and forward exchange rates (known as the forward premium or discount).

The algebraic expression for the relationship is:

$$\frac{F}{S} = \frac{1 + r_{\text{domestic}}}{1 + r_{\text{foreign}}}$$

Where:

- S is the current Spot Exchange Rate.
- F is the Forward Exchange Rate for the investment period.
- domestic is the risk-free interest rate in the domestic currency.
- foreign is the risk-free interest rate in the foreign currency.

Mechanism

If the market's forward exchange rate (F market) does not equal the theoretical rate (F theory) implied by the IRP formula, a Covered Interest Arbitrage (CIA) opportunity exists. Arbitrageurs would immediately exploit this by:

- (i) Borrowing in the currency with the *lower* implied return;
- (ii) Converting it to the currency with the *higher* implied return;
- (iii) Investing at the foreign interest rate; and
- (iv) Simultaneously locking in the future exchange rate via a forward contract to convert the maturity proceeds back to the original currency.

This mass movement of capital would instantly adjust the spot rate, forward rate, and/or interest rates until the IRP condition is restored, and the arbitrage profit is eliminated.

b) If there is covered interest arbitrage, the following must hold:

$(1 + R_D) = F/S (1 + R_F)$, where:

R_D = domestic interest rate
= 10% = 0.10

R_F = foreign interest rate
= 2% = 0.023

S = current spot rate (DC/FC)
= ₦1,200 per \$1

F = 1- year forward rate (DC/FC)
= ₦1,300 per \$1

In this case:

$(1.10) \text{ vs } 1,300/1,200(1.02)$

$1.10 < 1.105$

The left hand side (LHS) is less than the right hand side (RHS) of the quote, indicating that the CIA is **NOT** holding and there is arbitrage opportunity in the market.

c) **Arbitrage strategy**

- (i) Borrow in Nigeria today, the equivalent of \$500,000 to give $500,000 \times 1,200 = \text{₦}600,000,000$.
This grows to become $\text{₦}600,000,000 \times 1.10 = \text{₦}660,000,000$ in one year's time.
- (ii) Convert the ₦660 million to dollar at the spot rate of ₦1,200 to produce \$500,000.
- (iii) Invest \$500,000 at 2% for 1 year. This grows to become:
 $\$500,000 \times 1.02 = \$510,000$.
- (iv) Sell forward – at ₦1,300, the expected proceed of the US investment.
This will generate $510,000 \times \text{₦}1,300 = \text{₦}663$ million in one year's time.
- (v) Repay the Nigerian loan of ₦660 million.

Calculate profit:

	₦m
Proceed of US invest as detailed above	663
Loan repayment	<u>(660)</u>
Risk from profit	<u>3</u>

- d) The profit is risk-free because the dealer has locked in all the variables through contracts, such that
- The forward contract hedges the exchange rate risk, ensuring the dealer knows the exact amount that will be received when the U.S investment is converted back into JPY;
 - The interest rates are known and fixed when the investment and borrowing are made; and
 - Variables (the borrowing rate, the investment return and the future exchange rate) are predetermined, the dealer is not exposed to uncertainty or market fluctuations.

However the result in (c) does not imply the existence of permanent “money machines” in the market. Arbitrage opportunities arise when markets are temporarily inefficient, meaning prices deviate from their theoretical values (e.g. forward rates not aligned with interest rate parity). However, once these arbitrage opportunities are identified and exploited by traders, market forces typically bring the prices back into alignment. In this case, exploiting the arbitrage would push the forward rate toward the theoretical rate, eliminating the arbitrage opportunity over time.

Thus, arbitrage opportunities are temporary and self-correcting rather than on-going cash machines.

Examiner's report

This question tests candidates' knowledge of international finance. It is in four parts, covering aspects of international finance, including spot and forward exchange rates, interest parity and arbitrage.

Only about 40% of the candidates attempted this question and only about a quarter of them scored up to half of the marks allotted.

Many of the candidates could neither show whether covered interest rate parity existed in the data given, nor able to demonstrate existence of arbitrage opportunity.

Candidates at this level of the examination must develop analytical skills that will enable them apply concepts and principles to simple practical situations, as this is the distinction between Skills and Foundation levels of the examination.

Marking guide	Marks
4 a To explain the concept of interest rate parity theorem	5 marks
b To show whether covered interest parity (CIP) hold in the data given.	4 marks
c To calculate the profit available to the dealer at maturity, if there is an arbitrage opportunity	7 marks
d To explain why the profit in (C), if any, considered risk-free	4 marks
Total	20 marks

Solution 5

a) Advantages and disadvantages of a full stock exchange listing

Advantages

- i) Access to capital** – Listing would give Omega access to large pools of finance from institutional and retail investors to fund expansion into renewable energy projects.
- ii) Liquidity of shares** – Current shareholders can sell their shares more easily: new investors will be more willing to invest knowing an active market exists.
- iii) Enhanced reputation** – A listing improves the company's visibility, public image, and credibility with lenders, suppliers and customers.
- iv) Valuation transparency** – The company's shares will have a quoted market price, useful in mergers or acquisitions.

- v) **Employee incentives** – Share options can be offered to employee enhancing motivation.
- vi) **Diversification of shareholder base** – Attracts institutional investors and reduces reliance on a few private shareholders.

Disadvantages:

- i) **Loss of control** – Existing owners may lose decision-making power as ownership becomes dispersed.
 - ii) **Regulatory and disclosure burden** – Compliance with NGX and SEC regulations increases costs and reduces confidentiality.
 - iii) **Short-termism** – Pressure to meet quarterly results may conflict with long-term strategy (e.g. renewable investments).
 - iv) **Takeover risk** – A more widely held share structure could expose Omega to hostile bids.
 - v) **Flotation and on-going costs** – Underwriting, legal and advisory fees are high; annual compliance costs also increase.
- b) Factors in setting the issue price of new equity**
- i) **Profit record and future growth** – Omega’s history of profitability and renewable energy growth plans will justify a stronger valuation.
 - ii) **Dividend policy** – Investors will consider expected dividend yield when evaluating the issue price.
 - iii) **Comparable companies** – P/E ratios and dividend yields of other listed Nigerian manufacturing firms will guide pricing.
 - iv) **Asset base / net asset value** – The company’s tangible assets provide a benchmark for pricing, especially if growth prospects are modest.
 - v) **Market conditions** – General stock market climate and investor appetite for IPOs affect achievable pricing.
 - vi) **Level of subscription desired** – Price should ensure adequate demand; too high risks undersubscription, too low may undervalue shares.
 - vii) **Advisors’ guidance** – Underwriters and financial advisers will recommend a realistic price based on market testing.

- viii) **Reputation and confidence** – As a first-time issuer, a slightly conservative price may build goodwill and ensure strong aftermarket performance.

Examiner's report

This question, which is in two parts, tests candidates' knowledge of long term financing/raising of corporate capital. Part (a) tests advantages and disadvantages of full stock exchange listing. Part (b) requires candidates to state factors affecting the process of setting new equity shares prices.

About 80% of the candidates attempted this question. Performance in part (a) was good, but many could not analyse the factors to be considered when setting an issue price for new equity shares in a floatation.

Candidates at this level of the examination must develop analytical skills that will enable them apply concepts and principles to simple practical situations, as this is the distinction between Skills and Foundation levels of the examination.

MARKING GUIDE		Marks
5	A To discuss the potential advantages and disadvantages of obtaining a full stock exchange listing	10 marks
	B To analyze the key factors that should be considered when setting an issue price for new equity shares in a flotation	5 marks
	Total	15 marks

Solution 6

(a)

- i) **Reasons why a company may decide to finance a new project with the issue of a new bond**
- **Preserve ownership control**
Unlike issuing new equity, bonds do not dilute existing shareholders' control over the company.
 - **Tax advantages**
Interest payments on bonds are tax-deductible, lowering the effective cost of financing.
 - **Matching maturity with project life**
If the project has a defined useful life (say 5 years), issuing a bond with similar maturity provides a good financing match.

- **Predictability of cash outflow**
Bonds carry fixed interest obligations, allowing the company to plan project cash flows accordingly.
- **Possibility of lower cost of capital**
If market conditions make debt relatively cheaper than equity, bonds can reduce the overall cost of capital.
- **Flexibility in structuring terms**
Bonds can be tailored (convertible, callable, fixed vs. floating interest, etc.) to suit company and investor needs.
- **Market access and investor demand**
If investor appetite is high for fixed-income securities, bonds provide a viable financing source.

ii) **Should the project be appraised using the cost of capital of 15% (the coupon rate of the bond)?**

Answer: No — the coupon rate (15%) is not automatically the correct discount rate for project appraisal.

Reasons:

○ **Cost of debt \neq Coupon rate**

- The relevant cost of debt is the yield to maturity (YTM) of the bond, i.e., the market-determined return required by investors, not just the nominal coupon.
- If market interest rates differ from 15%, the actual cost of debt will be higher or lower than the coupon.

○ **Project appraisal should use WACC (weighted average cost of capital), not just debt cost**

- Projects should generally be appraised at the company's overall cost of capital (WACC), which reflects the weighted mix of debt and equity financing, unless the project is financed as a standalone with no recourse to equity holders.
- Even if debt is used exclusively, equity holders ultimately bear risk; hence WACC reflects the opportunity cost of capital.

○ **Risk-adjusted discount rate**

- The correct discount rate should reflect the systematic risk of the project.
- If the project has similar risk to the company's existing business, WACC is appropriate.
- If risk differs significantly, an adjusted cost of capital should be used (sometimes based on a "pure play" approach).

○ **Tax shield consideration**

- The effective cost of debt is after-tax cost of debt = $YTM \times (1 - \text{tax rate})$.
- Appraising at 15% coupon ignores the tax benefit of debt financing.

(b)

Given

- Initial portfolio value = \$1,000,000
- Final portfolio value = \$1,050,000
- Initial exchange rate = €1 per \$1
- Final exchange rate = €1.02 per \$1

i) **Investor's rate of return in dollars**

$$\text{Return in \$} = \frac{1,050,000 - 1,000,000}{1,000,000} = \frac{50,000}{1,000,000} = 5\%$$

Dollar return = 5%

ii) **Investor's rate of return in euros**

First convert both values into euros:

• **Initial value in €:**

$$1,000,000 \times 1 = \text{€}1,000,000$$

• **Final value in €:**

$$1,050,000 \times 1.02 = \text{€}1,071,000$$

• **Rate of return in €:**

$$\frac{1,071,000 - 1,000,000}{1,000,000} = \frac{71,000}{1,000,000} = 7.1\%$$

Euro return = 7.1%

iii) **Is the difference exactly equal to the percentage movement exchange rate?**

• Exchange rate change:

$$\frac{1.02 - 1.00}{1.00} = 0.02 = 2\%$$

- Dollar return = 5%
- Exchange rate effect = 2%
- Expected combined return (approximate) = $5\% + 2\% = 7\%$
But actual euro return = 7.1%, slightly higher.

Why not exactly equal?

Because returns compound multiplicatively, not additively.

The euro return is given by:

$$(1 + r_{\text{€}}) = (1 + r_{\text{£}}) \times (1 + r_{\text{FX}})$$

Substitute values:

$$(1 + r_{\text{€}}) = (1.05) (1.02) = 1.071$$

$$r_{\text{€}} = 7.1\%$$

So, the difference comes from the interaction term ($5\% \times 2\% = 0.1\%$), which makes the euro return slightly larger than the sum.

Examiner's report

This question tests candidates understanding of local and international bond investing. Part (a) of the question tests candidates' knowledge of local bonds investment, while part (b) tests international bond investing. Only about 40% of the candidates attempted this question.

Many of them performed well in part (a) of the question, but most did not have a clue to part (b), leading to just average performance overall.

Candidates at this level of the examination must develop analytical skills that will enable them apply concepts and principles to simple practical situations, as this is the distinction between Skills and Foundation levels of the examination.

MARKING GUIDE**Marks**

- | | | | |
|----|-----|--|---------|
| 6a | i | To provide reasons why a company may decide to finance a new project with issue of a new bond. | 5 marks |
| | ii | To explain with adequate justification whether the project should be appraised using cost of capital of 15% (the coupon rate of the bond). | 5 marks |
| b | i | To calculate the investor's rate of return in dollar. | 3 marks |
| | ii | To calculate the rate of return in Euros. | 1 mark |
| | iii | To determine whether the difference exactly equals to the percentage movement in exchange rate and if not why? | 1 mark |

Total**15 marks**

Solution 7

- a) Yes, the stock split will affect the conversion ratio which needs to be adjusted. Original conversion ratio = 10:1

Since the stock is split 2:1, the new conversion ratio will be 20:1

- b) The conversion price of the convertible bond issued after the stock split will be,

$$\text{Conversion price} = \frac{\text{Face value of the convertible bond}}{\text{Conversion ratio}} = \frac{1000}{20} = \text{N}50$$

- c) The conversion value of the convertible bond after the stock split with its current stock price at N52 will be:

$$\text{Conversion value} = \text{Conversion ratio} \times \text{Market price} = \text{N}20 \times 52 = \text{N}1040$$

- d) A straight value of a convertible bond is the price of a straight or non-convertible bond with characteristics similar to those of the convertible bond under consideration.

Straight value of bond (equal to present values of an equivalent non-convertible bond).

$$= \frac{40}{(1+5\%)^1} + \frac{40}{(1+5\%)^2} + \frac{40}{(1+5\%)^3} + \frac{40}{(1+5\%)^4} + \frac{40+1000}{(1+5\%)^5} = \text{N}956.71$$

- e) Usually, the actual price at which a convertible bond trades in the bond market is higher than the conversion value as well as the straight value of the convertible bond. The difference between the actual market price and the conversion value is called the market conversion premium (MCP).

$$\begin{aligned} \text{MCP} &= \text{Market price of bond} - \text{Conversion value} \\ &= \text{N}1100 - \text{N}1040 = \text{N}60 \end{aligned}$$

This is often expressed on a per share basis, i.e. N60/20 = N3 per share

- f) The minimum value of the convertible bond is the maximum value between the conversion value and the straight value.

$$\begin{aligned} \text{Minimum value of bond} &= \text{Maximum (Conversion Value, Straight Value)} \\ &= \text{Max (1040, 956.71)} = \text{N}1040 \end{aligned}$$

- g) Convertible bonds have lower ratings as compared to the non-convertible bonds because:

- i) Typically, convertible bonds are classified as subordinated debt, which is junior in ranking to senior or unsubordinated debt as far as principal repayment in the event of issuer distress or bankruptcy.
 - ii) Most companies that issue convertible bonds do so because their interest costs are high. By offering investors the option to convert bonds to stocks, the company can pay a lower rate than it does to straight bondholders. But companies with high borrowing costs tend to be lower rated.
- h) The lowering of the rating of the convertible bond issue indicates the possibility of default either for interest payment or principal payment or both has increased. In such a scenario, ceteris paribus, any rational investor will expect a higher return from investment due to its increase in risk factor which could be achieved by buying the bond at a lower price. Hence the price of the bond decreases.

Examiner's report

This question tests candidates' understanding of convertible bonds through eight questions requiring short answers.

More than 80% of the candidates attempted this question and performance was good as more than 60% of the candidates scored over 50% of the marks allotted. Those candidates that did not perform well did not understand the issues involved in the issuance of convertible bonds.

Candidates at this level of the examination must develop analytical skills that will enable them apply concepts and principles to simple practical situations, as this is the distinction between Skills and Foundation levels of the examination.

MARKING GUIDE

Marks

- | | | | |
|---|---|---|----------|
| 7 | a | To explain if the stock split of 2:1 would affect the conversion ratio of the company's convertible bonds issued; if yes, what is the conversion ratio? if no, explain why. | 1½ marks |
| | b | To calculate the conversion price of the convertible bond issued, after the stock split | 1½ marks |
| | c | To calculate the conversion value of the convertible bond, where the stock of ABC (after the split) is currently trading at ₦52 in the spot market. redemption. | 1½ marks |

- d To define and calculate the straight value of the convertible bond, given that another bond trading in the market similar in all characteristics to that of the convertible bond exists yielding 5%. 2½ marks
- e To define conversion premium of a convertible bond;
To determine the conversion premium if it is trading at 110 in the market, for the given convertible bond. 2 marks
- f To explain the minimum value of a convertible bond;
To calculate the minimum value of the given bond. 2 marks
- g To explain why convertible bonds usually have a lower rating as compared to non-convertible bonds with similar characteristics. 2 marks
- h To explain what impact the lowering of the rating of the convertible bond by a rating agency after one year of issue have on the issue price of the bond. 2 marks
- Total 15 marks**