



**THE INSTITUTE OF CHARTERED  
ACCOUNTANTS OF NIGERIA**

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# **PATHFINDER**

**NOVEMBRT 2019 DIET  
PROFESSIONAL LEVEL EXAMINATIONS**

Question Papers

Suggested Solutions

Examiner's Reports

Plus

Marking Guides

## **FOREWARD**

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

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

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

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

### **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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**THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA**  
**PROFESSIONAL LEVEL EXAMINATION – NOVEMBER 2019**

**CORPORATE REPORTING**

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

**INSTRUCTION: YOU ARE REQUIRED TO ANSWER FOUR OUT OF SIX QUESTIONS IN THIS PAPER**

**SECTION A: COMPULSORY QUESTION (40 MARKS)**

**QUESTION 1**

- a. A non-current asset (or disposal group) must be classified as held for sale at the date the operation meets the criteria to be classified as held for sale.

**Required:**

Discuss the criteria to be met before an asset or disposal group is classified as held for sale. **(5 Marks)**

- b. Miye plc. is a Nigerian company which operates in the service sector of the economy. Miye plc has a business combination relationship with Bidun plc and Yedun plc. It is the policy of Miye group to recognise the non-controlling interest at fair value at the date of acquisition. The following are the draft statements of financial position as at December 31, 2018:

	Miye Plc ₦'m	Bidun Plc ₦'m	Yedun Plc ₦'m
<b>Assets</b>			
Property, plant and equipment	1,936	600	620
Investment in subsidiaries			
Bidun Plc	1,460	-	-
Yedun Plc	-	640	-
Intangible assets	396	60	70
	<u>3,792</u>	<u>1,300</u>	<u>690</u>
Current assets	1,790	960	500
<b>Total assets</b>	<b><u>5,582</u></b>	<b><u>2,260</u></b>	<b><u>1,190</u></b>
<b>Equity and liabilities</b>			
Equity attributable to owners			
Ordinary shares (₦1 ordinary shares)	1,840	800	400
Other reserves	146	74	50
Retained earnings	1,790	884	278
<b>Total equity</b>	<b><u>3,776</u></b>	<b><u>1,758</u></b>	<b><u>728</u></b>
Non-current liabilities	990	246	186
Current liabilities	816	256	276
<b>Total liabilities</b>	<b><u>1,806</u></b>	<b><u>502</u></b>	<b><u>462</u></b>
<b>Total equity and liabilities</b>	<b><u>5,582</u></b>	<b><u>2,260</u></b>	<b><u>1,190</u></b>

### Additional information:

- (i) On January 2, 2016, Miye plc acquired 70% of the equity share capital of Bidun plc when the retained earnings of Bidun plc were ₦638m and other reserves were ₦54m. At acquisition, the fair value of the non-controlling interest in Bidun plc was ₦590m and the fair value of the identifiable net assets acquired was ₦1,670m. The excess in fair value was as a result of non-depreciable land.
- (ii) On January 2, 2017, Bidun plc acquired 80% of the equity share capital of Yedun plc when the retained earnings of Yedun plc were ₦212m and other reserves were ₦40m. The fair value of a 20% holding of the non-controlling interest was ₦144m; a 30% holding were ₦216m and a 44% holding was ₦322m. At the date of acquisition, the identifiable net assets of Yedun plc had a fair value of ₦724m and the excess in fair value was as a result of non-depreciable land.
- (iii) Both Bidun plc and Yedun plc, were tested for impairment at December 31, 2018. The recoverable amounts of both cash generating units as stated in the individual financial statements at December 31, 2018 were Bidun plc, ₦2,850m, and Yedun plc, ₦1,208m, respectively. The directors of Miye plc felt that any impairment of asset was due to the poor performance of the intangible asset.
- (iv) Miye plc acquired trademarks of ₦20m to use in a project to develop new products on January 2, 2017. Miye plc incurred additional cost of ₦14m on investigation and has determined that the product can be developed. A working proto-type was created at a cost of ₦8m and in order to put the product into a condition for sale, a further ₦6m was spent. Finally, marketing costs of ₦4m were incurred. All the foregoing costs are included in the intangible assets of Miye plc.
- (v) Miye plc intends to dispose of a major line of the parent's business operations. At the date the sale criteria were met, the carrying amount of the assets and liabilities comprising the line of business were as follows:

	₦'m
Property, plant and equipment (PPE)	98
Inventory	36
Current liabilities	6

It is anticipated that Miye plc will realise ₦60m for the business. No adjustments have been made in the financial statements in relation to the above decision.

**Required:**

Prepare the consolidated statement of financial position of Miye plc Group as at December 31, 2018. (25 Marks)

- c. Bidun plc has a property which has a fair value of ₦4million at December 31, 2018. This property had been revalued at the year end and a revaluation surplus of ₦800,000 had been recorded in other reserves. The Directors were intending to sell the property to Miye plc for ₦2 million shortly after the year end. Bidun plc previously used the historical cost basis for valuing property.

**Required**

Review the ethical and accounting implications of the above intended sale of assets to Miye plc by Bidun plc. (10 Marks)  
(Total 40 Marks)

**SECTION B: YOU ARE REQUIRED TO ANSWER ANY THREE OUT OF FIVE QUESTIONS IN THIS SECTION (60 MARKS)**

**QUESTION 2**

Bajekuta Industries Limited operates in Nigeria and in several foreign countries due to its large operations and global customer base. As part of its large scale operations, the Bajekuta imports its raw materials from a foreign country whose currency is the dollar (\$). On September 15, 2017, Bajekuta purchased goods from its foreign supplier for \$25m on credit terms. The foreign supplier was paid in full on October 28, 2017. Bajekuta prepares its year-end financial statements to 31 December.

The exchange rates on the dates of the transactions were:  
September 15, 2017 - \$1: ₦360  
October 28, 2017 - \$1: ₦365

Bajekuta also enters into leasing arrangements for the use of company vehicles. These vehicles are generally leased for a four year period and they are replaced with newer models at the end of every cycle. The management of Bajekuta allocates these vehicles to designated employees and determines that these vehicles are to be used only for official purposes. The company which leases these vehicles to Bajekuta provides identical car models in its accessible parking lots within reasonable distance from Bajekuta's corporate offices. The lease contract provides the lessor the right to substitute these cars at any time throughout the lease term without the consent of Bajekuta. The lessor ensured this clause was negotiated into the lease agreement to ensure efficiency of its operations and keep its costs and pricing of the lease arrangement optimal. The lessor also provides similar vehicle leasing services to other companies.

Bajekuta acquired a large piece of land many years ago for which it intended to construct a new factory as part of its expansion. The expansion plan has since been abandoned and management has yet to determine the future use of this piece of land. This piece of land is currently measured at cost in the books of Bajekuta. In addition to this piece of land, Bajekuta owns other properties in a highbrow location which are currently held to earn rental income and for capital appreciation as the value of properties in this location has increased approximately by 28% in the last 2 years. Bajekuta measures these properties at fair value.

**Required:**

- a. Briefly advise the directors how the foreign exchange transaction should be accounted for on the purchase date and upon settlement. **(7 Marks)**
  - b. Determine if the arrangement for the company vehicles contains a lease in accordance with IFRS 16 Leases. **(7 Marks)**
  - c. Advise the directors if the measurement method currently applied to piece of land is in line with the requirements of IAS 40 Investment Property **(6 Marks)**
- (Total 20 Marks)**

**QUESTION 3**

TedRufai plc is a large publicly listed retail company based in Nigeria. In order to raise some financing for several projects, the company makes a rights issue for 1 for 4 on 1 August 2018 at a price of ₦75. The company’s current share price is ₦100 per share. At the year-end 2017, the company had 1 million ordinary shares in issue. The year end of the company is January 31.

Below is an extract of the company’s income statement for the year end 2017 and 2018.

Income statement extract	2018	2017
	₦	₦
Profit for the year	812,500	625,000

TedRufai has recently received shipment of factory equipment for its new state of the art factory. The factory equipment which has two significant components, an engine and the body structure which cost ₦100m. The engine requires replacement every 10 years and the company’s directors determine this to be its useful economic life. The structure does not require replacement but will be retired at the end of its life which is expected to be 20 years. The directors determine that the engine is worth 35% of the value of the factory equipment. The directors are preparing a fixed assets summary at year end and would like to determine the depreciation expense to be recognised in profit or loss at year end in relation to this new equipment.

TedRufai owns several farms where agricultural and animal produce are harvested for subsequent sale in its grocery stores which are strategically located around the country. The directors of TedRufai are faced with a dilemma and are unsure how to measure its harvested agricultural produce at the point of harvest in order to be in compliance with International Financial Reporting Standards (IFRS) requirements.

**Required:**

- a. Assist the directors of TedRufai Industries to calculate the Earnings per Share (EPS) at January 31, 2019. (7 Marks)
- b. Determine the depreciation expense the directors of TedRufai need to recognise at year end in relation to the new factory equipment. (7 Marks)
- c. As an IFRS consultant, briefly discuss how the harvested agricultural produce should be accounted for, to be in line with the requirements of IAS 41 - Agriculture (6 Marks)

**(Total 20 Marks)**

**QUESTION 4**

- a. The Board of Directors of Maranathan plc at its meeting in August, 2019 expressed series of concerns over some of the growth strategies for the company. One of the concerns relates to the financial position of the company as presented in the financial statements, whether that will be adequate or sufficient to convince its bank to approve the loan request needed for expansion and diversification. Also, the diversification contemplated might require business combination. Therefore, there is the urgent need to analyse the company's financial position so as to enter into a good bargain with the other business associates. The financial statements are presented below.

**Statement of Profit or Loss and other Comprehensive Income  
for the year ended December 31, 2018**

	2018	2017
	₦'000	₦'000
Revenue	1,558,750	1,112,500
Cost of sales	<u>(1,049,375)</u>	<u>(720,000)</u>
Gross profit	509,375	392,500
Administrative expenses	(71,000)	(63,750)
Distribution costs	<u>(148,375)</u>	<u>(98,750)</u>
<b>Profit from operations</b>	<b>290,000</b>	<b>230,000</b>
Finance cost	(62,250)	(30,625)
Profit before tax	227,750	199,375
Taxation	<u>(37,250)</u>	<u>(27,812.5)</u>
<b>Profit for the year</b>	<b>190,500</b>	<b>171,562.5</b>

Other comprehensive income gain on revaluation	<u>46,000</u>	<u>20,687.5</u>
<b>Total comprehensive income for the year</b>	<b><u>236,500</u></b>	<b><u>192,250</u></b>
Dividends paid	<u>100,000</u>	<u>50,000</u>

**Statement of financial position as at December 31, 2018**

	<b>2018</b>	<b>2017</b>
	<b>₦'000</b>	<b>₦'000</b>
<b>Non-current assets</b>		
Property, plant and equipment	531,250	398,750
<b>Current assets</b>		
Inventory	111,625	65,000
Receivables	248,250	136,125
Cash and cash equivalents	-	21,375
<b>Total assets</b>	<b><u>891,125</u></b>	<b><u>621,250</u></b>
<b>Equity and liabilities</b>		
Share capital (₦1 per share)	125,000	125,000
Revaluation reserve	82,250	36,250
Retained earnings	<u>268,000</u>	<u>177,500</u>
	<b><u>475,250</u></b>	<b><u>338,750</u></b>
<b>Non- current liabilities</b>		
Loan notes	325,000	212,500
<b>Current liabilities</b>		
Trade payables	72,125	70,000
Overdraft	<u>18,750</u>	-
	<b><u>90,875</u></b>	<b><u>70,000</u></b>
<b>Total equity and liabilities</b>	<b><u>891,125</u></b>	<b><u>621,250</u></b>

**You are required to:**

- b. Write a report to the Board of Directors of Maranathan plc. analysing the financial statements and assessment of the financial performance of the company using the following ratios
- i. Profitability and efficiency
  - ii. Short term liquidity
  - iii. Long term liquidity and solvency
- (14 Marks)**
- c. Most companies adopting IFRS(s) are large and listed entities. Also, in many countries, IFRS(s) are used as national GAAP which means that unquoted Small and Medium-Sized Entities [SME(s)] have to apply them. This has generated series of arguments in favour and against adoption of the same IFRS used by large entities by SME(s). Hence, the need for IFRS for SMEs.

**You are required to:**

- i. Discuss the basic arguments in favour of the use of the same or general IFRSs used by large entities for SME(s) **(3 Marks)**
- ii. Explain the considerations in developing separate standards for SMEs called IFRS for SME(s) **(3 Marks)**

**(Total 20 Marks)**

**QUESTION 5**

Natural Oil Company plc., an indigenous oil company registered under the Companies and Allied Matters Act with its head office and operational offices in Lagos and Warri respectively has just been granted oil rig license for oil exploration. In order to forestall a recurrence of the pollution that occurred in the past in Ogoni land, the regulatory authority insisted on agreement that included the costs of dismantling and removing the item and restoring the site after the expiration of the contract agreement.

The board of directors consisting of members who are new in oil business was also recently constituted. They were disturbed by the clause on decommissioning of the plant after the expiration of the contract and request you to provide advice on this matter.

Experts estimate of decommissioning expenses of the plant is as provided below:

Years	2014	2015	2016	2017	2018
Expenses ₦'000	1,400	1,500	1,600	1,550	1,250

The experts estimated the annual expenses of ₦100,000 to remove the waste caused by the plant's operations during its useful life.

All expenses are stated in the real prices, assuming 2011 as the base year. Based on recent economic development, the inflation rate is assumed to be 1.5% p.a. and the appropriate discount rate is 2%. In year 2013, the estimated discount rate changed to 1.2% while other estimates (cash flow) remain unchanged.

**Required:**

Write a report to the Board of Natural Oil Company plc on:

- a. When and how these expenses should be accounted for in accordance with IAS 37. **(6 Marks)**

- b. Compute the provisions to decommission the plant under the different discount regimes and show extracts to recognise them in the financial statements for the relevant period.

(14 Marks)

(Total 20 Marks)

#### QUESTION 6

- a. According to the Conceptual Framework for financial reporting (8.4)  
“The concept of capital maintenance is concerned with how an entity defines the capital that it seeks to maintain. It provides the linkage between the concepts of capital and the concepts of profit because it provides the point of reference by which profit is measured.”

Distinguish between the capital in financial reporting and those of integrated reporting. (8 Marks)

- b. Discuss the concept of capital maintenance under the Conceptual Framework of Financial Reporting and relate that to capital maintenance under integrated reporting. (6 Marks)

- c. Briefly discuss **THREE** guiding principles of the International Integrated Reporting Council (IIRC's) Framework, and any concerns in the application of the principles in producing a useful integrated report. (6 Marks)

(Total 20 Marks)

## SOLUTION 1

- (a) The relevant standard is Non-Current Assets Held for Sales and Discontinued operations (IFRS 5). The actions required to complete the planned sale will have been made and it is unlikely that the plan will be significantly changed or withdrawn with adequate notification to stakeholders.

An asset or disposal group should be classified as held for sale in a period in which all the following criteria are met.

**Saleable condition** - The asset or disposal group is available for immediate sale in its present condition.

**Probable sale** - The sale is highly probable. A sale is highly probable if:

- i. **Management approval** - Management is committed to a plan to sell;
- ii. **Location of buyer** - An active programme and other actions exist to locate a buyer;
- iii. **12 months**- A sale is expected to be completed within one year of date of classification;
- iv. **Marketing** - The asset or disposal group is actively marketed;
- v. **Irrevocability** - It is unlikely that there will be significantly changes to the marketing plan or that management will consider withdrawing its plan to sell; and
- vi. **Reasonable price** - The price must be reasonable to attract a buyer.

### Accounting treatment (recognition)

An entity should classify a non-current asset or disposal group as held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use.

b)

**MIYE Plc Group**

**Consolidated statement of financial position as at December 31, 2018**

	<b>₹ m</b>
<b>Assets:</b>	
<b>Non-current assets</b>	
Property, plant and equipment ((1,936+600+620+178+72) – 98)	3,308
Goodwill (wk 4)	380
Intangible assets (wk 5)	<u>454</u>
	<u>4,142</u>
Current assets ((1,790+960+500) – 36)	<u>3,214</u>
Disposal group (wk 8)	<u>66</u>
<b>Total assets</b>	<b><u>7,422</u></b>
<b>Equity and liabilities</b>	
<b>Equity attributable to owners of parent</b>	
Ordinary shares (₹1 ordinary shares)	1,840
Retained earnings (wk 6)	1,857
Other reserves (wk 7)	<u>166</u>
<b>Total equity</b>	<b><u>3,863</u></b>
Non-controlling interests (wk 9)	<u>789</u>
	<u>4,652</u>
Non-current liabilities (990+246+186)	1,422
Disposal group (wk 8)	6
Current liabilities ((816+256+276) – 6)	1,342
<b>Total liabilities</b>	<b><u>2,770</u></b>
<b>Total equity and liabilities</b>	<b><u>7,422</u></b>

**Working notes**

<b>wk 1</b>	<b>Control structure</b>	<b>In Bidun Plc</b>	<b>In Yedun Plc</b>
Parent (Miye) Plc		70%	-
Indirect holding through Yedun Plc	70% X 80%		56%
Non-controlling interests		30%	44%
<b>Total</b>		<b>100%</b>	<b>100%</b>

2. Calculation of goodwill  
Miye Plc in Bidun Plc

	N'm	N'm
Purchase consideration		1,460
Fair value of non-controlling interests		<u>590</u>
		2,050
Fair value of identifiable net assets acquired:		
Ordinary shares	800	
Other reserves	54	
Retained earnings	638	
Fair value adjustment-land	<u>178</u>	<u>(1,670)</u>
Goodwill		<u>380</u>

3. Calculation of goodwill  
Bidun Plc in Yedun Plc

	N'm	N'm
Purchase consideration		640
Less Purchase consideration belonging to NCI (30% of N640)		<u>(192)</u>
Fair value of non-controlling interest (44%)		<u>322</u>
		770
Fair value of identifiable net assets acquired:		
Ordinary shares	400	
Other reserves	40	
Retained earnings	212	
Fair value adjustment-land	<u>72</u>	<u>(724)</u>
Goodwill		<u>46</u>

4. Impairment test of Bidun Plc and Yedun Plc

	Bidun Plc N'm	Yedun Plc N'm
Goodwill	380	46
Assets	2,260	1,190
Fair value adjustment-land	<u>178</u>	<u>72</u>
Total assets carrying amount	2,818	1,308
Recoverable amount	<u>2,850</u>	<u>1,208</u>
Impairment	<u>Nil</u>	<u>100</u>

**Note:**

There was no impairment in Bidun Plc since the recoverable amount is higher than the carrying value (N2,850 – N2,818), but Yedun Plc assets were impaired to the tune of N100m i.e. (N1,308 – N1,208). Goodwill of N46m is written off and N54m out of the intangible asset is written down with the impairment value.

Group reserves is debited with ₦56 (56% of 100) and NCI with ₦44 (44% of 100).  
Total goodwill is calculated as:

	₦' m
Bidun Plc	380
Yedun Plc	46
Impairment	<u>(46)</u>
	<u>380</u>

#### 5. Intangible assets

	₦' m
Cost of patent	20
Prototype cost	8
Cost to condition for sale	<u>6</u>
	<u>34</u>

Intangible assets expensed	
Cost of investigation	14
Market cost	<u>4</u>
	<u>18</u>

Dr Retained earnings ₦18  
Cr Intangible assets ₦18

Total intangible asset is calculated as:

	₦' m
Miye Plc	396
Bidun Plc	60
Yedun Plc	70
Intangibles expensed	(18)
Impairment of intangible assets (Wk 4)	<u>(54)</u>
	<u>454</u>

#### 6. Retained earnings

	₦' m
Miye Plc	1,790
Post- acquisition reserves:	
Bidun Plc (70% of (884-638))	172
Yedun Plc (56% of (278- 212))	37
Intangible assets (wk 5)	(18)
Impairment loss on goodwill of Yedun Plc (wk 4)	(56)
Impairment loss on disposal group (wk 8)	<u>(68)</u>
	<u>1,857</u>

7.- Other reserves	N' m
Miye Plc	146
Post- acquisition reserves:	
Bidun Plc (70% of (74-54))	14
Yedun Plc (56% of (50- 40))	<u>6</u>
	<u>166</u>
8. Disposal group	N' m
Property, Plant and Equipment (PPE)	98
Inventory	36
Current liabilities	<u>(6)</u>
Proceeds	128
Recoverable amount (31/12/18)	<u>(60)</u>
Impairment loss	<u>68</u>

The asset and liabilities will be shown as single line items in the statement of financial position. Asset at (N134-68) m= N66m and liabilities at N6m. A plan to dispose of net assets is an impairment indicator.

9. Non- controlling interest	N' m
Bidun Plc (at acquisition)	590
Yedun purchase consideration (wk 3)	(192)
Fair value of 44% (as per question)	322
Post- acquisition reserves: Bidun Plc	
Retained earnings (30% of (884-638))	74
Other reserves (30% of (74-54))	6
Post-acquisition reserves: Yedun Plc	
Retained earnings (44% of (278- 212))	29
Other reserves (44% of (50- 40))	4
Impairment loss on Goodwill of Yedun Plc (wk 4)	<u>(44)</u>
	<u>789</u>

**Wk 10 Discontinued operation effects**  
**The consolidated group account will be affected as follows**

	Debit (N'm)	Credit (N'm)
PPE (as per question)		98.00
Inventory (as per question)		36.00
Current liabilities	6.00	
Impairment loss on disposal group transferred to retained earnings	68.00	
Last line Current Assets (balancing figure)	66.00	
Last line Current Liabilities (as per question)		<u>6.00</u>
Total carrying amount at November 30, 2012	<u>140.00</u>	<u>140.00</u>

b)

### Accounting implications

- i. The intended sale of the asset from Bidun Plc to Miye Plc amounts to a distribution of profits rather than a loss on disposal. The shortfall between the sale proceeds and the carrying amount is ~~₺~~2 million and this will be treated as a distribution. A company may distribute non-cash assets.
- ii. Bidun Plc has retained earnings of ~~₺~~884 million available at the year end plus the sale of the non-current asset will 'realise' an additional amount of ~~₺~~800,000 from the revaluation reserve. It is likely that the sale will be legal, depending upon the jurisdiction concerned.
- iii. If the transaction meets the criteria of IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* paragraphs 6 to 8, then the asset would be held in the financial statements of Bidun Plc in a separate category from plant, property and equipment and would be measured at the lower of carrying amount at held-for-sale date and fair value less costs to sell.
- iv. If the asset is held for sale, IAS 16 *Property, Plant and Equipment* does not apply.
- v. As the transfer is from a subsidiary to its parent, IAS 24 *Related party disclosures* will apply and in the individual financial statements of Bidun and Miye, although it would be eliminated on consolidation. Knowledge of related party relationships and transactions affects the way in which users assess a company's operations and the risks and opportunities that it faces. In this case, the related party relationship clearly has affected the price of the transfer.
- vi. Even though the transfer is likely to be legal, and even if it is correctly accounted for and disclosed in accordance with IAS 24 and IFRS 5 (or IAS 16 if the IFRS 5 criteria are not met) the transaction raises ethical issues. Ethical behavior in the preparation of financial statements, is of paramount importance.

### Ethical implications

- i. This applies equally to preparers of accounts, to auditors and to accountants giving advice to directors. Financial statements may be manipulated for all kinds of reasons, for example to enhance a profit-linked bonus or to disguise an unfavorable liquidity position. In this case, suspicion might be aroused by the fact that the transfer of the property between groups companies at half the current value has no obvious logical purpose, and looks like a window dressing exercise of some kind, although its motives are unclear.

- ii. The boundary between ethical practices and legality is sometimes blurred. Questions would be asked of the directors as to why they would want to sell an asset at half of its current market value and that ₦2million is not a fair approximation of fair value. It may raise suspicion.
- iii. Corporate reporting involves the development and disclosure of information, which should be truthful and neutral. Both Bidun Plc and Miye Plc would need to make related party disclosures so that the transaction is understood by stakeholders.
- iv. The nature of the responsibility of the directors requires a high level of ethical behaviour.
- v. Shareholders, potential shareholders, and other users of the financial statements rely heavily on the financial statements of a company as they can use this information to make an informed decision about investment.
- vi. They rely on the directors to present a true and fair view of the company.

#### MARKING GUIDE

	Marks	Marks
(a) Criteria for classification as held for sale		5
(b) Statement of financial position	7 <sup>3</sup> / <sub>4</sub>	
Working note:		
- Goodwill	4	
- Impairment test	3	
- Intangible assets	1 <sup>3</sup> / <sub>4</sub>	
- Retained earnings	1 <sup>1</sup> / <sub>2</sub>	
- Other reserves	1	
- Disposal group	1 <sup>1</sup> / <sub>2</sub>	
- Non-controlling interests	3	
- Discontinued operation effects	<u>1<sup>1</sup>/<sub>2</sub></u>	25
(c) Accounting implications	5	
Ethical implications	<u>5</u>	<u>10</u>
<b>Total:</b>		<b><u>40</u></b>

#### EXAMINER'S REPORT

Part (a) of the question tests the criteria to be met before an asset or disposal group is classified as held for sale according to IFRS 5 - Non-Current Assets Held for Sales and Discontinued Operations. Part (b) tests business combination relationship of subsidiary and sub-subsidiary with application of impairment test, recognition of intangible assets and disposal of a major line of the parent's business operations.

Part (c) tests the ethical and accounting implications of intending sales of property to the parent by a subsidiary immediately after acquisition.

All the candidates attempted this question and performance was below average.

Commonest pitfalls were the candidates' inability to compute goodwill, non-controlling interests and they were unable to advise on accounting and ethical implications

Candidates are advised to understand the relevant requirements of group account since this is the core area of the syllabus. They are also to pay more attention to ethical and accounting implications of business combination for better performance in future examinations.

## SOLUTION 2

### (a) Effect of changes in foreign exchange rates IAS 21

Bajekuta should apply IAS 21 to the transaction with a US based organization since the raw material acquired was not settled at the spot rate ruling at the date of transaction. Therefore, Bajekuta should account for the purchase using rate ruling as at that date and account for actual amount paid at settlement date because the rate to naira has significantly moved from ₦360 to ₦365 at the date of settlement.

	₦'m
Settlement date value	$\$25m \times ₦365 = 9,125$
Opening value of liability	$\$25m \times ₦360 = (9,000)$
Effect of foreign exchange loss	125

On initial recognition, Bajekuta should debit Purchase with ₦9 billion and credit trade payable with same amount, upon payment, they should derecognise the financial liability by debiting trade payable with ₦9 billion and credit Bank of ₦9.125billion with a debit balance to profit or loss of ₦125m effect of foreign exchange rate on the transaction before the settlement date.

### (b) Lease IFRS 16

- i. IFRS 16 establishes principles for the recognition, measurement, presentation and disclosure of leases, with the objective of ensuring that lessees and lessors provide relevant information that faithfully represents those transactions.

- ii. The standard provides a single lessee accounting model, requiring lessees to recognise assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset has a low value.
- iii. In application to Bajekuta, Bajekuta is the lessee, they need to determine if this will be treated as finance or operating lease.
- iv. Bajekuta should account for the lease in accordance with IFRS 16 using a single lease model due to the following facts.
- v. The lease period is for four years ( More than 12 months)
- vi. The vehicle will be used for Bajekuta economic benefits (official purpose only)
- vii. Although the lease arrangement provides the lessor the right to substitute the cars at any time, however, IFRS 16 states that where a supplier has a substantive right of substitution throughout the period of use as it appears here, a customer does not have a right to use an identified asset.
- viii. A supplier's right of substitution is only considered substantive if the supplier has both the practical ability to substitute alternative assets throughout the period of use and they would economically benefit from substitution since the lessor do not satisfy the second criteria, then the lease should be accounted for by Bajekuta as finance lease in line with IFRS 16 using Net Present Value of Minimum lease payment and any cost incurred to sign up the lease arrangement.

**(c) Investment property IAS 40**

Investment property is identified property, plant and equipment earmarked for the purpose of generating economic benefits outside the day-to-day activities of the organisation.

Investment property is property, plant and equipment held for capital appreciation.

Investment Property is property own by organisation but the intended purpose is yet to be determined.

IAS 40 states that investment property can be carried either at cost in line with IAS 16 or at revalued amount (Fair Value).

IAS 40 permits an organization to change from cost model to revaluation model.

Investment property must be depreciated on an annual basis if an organisation chooses the cost model.

Depreciation is not applicable where an organisation uses revaluation model.

All increases or decreases in fair value of investment property must be recognised in profit or loss account immediately under other Income.

**In application to Bajekuta,**

The Land, is Investment Property, due to the fact that Bajekuta is yet to determine it uses, although cost method is allowed, but Bajekuta needs to adopt Fair value for the land and recognised gain/loss in Profit or loss due to the fact other Investment Property is measured at fair value and it is clear that all assets that belong to the same class must be fair valued.

**MARKING GUIDE**

	<b>Marks</b>	<b>Marks</b>
(a) Accounting for foreign exchange transactions:		
- On the purchase date	3	
- Upon settlement	3	
- Identification of the appropriate standard IAS 21	<u>1</u>	7
(b) IFRS 16 principles of:		
- Recognition of leased assets	2	
- Measurement of leased assets	2	
- Presentation of leased assets	1	
- Disclosure of leased assets	1	
- Right of substitution of lessor	<u>1</u>	7
(c) Definition of investment property in accordance with IAS 40	2	
Measurement of investment property	2	
Application of IAS 40 to Bajekuta	<u>2</u>	<u>6</u>
<b>Total:</b>		<b><u>20</u></b>

## EXAMINER'S REPORT

This question tests application of accounting standards on the effects of changes in foreign exchange rates – IAS 21; Leases – IFRS 16 and investment property – IAS 40. The question requires the candidates to determine accounting for recognition, measurement, presentation and disclosure of these accounting standards in real life situations.

About 70% of the candidates attempted the question and their performance was slightly above average.

Commonest pitfalls of the candidates that attempted the question were:

- Lack of clear and deeper understanding of the provisions of accounting standards.
- Inability to apply the provisions of the accounting standards to practical situations.
- Lack of proper knowledge of recognition, measurement, presentation and disclosure of accounting standards.

Candidates are advised to study all the accounting standards and familiarise themselves with their application and interpretation in financial reporting in order to perform well in future examinations.

## SOLUTION 3

(a) Calculation of Weighted Average Number of Ordinary Shares:

	Shares
Existing shares before rights issue $1,000,000 \times 6/12 \times 100/95$	= 526,315
Total number of share after rights issue $1,250,000 \times 6/12$	<u>625,000</u>
	<u>1,151,315</u>

EPS =	$812,500/1,151,315 \times 100K$	= 71K
Restated EPS	$625,000/1,000,000 \times 95/100$	= 59K

Workings

- Existing number of share before rights issue = 1,000,000 shares
- Number of rights shares issue = existing shares  $\times \frac{1}{4}$   
 $1,000,000 \times \frac{1}{4} = 250,000$  shares
- Total number of shares = existing + rights issue  
 $1,000,000 + 250,000 = 1,250,000$  shares

- Calculation of theoretical ex-rights price (TERP)

		₦
4	Existing shares @ ₦100	400
<u>1</u>	Rights share @ ₦75	<u>75</u>
<u>5</u>		<u>475</u>
TERP =		₦475/5 Shares = ₦95

- Adjusting factor on existing shares  
= current market price/TERP = ₦100/95
- Adjusting factor on preceding period  
= TERP/current price = ₦95/₦100

- b. IAS 16- Property, plant and equipment recognise Complex Asset. Factory equipment has two significant components: An engine and the body structure.

Complex asset is a single asset with different components that requires part replacement or has different components. It can be depreciated separately if amount and economic useful life can be identified separately and estimated reliably.

For the purpose of depreciation the total cost of the PPE should be splitted into two of:

- Engine
- Body structure

Factory equipment cost		₦100m
		₦
Engine 35% of ₦100m		35m
Body structure (₦100-35m)		65m
Depreciation: Engine	₦35m /10 years	= 3.5m
Body	₦65m/20 years	= 3.25m
Total depreciation for the year:		6.75m
Dr Profit or loss	₦6.75m	
Cr Property, plant and equipment	₦6.75m	
PPE	₦100m – ₦6.75m	= 93.25m

- (c) Agricultural activity is the management by an entity of the biological transformation harvest of biological asset for sales or for conversion into agricultural produce or into additional biological assets.

## Recognition

An entity shall recognise a biological asset or agricultural produce when, and only when:

- the entity controls the asset as a result of past events
- it is probable that future economic benefits associated with the asset will flow to the entity; and
- the fair value or cost of the asset can be measured reliably.

### Biological Asset (BA):

A biological asset shall be measured on initial recognition and at the end of each reporting period at its fair value less costs to sell (FVLCTS), except where the fair value cannot be measured reliably, then it is measured at cost less accumulated depreciation less accumulated impairment loss.

### Agricultural Produce (AP)

Agricultural produce harvested from an entity's biological assets shall be measured at its fair value less costs to sell at the point of harvest. Such measurement is the cost at that date when applying IAS 2 - Inventories or other applicable standards.

### Biological assets:

A gain or loss arising on initial recognition of a biological asset at fair value less costs to sell and from a change in fair value less costs to sell of a biological asset shall be included in profit or loss for the period in which it arises.

A loss may arise on initial recognition of a biological asset, because costs to sell are deducted in determining fair value less costs to sell of a biological asset. A gain may arise on initial recognition of a biological asset, such as when a calf is born.

## MARKING GUIDE

	Marks	Marks
(a) Calculation of Earnings Per Share (EPS)		7
(b) Explanation of IAS 16 on property, plants and equipment	1½	
Computation of depreciation expense	3½	
Accounting for depreciation	1	
Computation of carrying amount	<u>1</u>	7

(c) Definition of agricultural activities	1	
Recognition according to IAS 41	3	
Accounting treatment of agricultural products	<u>2</u>	<u>6</u>
<b>Total:</b>		<b><u>20</u></b>

## EXAMINER'S REPORT

Part (a) of the question tests computation of earnings per share after rights issue. Part (b) tests computation and recognition of depreciation expense on different components of complex assets. Part (c) tests the accounting for agricultural produce in line with the requirements of IAS 41 on Agriculture.

About 71 % of the candidates attempted the question and performance was average.

Commonest pitfalls were the candidates inability to compute theoretical ex-rights price after rights issue, poor understanding of accounting for depreciation expense under complex asset and lack of in-depth knowledge of recognition and measurement of biological assets.

Candidates are advised to pay more attention to all accounting standards and their application in order to perform well in future examinations.

### Solution 4

To: The Board of Directors

From: Chief Accountant

Date: November 12, 2019.

Subject: **Financial statement analysis for the year ended December 31, 2018**

### Introduction

In the present situation, loan request to bank and business combinations are the situations necessitating financial analysis. The focus is on Bank as a lender and an associate's information need. The questions to answer guiding the type of ratios to evaluate are: What do Banks and a potential associate need to know? What are the type of ratios that will be of interest to them?

An associate company needs information about an entity's profitability and probably information about whether or not the entity is managed efficiently. The focus is likely to be on profit margins, return on capital employed, asset turnover and working capital ratios. A bank that has been approached to lend money to an entity needs to know whether it will receive interest payments when these are due and whether the money that it lends will eventually be repaid. A bank manager will normally be most interested in cash flows and liquidity ratios (current ratio, acid test ratio) gearing and interest cover.

### **Profitability**

These ratios measure how well the entity is performing in the area of returns. The higher the ratios the better. The primary ratio here is ROCE; that measures the overall profitability and efficiency of an entity.

The ROCE has significantly declined from 41.7% in 2017 to 36% in 2018. This reduction may not be unconnected with the falling profit margins and asset turnover occasioned by acquisition of more non-current asset during the year that may have inflated the capital employed.

Management is advised to look inward especially into the production area and overhead control with a view to cutting down unnecessary wastages.

### **Efficiency**

The ability of an entity to use its assets to generate revenue is measured by the efficiency ratios. The higher the times the better. ROCE measures the overall profitability and efficiency of an entity. The primary ratio is the asset turnover.

The asset turnover has marginally diminished from 2.0 times in 2017 to 1.9 times in 2018, in the same vein, the inventory turnover dropped from 17.1 times to 3.9 times. However, in 2018, Maranathan Plc has become less efficient in its working capital. The collection of receivables from the customers has extended from 45 days to 58 days. While the trade payable payment period has unreasonably shortened from 35 days to 25 days. This scenario has placed pressure on the working capital. Management is advised to overhaul its non-current assets or perhaps change the non-performing ones. The use of Just-in-time (JIT) system of inventory control could be considered to improve on the inventory holding period.

### **Liquidity**

These ratios measure the ability of an entity to settle its short-term obligations as they fall due. The key ratios are the current and the quick ratios.

The liquidity position of Maranathan Plc is somewhat impressive as the current and quick ratios are substantially above the generally acceptable threshold of 2:1 and 1:1 respectively and are better off one-to-one as the current ratio improved from 3.18:1 in 2017 to 3.96:1 in 2018. However the entity's cash declined to ₦18.75 million overdraft in 2018 compared to ₦21.37m plus in 2017.

Management is advised to consider expediting cash collection from customers and possibly disposing non-performing assets to raise cash to cushion the cash liquidity challenge.

### **Gearing**

These ratios measure the financial risk facing an entity. The key ratios are the capital gearing and the interest gearing. The financial risk facing Maranathan plc has deteriorated from 38.5% in 2017 to 40.6% in 2018 despite the increase in Equity; although still lowly geared. Also the interest gearing fell from 7.5 times in 2017 to 4.7 times in 2018.

The increase in the gearing position could be traceable to the additional loan note issued during the year and the falling profit margins due to high percentage increase in interest expense paid in 2018 compared to 2017.

If the recommendation to sell off non-current assets that are not adding value is adopted, the proceeds could be helpful in repaying a fragment of the entity's debt and may go a long way in improving the gearing status of the Maranatham plc.

In conclusion, the financial performance, efficiency, and gearing position of Maranathan Plc are not impressive and not promising. However, if the recommendations aforementioned are executed and a team of professionals are brought on board to manage the affairs of the company, the fortune could be turned around.

Thank you.

Chief Accountant

**Computation of Maranathan Plc ratios computed**

<b>Profitabilty and efficiency ratios</b>					
			<b>2018</b>		<b>2017</b>
<b>ROCE(%)</b>	$\frac{\text{Profit before interest \& tax}}{\text{Capital employed}} \times 100$	$\frac{(227750 + 62250)}{(475250 + 325000)} \times 100$	<b>36%</b>	$\frac{(199375 + 30625)}{(338750 + 212500)} \times 100$	<b>41.70%</b>
<b>Gross profit margin(%)</b>	$\frac{\text{Gross profit}}{\text{Revenue}} \times 100$	$\frac{509375}{1558750} \times 100$	<b>32.70%</b>	$\frac{392500}{1112500} \times 100$	<b>35.30%</b>
<b>Profit margin(%)</b>	$\frac{\text{Profit before interest \& tax}}{\text{Revenue}} \times 100$	$\frac{290000}{1588750} \times 100$	<b>18.30%</b>	$\frac{230000}{1112500} \times 100$	<b>20.70%</b>
<b>Returns on equity(%)</b>	$\frac{\text{Profit after tax - non controlling interest - pref. dividend}}{\text{Equity}} \times 100$	$\frac{190500}{475250} \times 100$	<b>40.10%</b>	$\frac{171562.5}{338750} \times 100$	<b>50.60%</b>
<b>Returns on investment (%)</b>	$\frac{\text{Profit before interest \& tax}}{\text{Total assets}} \times 100$	$\frac{290000}{891125} \times 100$	<b>32,5%</b>	$\frac{230000}{621250} \times 100$	<b>37.00%</b>
<b>Efficiency ratios</b>					
<b>Asset turnover(times)</b>	$\frac{\text{Revenue}}{\text{capital employed}}$	$\frac{1558750}{800250}$	<b>1.9 times</b>	$\frac{1112500}{551250}$	<b>2.0 times</b>
<b>Inventory turnover</b>	$\frac{\text{Turnover}}{\text{Inventory}}$	$\frac{1558750}{111625}$	<b>13.9 times</b>	$\frac{1112500}{65000}$	<b>17.1 times</b>
<b>Trade receivable collection period (days)</b>	$\frac{\text{Average Receivable}}{\text{credit revenue}} \times 365$	$\frac{248250}{1558750} \times 365$	<b>58 days</b>	$\frac{136125}{1112500} \times 365$	<b>45 days</b>
<b>Trade payable payment (days)</b>	$\frac{\text{Average Payable}}{\text{Credit purchases or cost of sales}} \times 365$	$\frac{72125}{49375} \times 365$	<b>25 days</b>	$\frac{70000}{720000} \times 365$	<b>35 days</b>

<b>Liquidity</b>					
<b>Current ratio</b>	<u>Current asset</u> <u>Current liability</u>	<u>359875</u> <u>90875</u>	<b>3.96:1</b>	<u>222500</u> <u>70000</u>	<b>3.18:1</b>
<b>Quick ratio</b>	<u>Current asset-inventory</u> <u>Current liability</u>	<u>(359875-111625)</u> <u>90875</u>	<b>2.73:1</b>	<u>(222500-65000)</u> <u>70000</u>	<b>2.25:1</b>
<b>Solvency</b>					
<b>Capital gearing(%)</b>	$\frac{\text{Long term debt}}{\text{Ordinary shares + reserves} + \text{long term debt}} \times 100$	$\frac{325000}{(325000 + 475250)} \times 100$	<b>40.60%</b>	$\frac{212500}{(212500 + 338750)} \times 100$	<b>38.50%</b>
<b>Interest gearing interest cover</b>	<u>Profit before interest &amp; tax</u> <u>Interest expense</u>	<u>290000</u> <u>6226</u>	<b>4.7 times</b>	$\frac{230000}{30625} \times 100$	<b>7.5 times</b>
<b>Debt to equity ratio</b>	$\frac{\text{Debt}}{\text{Equity}} \times 100$	$\frac{325000}{475250} \times 100$	<b>68.38%</b>	$\frac{212500}{338750} \times 100$	<b>62.73%</b>

**b.**

**i. Arguments against development of separate IFRSs for SMEs and in favour of the use of same IFRSs by all Entities irrespective of their size.**

These are the reasons why SMEs should adopt the same IFRSs for the preparation of their financial statements:

- If SMEs use different accounting rules and requirements to prepare their financial statements, there will be a 'two-tier' system of accounting. This could make it difficult to compare results of larger and smaller companies, should the need arise.
- Confidence in the quality of financial reporting might be affected adversely.
- If SMEs prepared financial statements in accordance with their national GAAP, it will be impossible to compare financial statements of companies in different countries.
- If SMEs grew in size and eventually obtain a stock market quotation, they will have some difficulty in the transition from national GAAP to IFRSs.
- It has also been argued that full statutory accounts for SMEs would be in the public interest, and might help to protect other stakeholders in the company (such as suppliers, customers, lenders and employees).

**ii. Considerations in developing separate standards for SMEs**

There are several reasons why SMEs should not adopt the same IFRSs used by large entities for the preparation of their financial statements. These reasons constitute part of the considerations for developing a set of separate accounting standards for SMEs.

- IFRSs for SMEs will allow information to be presented that is relevant, reliable, comparable and understandable.
- The information presented will be suitable for the use of the managers and directors and any other interested parties of the SME.
- Many of the IFRS are complex and can be difficult for SMEs to apply.
- Not all the information required by IFRSs for disclosure is needed by the users of the SMEs financial statements.
- Many of the detailed disclosures within full IFRSs are not relevant and the accounting standards should be modified for this.

- Some IFRSs deal with subjects that are of little or no relevance to SMEs, such as accounting standards on consolidation, associates, joint ventures, deferred tax, construction contracts and standards that deal with complex issues of fair value measurement.
- The costs of complying with IFRSs can be high. Large companies are able to bear the cost, which might not be significant relative to their size. For SMEs, the cost is proportionately much higher, and it is doubtful whether the benefits of complying with IFRSs would justify the costs.
- There are not many users of financial statements of SMEs, and they use the financial statements for a smaller range of decisions, compared to investors in international capital markets. So, it would be a waste of time (as well as cost) to comply with IFRSs.

## MARKING GUIDE

	Marks	Marks
(a) Introductory discussion to determine relevant ratios	2	
Formula, calculation and interpretation of identified ratios:		
- Profitability and efficiency	4	
- Short term liquidity	4	
- Long term liquidity and solvency	<u>4</u>	14
(b) Arguments against IFRSs for SMEs	3	
Consideration for developing IFRSs for SMEs	<u>3</u>	<u>6</u>
<b>Total:</b>		<b><u>20</u></b>

## EXAMINER'S REPORT

Part (a) of the question tests candidates' knowledge of report writing on analysis and assessment of the financial performance using profitability and efficiency, short term liquidity and long term liquidity and solvency. Part (b) tests the basic arguments in favour and against developing separate standards for Small and Medium Enterprises (SMEs).

About 92% of the candidates attempted the question and their performance was above average.

Commonest pitfalls were that most candidates did not present their solution in form of a report as required by the question, some failed to interpret and advise the company on how to improve its financial situation using the ratios computed.

Candidates are advised to be familiar with the various categories of ratios , their interpretations and be able to advise the company based on the computed ratios for better performance in future.

### **Solution 5**

To: The Board of Directors

From: Chief Accountant

Date: November 12, 2019.

Subject: **Accounting for cost of decommissioning plant**

### **Introduction**

The standard IAS 37 - Provisions, Contingent Liabilities and Contingent Assets, requires recognising a provision when there is a liability – i.e. present obligation arising from past events. When an asset that requires removal after the end of its useful life and restoration of the site is built, then a present obligation arises at the time of its construction.

The obligation can result either from legislation (legal obligation) or from valid expectations of the third parties created by the company (constructive obligation).

Except for IAS 37, there's the standard IAS 16 Property, plant and equipment, that requires including the initial estimate of the costs of dismantling and removing the item and restoring the site into the cost of an asset.

It means that you do NOT recognise a decommissioning provision in statement of profit or loss, but in your assets as a part of an item of PPE.

Finally, *IFRIC 1 Changes in Existing Decommissioning, Restoration and Similar Liabilities made pronouncement* dealing with how an entity accounts for any subsequent changes to the amount of the liability that may arise from:

- i. A revision in the timing or amount of the estimated decommissioning, restoration and rehabilitation costs, or from
- ii. A change in the current market-based discount rate

(b) With the estimates of inflation and discount rate, there is the need to:

- Inflate the cash flows, because they are stated in the current prices; and
- Discount them to a present value

The estimated expenses for removal of waste should not be included in the initial provision.

The reason is that the obligation arises when the plant is in operation and therefore, there is need to recognise a relevant provision when a plant operates and produces waste in profit or loss.

The initial measurement of a provision for decommissioning the plant is shown in the following table:

Years	No of Years using 2011 as base year	Expenses ₦ C	Expenses inflated at 1.5% p.a. ₦ d	Discount factor at 2% p.a. E	Present Value ₦ f
A	b				
2014	3	1400	1463.95	0.9423	1379.48
2015	4	1500	1592.05	0.9238	1470.74
2016	5	1600	1723.65	0.9057	1561.11
2017	6	1550	1694.84	0.8879	1504.85
2018	7	1250	1387.31	0.8706	1207.79
<b>Total</b>		7300	7861.80		7123.97

*Notes:*

- *Expenses inflated at 1.5% p.a. (d) = c \* 1.015 to the power of (b)*
- *Discount factor at 2% (e) = 1/(1.02 to the power of (b))*
- *Present value (f) = (d)\*(e)*

The journal entry is:

- Debit Property, Plant and Equipment : ₦7,123.97
- Credit Provision for Decommissioning: ₦7,123.97

When there is no change in estimates in the subsequent reporting period, you need to *unwind the discount*. Therefore, journal entry in 2012 is:

- Debit Statement of Profit or Loss (SOPL) – with finance expenses: ₦142.48 (₦7,123.97\*2%)
- Credit Provision for decommissioning: ₦142.48

Discount rate changes to 1.2% and all the other estimates (cash flows) remain unchanged.

Recalculate the provision and account for its changes under IFRIC 1. Now in 2013, not in 2011 and therefore, the number of years for discounting change (not for inflating the costs, as you still inflate from the date of your report).

Based on the above assumptions, the new table will be:

Years	No of Years using 2013 as base year	Expenses ₦ C	Expenses inflated at 1.5% p.a. ₦ d	Discount factor at 1.2% p.a. e	Present Value ₦ F
A	b				
2014	1	1400	1421.00	0.9881	1404.09
2015	2	1500	1545.34	0.9764	1508.87
2016	3	1600	1673.09	0.9648	1614.20
2017	4	1550	1645.11	0.9534	1568.45
2018	5	1250	1346.61	0.9421	1268.64
<b>Total</b>		7300	7631.15		7364.25

The revised provision is ₦7,364.25 and different from the earlier recognised provision of ₦7,123.97

Before we recognize this change in line with IFRIC 1, we must not forget to unwind the discount for 2013, too:

- Debit SOPL – Finance charges: ₦145.33 (₦7,123.97 + ₦142.48) \*2%)
- Credit Provision for decommissioning: ₦145.33

Then, we can recognise the change in the provision:

- Debit PPE: ₦47.53 (₦7,364.25 – (₦7,123.97 + ₦142.48 + ₦145.33))
- Credit Provision for Decommissioning: ₦47.53

Finally, when a company starts decommissioning – i.e. removing the plant and restoring the site, then all expenses are charged against the provision:

Thank you.

Chief Accountant

## MARKING GUIDE

	Marks	Marks
(a) Accounting for expenditure in accordance with IAS 37	3	
Computation of the expenditure	<u>3</u>	6
(b) Computation of the provisions for decommissioning the plant		<u>14</u>
<b>Total:</b>		<u><b>20</b></u>

## EXAMINER'S REPORT

The question tests the provisions of IAS 37 on provisions, contingent liability and contingent asset on accounting for decommissioning expenses on oil rig licence. Incorporation of inflation rate to compute present value was also tested.

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

Commonest pitfalls were that most candidates only considered either inflation or discount factors but not both. Also, candidates demonstrated lack of knowledge of the effect of inflation and discount rates on the cash flows. They did not understand accounting treatment of decommissioning costs.

Candidates are advised to pay attention to all aspects of the syllabus and use ICAN Study Text for better performance in future examinations.

## QUESTION 6

### (a) Capital in financial reporting

In financial reporting, capital is a term for financial assets, such as funds held in deposit accounts and/or funds obtained from special financing sources. Capital can also be associated with capital assets of a company that require significant amounts of capital to finance or expand. Capital can be held through financial assets or raised from debt or equity financing. Businesses will typically focus on three types of business capital: working capital, equity capital, and debt capital. In general, business capital is a core part of running a business and financing capital intensive assets. Capital assets are assets of a business found on either the current or long-term portion of the Statements of Financial Position. Capital assets can include cash, cash equivalents, and marketable securities as well as manufacturing equipment, production facilities, and storage facilities. In financial reporting, capital could include, debt capital, equity capital, working capital and trading capital.

## **Debt capital**

A business can acquire capital through the assumption of debt. Debt capital can be obtained through private or government sources. Sources of capital can include friends, family, financial institutions, online lenders, credit card companies, insurance companies, and federal loan programmes. Individuals and companies must typically have an active credit history to obtain debt capital. Debt capital requires regular repayment with interest. Interest will vary depending on the type of capital obtained and the borrower's credit history.

## **Equity capital**

Equity capital can come in several forms. Typically distinctions are made between private equity, public equity, and real estate equity. Private and public equities will usually be structured in the form of shares. Public equity capital occurs when a company lists on a public market exchange and receives equity capital from shareholders. Private equity is not raised in the public markets. Private equity usually comes from selected investors or owners.

## **Working capital**

Working capital includes a company's most liquid capital assets available for fulfilling daily obligations. It is calculated on a regular basis through the following two assessments:

Current assets – current liabilities

Accounts receivable + inventory – accounts payable

Working capital measures a company's short-term liquidity more specifically, its ability to cover its debts, accounts payable, and other obligations that are due within one year.

## **Trading capital**

Trading capital may be held by individuals or firms who place a large number of trade on a daily basis. Trading capital refers to the amount of money allotted to buy and sell various securities. Investors may attempt to add to their trading capital by employing a variety of trade optimization methods. These methods attempt to make the best use of capital by determining the ideal percentage of funds to invest with each trade. In particular, to be successful, it is important for traders to determine the optimal cash reserves required for their investing strategies.

## **Capital in integrated reporting**

Integrated reporting is a new domain in accountancy that aims to enhance the scope of corporate reporting. Unlike financial reporting, integrated reporting attempts to report the value creation process of an organisation. It infers that both financial as well as non-financial factors are responsible for development of sustainable value addition for an organization. The framework of integrated reporting includes six capitals:

- Financial capital
- Human capital
- Manufactured capital
- Intellectual capital
- Social and relationship capital
- Natural capital

**Financial capital** – The pool of funds that is:

- available to an organisation for use in the production of goods or the provision of services,
- obtained through financing, such as debt, equity or grants, or generated through operations or investments.

**Human capital** – People’s competencies, capabilities and experiences, and their motivations to innovate, including their:

- alignment with and support for an organisation’s governance framework, risk management approach, and ethical values;
- ability to understand, develop and implement an organisation’s strategy;
- loyalties and motivations for improving processes, goods and services, including their ability to lead, manage and collaborate.

### **Manufactured capital**

Manufactured physical objects (as distinct from natural physical objects) that are available to an organization for use in the production of goods or the provision of services, including:

- buildings
- equipment
- infrastructure (such as roads, ports, bridges, and waste and water treatment plants)

Manufactured capital is often created by other organisations, but includes assets manufactured by the reporting organisation for sale or when they are retained for its own use.

## **Intellectual capital**

Organisational knowledge-based intangibles, including:

- intellectual property, such as patents, copyrights, software, rights and licences
- organisational capital such as tacit knowledge, systems, procedures and protocols.

## **Social and relationship capital**

The institutions and the relationships within and between communities, group of stakeholders and other networks, and the ability to share information to enhance individual and collective well-being. Social and relationship capital includes:

- shared norms, and common values and behaviours ,
- key stakeholder relationships, and the trust and willingness to engage that an organisation has developed and strives to build and protect with external stakeholders,
- intangibles associated with the brand and reputation that an organisation has developed, and
- an organisation's social licence to operate.

## **Natural capital**

All renewable and non-renewable environmental resources and processes that provide goods or services that support the past, current or future prosperity of an organisation. It includes:

- air, water, land, minerals and forests
- biodiversity and eco-system health

(b) **The Framework explains two concepts of capital**

## **Financial capital**

This is synonymous with the net assets or equity of the entity. Under the financial maintenance concept, the profit is earned only when the amount of net assets at the end of the period is greater than the amount of net assets in the beginning, after excluding contributions from and distributions to equity holders. The financial capital maintenance can be measured either in:

- Nominal monetary units, or
- Units of constant purchasing power.

## **Physical capital**

This is the productive capacity of the entity based on, for example, units of output per day. Here, the profit is earned if physical productive capacity increases during the period, after excluding the movements with equity holders.

An integrated report is a concise communication about how an organisation's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value over the short, medium and long term.

All organisations depend on various forms of capital for their success, such as financial, manufactured, intellectual, human, social and relationship, and natural, that are increased, decreased or transformed through the activities and outputs of the organisation. For example, an organisation's financial capital is increased when it makes a profit, and the quality of its human capital is improved when employees become better trained.

The overall stock of capitals is not fixed over time. There is a constant flow between and within the capitals as they are increased, decreased or transformed. For example, when an organisation improves its human capital through employee training, the related training costs reduce its financial capital. The effect is that financial capital has been transformed into human capital.

(C)

The following guiding principles underpin the preparation and presentation of an integrated report, informing the content of the report and how information is presented:

- i. Strategic focus and future orientation
- ii. Connectivity of information
- iii. Stakeholder relationships
- iv. Materiality
- v. Conciseness
- vi. Reliability and completeness

### **Strategic focus and future orientation**

Integrated report should provide insight into the organization's strategy, and how it relates to the organization's ability to create value in the short, medium and long term and to its use of and effects on the capitals.

## **Connectivity of information**

An integrated report should show a holistic picture of the combination, interrelatedness and dependencies between the factors that affect the organisation's ability to create value over time.

## **Stakeholder relationships**

An integrated report should provide insight into the nature and quality of the organisation's relationships with its key stakeholders, including how and to what extent the organisation understands, takes into account and responds to their legitimate needs and interests.

## **Materiality**

An integrated report should disclose information about matters that substantively affect the organisation's ability to create value over the short, medium and long terms.

## **Conciseness**

An integrated report should be concise. An integrated report includes sufficient context to understand the organisation's strategy, governance, performance and prospects without being burdened with more than necessary information.

## **Reliability and completeness**

An integrated report should include all material matters, both positive and negative, in a balanced way and without material error.

These guiding principles are applied individually and collectively for the purpose of preparing and presenting an integrated report; accordingly, judgement is needed in applying them, particularly when there is an apparent tension between them (e.g., between conciseness and completeness).

## **MARKING GUIDE**

	<b>Marks</b>	<b>Marks</b>
(a) Definition and identification of capital in:		
- Financial reporting	4	
- Integrated reporting	<u>4</u>	8

(b)	Concept of capital maintenance under:		
	- Conceptual framework	3	
	- Integrated reporting	<u>3</u>	6
(c)	Guiding principles of the IIRC's framework		<u>6</u>
	<b>Total:</b>		<b><u>20</u></b>

## EXAMINER'S REPORT

The question tests the concept of capital in financial reporting, integrated reporting, capital maintenance and the guiding principles of the International Integrated Reporting Council (IIRC) framework on different types of capital.

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

Commonest pitfall was that the candidates demonstrated lack of understanding of the concept of capital in financial reporting and integrated reporting. They could not differentiate different types of capital and most of them completely misinterpreted the requirements of the question.

Candidates are advised to acquaint themselves with all new and emerging concepts in corporate reporting. They should use ICAN Study Text to prepare for better performance in future examinations.



Ease of paying taxes ranking (out of 190 economies)	126	159	48
Double taxation agreement with other African countries	2	1	6
Companies income tax rates	30%	30%	28%
Tertiary education tax rate	0%	2%	0%
Information technology tax	0%	1%	0%
Withholding tax on dividend	10%	10%	8%
Withholding tax on interest	15%	10%	10%
Thin capitalisation	3:1	Nil	2:5
Exchange control measures	Not applicable	Restrictions apply	Not applicable

**Required:**

- a.
- i. Discuss the taxation of business and investment income in Nigeria. (4 marks)
  - ii. Calculate the effective companies income tax rate in the respective countries, assuming that all the countries grant full relief for local losses but only **Nigeria** and **Kenya** disallow deduction for foreign losses incurred by a holding company such as foreign branch losses. (10 marks)
  - iii. Advise the management of AIG where to locate the group's holding company with reasons. (6 marks)
  - iv. Using information available in this scenario, discuss the possible ways in which the Federal Government of Nigeria can improve Nigeria's competitiveness for investment. (8 marks)
- b. Explain the following terms:
- i. Tax haven (2 marks)
  - ii. Tax inspectors without borders (2 marks)
  - iii. Cooperative compliance (2 marks)
  - iv. Common reporting standards (2 marks)
  - v. Mutual agreement procedures (2 marks)
  - vi. Country by country reporting (12 Marks)
- (Total 40 Marks)**

**SECTION B: YOU ARE REQUIRED TO ANSWER ANY THREE OUT OF FIVE QUESTIONS IN THIS SECTION (60 MARKS)**

**QUESTION 2**

Olab-jay Nigeria Limited is a manufacturer of pesticides and is based in Mowe, Ogun State. The company has been operating in Nigeria since 2001. One of the major highlights of the summit of heads of government of the regional body, Economic Community of West African States (ECOWAS) held in Abuja, Nigeria, in 2014, was the encouragement of trade among member states. With the expected introduction of a single currency (Eco) for the sub-region in 2020, it is hoped that the problem of currency exchange risk will be reduced considerably.

It was as a result of the future prospects in the West African market and general acceptability of the company's product (through numerous sales representatives from Ghana), that made the management of Olab-jay Nigeria Limited to extend its operations to a commonwealth country, Ghana on January 1, 2015. The business is located in Takoradi, Ghana.

The results of the business operations in Nigeria and Ghana for the year ended December 31, 2018, are as follows:

	Nigeria ₦	Ghana ₦	Total ₦
Revenue	32,850,000	19,840,000	52,690,000
Other income	<u>1,810,000</u>	<u>850,000</u>	<u>2,660,000</u>
	34,660,000	20,690,000	55,350,000
Less: Cost of sales	<u>(12,330,000)</u>	<u>(6,220,000)</u>	<u>(18,550,000)</u>
Gross profit	22,330,000	14,470,000	36,800,000
Less: other expenses:			
Salaries	4,950,000	2,050,000	7,000,000
Bad debts	1,600,000	500,000	2,100,000
Entertainment	850,000	120,000	970,000
Legal expenses	1,270,000	-	1,270,000
Traveling expenses	1,250,000	730,000	1,980,000
Repairs and renewals	1,540,000	900,000	2,440,000
Bank charges	425,000	110,000	535,000
Audit fees	1,000,000	400,000	1,400,000
Depreciation of assets	1,820,000	720,000	2,540,000
Foreign exchange loss provision	-	1,410,000	1,410,000
Miscellaneous expenses	900,000	200,000	1,100,000
Foreign taxes paid	-	<u>1,830,000</u>	<u>1,830,000</u>
Net profit	<u>6,725,000</u>	<u>5,500,000</u>	<u>12,225,000</u>

**Additional information:**

- (i) For the Nigerian operation, bad debts include ₦900,000 general provision.
- (ii) Legal expenses consist of:

	₦
Tax dispute	400,000
Defence of title to land	320,000
Debt recovery	200,000
Others (allowable)	<u>350,000</u>
	<u>1,270,000</u>

- (iii) The foreign exchange loss provision arose as a result of fluctuation in cash balance through conversion from Ghanaian Cedis to Nigerian Naira by a commercial bank in Ghana.
- (iv) Capital allowances for the year as agreed with the Federal Inland Revenue Service are as follows:

	₦
Nigeria	1,600,000
Ghana	520,000

The Chairman of the company was not happy with the assessment by the officials from the Federal Inland Revenue Service (FIRS) on the Ghanaian operation. He based his opinion on the fact that the Ghanaian operation is off-shore and relevant taxes had been paid in Ghana. The FIRS officials disagreed with the Chairman and asked the company to file for double taxation relief since Nigeria has a double taxation agreement with Ghana.

At an emergency meeting of the company's board held on June 12, 2019, it was decided that a professional accounting firm should be engaged to resolve this contentious issue.

You have been appointed as the tax consultant to the company.

**Required:**

- a. Provide professional advice on the status and tax implications of the company's operation in Ghana. (4 Marks)
- b. Draft a report showing the tax liability of the company for the relevant assessment year bearing in mind the reliefs available to the company under the Companies Income Tax Act Cap C21 LFN 2004 (as amended).

(16 Marks)

**(Total 20 Marks)**

### QUESTION 3

Ever Smart Nigeria Limited in Sakwato State, has been in business for over twelve years as a manufacturer of polythene and plastic products. The company usually prepares its accounts to December 31, each year.

On April 10, 2019, the company filed its annual self-assessment returns and tax computations with the Sakwato Integrated Tax Office of the Federal Inland Revenue Service. The review made by the tax inspector indicated a case of filing of incomplete returns. The management of Ever Smart Nigeria Limited was contacted through a letter with reference number ITO/SK/19/0022 dated April 27, 2019, to provide all the relevant documents and offer explanation in respect of the gaps noticed in the returns filed with the Revenue Service.

The company, however, failed to respond to the request made by the Revenue Service. This prompted the head of the tax audit unit to call for the conduct of field audit in respect of the company from June 25 to 29, 2019. A letter (ITO/SK/19/0035, dated June 12, 2019) to that effect was sent to and received by the company's General Manager on June 13, 2019. The cooperation of the management and staff of the company was sought for the smooth audit exercise to take place.

The findings of the field audit indicated a suspected case of material understatement of income and claims of underserved input value added tax refund, hence the government was short-changed to the tune of ₦15 million. This audit finding was discussed with the management of the company with the hope that additional documents could still be provided for possible review. However, the comment made by the company's General Manager was "this is how we have been doing it at least in the last five years". This raised issues of concern to the tax auditors, hence, in their final report submitted to the Head of the Tax Audit Unit, a tax investigation of the activities of Ever Smart Nigeria Limited was recommended.

The tax audit unit has been directed by the Chairman of the Federal Inland Revenue Service to conduct tax investigation on operations of Ever Smart Nigeria Limited. A letter with reference number ITO/SK/19/0052 dated August 1, 2019, informing the company on the proposed visit to the company by "team of investigators" from the tax office was delivered and received by the Managing Director on August 2, 2019. The date of the visit has been fixed for the period of August 12 to 22, 2019.

As the newly appointed tax consultant to the company, the Managing Director has provided you with all the letters received from the tax office and documents that will be of assistance to you in discharging your duties. In a lighter mood, the Managing Director, who is not versatile in Nigerian tax system when making his final remarks said, "after all, the tax officials had conducted audit, why investigation now? They are just confusing us with their grammar. At the end of the day, they cannot close down our company, we will only be required to pay fine."

**Required:**

Prepare a report to the company explaining the following:

- a. Objectives of tax audit (5 Marks)
- b. Tax investigation as distinct from tax audit (4½ Marks)
- c. Stages of tax investigation (4½ Marks)
- d. Back duty assessment (3 Marks)
- e. Power of search and seizure (3 Marks)

**(Total 20 Marks)**

**QUESTION 4**

Mr. Femi Uche left Nigeria for Japan in 1998 to acquire academic degree in textile technology. After completing the programme in 2002, he was employed as Textile Officer by one of the leading garment companies in Japan with substantive interests in African and Asian markets. His excellent performance within seven years of his engagement, made the company to promote him to the post of General Manager in the head office, Tokyo.

He temporarily visits Nigeria with no intention to establish permanent residence at least in the next few years. In one of his visits to Nigeria in January 2010, he was convinced by his mother to establish a manufacturing company in his state. On his return to Japan in the following month, he disposed of one of his landed properties (not dwelling house) for 120,000,000 Japanese Yen. The cost of acquisition of the property in 2007 was 85,000,000 Japanese Yen and incidental expenses incurred for the purpose of disposal was 3,250,000 Japanese Yen. The net amount received from the transaction was paid into his deposit money bank's domiciliary account in Nigeria. The exchange rate was ₦1 to 0.7 Japanese Yen in 2010.

With express permission of his employer, Mr. Uche incorporated a company, Uche Garment Limited, Onitsha, Anambra State, in July 2010. The board of the company comprises his wife as the Managing Director/Chairman and five of his family members and a childhood friend as directors.

For the first five years of operation, the revenue of the company improved tremendously. The huge profit from the operations attracted new investors into the product line market. Importation of cheap textile materials into the country also made the business less attractive and profit was dwindling.

The company's board of directors in one of its meetings in December 2016, took a decision to close down the factory in Onitsha and move to a more populous state, Lagos State, with population size of over 20 million.

In April 2017, the premises of Onitsha factory which cost ₦55,000,000 in 2010, was sold for ₦90,000,000. Incidental costs of disposal amounted to ₦2,500,000. The management in June 2017 spent ₦75,000,000 for the acquisition of a new factory

in Ikeja, Lagos State, while ₦15,000,000 was kept in the bank account for future investment opportunities. Also, in May 2017, the company disposed of part of the plant and equipment which was acquired in 2015 at an all-inclusive cost of ₦19,200,000 for ₦16,000,000. The remaining equipment was valued at ₦7,100,000. The incidental disposal expenses amounted to ₦250,000.

Business operations officially commenced at Ikeja premises on June 1, 2017, and the company still maintains its financial year end of December 31.

The audit review made by the tax inspectors of the Integrated Tax Office in April 2019, revealed that the company had paid companies income tax and tertiary education tax for 2018 assessment year. However, both Mr. Uche and the company were yet to respond to the assessment demand notice in respect of disposal of properties by Mr. Uche in Japan and the company's sale of the factory in Onitsha. The company has been given the final demand notice and tax due expected to be paid within 30 days.

Uche Garment Limited has just appointed you as the company's tax consultants.

**Required:**

You are to draft a report advising management on:

- a. Capital gains (if any) arising from the transactions. (13 Marks)
- b. Capital gains tax payable. (5 Marks)
- c. How to reduce the capital gains tax payable. (2 Marks)

**(Total 20 Marks)**

**QUESTION 5**

At a recent quarterly round-table discussion programme organised by a reputable Nigerian manufacturers' association in Kaduna, the issue of how business enterprises could cope under the prevailing difficult operating and economic climate in both domestic and foreign markets was discussed. One of the lead discussants, in his submission, encouraged firms especially in related industry or line of business to consider the option of merger or acquisition. His suggestion was premised upon the synergy from business operations and economies of scale that would result from it.

MTU Agro-all Limited, a private limited liability company, based in the Nigerian Middle Belt region, with interests in cultivation and sales of fruit crops, such as mango, pineapple and cashew was represented at the programme by its Managing Director and Chief Executive, Mallam Tobi Usman. In his contribution, Mallam Usman, whose company was being ravaged by poor agricultural yield and low revenue in the last three years, however, accepted the submission of the lead discussant, but with reservation. His major area of concern was the tax implications

to companies that are involved in merger or acquisition. The other participants who spoke on the issue were unable to convince him beyond reasonable doubt.

Success Foods Limited is a leading juice-making company located in a major city in the South Western part of the country. The company was having an issue with sourcing for its raw materials (edible fruits). The director of the company, Mr. Taof Togun, who also attended the event during the plenary session, had preliminary discussion with Mallam Usman on the possibility of merger or acquisition of their business entities. Both senior officials promised to discuss the possibility of merging the two companies with their respective management and board for consideration and approval.

An emergency meeting of the Board of Directors of MTU Agro-all Limited has been scheduled for the next three weeks, purposely to discuss and take a position on the possibility of being merged with or acquired by Success Foods Limited under any of the following scenarios:

- (i) Complete acquisition by Success Foods Limited, while both MTU Agro-all Limited and Success Foods Limited would cease operations and a new company would arise from the process;
- (ii) To merge with Success Foods Limited, the new company will also inherit all the assets and operations of the merged companies. The company's new name will be Success Foods Limited; and
- (iii) As a result of merger with Success Foods Limited, MTU Agro-all Limited will cease operations.

You have been appointed as the tax consultants for MTU Agro-all Limited and your mandate is to offer professional advice that will assist management in selecting the best option that will be beneficial to its shareholders.

**Required:**

You are to draft a report to the Managing Director and Chief Executive of MTU Agro-all Limited, explaining the following:

- a. The differences between merger and acquisition, giving suitable examples. (4 Marks)
- b. The tax implications of two companies in the same industry merging with each other, where:
  - i. An entirely new company emerges from the process. (4 Marks)
  - ii. One of the merging companies survives with its old name or new name. (7 Marks)
  - iii. Where any of the merged companies ceased business operations. (2 Marks)

- c. The possible tax effect on gains accruing to the shareholders of MTU Agro-all Limited for surrendering their shares in exchange for cash and/or equity shares from the new company that will emerge from the merger.
- (3 Marks)  
**(Total 20 Marks)**

**QUESTION 6**

- a. The Nigerian National Petroleum Corporation (NNPC) was established by Act Number 33 of April 1, 1977, as the sole authority over the petroleum activities in Nigeria. In order to discharge this onerous task effectively, the organisation has some subsidiaries, among which is, Nigerian Petroleum Development Company (NPDC).

Your Managing Director, who is not versatile in Nigerian tax issues, has sent a memo to you, as the Assistant Manager (Tax matters), to educate him on the activities of the NPDC in the oil and gas sectors.

**Required:**

Draft a memo in response to your Managing Director’s enquiry by specifically stating **FOUR** areas the NPDC is engaged in the Nigerian oil and gas sectors.

(4 Marks)

- b. Colmas Petroleum Nigeria Limited is an oil exploration company located in the Niger Delta region of Nigeria. The company has been operating for over fifteen years. The following details have been extracted from its operations for the year ended December 31, 2018:

• Sale of crude oil	1,300,000 barrels
	₦
• Sale of natural gas (gross)	720,000,000
• Incidental income from petroleum operations	155,250,000
• Expenditure incurred:	
Production and exploration cost	5,180,500,000
Intangible drilling cost	655,300,000
Salaries and wages	2,320,250,000
Administrative expenses	1,540,400,000
Non-productive rentals	121,740,000
Royalties on export sales	910,200,000
Royalties on local sales	8,260,000
Depreciation	365,500,000

Cost of five appraisal wells	272,500,000
Allowance for doubtful debts – General	322,500,000
- Specific	115,300,000
Interest paid on loans	64,100,000
Repairs and maintenance	298,000,000

- Qualifying capital expenditure:  
Pipeline and storage tanks acquired on September 12, 2018, for ₱170,500,000 are located in the continental shelf of 150 metres water depth.
- Building constructed at a cost of ₱96,000,000 on April 10, 2016, is located onshore.

**The following additional information is provided on the financial statements:**

- Crude oil sales consists of 80% exported at posted price of US \$70 per barrel, while the remainder was sold locally at ₱520 per barrel;
- The average rate of exchange was ₱305 to a US \$;
- The sale of natural gas, with load factor of 52<sup>o</sup> came from a contract entered with Agbat Limited. The fourth schedule of the Petroleum Profits Tax Act Cap P13 LFN 2004 (as amended) indicates that:

Load factor	G-factor (%)
50 <sup>o</sup>	16.9
60 <sup>o</sup>	15.5
70 <sup>o</sup>	14.3
80 <sup>o</sup>	13.6

- Included in incidental income from petroleum operations was ₱110,500,000 derived from ocean-going transportation business during the course of the year. The related expenses incurred of ₱52,250,000, was included in administrative expenses;
- Custom duties on storage tank of ₱9,600,000 was included in production and exploration cost;
- Included in interest paid was ₱17,000,000 which was paid to a subsidiary of the company. The loan was obtained at prevailing market rate; and
- Capital allowances agreed with the Federal Inland Revenue Service was ₱220,300,000.

As the newly appointed Assistant Manager (Tax matters) of the company, you have been assigned by the Manager (Tax matters), the task of producing statement of tax payable by the company.

**Required:**

In line with provisions of Petroleum Profits Tax Act Cap P13 LFN 2004 (as amended) compute the following for the relevant assessment year:

- |       |                   |                         |
|-------|-------------------|-------------------------|
| (i)   | Assessable profit | (9 Marks)               |
| (ii)  | Chargeable profit | (3 Marks)               |
| (iii) | Assessable tax    | (1 Mark)                |
| (iv)  | Chargeable tax    | (1 Mark)                |
| (v)   | Total tax payable | (2 Marks)               |
|       |                   | <b>(Total 20 Marks)</b> |

## 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	Nil
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

10%

### 3. RATES OF PERSONAL INCOME TAX

Graduates tax rates with 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	30%
5.	TERTIARY EDUCATION TAX	(2% of assessable profit)
6.	CAPITAL GAINS TAX	10%
7.	VALUE ADDED TAX	5%

## SOLUTION 1

### a(i) Taxation of business and investment income in Nigeria

#### Taxation of business incomes

Profits or gains of business undertaken, both incorporated and unincorporated entities in Nigeria, are normally assessed to tax on preceding year basis (PYB), provided the business is an on-going business and have a normal basis period. Special rules such as commencement, change of accounting date and cessation rule shall be applicable where the taxpayer has abnormal basis periods.

Incorporated entities are assessed to tax under the provisions of Companies Income Tax Act Cap C21 LFN 2004 (as amended) at the rate of 30% (or 20% in case of a small business) of total profit on normal basis or other anti-avoidance basis such as minimum tax, dividend and turnover basis. Company taxes are administered and collected by the Federal Inland Revenue Service.

Unincorporated entities such as individuals, partnerships, trusts, etc are normally assessed to tax in accordance with the provisions of the Personal Income Tax Act Cap P8 LFN 2004 (as amended). Tax payable by unincorporated entity is administered and collected by the Board of Internal Revenue Service of the State where the businesses are located and carried on.

#### Taxation of investment incomes

Investment incomes include dividends, interests, rents and royalties. Investment incomes are subject to withholding taxes. Withholding taxes on certain investment incomes constitute a final tax on such income, for example, withholding tax on dividend is a final tax, as such net dividend received is termed franked investment income (FII). Investment incomes are also assessed to tax on preceding year basis.

(ii)

#### AFRICONNECT INTERNATIONAL GROUP(AIG) Computation of income tax liability for 2019 tax year

	KENYA US \$	NIGERIA US \$	SOUTH AFRICA US \$
Adjusted/assessable profit	<u>120,000,000</u>	<u>120,000,000</u>	<u>120,000,000</u>
Loss relief			
Unrelieved loss b/f:			
Local loss	18,000,000	18,000,000	18,000,000
Foreign loss	<u>22,000,000</u>	<u>22,000,000</u>	<u>22,000,000</u>
	<u>40,000,000</u>	<u>40,000,000</u>	<u>40,000,000</u>

Loss relieved	<u>(18,000,000)</u>	<u>(18,000,000)</u>	<u>(40,000,000)</u>
Total profit	<u>102,000,000</u>	<u>102,000,000</u>	<u>80,000,000</u>
Companies income tax rate	<u>30%</u>	<u>30%</u>	<u>28%</u>
Companies income tax	<u>30,600,000</u>	<u>30,600,000</u>	<u>22,400,000</u>
TET (2% x assessable profit in Nigeria)	-	<u>2,400,000</u>	-
Total liability	<u>30,600,000</u>	<u>33,000,000</u>	<u>22,400,000</u>
Effective tax rate (CIT/ ass profit) X 100%	<u>25.5%</u>	<u>27.5%</u>	<u>18.7%</u>

**(iii) Africonnect international group (AIG) should locate the group holding company in South Africa for the following reasons:**

- South Africa ranks 48th among 190 economies in ease of paying taxes. This suggests that tax systems in South Africa would be business friendly. Taxpayers enjoy tax incentives, minimising tax evasion and encouraging taxpayer's compliance with the tax laws.
- Availability of foreign loss relief in case of foreign losses incurred by a holding company such as foreign branch losses which is not available in the other countries:
- South Africa has the lowest CIT rate of 28% compared to 30% applicable in Nigeria and Kenya;
- Benefit of double taxation agreement (DTA). The double taxation relief that will be granted to a company where there is DTA is usually higher than where there is no DTA. This suggests that companies resident in South Africa, compared to other countries, will enjoy the benefit of higher double taxation relief because it has DTA with 6 African countries;
- Investors in businesses located in South Africa enjoy the lowest withholding tax (WHT) on dividend; and
- No payment of tertiary education tax and information technology (IT) levy in South Africa like Kenya.

**(iv) How Federal Government of Nigeria can improve Nigeria's competitiveness for investment include:**

- Embracing tax system that will reduce tax evasion, grant tax reliefs and incentives to encourage taxpayer's willingness to pay taxes. This will contribute to the ease of paying taxes in Nigeria and improve Nigeria's ranking among the world 190 economies;
- Nigerian government should endeavour to sign more international treaties and DTA with other African countries;
- Nigerian government should eliminate payment of tertiary education tax and IT levy like other countries where such taxes are not applicable;
- Nigeria, like South Africa, should allow deduction of foreign losses incurred by holding company through their foreign branches; and
- Nigeria should, also encourage thin capitalization.

**b (i) Tax haven**

Tax haven is a state, country or territory where certain taxes are levied at a low rate or not at all which taxpayers consider attractive to establish or relocate business operations. Companies and individuals carry out certain economic activities through tax havens as a means of tax planning. Companies generally tend to move from higher tax countries to countries with favourable tax regimes.

**(ii) Tax inspectors without borders**

Tax inspectors without borders is tax audit process whereby tax audit experts work alongside local officials of developing countries' tax authorities on current direct and indirect tax audits and audit related issues concerning international tax matters and sharing general audit practices for specific cases.

**(iii) Cooperative compliance**

Cooperative compliance is a tax planning strategy that is in a form of relationship between the revenue authority and a taxpayer with the objective of agreeing actions that ensure that taxpayer is tax compliant in an uncertain and controversial tax situation. The aim of cooperative compliance is to ensure that a business is fully tax compliant through a preventive dialogue with tax authorities.

**(iv) Common reporting standards**

These are regulations that provide guidelines on how reporting financial institutions should identify reportable accounts, perform due diligence on relevant financial information to be disclosed, outline compliance obligations, mode of compliance and specify penalties for non-compliance.

**(v) Mutual agreement procedures (MAP)**

MAP is a dispute resolution mechanism, established in tax treaties enforceable in Nigeria, through which a Nigerian taxpayer may request a competent authority, for example, the Minister of Finance or his authorised representative in Nigeria to engage the competent authorities of other countries with whom Nigeria has tax treaties to seek mutual resolution of tax issues affecting such taxpayer. MAP is triggered by taxpayers who is of the opinion that actions of either or both of the tax authorities may result in tax implications that are not foreseen in the treaty.

**(vi) Country by country reporting (CbCR)**

Country by Country Reporting is a report that provides certain financial information about each member of a multinational enterprise (MNE) group including permanent establishment and foreign branches. The information to be included in the CbCR includes revenues from related parties, profit or loss before income tax, income tax paid on cash basis, income tax accrued, stated capital, number of employees, retained earnings and tangible assets of each entity within the group.

### **Examiner's Report**

The question tests candidates knowledge of principle of taxation of business and investment, income and comparative analysis of ease of doing business in different tax jurisdiction and explanations of tax terminologies.

Being a compulsory question, all the candidates attempted the question and performance was below average. The major pitfall was the inability of candidates to use the overwhelming facts given in the question to advise on location of a group holding companies in a tax friendly jurisdiction and ways of improving Nigeria's competitiveness for investment.

Candidates are advised to make use of the ICAN study texts and other relevant texts on this subject.

### **Marking Guide**

	Marks	Marks
a(i) Taxation of business & investment income in Nigeria		
- Assessment on preceding year basis		1
- Rate of 30 % (or 20 % for small company) of total profit	½	
- Minimum tax dividend & turnover basis	½	
- Company taxes collected by FIRS	½	

- Unincorporated entities assessed to PIT	$\frac{1}{2}$	
		<b>2</b>
- Investment incomes subject to withholding tax	$\frac{1}{2}$	
- Preceding year basis	<u><math>\frac{1}{2}</math></u>	
		<b><u>1</u></b>
		<b>4</b>
<b>(ii) Effective income tax rate:</b>		
Assessable profit $\frac{1}{4}$ each per country	$\frac{3}{4}$	
Local loss $\frac{1}{4}$ mark per country ( $\frac{1}{4} \times 3$ )	$\frac{3}{4}$	
Foreign loss $\frac{1}{4}$ mark per country ( $\frac{1}{4} \times 3$ )	$\frac{3}{4}$	
Total losses $\frac{1}{4}$ mark per country ( $\frac{1}{4} \times 3$ )	$\frac{3}{4}$	
Loss-relieved $\frac{1}{4}$ mark per country ( $\frac{1}{4} \times 3$ )	$\frac{3}{4}$	
Total profit $\frac{1}{4}$ mark per country ( $\frac{1}{4} \times 3$ )	$\frac{3}{4}$	
Companies income tax $\frac{1}{2}$ mark per country ( $\frac{1}{2} \times 3$ )	$1\frac{1}{2}$	
Companies income tax rate $\frac{1}{4}$ mark per country ( $\frac{1}{4} \times 3$ )	$\frac{3}{4}$	
Tertiary education tax correct answer	<b>1</b>	
Total liability $\frac{1}{2}$ mark per country ( $\frac{1}{2} \times 3$ )	$1\frac{1}{2}$	
Effective tax rate $\frac{1}{4}$ mark per country ( $\frac{1}{4} \times 3$ )	<u><math>\frac{3}{4}</math></u>	
		<b>10</b>
<b>Location of the group holding company:</b>		
(iii) $1\frac{1}{2}$ marks each for any 4 points		<b>6</b>
(iv) 2 marks each for any 4 points		<b>8</b>
b(i) Tax haven (2 marks for correct point)	<u>2</u>	
(ii) Tax inspectors without borders (2 marks for correct point)	<u>2</u>	
(iii) Cooperative compliance (2 marks for correct point)	<u>2</u>	
(iv) Common reporting standards (2 marks for correct point)	<u>2</u>	
(v) Mutual agreement procedures (2 marks for correct point)	<u>2</u>	
(vi) Country by country reporting (2 marks for correct point)	<u>2</u>	
		<b><u>12</u></b>
		<b><u>40</u></b>

## **SOLUTION 2**

**(a) Status and tax implication of the company's business operation in Ghana are as follows:**

- (i) Olab-jay Nigeria Limited having been incorporated in Nigeria is a resident Nigerian company. The company's operation in Ghana represents a foreign branch of a Nigerian company.
- (ii) Following the provisions of the Companies Income Tax Act Cap C21 LFN 2004 (as amended), any profit made by the company from any of its operations outside the shores of Nigeria brought in to the country will be available for tax assessment.
- (iii) Since the business operation in Ghana has suffered tax of ₦1,830,000 from profit of ₦5,500,000, if the whole profit is now assessed to tax in Nigeria, the issue of double taxation will arise.
- (iv) The above issue is addressed if there is a double taxation agreement in place between Nigeria and the country where the off-shore business is located, then there will be double taxation relief on the profit brought in to Nigeria. Nigeria and Ghana are both commonwealth countries and there exists double taxation agreement between the two countries hence, the profit made by Olab-jay Nigeria Limited in Ghana will be entitled to double taxation relief; and
- (v) The double taxation relief is arrived at by the following provisions of the Act:
  - If the commonwealth rate does not exceed one-half of the rate of tax as specified in CITA 2004 (as amended), the rate at which relief is to be given shall be the commonwealth rate of tax; and
  - In any other case, the rate at which relief is to be given shall be half of the rate of tax under this Act.

(b)

**JKL & CO (CHARTERED ACCOUNTANTS)**

Date: .....

The Managing Director  
Olab-jay Nigeria Limited  
Mowe  
Ogun State

Dear Sir,

**Re: Companies income tax on Ghanaian operations**

In line with the terms of our engagement as the company's tax consultant, this is to inform you that the assignment has been concluded. Our comments on the income tax payable on your company's business operations are as follows:

- (i) the total profit from the Nigerian operations during the 2018 financial year was ₦8,565,000 and that of Ghanaian operations was ₦8,940,000. The grand total was ₦17,505,000 (see Appendix I);
- (ii) The gross companies income tax liability for the two business operations was ₦5,251,500 (see Appendix I), while tertiary education tax was ₦392,500 (see Appendix II);
- (iii) Double taxation relief to be granted by the Federal Inland Revenue Service is ₦1,341,000 (see Appendix III); and
- (iv) The net tax liability was ₦4,303,000 (see Appendix II).

We hereby suggest that the company should respond positively to the demand notice from the FIRS and efforts should be made in effecting the payment of tax due.

If you still need any further clarification on this matter, please do not hesitate to contact us.

Yours faithfully,

For: JKL & Co.

Akim Salam:

Senior Manager (Tax Matters)

### APPENDIX I: Computation of total profits for the year ended December 31, 2018

	Nigeria	Ghana	Total
	₦	₦	₦
Net profit as per accounts	6,725,000	5,500,000	12,225,000
Add back: disallowables			
Bad debts (general prov.)	900,000	-	900,000
Legal expenses:			
Tax disputes	400,000	-	400,000
Defence of title to land	320,000	-	320,000
Foreign exchange loss prov.	-	1,410,000	1,410,000
Depreciation	1,820,000	720,000	2,540,000
Foreign taxes paid	-	<u>1,830,000</u>	<u>1,830,000</u>
Adjusted profit	10,165,000	9,460,000	19,625,000
Less: Capital allowances	<u>(1,600,000)</u>	<u>(520,000)</u>	<u>(2,120,000)</u>
Total profit	<u>8,565,000</u>	<u>8,940,000</u>	<u>17,505,000</u>

### APPENDIX II: Computation of tax liability for the assessment year 2019

	₦
Total profit (as in Appendix I)	<u>17,505,000</u>
Companies income tax @ 30%	5,251,500
Less: Double taxation relief (Appendix III)	<u>1,341,000</u>
Net Companies income tax due	<u>3,910,500</u>
Tertiary education tax:	
2% of ₦19,625,000	<u>392,500</u>
	<u>4,303,000</u>

### APPENDIX III: Computation of double taxation relief

$$\begin{aligned}\text{Commonwealth rate of tax (CR)} &= \frac{\text{Total tax paid}}{\text{Total profit}} \\ &= \frac{1,830,000}{8,940,000} \times 100 \\ &= \underline{20.47\%}\end{aligned}$$

The Nigerian rate of tax (NR) = 30%

$\frac{1}{2}$ Nigerian rate of tax =  $30\% \times \frac{1}{2} = \underline{15\%}$

Since, Olab-jay Nigeria Limited is a resident company, the CR will be compared with  $\frac{1}{2}$ NR.

In this case CR is greater than  $\frac{1}{2}$ NR, hence the relief will be  $\frac{1}{2}$ NR.

Double taxation relief = 15% of foreign profit (N8,940,000) = N1,341,000.

### Examiner's Report

The question tests candidates knowledge of across the border transactions vis-a-vis double taxation reliefs agreement.

Few candidates attempted the question. Performance was above average. Major pitfall amongst those that attempted the question was inability of using the data available to arrive at the total profits of the operations in both Nigeria and Ghana, and computation of double taxation reliefs.

Candidates are advised to make use of the Institute's relevant texts on this subject.

### Marking Guide

	Marks	Marks
1 mark each, maximum of 4 points		
a. Status and tax implication of company's business operation in Ghana		4
b. Computation of total profits:		
Heading of the report	$\frac{1}{2}$	
Opening statement of the report	$\frac{1}{2}$	
Body of the report (1 $\frac{1}{2}$ marks for each item x 4)	6	
Closing statement of the report	$\frac{1}{4}$	

### Workings:

#### Appendix 1

#### Computation of Total Profits:

Net profit as per account ( $\frac{1}{4}$ mark for each correct answer)	$\frac{3}{4}$
Bad debts ( $\frac{1}{4}$ mark for each correct answer)	$\frac{1}{2}$

Tax disputes ( $\frac{1}{4}$ mark for each correct answer)	$\frac{1}{2}$
Defence of title to land ( $\frac{1}{4}$ mark for each correct answer)	$\frac{1}{2}$
Foreign exchange loss prov. ( $\frac{1}{4}$ mark for each correct answer)	$\frac{1}{2}$
Depreciation ( $\frac{1}{4}$ mark for each correct answer)	$\frac{3}{4}$
Foreign taxes paid ( $\frac{1}{4}$ mark for each correct answer)	$\frac{1}{2}$
Adjusted profit ( $\frac{1}{4}$ mark for each correct answer)	$\frac{3}{4}$
Capital allowances ( $\frac{1}{4}$ mark for each correct answer)	$\frac{3}{4}$
Total profits ( $\frac{1}{4}$ mark for each correct answer)	$\frac{3}{4}$

## Appendix II

### Computation of tax liability for the assessment year 2019:

Companies income tax	$\frac{1}{4}$
Double taxation relief	$\frac{1}{4}$
Net companies income tax	$\frac{1}{4}$
Tertiary education tax	$\frac{1}{4}$
Total tax liability	$\frac{1}{4}$

## Appendix III

### Computation of double taxation relief:

Formula for CR	$\frac{1}{4}$
Rate	$\frac{1}{4}$
Rate of Nigerian tax (NR)	$\frac{1}{4}$
$\frac{1}{2}$ NR Rate of tax	$\frac{1}{4}$
Double tax relief	$\frac{1}{4}$

**TOTAL**

**16**

**20**

## SOLUTION 3

PQR & Co.  
(Chartered Accountants)  
12, Oleku Street,  
Sakwato  
August 7, 2019

The Managing Director  
Ever Smart Nigeria Limited  
Sakwato.

Dear Sir,

### **Re: Proposed visit of tax investigators**

We refer to our appointment as tax consultants to your company for the purpose of providing professional advice in respect of the proposed visit of tax investigators from the Federal Inland Revenue Service to your organisation. We would like to make the following comments:

#### **(a) Objectives of tax audit**

The primary objectives are to enable the tax auditors determine whether or not:

- (i) Adequate accounting books and records exist for the purpose of determining the total profit or loss of the taxpayer and the related tax payable;
- (ii) The tax computations submitted to the tax authority by the taxpayer agree with the underlying records; and
- (iii) All applicable tax legislations have been complied with.

The secondary objectives are to:

- (i) Provide for an avenue to educate taxpayers on various provisions of the tax laws;
- (ii) Discourage tax evasion;
- (iii) Detect and correct accounting and /or arithmetic errors in tax returns;
- (iv) Provide feedback to the management on various provisions of the law and recommend possible changes;
- (v) Identify cases involving tax fraud and recommend them for investigation;
- (vi) Forestall taxable persons' failure to render tax returns;

- (vii) Forestall taxable persons' rendering incomplete or inaccurate returns; and
- (viii) Encourage voluntary compliance by taxpayers.

**b. Tax investigations as distinct from tax audits are:**

- (i) Tax investigation is called for when there are problems in, for example, an organisation either affecting the whole or particular segment of the organisation. Such could be required when a large fraud is suspected;
- (ii) In an investigation, the scope of work is wider than that of a tax audit. The details of checking and depth of the work will also likely be more than what is required for an audit exercise;
- (iii) Tax investigation is similar to any other form of investigation. It is not carried out on routine basis as that of an audit;
- (iv) Tax investigation would be carried out when a taxpayer is suspected to have committed fraud. Suspected cases of tax evasion could lead to investigation;
- (v) Tax investigation is conducted by tax inspectors who have special training and competence in investigation techniques. They can request for assistance of police investigators and enforcers, if necessary. These are not required for tax audit;
- (vi) The principal aim of investigation is to expose all the circumstances of fraud or tax evasion and to obtain evidence for possible prosecution. Tax investigators have been given greater power than tax auditors. They can seal up a business premises to facilitate their work and obtain all the documents needed to substantiate the evidence of tax evasion and fraud; and
- (vii) Tax audit was introduced to empower the relevant tax authority to conduct tax audit. Tax audit is legally required periodically, to confirm the accuracy of the self-assessment of a taxpayer. Tax investigation may not be required for same tax payer for several years.

c. **Stages of tax investigation, these are:**

- (i) **Surveillance or pre-investigation activities:** This involves checking and cross checking, obtaining more information on the alleged tax fraud. It involves discrete analysis of data, reports and complaints. These activities have to be done speedily or the offence could become aggravated;
- (ii) **Evidential audit or investigation:** At this stage, the investigators move into the business premises of the suspected party to conduct in-depth tax audit, take charge of any evidence discovered, secure a warrant of arrest and have the suspect arrested if necessary. Any individual may be invited for investigation. Also, thorough searches of individuals, offices and apartments may be conducted to obtain relevant evidence that might be useful in prosecuting the case;
- (iii) **Case preparation:** This involves the collation of evidence, the interrogation of suspects and careful examination and analysis of seized documents to assess their relevance to the case and potency in the law courts. At this stage, the case can still be dropped if the evidence is weak; and
- (iv) **Arraignment:** This is the stage where the case goes to court for criminal prosecution. All the evidence collected and witnesses secured are made available to the prosecutor who is thoroughly briefed on the case.

d. **Back duty assessment**

- (i) This will arise on a tax audit exercise where the relevant tax authority has reviewed the underlying records of a taxpayer to confirm that the records agree with the returns that were earlier on filed.
- (ii) Any difference observed between the original returns and the underlying records form the basis of an additional assessment. This may be due to fraud, willful default or neglect by the taxpayer, which were discovered from the review of the documents submitted.
- (iii) Such additional assessments may become the subject of the objection and appeal procedures.
- (iv) Back-duty work is limited to 6 years before the year of the audit.

e. **Power of search and seizure:**

Where the tax authority has a reasonable ground to suspect that an offence involving any form of total or partial non-disclosure of information or any irregularity or offence in connection with tax has been committed; or

Can be found on the premises, registered office or any other office or place of management of the taxpayer or his residence or the residence of its principal officers or agents or representatives.

- (i) The tax authority may authorise any of its officers to enter, if necessary by force, such locations at any time from the date of such authorisation and conduct a search.
- (ii) The authority to enter and search must be made in the prescribed form in the 6<sup>th</sup> schedule of the Act.
- (iii) Upon entering the premises, the officer may seize and remove anything whatsoever found therein which he has reasonable cause to believe may be required for the purpose of arriving at a fair and correct tax chargeable on the taxpayer or as evidence for the purpose of proceedings in respect of such an offence.
- (iv) An officer authorised to carry out any such search and seizure may execute any warrant by calling to his assistance any police officer and it shall be the duty of the police officer to aid and assist him.

Kindly contact us for any further clarification on the points raised, where necessary.

Yours faithfully,

For: PQR & Co.

Ogbasuru, A.

Senior Partner

(Chartered Accountants)

### **Examiner's Report**

The question tests candidates knowledge on basic differences between tax audit and tax investigation.

Many candidates attempted the question. Performance was above average. Pitfalls discovered were lack of understanding of power of search and seizure by tax authorities.

Candidates are advised to make use of both ICAN study texts and other relevant study materials on this subject.

## Marking Guide

	Marks	Marks
a i. Objectives of tax audit:		
½ mark for heading of report	½	
¼ mark for opening statement of report	¼	
¼ mark for closing statement of report	¼	
ii 1 mark for each objective of tax audit (maximum of 4 points)	<u>4</u>	5
b. Tax investigation as distinct from tax audits:		
1½ marks for each discussion on difference between tax investigation and tax audits (maximum of 3 points)		4½
c. Stages of tax investigation:		
1½ marks for each discussion on stages of investigation, (maximum of 3 points)		4½
d. Back duty assessment:		
1 mark for each discussion on back duty assessment, (maximum of 3 points)		3
e. Power of search and seizure		
1 mark for each discussion on power of search and seizure, (maximum of 3 points)		<u>3</u>
<b>TOTAL</b>		<b><u>20</u></b>

## SOLUTION 4

### EFG & CO (CHARTERED ACCOUNTANTS)

Date: .....

The Managing Director

Uche Garment Limited

Ikeja.

Lagos State

Dear sir,

#### **Re: Advice on Asset Disposal and Capital Gains Tax Computations**

Sequel to your letter with Reference No. .... dated ..... appointing us as your tax consultants and your request from professional advice on the above subject matter. We have this day completed the assignment and our comments are as follows:

#### **(a) Disposal of landed properties in Japan by the founder of the company, Mr. Uche**

Based on the Nigerian tax law, any income brought in to Nigeria by a resident individual will be liable to Nigerian tax. From our computation, as shown in Appendix I (i), the chargeable gain on the property disposed is 31,750,000 Japanese Yen. However, Mr. Uche being a non-resident individual is not liable to pay any tax liability. The gain made in the disposal of the asset is not liable to capital gains tax.

#### **Disposal of factory premises in Onitsha**

From the review of the records at our disposal, the company made a capital gains of ₦32,500,000 as indicated in Appendix I(ii). However, as a result of the re-investment made by the company by acquiring another premises in Ikeja for the purpose of the business, the company is entitled to a roll-over relief. Since only ₦75 million out of the ₦90 million proceeds received from the disposal was applied for the acquisition of the Ikeja factory, the company is entitled to a partial roll-over relief of ₦20 million and the net capital gains is ₦12,500,000 and capital gains tax of ₦1,250,000 as in Appendix II (ii).

#### **Part disposal of plant and equipment**

Our findings as revealed in Appendix I(iii) indicated that the company made a capital gains of ₦2,451,299. This implies that capital gains tax that is due for payment to the Federal Inland Revenue Service, Onitsha Integrated Tax Office is ₦245,129.90 as shown in Appendix II (iii).

Our suggestions on how to reduce capital gains tax payable are provided in Appendix III.

We hereby advise the company to pay all the capital gains tax due to the appropriate tax authorities urgently as non-payment constitutes an offence in our tax laws.

Should you require further clarifications on this, please contact us.

Yours faithfully,

For: EFG & CO

(Chartered Accountants)

**(a) Appendix I: Capital gains arising from the transactions**

**(i) Transaction made in Japan by Mr. Uche**

	Yen	Yen
Sales proceeds		120,000,000
Less: Cost of acquisition	85,000,000	
Incidental cost of disposal	<u>3,250,000</u>	
		<u>88,250,000</u>
Capital gains		<u>31,750,000</u>

**(ii) Disposal of Onitsha factory premises**

	₦	₦
Sales proceeds		90,000,000
Less: Cost of acquisition	55,000,000	
Incidental cost of disposal	<u>2,500,000</u>	
		<u>57,500,000</u>
Gross Capital gains		<u>32,500,000</u>

**(iii) Part disposal of Onitsha factory plant and equipment**

$$\text{Cost of part disposed} = \frac{A}{A + B} \times C$$

Where,

A = sales proceeds from the disposal = ₦16,000,000

B = market value of part undisposed = ₦7,100,000

C = all inclusive cost of assets = ₦19,200,000

$$\begin{aligned} \text{Cost} &= \frac{16,000,000}{16,000,000 + 7,100,000} \times 19,200,000 \\ &= \frac{16,000,000}{23,100,000} \times 19,200,000 \\ &= \underline{\underline{N13,298,701}} \end{aligned}$$

	N	N
Sales proceeds		16,000,000
Less: Cost of acquisition	13,298,701	
Incidental cost of		
Disposal	<u>250,000</u>	
		<u>13,548,701</u>
Gross capital gains		<u><u>2,451,299</u></u>

**(b) Appendix II: Capital gains tax payable**

**(i) Transaction made in Japan by Mr.Uche**

Capital gains (as in Appendix 1(i))	<u>31,750,000 Yen</u>
Capital gains tax @ 10%	<u>NIL</u>

Being a non-resident individual, the gain is not liable to capital gains tax in Nigeria

**(ii) On disposal of Onitsha factory premises**

	N
Computation of roll-over relief:	
Lower of:	
Sales proceeds from the disposal of old asset	<u>90,000,000</u>
And	
Amount re-invested in acquiring new asset	75,000,000
Less: cost of the old asset	<u>55,000,000</u>
Roll-over relief	<u><u>20,000,000</u></u>

Capital gains record (as above)	32,500,000
Less: Roll-over relief	<u>20,000,000</u>
Net capital gains	<u>12,500,000</u>
Capital gains tax @ 10%	<u>1,250,000</u>

**(iii) On part disposal of Onitsha factory plant and equipment**

Capital gains as computed above in Appendix I(iii)	₦2,451,299
Capital gains tax @ 10%	<u>₦245,129.90</u>

**(c) Appendix III: How to reduce capital gains tax payable**

In order for the company to reduce its capital gains tax payable, the following are recommended:

- (i) The full amount of ₦90,000,000 realised from the disposal of Onitsha factory should be re-invested in acquiring the new factory premises;
- (ii) Arising from (i) above, the balance (₦15,000,000) that was kept in the company's account could still be applied to the new factory in order to be given full roll-over relief and no payment of capital gains tax therefrom.
- (iii) Disposal of chargeable assets which are specifically exempted from capital gains tax.

**EXAMINER'S REPORT**

The question tests candidates understanding of capital gains tax on both residents and non residents including roll-over reliefs.

Many candidates attempted the question. Performance was above average.

Candidates are enjoined to read up areas of reduction of capital gains tax with roll-over reliefs.

**Marking Guide**

	Marks	Marks
a. Capital gains arising from the transactions:		
Heading of report	1/2	
Opening statement of the report	1/4	

Information on the disposal of landed properties in Japan	1
Information on disposal of factory premises in Onitsha	1
Information on part disposal of plant and equipment	1
Closing statement of the report	¼
Appendix I:	
(i) Transaction in Japan	
Consideration/sales proceeds	½
Cost of acquisition	½
Incidental expenses	½
Capital gains	1
(ii) Disposal of Onitsha factory	
Consideration/sales proceeds	½
Cost of acquisition	½
Incidental expenses	½
Gross Capital gains	1
(iii) Partial disposal of plant and equipment	
Consideration/sales proceeds	½
Cost of acquisition	½
Incidental expenses	½
Capital gains	1
Workings on cost of part disposed	<u>1½</u>
13	
b. Capital gains tax payable:	
Appendix II:	
(i) Transaction in Japan:	
CGT @ 10% (NIL)	½
(ii) Disposal of Onitsha factory:	
Sales proceeds from old asset	½

Amount of re-investment	1/2	
Less: cost of the old asset	1/2	
Roll- over relief	1/2	
Capital gains record	1/2	
Less: Roll-over relief	1/2	
Net capital gains	1/2	
CGT @ 10%	1/2	
(iii) Partial disposal of plant and equipment		
CGT @ 10%	<u>1/2</u>	5
<b>c. Reduction of capital gains tax</b>		
Appendix III:		
1 mark each for professional advice on how to reduce capital gains tax payable, maximum of 2 points		<u>2</u>
<b>TOTAL</b>		<b><u>20</u></b>

## SOLUTION 5

XYZ & Co.  
(Chartered Accountants)  
3, OK Avenue,  
Middle Town  
September 6, 2019

The Managing Director  
MTU Agro-all Limited  
Middle-Belt Region  
Dear Sir,

### Re: Proposal on merger or acquisition- Success Foods Limited

Further to our discussion and subsequent engagement as your tax consultants, please find below our comments on the related issues of merger or acquisition:

#### a. Differences between merger and acquisition

- (i) A merger is an arrangement in which the assets, liabilities and businesses of two or more companies are vested in and carried on by one company, which may or may not be one of the merging companies and under a situation in which the new company is owned by the owners of the merging companies.
  - (ii) Two types of merger are common. These are horizontal merger and vertical merger. Horizontal merger involves a merger of companies in the same line of business producing similar goods or providing similar services. On the other hand, vertical merger involves a merger between two entities in the same industry.
  - (iii) Acquisition is the art of acquiring effective control over assets or management of one or more companies by another company by acquiring all or majority of the equity shares or voting rights of the company or companies.
  - (iv) Where a company (X Limited) acquires more than 50% of the equity shares of another companies (Y Limited and Z Limited), the Y Limited and Z Limited become the subsidiaries of X Limited, while X Limited becomes the holding company.
- b i. Tax implications of two companies in the same industry merging with each other where an entirely new company emerges from the process:**
- Rendition of annual returns;
  - Commencement provisions of the law under Section 29(3) will apply;
  - Claim of capital allowances on qualifying capital expenditure will be deemed to have been taken over at their tax written down values;
  - Unabsorbed losses and un-utilised capital allowances brought forward by the old company cannot be carried forward to the new company;
  - Taxes and related expenses (stamp duties, fees for SEC, NSE, CBN, land authorities, professional fees that is liable to VAT and WHT deductions, etc) to be capitalised; and
  - Any cost associated with the merger or arrangement shall not be allowed for tax purposes.

- ii. **One of the merging companies surviving with its old name or new name**
- Surviving company must file returns not more than 6 months after the end of the accounting year.
  - Commencement rules will not be applicable.
  - No investment allowances on assets transferred.
  - No initial allowance on assets transferred.
  - Claim of annual allowance on tax written down value (TWDV) of the assets inherited.
  - Not to inherit the unabsorbed losses and unutilised capital allowance of the merger unless there is evidence that the company is reconstituted.
  - Professional service fees to be liable to VAT and WHT.
  - Stamp duties to be paid on increase in share capital.
- iii. **Where any of the merged companies ceased business operation**
- Cessation rule will be applicable under Section 29(4) of CITA Cap C21 LFN 2004 (as amended).
  - Cessation may not be applicable where the merging companies are connected in line with the discretionary powers of the Revenue Services under Section 29(9) of CITA Cap C21 LFN 2004 (as amended).
  - Cessation may not be applicable where a reconstituted company is formed to take over the trade or business formerly run by its foreign parent company.
  - Any unrelieved loss in the year of cessation is a terminal loss.
- c. **Possible effect on gains accruing to the shareholders of MTU Agro-all Limited for surrendering their shares in exchange for cash and/or equity shares received from the new company**
- (i) Where the shares of the acquirer are issued in exchange for the shares of the acquired company (i.e. share for share exchange), the transaction is exempted from capital gains tax.

- (ii) Where shareholders are either wholly or partly paid in cash for surrendering their shares in the ceased business, the gains arising from such cash payment will be subject to capital gains tax at 10% contrary to the provision of capital gains tax Act which exempted gains from disposal of stock and shares from CGT effective January 1, 1998.

It is pertinent to note that in any business combination, the consent of the Federal Inland Revenue Service must be sought and clearance obtained regarding the full liabilities of companies involved in the combination have been settled.

We shall be pleased to provide further clarification on this matter if the need arises.

Yours sincerely,

For: XYZ & Co

Oworru, F.

Chartered Accountants

### EXAMINER'S REPORT

The question tests candidates knowledge on merger and acquisition with different parameters.

Few candidates attempted this question. Performance was very poor. Major pitfall was the candidates lack of understanding of the various parameters of mergers and surrender of shares in exchange for cash and for equity.

Candidates are advised to read up this topic in both ICAN text and other relevant texts.

### Marking Guide

	Marks	Marks
a. Differences between merger and acquisition:		
Heading of the report	$\frac{1}{2}$	
Opening statement of the report	$\frac{1}{4}$	
1 mark each for identification of the differences between merger and acquisition, subject to maximum of 3 points	3	
Closing statement of the report	$\frac{1}{4}$	4

b.	Implications of the companies in the same industry merging with each other:	
(i).	1 mark each for identification of the tax implication of two companies merging and a new company emerged, maximum of 4 points	4
(ii).	1 mark each for identification of the tax implication of two companies merging and one of the companies survives with old name or new name, maximum of 7 points	7
(iii).	1 mark each for identification of the tax implication of two companies merging where any of the merged companies ceased business operation, maximum of 2 points	2
c.	Effect of gains accruing to the shareholders: 1½ marks each on discussion of possible effect of gains accruing to the shareholders, maximum of 2 points	3
	<b>TOTAL</b>	<b><u>20</u></b>

## SOLUTION 6

### INTERNAL MEMO

Date:           xxxx  
From:           Assistant Manager (Tax matters)  
To:              Managing Director

**(a) Subject: Areas the NPDC is engaged in the Nigerian oil and gas sectors**

Sequel to your request on the above subject-matter, I have gone through the Petroleum Profits Tax Act Cap P13 LFN 2004 (as amended) and the areas where the Nigerian Petroleum Development Company (NPDC) are engaged in the Nigerian oil and gas sectors are as listed below:

- (i) Exploration- seismic acquisition/processing- analysis exploratory, drilling and testing;
- (ii) Appraisal- drilling of appraised wells, re-evaluation survey testing;
- (iii) Development- drilling/development of wells, production, optimisation, well engineering and field survey;

- (iv) Production- intervention and stimulation of production optimisation; and
- (v) Abandonment- environmental impact assessment, effluent monitoring, testing/facilities demobilisation, remediation and decommissioning.

Thank you, Sir.

Akin Boddeh

**b. Colmas Petroleum Nigeria Limited**  
**Petroleum profits tax**  
**For 2018 assessment year**

	₦'000	₦'000
Export sales (Note1)		22,204,000
Local sales (20% of 1,300,000 barrels x N520)		135,200
Natural gas (Note2)		600,336
Incidental income ( <del>₦155,250,000</del> – <del>₦110,500,000</del> )		<u>44,750</u>
		22,984,286
Less: Allowable deductions:		
Production and exploration cost ( <del>₦5,180.5m</del> - <del>₦9.6m</del> )	5,170,900	
Customs duty on storage tank	9,600	
Intangible drilling cost	655,300	
Salaries and wages	2,320,250	
Admin expenses ( <del>₦1,540.4 m</del> – <del>₦52.25m</del> )	1,488,150	
Non-productive rents	121,740	
Royalties on export sales	910,200	
Royalties on local sales	8,260	
Cost of appraisal wells (2/5 x N272.5 m)	109,000	
Bad debts (specific)	115,300	
Interest on loans	64,100	
Repairs and maintenance	298,000	
Tertiary education tax (2/102 x N11,713.486 m)	<u>229,676</u>	
		<u>11,500,476</u>
Adjusted profit of the accounting period		11,483,810

Deduct: Unrelieved loss b/f		<u>Nil</u>
(i) Assessable profit		11,483,810
Less: Capital allowances		
Lower of:		
Actual capital allowance for the year	220,300	
PIA (Note3)	<u>25,575</u>	
	<u>245,875</u>	
And		
85% of Assessable profit	9,761,239	
Less: 170% of PIA (25.575 m)	<u>43,478</u>	
	<u>9,717,761</u>	
		<u>245,875</u>
(ii) Chargeable profit		<u>11,237,935</u>
(iii) Assessable tax @ 85%		<u>9,552,245</u>
(iv) Chargeable tax		9,552,245
Tertiary education tax		<u>229,676</u>
		9,781,921
Companies income tax (Note 4)		<u>17,475</u>
(v) Total tax payable		<u>9,799,396</u>

### Tutorial notes

#### 1. Export sales

This is equal to 80% of 1,300,000 x \$70 x N305 =  
N22,204,000,000

#### 2. Natural gas

$$\frac{50 - 52}{50 - 60} = \frac{16.9 - x}{16.9 - 15.5}$$

$$\frac{-2}{-10} = \frac{16.9 - x}{1.4}$$

$$5(16.9 - x) = 1.4$$

$$x = \underline{16.62\%}$$

Gross income	₦ 720,000,000
Less: G-factor allowance (16.62% of N720m)	<u>119,664,000</u>
Net income	600,336,000

3. PIA

Pipeline and storage tanks = N170,500,000 x 15% = N25,575,000

4. Companies income tax payable on transportation business

	₦	
Income	110,500,000	
Express	<u>(52,250,000)</u>	
Adj/assessable exp.	58,250,000	
Capital allowance	<u>-</u>	-
Total profit	<u>58,250,000</u>	
Companies income tax		
@ 30%	<u>17,475,000</u>	

### EXAMINER'S REPORT

The question tests candidates knowledge of activities of a subsidiary of Nigerian Natural Petroleum Corporation (NNPC) and computations leading to total tax payable in the industry.

Many candidates attempted this question. Performance was above average.

Few candidates however did not get the calculation of tertiary education tax correctly.

Candidates are advised to make use of ICAN study texts and other relevant study materials.

## Marking Guide

	Marks	Marks
a. Memo on NPDC engagement in oil and gas industry		
Heading of the memo	1/2	
Opening statement of the memo	1/2	
1 mark each on areas the NPDC is engaged, maximum of 3 points	<u>3</u>	4
b (i) Computation of assessable profit		
Export sales	1/2	
Local sales	1/2	
Natural gas	1/2	
Incidental income	1/2	
Production and exploration cost	1/2	
Customs duty on storage tank	1/2	
Intangible drilling cost	1/2	
Salaries and wages	1/2	
Admin expenses	1/2	
Non-productive rents	1/2	
Royalties on export sales	1/2	
Royalties on local sales	1/2	
Cost of appraisal wells	1/2	
Bad debts (specific)	1/2	
Interest on loans	1/2	
Repairs and maintenance	1/2	
Tertiary education tax	1/4	
Assessable profit	<u>1/2</u>	9
(ii) Computation of chargeable profit:		
Actual capital allowance for the year	1/2	
PIA	1/2	
85% of assessable profit	1/2	
170% of PIA	1/2	
Chargeable profit	<u>1</u>	3
(iii) Assessable tax @ 85%		1
(iv) Chargeable tax		1
(v) Computation of total tax payable:		
Tertiary education tax	1/4	
Companies income tax	1/2	
Total tax payable	<u>1</u>	2

**Workings**

(i)	Export sales and natural gas	$\frac{1}{4}$	
(ii)	P/A and companies income tax	$\frac{1}{4}$	
	<b>TOTAL</b>		<b><u>20</u></b>

**THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA**  
**PROFESSIONAL LEVEL EXAMINATION – NOVEMBER 2019**  
**STRATEGIC FINANCIAL MANAGEMENT**

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

**INSTRUCTION: YOU ARE REQUIRED TO ANSWER FOUR OUT OF SIX QUESTIONS IN THIS PAPER**

**SECTION A: COMPULSORY QUESTION (40 MARKS)**

**QUESTION 1**

Agbeloba Limited (AL) is an unlisted company based in Akure, Nigeria. Over the years, the company has been producing and selling agricultural support tools. AL is now considering the production and sale of yam pounders.

Although this is a completely new venture for AL, it will be in addition to the company's core business. AL's directors plan to develop the project for a period of four years and then sell it for ₦24million to a group of young investors.

The government is excited about the project and has offered AL a subsidised loan of up to 80% of the investment funds needed at the beginning of the project, at a rate of 200 basis points below AL's borrowing rate. Currently AL can borrow at 300 basis points above the five-year government debt yield rate.

A feasibility study commissioned by the directors, at a cost of ₦5,000,000, has produced the following information:

- The company can buy an existing suitable factory at a cost of ₦16.5m payable now;
- ₦4.5m is required now to buy and install the necessary plant and machinery;
- The company will produce and sell 1,300 units in the first year. Unit sales will grow by 40% in each of the next two years before falling to an annual growth rate of 5% for the final year;
- Unit selling price for the first year will be ₦3,750 but this will increase by 3% per year thereafter;
- In the first year, total variable cost per unit will be ₦1,800 but this will increase by 8% per year thereafter;
- In the first year, the fixed overhead costs will be ₦3.75m, of which 60% are centrally allocated overheads. The fixed overheads will increase by 5% per year after the first year;

- AL will require working capital of 15% of the anticipated sales revenue for the year, at the beginning of each year. The working capital is expected to be released at the end of the fourth year when the project is sold;
- AL's tax rate is 25% per year on taxable profits. Tax is payable in the same year as when the profits are earned. Tax allowable depreciation is available on the plant and machinery on a straight-line basis. It is anticipated that the value attributable to the plant and machinery after four years is ₦600,000 of the price at which the project is sold. No tax allowable depreciation is available on the factory;
- AL uses 12% as its discount rate for new projects but feels that this rate may not be appropriate for this new type of investment. It intends to raise the full amount of funds through debt finance and take advantage of the government's offer of a subsidised loan;
- Issue costs are 4% of the gross finance required. It can be assumed that the debt capacity available to the company is equivalent to the actual amount of debt finance to be raised for the project;
- Although no other companies produce yam pounders in the country, Casscare plc. (CL) produces cassava crushing machines, using almost similar technology to that required for yam pounder. CL's cost of equity is estimated to be 14% and it pays tax at 28%. CL has 15 million shares in issue, trading at ₦2.53 each and ₦40 million bonds, trading at ₦94.88 per ₦100; and
- The five-year government debt yield is currently estimated at 4.5% and the market risk premium at 4%.

**Required:**

- Evaluate, on financial grounds, whether AL should proceed with the project. (28 Marks)
  - Discuss the appropriateness of the evaluation method used and explain the assumptions made in part (a). (5 Marks)
  - Provide examples of ethical issues that might affect capital investment decisions, and discuss the importance of such issues for strategic financial management. (7 Marks)
- (Total 40 Marks)**

**SECTION B: YOU ARE REQUIRED TO ANSWER ANY THREE OUT OF FIVE QUESTIONS IN THIS SECTION (60 MARKS)**

**QUESTION 2**

- Two neighbouring countries, A and B have chosen to organise their electricity supply industries in different ways.

In country A, electricity supplies are provided by a nationalised industry. In country B, electricity supplies are provided by a number of private sector companies.

**Required:**

- (i) Explain how the objectives of the nationalised industry might differ from those of the private sector companies. (6 Marks)
  - (ii) Briefly discuss, whether investment planning and appraisal techniques are likely to differ in the nationalised industry and private sector companies. (6 Marks)
- b. Explain, the circumstances in which the Black- Scholes option pricing (BSOP) model could be used to assess the value of a company and the data required for the variables used in the model. (8 Marks)
- (Total 20 Marks)**

**QUESTION 3**

R Plc. is a successful IT services company formed ten years ago. It was listed on the stock exchange three years ago. The company has a broad customer base mainly consisting of small and medium sized companies. R Plc. has achieved rapid growth in recent years by obtaining repeat business from satisfied customers and also by acquiring other IT services companies.

The directors of R Plc. have identified H Limited, an unlisted company, as a possible acquisition target. H Limited appears to have a larger number of large multinational clients than those of R Plc. If the negotiation is successful, the acquisition would commence on January 1, 2020.

Forecast financial data for R Plc. and H Limited as at December 31, 2019 is summarised below:

	<b>R Plc.</b>	<b>H Limited</b>
Share capital (ordinary ₦1 shares)	<b>₦150m</b>	<b>₦40m</b>
Market share price	<b>₦ 4.90</b>	<b>N/A</b>

N/A: Not applicable as unlisted.

**Additional information**

- (i) If H Limited were to remain an independent company, its directors estimate that reported profit after tax would be ₦15million for 2020 and then grow by 2% a year in perpetuity.
- (ii) If the acquisition were to go ahead, R Plc's directors estimate that H Limited's profit after tax would be 5% higher for 2020 than if the company remains an independent company and that profit after tax would then grow by 3% a year in perpetuity.
- (iii) The average ungeared cost of equity for the industry is 8%.

- (iv) Both R Plc. and H Limited are wholly equity financed.
- (v) Profit after tax can be assumed to be a good approximation of free cash flow attributable to investors.

The directors of R Plc. are considering offering to purchase H Limited at a price of ₦7.00 per share. It is estimated that transaction costs of ₦8million would be payable on the acquisition and that ₦2million would be required in the first year to cover the costs of integrating the two companies.

**Required:**

- a. Calculate
  - The value of R Plc. on December 31, 2019.
  - The value of H Limited on December 31, 2019 before taking the possible acquisition of the company by R Plc. into account.
  - The overall increase in value created by the acquisition of H Limited by R Plc. (6 Marks)
- b. i. Explain how value might be created by the proposed acquisition. (3 Marks)  
 ii. Advise on the challenges that R Plc is likely to face in realising the potential added value after the acquisition. (3 Marks)
- c. Evaluate the proposed offer price of ₦7.00 per share for H Limited from the viewpoint of:
  - H Limited's shareholders
  - R Plc.'s shareholders. (8 Marks)**(Total 20 Marks)**

**QUESTION 4**

You are the portfolio manager of an asset management company. A client has approached you for the creation of his portfolio. The client is considering three stocks A, B and C. Your research department has provided you with the following annualised details concerning the three stocks and the market index.

Assets	Expected Return (%)	Standard Deviation (%)	Beta
Stock A	12.8	17.8	0.75
Stock B	15.2	25.4	1.12
Stock C	5.6	12.6	0.22
Market index	15.0	21.2	1.00

Risk-free rate is 3 %.

**Required:**

- a. Explain which of the three stocks A, B and C will lie on the capital market line (CML). (2 Marks)

- b. Using the security market line (SML), which of the three stocks is the most attractive to buy. Show all relevant calculations. (4 Marks)
- c. Using the CAPM theory and the above tabulated data, calculate the correlation coefficient with the market index for each of the three stocks. (2 Marks)
- d. Your client wants to invest 10% in stock B and the rest in stock A and C as suggested by you. Also he wants to have a market exposure of 1 (i.e. a portfolio beta of 1).  
Calculate what will be the investments in the other two assets to reach the client's objective. Also calculate the expected return of the resulting portfolio.  
(Assume you can sell short any quantity of any stock). (4 Marks)
- e. Now assume the client wants to invest only in stock B and the risk-free asset. He wants portfolio's standard deviation of 10%. Calculate what the weight on stock B should be in order to achieve the stated objective. (3 Marks)
- f. The equity beta of Zinta Plc., another client of yours, is 0.95 and the alpha value is 1.5%. Explain the meaning and significance of these values to the company. (5 Marks)
- (Total 20 Marks)**

## QUESTION 5

- a. You have worked with a major oil servicing company in Nigeria, with headquarters in the USA, for the past six years. Recently you completed your ICAN examinations and have been asked to join the international treasury department in New York City for a two-year attachment.

The company is due to pay a UK supplier the sum of £5million in three months' time. Your team is considering alternative methods of hedging the expected payment against adverse movements in exchange rate.

### Exchange rate information

	US\$ per £1
Spot rate	1.9410 – 1.9531
One – month forward rate	1.9339 – 1.9452
Three – month forward rate	1.9223 – 1.9339

### Futures market (contract size of £62,500, Quotation: US\$ per £)

2-month expiry	1.9305
5-month expiry	1.9170

Options market (£31,250 contracts size, premiums are quoted in cents per £1)

Exercise price	Call option		Put option	
	2-month expiry	5-month expiry	2-month expiry	5-month expiry
1.9000	2.88	3.55	0.15	0.28
1.9200	1.59	2.32	1.00	1.85
1.9400	0.96	1.15	2.05	2.95

You are required to advise the company which of the following hedging strategies should be adopted for the payment due in three months. Show all workings.

- i. Forward contract
- ii. Currency futures
- iii. Currency options (15 Marks)

- b. In your personal investment portfolio, you have gone short (i.e. you have sold) 110,000 units of Big Bank plc. Call and put options exist on the bank's shares.

You decide to hedge your position using put options on the bank's shares. For the relevant option you know that;

$$N(d_1) = 0.45$$

You are required to calculate how many put options you will need to buy or sell in order to delta-hedge.

Be specific.

(5 Marks)

(Total 20 Marks)

## QUESTION 6

The directors of Jaleyemi plc. (JP), an Abuja-based entertainment company, are currently considering the appropriate cost of capital to use in appraising capital investments. It is the policy of the company to assess the financial viability of all capital projects using net present value criterion.

You have been provided with the following financial information of the company.

### Most recent statement of financial position

	₦m	₦m
<b>Equity finance</b>		
Ordinary shares (₦1 nominal value)	200	
Reserves	<u>120</u>	320
<b>Non-current liabilities</b>		
7% Convertible bonds (₦100 nominal value)	160	
5% Preference shares (₦1 nominal value)	<u>80</u>	240

**Current liabilities**

Trade payables	80	
Overdraft	<u>120</u>	<u>200</u>
Total liabilities		<u>760</u>

JP has an equity beta of 1.2 and the ex-dividend market value of the company's equity is ₦1 billion. The ex-interest market value of the convertible bonds is ₦168 million and the ex-dividend market value of the preference shares is ₦50 million.

The convertible bonds of JP have a conversion ratio of 19 ordinary shares per bond. The conversion date and redemption date are both on the same date in five years' time. The current ordinary share price of JP is expected to increase by 4% per year for the foreseeable future.

The equity risk premium is 5% per year and the risk-free rate of return is 4% per year. JP pays profit tax at an annual rate of 30% per year.

**Required:**

- Calculate the market value after-tax weighted average cost of capital of JP, explaining clearly any assumptions you made. (10 Marks)
  - Discuss why market value weighted average cost of capital is preferred to book value weighted average cost of capital when making investment decisions. (4 Marks)
  - Discuss how the capital asset pricing model can be used to calculate a project - specific cost of capital for JP, referring in your discussion to the key concepts of systematic risk, business risk and financial risk. (6 Marks)
- (Total 20 Marks)**

# Formulae

## Modigliani and Miller Proposition 2 (with tax)

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

### Asset Beta

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

### Equity Beta

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

### Growing Annuity

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

### Modified Internal Rate of Return

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

### The Black-Scholes Option Pricing Model

$$C_0 = S_0 N(d_1) - E e^{-rt} N(d_2)$$

$$d_1 = \frac{\ln\left(\frac{S_0}{E}\right) + (r + 0.5\sigma^2)T}{\sigma\sqrt{T}}$$

$$d_2 = d_1 - \sigma\sqrt{T}$$

### The Put Call Parity

$$C + E e^{-rt} = S + P$$

### Binomial Option Pricing

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

$$d = 1/u$$

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

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

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

**Annuity Table**

Present value of an annuity of 1 i.e.

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

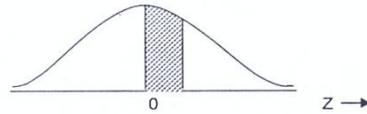
Where  $r$  = discount rate  
 $n$  = number of periods

*Discount rate (r)*

<i>Periods</i>											
(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									

## SOLUTION 1

a)

### i) Base-case NPV (₦'000)

Year	0	1	2	3	4
Sales revenue (W1)		4,875	7,031	10,136	10,962
Direct costs (W2)		(2,340)	(3,538)	(5,351)	(6,064)
Fixed overheads		<u>(1,500)</u>	<u>(1,575)</u>	<u>(1,654)</u>	<u>(1,736)</u>
Cash profit		1,035	1,918	3,131	3,162
Tax on cash profit		(259)	(480)	(783)	(791)
Tax savings on tax depr. (W5)		244	244	244	244
Investment/sale	(21,000)				24,000
Working capital (W3)	<u>(731)</u>	<u>(324)</u>	<u>(465)</u>	<u>(124)</u>	<u>1,644</u>
Net cash flows	(21,731)	696	1,217	2,468	28,259
D F@ 10%	<u>1.0</u>	<u>0.909</u>	<u>0.826</u>	<u>0.75</u>	<u>0.683</u>
PV	<u>(21,731)</u>	<u>633</u>	<u>1,005</u>	<u>1,853</u>	<u>19,301</u>

Base case NPV = ₦1,061,000

**NOTE:** The sales price of the project, that is, ₦24million at the end of the 4<sup>th</sup> year includes the ₦600,000 scrap value of the plant and machinery since the business is sold as a going concern.

### Working notes

#### 1. Sales revenue

Year	1	2	3	4
Qty sold (q)	1,300	1,820	2,548	2,675
Selling price (₦)	3,750	3,863	3,978	4,098
Sales revenue (₦'000)	4,875	7,031	10,136	10,962

#### 2. Direct materials, etc

Year	1	2	3	4
Qty sold (q)	1,300	1,820	2,548	2,675
Cost per unit (v) in ₦	1,800	1,944	2,100	2,267
Total (q × v) in ₦'000	2,340	3,538	5,351	6,064

#### 3. Working capital

Year	0	1	2	3	4
	₦'000	₦'000	₦'000	₦'000	₦'000
Cumulative (15% of sales)		731	1,055	1,520	1,644
Incremental cash flows	(731)	(324)	(465)	(124)	1,644

#### 4. Ungeared cost of equity

This has to be calculated from the information given in respect of CL.

From CAPM, we compute the equity beta of CL:

$$14 = 4.5 + \beta_E (4)$$

$$\beta_E (4) = 14 - 4.5 = 9.5$$

$$\beta_E = 2.375$$

Asset beta ( $\beta_A$ ) is computed using

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

$$= \frac{2.53 \times 15m}{37.95} + 0 = 10.023$$

$$= \frac{40m \times 0.9488}{37.952} + 0 = 10.023$$

$$\beta_A = \frac{2.375 \times 37.95}{37.95 + 37.952(0.72)} + 0 = 1.3808$$

(Since we are not given the beta of debt, we assume it has a beta of 0).

Cost of equity of ungeared is:

$$K_{EU} = 4.5 + 1.3808 (4) = 10.023 \quad \text{or (say) 10\%}$$

**Note:** An alternative method of computing the ungeared cost of equity is to use M and M formula as given in the question paper.

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

$$14 = x + (x - 4.5) \left[ \frac{37.952}{37.95} \right] (1 - 0.28)$$

$$14 = x + 0.72x - 3.24$$

$$17.24 = 1.72x$$

$$x = 17.24/1.72 = 10.02\% = 10\%$$

#### 5. Tax savings on tax depreciation

Annual tax savings:

$$\left( \frac{4.50m - 0.60m}{4 \text{ years}} \right) \times 25\% = \text{₹}243,750$$

ii) **Financing side effects**

**Note:** It is assumed that the net amount needed is ₦21,731,000 (i.e. it includes the required working capital in year 0). Alternative assumption that excludes working capital will be fully rewarded.

**Issue costs (₦'000)**

	<b>Government loan</b>		<b>Commercial loan</b>
Net amount ( $0.8 \times \text{₦}21,731$ )	17,384.80	$(0.2 \times \text{₦}21,731)$	4,346.20
Issue costs ( $4/96 \times \text{₦}17,384.80$ )	<u>724.37</u>	$(4/96 \times \text{₦}4,346.20)$	<u>181.09</u>
Gross amount needed	<u>18,109.17</u>		<u>4,527.29</u>

- **Tax savings on issue costs (due in year 1)** ₦'000  
 $25\% \times (\text{₦}724.37 + \text{₦}181.09) = \underline{\underline{\text{₦}226.37}}$

- **Tax savings on interest (₦'000)**  
Govt. loan  $0.055 \times \text{₦}18,109.17 \times 0.25 = 249.00$   
Commercial loan  $0.075 \times \text{₦}4,527.29 \times 0.25 = \underline{84.89}$   
Total tax savings due years 1 – 4 333.89

- **Net interest saved on govt. subsidised loan (₦'000)**  
Gross interest saved =  $\text{₦}18,109.17 \times 0.02 = 362.18$   
Less tax at 25% (90.55)  
Net interest savings (years 1 – 4) 271.63

- **Present value of financing side effect (₦'000)**

	Year	NCF	PVF At 7.5%	PV
Issue costs (724.37 + 181.09)	0	(905.46)	1	(905.46)
Tax savings on issue costs	1	226.37	0.93	210.52
Tax savings on interest	1 – 4	333.89	3.349	1,118.20
Net interest saved on subsidised loan	1 – 4	271.63	3.349	<u>909.69</u>
Net financing effect				<u>1,332.95</u>

- **Adjusted present value (₦'000)**

Base-case NPV	1,061.00
Financing side effect	<u>1,332.95</u>
APV	<u>2,393.95</u>

Recommendation – With positive APV, the project is viable.

- b) The adjusted present value can be used where the impact of using debt financing is significant. Here the impact of each of the financing side effects from debt is shown separately rather than being imputed into the weighted average cost of capital. The project is initially evaluated by only taking into account the business risk element of the new venture. This shows that, although the project results in a positive net present value, it is fairly marginal and volatility in the input factors could turn the project to a negative net present value. However, sensitivity analysis can be used to examine the sensitivity of the factors. The financing side effects show that almost 110% value is added when the positive impact of the tax shields and subsidy benefits are taken into account even after the issue costs.

### Assumptions

1. CL ungeared cost of equity is used because it is assumed that this represents the business risk attributable to the new line of business.
2. The ungeared cost of equity is calculated on the assumption that Modigliani and Miller's (MM) proposition 2 which assumes that there are no bankruptcy nor agency cost and no tax.
3. It is assumed that initial working capital requirement will form part of the funds borrowed but the subsequent requirements will be available from the funds generated from the project.
4. The feasibility study is ignored as a past cost.
5. It is assumed that the five-year debt yield is equivalent to the risk-free rate.
6. It is assumed that the annual reinvestment needed on plant and machinery is equivalent to the tax allowable depreciation.
7. It is assumed that all cash flows occur at the end of the year unless specified otherwise.
8. All amounts are given either in ₦'000 or to the nearest ₦'000. When calculating the units produced and sold, the nearest approximation for each year is taken.

Assumptions 4, 5, 6, 7 are standard assumptions made for a question of this nature. Assumptions 1, 2 and 3 warrant further discussion. Taking assumption 3 first, it is reasonable to assume that before the project starts, the company would need to borrow the initial working capital as it may not have access to the working capital needed. In subsequent years, the cash flows generated from the operation of the Project may be sufficient to fund the extra working capital required. In the case of AL, because of an expected rapid growth in sales in years 2 and 3, the working capital requirement

remains high and the management need to assess how to make sufficient funds available.

Considering assumptions 1 and 2, the adjusted present values methodology assumes that MM proposition 2 applies and the equivalent ungeared cost of equity does not take into account the cost of financial distress. This may be an unreasonable assumption. The ungeared cost of equity is based on another company which is in a similar line of business to the new project, but it is not exactly the same. It can be difficult to determine an accurate ungeared cost of equity in practice. Generally, the discount rate (cost of funds) tends to be the least sensitive factor in investment appraisal and therefore some latitude can be allowed.

- c. There are many possible answers to this question. The solution suggested below is indicative only.

Ethics impact on many aspects of investment decisions. In theory, companies seek to maximise shareholder's wealth which is often subject to constraining secondary objectives. Such secondary objectives include the welfare of the public. Companies are affected by ethical standards relating to:

- **Health and safety.** Employees and the public should be protected from danger, which includes working conditions, effective employment law and product safety;
- **Environmental issues** such as controlling pollution, protecting wildlife and the countryside. Fully satisfying these issues might be an expensive element in a capital investment;
- **Bribes and other payments.** Investment might proceed more quickly and efficiently if bribes, 'incentive payments', 'gifts' etc. are paid to officials. This is a difficult area, as gifts are part of the business culture in some countries. Even the ethics of political contributions is debatable;
- **Corporate governance.** Many examples exist of companies, e.g. Enrons, where the results of investments and the true financial position have been hidden from shareholders and the public;
- **Taxation.** Companies may try to minimise their tax liability. Tax evasion is illegal, but there is an ethical question over the sophisticated tax avoidance measures, especially in developing countries;
- **Wage levels.** Should a company pay low wages to maximise shareholders' wealth, especially in countries where the standard of living is very low?

- **Individual manager's ethics.** The ethics of individuals, including pursuing their own goals and self-interest (such as job security) rather than those of the organisation might influence the outcome of investment decisions.

There is inevitably some subjectivity as to what constitutes ethical behaviour, but there is little doubt that ethical issues are of increasing importance to companies. Acting in an ethically responsible way often has a direct detrimental impact upon expected cash flows and NPV. However, stakeholders, including shareholders, are increasingly expecting companies to act ethically. If they do not, then their share price might suffer as a result of adverse publicity and investors withdrawing their support.

The concept of ethical shareholders' wealth creation is likely to become increasingly important in strategic financial management.

### **EXAMINER'S REPORT**

This was a three-part question that tested the candidates' understanding of capital investment element of the syllabus. In addition, it tested candidates' understanding of ethical issues in capital investment decisions.

Part (a) of the question implicitly required candidates to appraise a capital project using adjusted present value (APV).

Part (b) asked candidates to discuss the appropriateness of the evaluation method used in Part (a).

Being a compulsory question, virtually all the candidates attempted it but the level of performance was disappointing.

The poor performance emanated from the following areas:

- A failure to omit irrelevant costs;
- Inaccurate calculation of the working capital impact of the investment proposal;
- Failure to recognise that the use of APV was required;
- Confusion regarding the appropriate cost of capital to use; and
- Identification of the relevant financing costs and their timing.

Candidates must be aware that the Institute's examinations demand comprehensive study covering the entire syllabus. It is necessary to practise examination type questions during revision.

## MARKING GUIDE

	MARKS	MARKS
(a) i. Base case NPV		
Sales revenue	4	
Direct costs	4	
Fixed overheads	2	
Tax on cash profits	1	
Tax savings on tax depreciations	1	
Investment/sale	½	
Working capital calculations	2	
Net cash flows	1	
Discount factor @ 10%	½	
Present values @ 10%	1	
Computation of equity beta of CL	½	
Calculation of asset beta	2	
Calculation of Tax savings on tax depreciation	1	
ii. Financing side effects:		
Calculation of:		
- Issue cost – Government loan/commercial loan	2	
- Tax savings on issue cost due in year 1	½	
- Tax savings on interest	1	
- Net interest saved on govt. Subsidised loan	½	
- Present value of financing side effect	2½	
- Adjusted present value/recommendation	<u>1</u>	28
(b) Evaluation of the project	2	
1 mark per valid assumption (3 assumptions)	<u>3</u>	5
(c) 1½ marks per valid point (5 points), max 7 marks		<u>7</u>
		<u>40</u>

## SOLUTION 2

- a) i. The objectives of the nationalised electricity supply industry are likely to be strongly influenced by the government and may not be primarily financial. State owned enterprises exist to provide a service and to ensure that social needs are satisfied; they are not usually profit maximising. The prime objective of a nationalised electricity supply industry might be to promote the development of an efficient and co-ordinated economic system of electrical supply, with subsidiary objectives concerned with earning an acceptable return on capital employed (acceptable being defined by the government), and achieving efficiency through cost control.

Service considerations might mean the provision of electrical facilities to remote areas at far less than full cost price. In order to provide reasonably priced electricity for all people, a government might be prepared to subsidise the nationalised industry and set a negative target return on capital. Alternatively the target return might be set such that the industry is a substantial contributor to government finances.

The objectives of a private sector electrical supply company will be mainly determined by the senior management of the company. The prime objective of a company is often stated to be the maximisation of shareholders' wealth. In practice management teams might be content to achieve a 'satisfying' level of shareholders' wealth and also be concerned with a number of non-financial objectives. Such objectives include market share, growth, environmental factors, provision of community facilities, sponsorship, service to consumers, good working conditions and facilities for employees, and corporate survival. Some of these 'non-financial' objectives will strongly affect the financial success of the company and shareholders' wealth. A vital industry such as electricity supply, even if privately owned, might well be subject to strong government influence and constraints, particularly with respect to the provision of services and pricing policy.

- (ii) Strategic investment planning in a nationalised industry is normally subject to government approval. Smaller scale investments will be planned and approved by the management of the nationalised industry. However, the amount of investment undertaken is likely to be influenced by the government as much of the funding for investment will come from government sources, and the use of external financing (from the capital markets) will often be limited by the government.

Investment planning in the private sector is strongly influenced by market forces, with managers considering the possible effects of investments (with their associated implications for financing decisions and dividend decisions) on share price and shareholders' wealth, and how investments will affect the achievement of other corporate objectives.

Private sector investment appraisal techniques usually assume that the company is seeking to maximise shareholders' wealth in an efficient market. As there are no share prices in a nationalised industry and investors' wealth maximisation is not the assumed objective, some private sector investment appraisal techniques will not be appropriate. However, this does not mean that all private

sector techniques cannot be used in the public sector. Discounted cash flow for example is often used in nationalised industries.

- b) Using the Black-Scholes option pricing model in company valuation rests upon the idea that equity is a call option, written by the lenders, on the underlying assets of the business. If the value of the company declines substantially then the shareholders can simply walk away, losing the maximum of their investment. On the other hand, the upside potential is unlimited once the interest on debt has been paid.

The BSOP model can be helpful in circumstances where the conventional methods of valuation do not reflect the risks fully or where they cannot be used. For example if we are trying to value an unlisted company with unpredictable future growth.

There are five variables which are input into the BSOP model to determine the value of the option. Proxies need to be established for each variable when using the BSOP model to value a company. The five variables are: the value of the underlying asset, the exercise price, the time to expiry, the volatility of the underlying asset value and the risk free rate of return.

For the exercise price, the debt of the company is taken. In its simplest form, the assumption is that the borrowing is in the form of zero coupon debt, i.e., a discount bond. In practice such debt is not used as a primary source of company finance and so we calculate the value of an equivalent bond with the same yield and term to maturity as the company's existing debt. The exercise price in valuing the business as a call option is the value of the outstanding debt calculated as the present value of a zero coupon bond offering the same yield as the current debt.

The proxy for the value of the underlying asset is the fair value of the company's assets less current liabilities on the basis that if the company is broken up and sold, then that is what the assets would be worth to the long-term debt holders and the equity holders.

The time to expiry is the period of the time before the debt is due for redemption. The owners of the company have that time before the option needs to be exercised, that is when the debt holders need to be repaid.

The proxy for the volatility of the underlying asset is the volatility of the business' assets.

The risk-free rate is usually the rate on a riskless investment such as a short-term government bond.

## EXAMINER'S REPORT

This was a two-part question. The first part tested the candidates' understanding of the key objectives of nationalised industry vs those of private sector companies. The second part tested candidates' understanding of the circumstances under which the Black-Scholes option pricing model can be used to value companies.

Large number of the candidates attempted the first part of the question and performance was average. Less than half of the candidates attempted the second part with below average level of performance.

In the first part of the question, most of the candidates could not relate their discussion to "investment planning and appraisal techniques" as required by the question.

In part (b), most of the candidates could not identify the required variables of the model despite the fact that the Black-Scholes formula is given in the formula sheet. Those who identified the variables could not relate them to the special case of company valuation.

It is recommended that students should cover the entire syllabus in their preparation for the Institute's examination.

## MARKING GUIDE

- |        |  |          |   |
|--------|--|----------|---|
| (a) i. | 1 mark per well explained objective of a nationalised Industry – essential to mention provision of service, not for profit etc, (Max 3)  | 3        |   |
|        | 1 mark per well explained objective of a private sector industry – essential to mention maximisation of shareholders' wealth, profit maximisation and non-financial objectives such as corporate social responsibility | <u>3</u> | 6 |
| ii.    | 1 mark per valid point discussed   |          |   |
|        | - Nationalised industry - 3 points   | 3        |   |
|        | - Private sector industry - 3 points   | <u>3</u> | 6 |

## SOLUTION 3

a)

• Pre-acquisition value:			₤'m
R Plc.	$\text{₤}4.90 \times 150\text{m}$	=	735.00
H Ltd.	$\frac{15\text{m}}{0.08 - 0.02}$	=	<u>250.00</u>
			<u>985.00</u>

• Post-acquisition value:		₤'m
H Ltd.	$\frac{15m \times 1.05}{0.08 - 0.03}$	= 315.00
R Plc.		735.00
Transaction costs		(8.00)
Integration costs	$\frac{2m}{1.08}$	= (1.85)
Total value		1,040.15
Pre-acquisition total value		<u>(985.00)</u>
Incremental value		<u>55.15</u>

- b) i) Value can be created by combining the two companies through the achievement of synergies and economies of scale. In most business combinations there are likely to be savings generated from combining operations and reducing the amount of resources needed to fund central functions such as human resources, finance and treasury. The cost savings are likely to have an almost immediate impact on the cash flow and hence are likely to be reflected in 5% growth in free cash flow in the first year.

Synergies might also arise in respect of the cross-selling of services between the two companies to their respective client bases. It's possible that the directors of R Plc anticipate that there are opportunities to enhance the cash flows of H Ltd by utilising the expertise of R Plc leading to a higher growth rate of 3% a year compared to 2%.

- ii) Key challenges in realising the potential added value after the merger
- Success depends on the extent that H's management and staff accept the transfer of ownership and remain committed to servicing H's clients to the best of their ability. Consider introducing an incentive scheme such as a bonus payment or employee share option scheme.
  - It also depends on whether H's clients are happy with the new arrangement and are confident of receiving the same level of service as before.
  - The reliability of the forecast improvement in earnings and growth is also key to successful realisation of the potential added value.

c) Consideration paid: ₦7 × 40 million shares = ₦280 million

Comparison of shareholders' wealth before and after the acquisition:

	R Plc.	H Limited	Total value
Before the acquisition	₦735 million	₦250 million	₦985 million
After the acquisition	₦760 million	₦280 million	₦1,040 million
	(i.e. ₦1,040 million – ₦280 million)	(proceeds)	
Share of synergistic benefits	₦25 million	₦30 million	

**H Ltd.'s shareholders' perspective:** Very attractive. H Ltd's shareholders can expect to receive 54% of the synergistic benefits of the merger which does not seem to be a fair split considering that:

- H Ltd. is the smaller company and contributing less to the merger;
- H Ltd.'s shareholders do not carry any of the risks that the synergistic benefits cannot be realised; and
- H Ltd. is unlisted and it is therefore very difficult for the shareholders to realise their investment at all, let alone at such a generous price which is above the company's own bullish value estimates derived from discounted cash flow analysis.

**R Plc.'s shareholders' perspective:** Possibly too high a price for comfort. The main reasons for this conclusion are as follows:

- The reverse of the above: R Plc.'s shareholders take all the risk and contribute most value to the combined business and yet only expect to receive 45% of the increase in value; and
- It is likely that H Ltd. has a higher business risk than R Plc. despite being in the same industry because of the different client profile. If one customer were to be lost by H Ltd. then this could have a significant impact on cash flow and hence the variability of H Ltd.'s cash flows is likely to be higher than for R Plc. Therefore it is possible that a higher discount rate should be used to value H Ltd. which would have effect of reducing its value.

**Conclusion:** The price needs to be reduced. The proposed price is not fair to R Plc.'s shareholders and H Ltd. is potentially over-valued at a discount rate of 8%.

## EXAMINER'S REPORT

The question tested the candidates' understanding of business valuation. It was a replica of one of the questions set in a recent examination. Candidates were expected to place value on each of the two companies separately and eventually

the combined company in order to determine the appropriate synergy. Candidates were also expected to identify the problems of realising synergies in practice.

Surprisingly, the level of performance was very disappointing as many of the candidates could not make effective use of the perpetual growth formula. The discussion part of the question was also poorly handled.

It is recommended that students should make effective use of the learning materials, especially the pathfinder, provided by the Institute when preparing for the examination.

### MARKING GUIDE

(a) Calculation of :

Pre-acquisition value	2	
- Post acquisition value	<u>4</u>	6

- (b) i. 1½ marks per well explained point – essential to consider economies of scale and cross-selling of services (max 2 points) 3
- ii. 1½ marks per well explained challenges (2 key challenges) 3

(c) Computation and comparison of shareholders' wealth before and after the acquisition:

- R Plc.	2	
- H Ltd.	2	
Evaluation of the computed shareholders' wealth:		
H Ltd.'s shareholders' perspective	2	
R Plc.'s shareholders perspective	<u>2</u>	<u>8</u>
		<u>20</u>

### SOLUTION 4

a) None of the stocks lies on the Capital Market Line (CML). The CML describes the risk-return relationship applicable only to efficient portfolios. It does not apply to individual assets or non-efficient portfolios.

b) First, we determine the required return of each stock using CAPM:

$$R_i = R_F + \beta_i (R_m + R_F)$$

$$A \quad 3 + 0.75 (15 - 3) = 12\%$$

$$B \quad 3 + 1.12 (15 - 3) = 16.44\%$$

$$C \quad 3 + 0.22 (15 - 3) = 5.64\%$$

Next, we determine the alpha ( $\alpha$ ) of each stock.

$\alpha = \text{Expected return} - \text{Required return}$

A  $12.8 - 12 = 0.8$

B  $15.2 - 16.44 = -1.24$

C  $5.6 - 5.64 = -0.04$

Stock with positive alpha are undervalued and worth buying and stocks with negative alpha are overvalued and are not worth buying. Therefore, only stock A is worth buying.

c) Correlation between stock, i, and the market, m, is given by:

$$R(i, m) = \frac{\beta_i \cdot \sigma_m}{\sigma_i}$$

A  $\frac{0.75 \times 21.2}{17.8} = 0.89$

B  $\frac{1.12 \times 21.2}{25.4} = 0.93$

C  $\frac{0.22 \times 21.2}{12.6}$   
 $= 0.37$

d) The client wants a 10% investment in stock B, thus remaining 90% should be invested in stock A and/or stock C. The client also wants his portfolio beta to be 1.

Let  $w = \text{weight in stock A}$

Weight in stock C =  $0.9 - w$

Portfolio beta is a weighted average of the betas of securities in the portfolio.

Thus:

$$(0.75w) + (1.12 \times 0.1) + 0.22(0.9 - w) = 1$$

$$0.75w + 0.112 + 0.198 - 0.22w = 1$$

$$0.53w = 0.69$$

$$w = 1.3019 \text{ (i.e. 130.19\%)}$$

Hence the effective investments to meet the client's objective will be:

Stock A = 130.19%

Stock B = 10%

Stock C =  $0.90 - 1.3019 = -0.4019 = -40.19\%$

The client will therefore have to short sell stock C to meet his objective.

**Check:**

$$(0.75 \times 1.3019) + (1.12 \times 0.1) - (0.22 \times 0.4019) = 1$$

With beta of 1, the portfolio return should be the same as the market return.

**Check:**

$$E(R_p) = (12 \times 1.3019) + (16.4 \times 0.10) - (5.6 \times 0.4019) = 15\%$$

e) Let  $w$  = weight of stock B.

$1 - w$  = weight of risk-free asset

Noting that the risk-free asset is not correlated with any asset (i.e.  $R(B, R_f) = 0$ ) and the risk-free asset is riskless ( $\sigma_{RF} = 0$ ), the standard deviation of a portfolio comprising of only stock B and risk-free asset becomes:

$$\sigma_p^2 = w^2 \cdot \sigma_B^2$$

$$10^2 = w^2 (25.4)^2$$

$$w^2 = 10^2 / (25.4)^2 = 0.155$$

$$w = \sqrt{0.155} = 0.3937 = 39.37\%$$

Thus, 39.37% should be invested in stock B and 60.63% in risk-free asset.

**Check**

$$\sigma_p = 39.37\% \text{ of } 25.4 = 10\%$$

f) The equity beta measures the systematic risk of a company's shares, the risk that cannot be eliminated by diversification. It is a measure of a share's volatility in terms of the market's risk, and may be estimated by relating the covariance between the returns on the share and the returns on the market to market variance. An equity beta of 0.95 suggests that Zinta Plc shares are less risky than the market as a whole which has a beta of 1. If average market returns change, for example increase by 4% the return of Zinta Plc shares would be expected to increase to  $0.95 \times 4\% = 3.8\%$ .

The alpha value measures the abnormal return on a share. An alpha value of 1.5% means that the returns on Zinta Plc shares are currently 1.5% more than would be expected given the shares systematic risk. Alpha values are only temporary and may be positive or negative; in theory the alpha for an individual share should tend to zero. An alpha value of 1.5% should cause investors to buy the share to benefit from the abnormal return, which would increase share price and cause the return to fall until the alpha value falls to zero. In a well-diversified portfolio the alpha value is expected to be zero.

**EXAMINER'S REPORT**

This multi-part question tested the candidates' knowledge of some elementary calculations in portfolio theory and capital asset pricing model (CAPM). Candidates were expected to show an understanding of capital market line (CML) and security market line (SML).

About 50% of the candidates attempted the question with the level of performance being below average.

The most common pitfall in parts (a) and (b) was the inability of the candidates to differentiate between CML and SML.

In parts (c) – (f), candidates demonstrated complete lack of understanding of the basic concepts being tested. For example, most of the candidates did not understand that the volatility (standard deviation) of a risk-free asset is zero! They also did not recognise that the correlation of a risk-free asset with any other asset is zero.

Candidates are advised to ensure adequate preparation for future examination.

### MARKING GUIDE

4. (a)	2 marks for a well explained point		2
(b)	Computation of the required return of each stock using CAPM	1½	
	Computation of the alpha of each stock	1½	
	Recommendation	<u>1</u>	4
(c)	Calculation of the correlation coefficient with the market index for each of the three stocks		2
(d)	Determining the weights of stocks A and C	1	
	Computing the effective investments in stocks A & C that meet the client's objective	2½	
	Recommendation on the negative result of stock C	<u>½</u>	4
(e)	Determining the weights of stock B and the risk-free asset	1	
	Calculation of the weight on stock B that will achieve the stated objective	1	
	Recommendation	<u>1</u>	3
(f)	Explanation of the meaning and significance of equity beta	2½	
	Explanation of the meaning and significance of alpha value	<u>2½</u>	<u>5</u>
			<u>20</u>

## SOLUTION 5

a)

### i. Forward Contract

Since the payment is due in three months, the three-month forward contract should be used. The company is to buy pounds and the currency dealer is selling. We therefore make use of the selling rate of \$1.9339.

The cost = £5 million × \$1.9339 = \$9,669,500

### ii. Currency Futures

\* Buy or sell futures?

You need to sell dollars in order to buy pounds, so we need to buy futures.

\* Which expiry date?

The first futures to mature after the expected payment date (transaction date) are chosen. We therefore select the 5-month expiry date.

\* How many contracts?

$£5,000,000 \div £62,500 = 80$  contracts

So we buy 80 contracts at \$1.9170/£

\* Predicted futures rate

Current basis = spot price – futures price =  $$(1.9339 - 1.9170) =$   
\$0.0169

Unexpired basis on the transaction date =  $\frac{1}{2} \times 0.0169 =$   
0.0067

Lock-in exchange rate = opening futures price + unexpired basis  
=  $\$1.9170 + \$0.0067 = \$1.9237$

Expected total cost =  $£5,000,000 \times \$1.9237 = £9,618,500$

**NOTE:** Alternative approaches are available and allowed.

### iii. Currency options

\* Put or Call?

We are required to buy pounds so we must buy a call option on pounds.

\* How many contracts?

$£5,000,000 \div £31,250 = 160$  contracts

\* Which expiry date?

Same as under futures – we select the 5-month expiry date.

\* Which exercise price?

We should choose the cheapest one that includes the exercise price and the premium. Since we are buying pounds we add the premium to the exercise price:

Exercise price	+	Premium	=	Net cost
\$		\$		\$
1.9000	+	0.0355	=	1.9355
1.9200	+	0.0232	=	1.9432
1.9400	+	0.115	=	1.9515

To minimise cost, an exercise price of \$1.900 should be selected.

#### Summary of total cost

			\$
Payment through option	=	$\text{£}5,000,000 \times \$1.9000$	= 9,500,000
Add option premium	=	$160 \times \text{£}31,250 \times \$0.0355$	= <u>177,500</u>
Net cost			= <u>9,677,500</u>

#### Comment and recommendations

Based on cost, currency futures offer the best choice. However, these calculations ignore margin requirements on futures and problems of basis risk.

b. Put delta =  $0.45 - 1 = -0.55$

Let  $x$  = number of puts needed:

Delta of stock =  $-110,000$

Delta of put =  $-0.55x$

Total delta of portfolio =  $-110,000 - 0.55x$

For delta hedging:

$$-110,000 - 0.55x = 0$$

$$x = -200,000 \text{ put options}$$

Because this figure is negative, 200,000 put options should be sold.

#### EXAMINER'S REPORT

The question tested candidates' understanding of key derivative instruments used to hedge foreign exchange risk. They were expected to make use of forward contract, futures and options.

Less than 20% of the candidates attempted the question and performance was simply woeful! It would appear that the candidates have made up their minds not to study the risk management section of the syllabus.

### MARKING GUIDE

(a) i.	Forward contract:		
	- Determining the rate and cost to adopt for the payment due in 3 months	3	
ii.	Currency futures:		
	Determining the rate and calculation of the expected total cost	3½	
iii.	Currency options		
	Determining the rate and calculation of the expected cost	7½	
	Comment/recommendation	<u>1</u>	15
(b)	Calculation of the put options to be bought or sold in order to delta hedge	4	
	Recommendation	<u>1</u>	<u>5</u>
			<u>20</u>

### SOLUTION 6

a)

- Cost of equity ( $K_E$ ), using CAPM  
 $K_E = 4 + (1.2 \times 5) = 10\%$
- Cost of convertible bonds

Current market value of bonds =  $100 \times 168/160 = \text{N}105$  per bond

Current share price =  $\text{N}1 \text{ billion}/200\text{m} = \text{N}5$  per share

VPS in five years' time =  $\text{N}5 \times 1.04^5 = \text{N}6.08$

Conversion value =  $19 \times \text{N}6.08 = \text{N}115.52$

Redemption value (assumed at par) =  $\text{N}100$

Since the conversion value is higher than the redemption value, it is assumed that the bondholders will likely convert.

After-tax interest payment =  $0.07 \times 100 \times (1 - 0.3) = \text{N}4.90$  per bond

Using linear interpolation to calculate the Internal Rate of Return (IRR):

Year	cash flow	₦	Discount at 7%	PV (₦)
0	Market price	(105.00)	1.000	(105.00)
1-5	Interest	4.90	4.100	20.09
5	Conversion value	115.52	0.713	<u>82.37</u>
				<u>(2.54)</u>

Year	cash flow	₦	Discount at 6%	PV (₦)
0	Market price	(105.00)	1.000	(105.00)
1-5	Interest	4.90	4.212	20.64
5	Conversion value	115.52	0.747	<u>86.29</u>
				<u>1.93</u>

$$\text{After-tax } K_D = 6 + ((7-6) \times 1.93)/(1.93 + 2.54) = 6 + 0.43 = 6.43\%$$

- **Calculation of cost of preference shares**

$$K_D = 100 \times (0.05 \times 80\text{m}/50\text{m}) = 8\%$$

Alternatively, the preference dividend per share can be compared with the preference share price to find the cost of preference shares.

- **Calculation of weighted average after-tax cost of capital**

$$\text{Total value of company} = \text{₦}(1000\text{m} + 50\text{m} + 168\text{m}) = \text{₦}1,218\text{million}$$

$$\text{After-tax WACC} = ((10\% \times \text{₦}1,000) + (8\% \times \text{₦}50\text{m}) + (6.43\% \times \text{₦}168\text{m}))/\text{₦}1,218\text{m} = 9.4\%$$

It is assumed that the overdraft can be ignored in calculating the WACC, even though it persists from year to year and is a significant source of finance for JP.

- b) Market values of different sources of finance are preferred to their book values when calculating weighted average cost of capital (WACC) because market values reflect the current conditions in the capital market. The relative proportions of the different sources of finance in the capital structure reflect more appropriately their relative importance to a company, if market values are used as weights. For example, the market value of equity is usually much greater than its book value, so using book values for weights would seriously underestimate the relative importance of the cost of equity in the weighted average cost of capital.

If book values are used as weights, the WACC will be lower than if market values were used, due to the understatement of the contribution of the cost of equity, which is higher than the cost of capital of other sources of finance. This can be seen in the case of JP, where the market value after-tax WACC was found to be 9.4% and the book value after-tax WACC is 8.7% ( $10\% \times 320 + 8\% \times 80 + 6.43\% \times 160/560$ ).

If book value WACC were used as the discount rate in investment appraisal, investment projects would be accepted that would be rejected if market value WACC were used. Using book value WACC as the discount rate will therefore lead to sub-optimal investment decisions.

As far as the cost of debt is concerned, using book values rather than market values for weights may make little difference to the WACC, since bonds often trade on the capital market at or close to their nominal (par) value. In addition, the cost of debt is lower than the cost of equity and will therefore make a smaller contribution to the WACC. It is still possible, however, that using book values as weights may under – or over-estimate the contribution of the cost of debt to the WACC.

- c) The capital asset pricing model (CAPM) assumes that investors hold diversified portfolios, so that unsystematic risk has been diversified away. Companies using the CAPM to calculate a project-specific discount rate are therefore concerned only with determining the minimum return that must be generated by an investment project as compensation for its systematic risk.

The CAPM is useful where the business risk of an investment project is different from the business risk of the investing company's existing business operations. In such a situation, one or more proxy companies are identified that have similar business risk to the investment project. The equity beta of the proxy companies represents the systematic risk of the proxy company, and reflects both the business risk of the proxy company's business operations and the financial risk arising from the proxy company's capital structure.

Since the investing companies is only interested in the business risk of the proxy company, the proxy company's equity beta is 'ungeared' to remove the effect of its capital structure. 'ungearing' converts the proxy company's equity beta into an asset beta, which represents business risk alone. The asset betas of several proxy companies can be averaged in order to remove any small differences in business operations.

The asset beta can then be 'regeared', giving an equity beta whose systematic risk takes account of the financial risk of the investing company as well as the business risk of an investment project. Both ungearing and regearing use the weighted average beta formula, which equates the asset beta with the weighted average of the equity beta and the debt beta.

The project-specific equity beta resulting from the regearing process can then be used to calculate a project-specific cost of equity using the CAPM. This can be used as the discount rate when evaluating the investment project with a discounted cash (DCF) flow investment appraisal method such as net present value or internal rate of return. Alternatively, the project-specific cost of equity can be used in calculating a project-specific weighted average cost of capital, which can also be used in a DCF evaluation.

## EXAMINER'S REPORT

The question tested the candidates' understanding of cost of capital. In part (a), they were expected to calculate:

- Cost of equity;
- Cost of preference shares; and
- Cost of convertible bond, and WACC.

Part (b) asked candidates to explain the preference of market value over book value when computing WACC.

In part (c), candidates were asked to explain how CAPM can be used to estimate project-specific cost of capital.

About 60% of the candidates attempted the question and the level of performance was just about average.

In part (a), some of the candidates were able to calculate cost of equity and cost of preference shares. However, majority of them struggled with the calculation of cost of convertible bond.

In parts (b) and (c), most of the answers submitted were completely meaningless.

Cost of capital is one of the pillars of Financial Management and students preparing for this examination cannot afford to gamble with it.

## MARKING GUIDE

(a) Calculation of cost of equity using CAPM	1	
Calculation of cost of convertible bonds:		
- Computing the market value of bonds	½	
- Computing the conversion value of the bonds	1½	
- Computing the after tax interest payment	1	
- IRR calculations	4	
Calculation of cost of preference shares	1	
Calculation of weighted average after tax cost of capital	<u>1</u>	10
(b) 1 mark each for discussion of issue (4 points)		4

- (c) 1½ marks per points, max 4 points - essential to discuss business risk, systematic risk and financial risk

6  
20

# THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

## PROFESSIONAL LEVEL EXAMINATION – NOVEMBER 2019

### ADVANCED AUDIT AND ASSURANCE

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

**INSTRUCTION: YOU ARE REQUIRED TO ANSWER FOUR OUT OF THE SIX QUESTIONS IN THIS PAPER**

**SECTION A: COMPULSORY QUESTION (40 MARKS)**

#### QUESTION 1

Yoga Limited is one of your audit clients. The company is into e-commerce, procuring and selling goods online to interested buyers, in and outside the country. The company also delivers goods sold to the buyers. Furthermore, the company provides an online platform for third party sellers (sellers not affiliated with the company) to sell goods to interested buyers. The interest in online trades has increased and the business is flourishing. The payments system has been outsourced to Heidi Limited, a third party payments company.

The audit of the company for the year ended December 31, 2018 is about to commence and some members of the team are new to the engagement. As the audit manager, you have decided to brief them on what they need to know about the engagement.

#### Required:

- a. Explain the elements of the audit approach that an auditor should deploy in auditing an e-commerce system. (5 Marks)
- b. Explain management's responsibilities with regards to the risks that arise from e-commerce systems. (5 Marks)
- c. Sometimes in an outsourcing situation, the external supplier controls the information from which the figures in the general ledger are obtained, and the audit client might hold none of this information.

#### Required:

Discuss the issues that the auditor ought to consider in this situation (4 Marks)

- d. Discuss the possible reasons for the following changes found at the planning stage of the audit:
  - i. An increase in inventory turnover; (4 Marks)
  - ii. An increase in average collection period; (4 Marks)
  - iii. An increase in the debt ratio; (4 Marks)

- iv. A decrease in the times interest earned ratio; and (4 Marks)
  - v. An increase in the return on total assets; (4 Marks)
- e. Discuss the advantages and disadvantages of outsourcing. (6 Marks)
- (Total 40 Marks)**

**SECTION B: YOU ARE REQUIRED TO ANSWER ANY THREE OUT OF FIVE QUESTIONS  
IN THIS SECTION (60 MARKS)**

**QUESTION 2**

You are an audit manager in Anthill & Co., a firm of chartered accountants. Dotun Limited, which manufactures tissue papers is one of your audit clients. In February 2018, Dotun Limited purchased Udanga Limited, a competitor group of companies. Significant synergies are expected as the operations of Dotun Limited and Udanga Limited are being combined into one group of companies.

In November 2018, Dotun Limited purchased Gango Limited a large manufacturer of home appliances in Gambia, where your firm has no representation. The financial statements of Gango Limited for the year ending December 31, 2018 will continue to be audited by a local firm of chartered accountants. The Chief Finance Officer of Dotun Limited has informed you that he does not intend to consolidate the results of Gango Limited's activities in the group financial statements.

**Required:**

- a. Explain **THREE** conditions under which a parent company need not present consolidated financial statements in line with the requirements of IFRS 10. (3 Marks)
- b. Explain the conditions that must be met for an investor to control an investee as stated in IFRS 10. (3 Marks)
- c. If the group engagement team plans to request a component auditor to perform work on the financial information of a component, the group engagement team is required to obtain an understanding of the component auditor.

**Required:**

- Explain the **FOUR** matters that the engagement team needs to consider in obtaining an understanding of the component auditor. (4 Marks)
- d. The group engagement team shall request the component auditor to communicate matters relevant to the group engagement team's conclusion with regards to the group audit.

**Required:**

Explain **FIVE** matters that could be covered in the communication from the component auditor to the group engagement team. (10 Marks)

**(Total 20 Marks)**

**QUESTION 3**

Auditing standards require auditors to carry out procedures designed to obtain sufficient and appropriate audit evidence. In order to do this, the external auditors may use the work of internal auditors.

The Institute of Chartered Accountants of Nigeria has organised a Mandatory Continuing Professional Education (MCPE) session to sensitise members on the work of internal auditors. As a senior manager in an audit firm, the Institute has asked you to facilitate the session.

**Required:**

- a. Describe an internal audit function. (2 Marks)
- b. Explain with **FOUR** examples, the work of the internal auditor that the external auditors could rely on. (4 Marks)
- c. Evaluate three matters that the external auditors need to consider in determining whether the work of the internal auditor could be used for the purpose of the audit or not. (6 Marks)
- d. Describe how external auditor may evaluate the objectivity and competence of the internal auditors. (8 Marks)

**(Total 20 Marks)**

**QUESTION 4**

You are a partner in a large audit firm, Ande & Associates. The firm is a part of a network of audit firms operating in different countries around the world. As part of the quality control practices of the network of firms, a peer review is done every year. During the peer review, partners from other firms in the network visit your firm to review the working papers for selected audit engagements that were carried out during the year.

After the peer review, the reviewers compile the review comments and categorised them into recurrent themes. The recurrent themes identified after the review in the current year include the following:

- (i) No evidence of review of audit working papers by the senior team members;
- (ii) Review comments were not properly cleared before the signing of the audit report;

- (iii) In some instances, despite evidence of review of working papers during the audit, the peer review identified deficiencies in the audit documentation, which led the reviewers to question the quality of the review done during the audit; and
- (iv) In some instances, all audit working papers were not in the file prior to signing of the audit report.

At the end of the peer review exercise, a report was prepared and sent to the Managing Partner of the firm, the head of audit and the risk management partner.

The Managing Partner of the firm was alarmed at the nature of the findings from the review and decided that necessary steps had to be taken to address the deficiencies noted.

As part of the initiatives to address the situation, you were asked to facilitate a refresher course for the management team on the requirements of ISQC 1 – Quality Control for firms that perform audits and reviews of financial statements.

**Required:**

- a. Explain the purpose of a review of audit work. (1 Mark)
  - b. Explain the **FOUR** types of audit reviews. (4 Marks)
  - c. Discuss the requirements of ISQC 1 on the system of controls that a firm should have that addresses any **FIVE** elements. (15 Marks)
- (Total 20 Marks)**

**QUESTION 5**

XBS Plc. has been experiencing declining fortunes in the market in which the company operates. This was reflected in the financial statements in the last two years. The management has tried to assuage the concerns of shareholders by proposing and getting approval for the issue of bonus shares out of the share premium account. Despite this, the shareholders have registered their displeasure about the declining revenue and distributable profits. Concerted efforts are being made by the shareholders to vote out the directors unless something very significant happens.

Worried by this reaction of the shareholders and the position of other stakeholders, the management engaged a consultant to help improve the financial fortunes of the company and ensure that the company is back on track. The consultant, after a review of the information available to him and based on detailed discussions with management, proposed the raising of additional capital from the public, based on the existing goodwill of the company in the stock market. The funds raised from this exercise will be used in technology enhancement, marketing and new product development. These initiatives are aimed at more efficient operations and increased sales volume. Accordingly, the consultant has produced the necessary

financial projections that management believes will convince investors to put up the desired capital.

The company's management, in a bid to ensure the success of the capital raising exercise, decided to seek a second opinion on the work done by the consultant before actual implementation. The firm which you work for was chosen to provide the second opinion. Your senior partner in whose team, the responsibility falls, has asked you to make preparations to handle the task with him. The task requires that you are conversant with the company, the background to the crisis and the market in which the company operates. It is expedient that you verify the information prepared by the consultant, address any deficiencies in the report and uphold the reputation of your firm.

**Required:**

- a. Develop a work plan necessary for the task in accordance with the requirements of ISAE 3400 – The Examination of Prospective Financial Information. (5 Marks)
- b. Evaluate the considerations to be made and the procedures to be carried out before accepting the engagement, in accordance with ISAE 3400 – The Examination of Prospective Financial Information. (5 Marks)
- c. Prepare an outline of the report to be presented on the engagement. (10 Marks)

**(Total 20 Marks)**

**QUESTION 6**

A group of small practitioners realized that they had not taken advantage of the opportunities provided by the Institute's Mandatory Continuing Professional Education (MCPE) for members' professional development.

At a recent seminar which they attended, while waiting for the commencement of the programme, one of them overheard a discussion by some other professional colleagues about difficulties they were encountering because of the restriction on the types of non-audit services that can be offered to the audit clients. The group of small practitioners became curious and wanted to know more.

Your partner who was also listening, interjected that one of the seniors in his firm could help improve their knowledge on the topic. You were therefore given the responsibility to prepare a presentation to the sole practitioners, focusing on ways to improve auditor's independence generally.

**Required:**

- a. (i) Discuss the current position on the independence of the auditor and the basis for this position.

- (ii) Discuss the services that may impair the independence of an auditor if provided to the same audit client. (12 Marks)
  - b. Evaluate the advantages and disadvantages of a firm's provision of non-audit services to an audit client. (4 Marks)
  - c. Evaluate for your audience, the arguments in favour of and against mandatory audit firm rotation. (4 Marks)
- (Total 20 Marks)**

**SECTION A**  
**SOLUTION 1**

- a. The elements of audit approach to an e-commerce system should include the following:
  - i. The auditor should decide whether or not the engagement should be accepted (as in any professional engagement);
  - ii. The auditor should then plan the engagement: an important aspect of planning may be to make available audit staff with appropriate expertise in e-commerce systems;
  - iii. The auditor should obtain a detailed knowledge of the client's business;
  - iv. He should consider liaising with the internal auditors of the client, if there had been internal audit investigations into the client's e-commerce transactions or system;
  - v. The auditor should identify and evaluate the risks in the system;
  - vi. He should ascertain and evaluate the control environment and the specific internal controls that are in operation; and
  - vii. He may also be appropriate to perform a going concern review, particularly in the case of entities that rely mainly on e-commerce activities for their revenue.
- b. As in all risk situations, management should evaluate the risks to which the entity is exposed and take appropriate action to manage those risks. The general approach that should be taken is summarised below:
  - i. Management should carry out risk assessment exercises on a regular basis;
  - ii. Management should create an appropriate control environment, including an information systems security policy;
  - iii. The entity should make appropriate use of an internal audit function, to obtain assurance that the e-commerce system is functioning properly;
  - iv. There should be adequate audit trails for e-commerce transactions;
  - v. The entity should keep up-to-date back-up copies of data files;

- vi. For some systems, it may be appropriate to use encryption for data-encryption involves the electronic conversion of data into a secure coded language for transmission, so that it will be incomprehensible to anyone who intercepts it in transmission; and
  - vii. The system user should comply with generally accepted standards and register with the Web Trust or similar organisations.
- c. Issues for the auditor to consider in this type of situation include:
- i. **Materiality-** The auditor should decide whether or not the outsourced operation is material in terms of the financial statements. If payroll work is outsourced, this is likely to be a material item and the auditor will have to consider how to obtain sufficient appropriate evidence about payroll costs;
  - ii. **Accessibility to the records-** It is important that access to the relevant records is available for the auditor, and the auditor should discuss with the service organisation the arrangements for obtaining the information required;
  - iii. **Control risk-** The auditor will need to assess control risk in the outsourced operation. A systems audit will be possible only if the auditor is satisfied with the control system in the service organisation, otherwise substantive auditing procedures will be needed;
  - iv. **Compliance-** Where the outsourced work is subject to regulatory requirements, the auditor will need to consider how to gather evidence about compliance with the regulations. An example is the need to check compliance with tax regulations for deductions of tax, in the case of outsourced payroll activities; and
  - v. **Transfer of information-** It may also be necessary to check the procedures for the transfer of information between the service organisation and the audit client, to establish how information is transferred, how often it is transferred and whether the method of transfer is reliable.
- d. Possible reasons for changes found at the planning stage of the audit in relation to the following areas are as follows:-
- i. **An increase in inventory turnover includes:**
    - Greater demand of products;
    - Increase in sales or turnover over the period;
    - Advertising and marketing strategy;
    - Scarcity of competing products; and
    - Sales promotion, etc.

ii. **Increase in average collection period:**

This has to do with collection of debts from customers. Payment period relative to 365 days, hence, increase in average collection period can be as a result of:

- Economic conditions affecting cashflows of consumers; and
- Poor credit control policy.

iii. **An increase in debt ratio**

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

**Increase could be caused by:**

- Borrowing to meet essential activities;
- Slow rate of recovery of debts from customers;
- Economic downturn affecting demand for Company's products; and
- Overtrading leading to employing more resources than the company's cashflow capabilities.

iv. **Decrease in times interest earned ratio:**

- Increase in average collection period;
- Increasing debt profile – customers not paying promptly; and
- Decrease in inventory turnover.

v. **Increase in return on total assets**

$$\text{Return on total assets} = \frac{\text{Net profit after interest and tax}}{\text{Total assets}}$$

**Increase could be caused by:**

- Increase in turnover;
- Reduction in expenses;
- Reduction in income tax for the year;
- Ageing assets

e. **Advantages of outsourcing include:**

- i. **Cost savings-** It may be cheaper to outsource work to an external service provider than to do the work in-house;
- ii. **The skills of the external agency or service provider-** An external service provider may have skills and expertise for doing the work which the entity itself does not have 'in house';
- iii. **Access to the most up-to-date techniques and technology** might not be readily available within the entity, but the external agency may have them; and

- iv. The management of the entity are able to focus their time and efforts on 'core activities', and do not have to spend as much time monitoring the outsourced activities.

**Disadvantages of outsourcing include:**

- i. The management of the entity needs to make sure that the service provider understands the requirements of the entity in respect of the service that it is providing. If the work is not properly specified, the service provider may fail to do everything that the entity requires it to do;
- ii. There may be problems with negotiating an appropriate fee for the work with the service provider;
- iii. Management needs to ensure that the service provider gives the organisation an appropriate level of priority and 'customer care'. This means that management must carry out regular reviews of the service level and service quality provided; and
- iv. There may be issues of confidentiality and security of the company's data and documents on the part of the service provider.
- v. Continuity of service
- vi. Stability of price
- vii. Acceptable level of quality

**EXAMINER'S REPORT**

The question tests candidates' knowledge of (a) e-commerce business (b) outsourcing and (c) financial analysis.

Being a compulsory question, all the candidates attempted the question and performance was good.

## Marking Guide

		Mark	Mark
a.	Any five of the element of the audit approaches to an e-commerce system (1 mark each)		5
b.	Explanation of any five of management responsibilities (1 mark each)		5
c.	$\frac{1}{2}$ mark each for mentioning any four $\frac{1}{2}$ mark for elaborating on each of the mentioned points	2 <u>2</u>	4
d.(i)	2 marks each for any two reasons	4	
(ii)	2 marks each for any two points	4	
(iii)	2 Marks each for any two points	4	
(iv)	2 marks each for any two points	4	
(v)	2 marks each for any two points	<u>4</u>	20
e.	Mentioning any three advantages of outsourcing (1 mark each for any three points) Mentioning any three disadvantages of outsourcing (1 mark each for any three points)	3 <u>3</u>	<u>6</u> <b><u>40 Marks</u></b>

## SECTION B SOLUTION 2

- a. **Conditions under which a parent company need not present consolidated financial statements in line with the requirements of IFRS 10 are: if**
- i. It is a wholly-owned subsidiary or is a partially-owned subsidiary of another entity and its other owners, including those not otherwise entitled to vote but have been informed about, and do not object to the parent company not presenting consolidated financial statements.
  - ii. Its debt or equity instruments are not traded in a public market (a domestic or foreign stock exchange or an over-the-counter market, including local and regional markets)
  - iii. It did not file nor is it in the process of filing, its financial statements with a securities and exchange commission or other regulatory organization for the purpose of issuing any class of instruments in a public market, and

- v. Its ultimate or any intermediate parent or the parent company produces financial statements available for public use that comply with IFRS, in which subsidiaries are consolidated or are measured at fair value through profit or loss in accordance with IFRS 10
- b. Conditions that must be met for an investor to control an investee as stated in IFRS 10**
- An investor controls an investee, if and only if, the investor has all of the following elements:
- i. Power over the investee, that is the investor has existing rights that give it the ability to direct the relevant activities (the activities that significantly affect the investee's returns);
  - ii. Exposure or rights, to variable returns from its involvement with the investee; and
  - iii. The ability to use its power over the investee to affect the amount of the investor's returns.
- c. Matters that the engagement team needs to consider in obtaining an understanding of the component auditor include:**
- i. Whether the component auditor understands and will comply with the ethical requirements that are relevant to the group audit (in particular that he is independent);
  - ii. The component auditor's professional competence;
  - iii. Whether the group engagement team will be involved in the work of the component auditor to the extent necessary to obtain sufficient appropriate audit evidence;
  - iv. Whether the component auditor operates in a regulatory environment that actively oversees auditors; and
  - v. Reputation of the component auditor.
- d. The component auditor's communication with the group auditor will usually be in the form of a memorandum or report of work performed and this will include the following:**
- i. A statement of compliance with ethical and group auditor's requirements;
  - ii. Identification of the financial information on which the component auditor is reporting;

- iii. Any instance of non-compliance with laws and/or regulations which could lead to a material misstatement of the group financial statements;
- iv. A list of uncorrected misstatements of the financial information of the component entity;
- v. Indicators of possible management bias;
- vi. Any identified material weakness in internal control;
- vii. Any other significant matters the component auditor expects to communicate to those charged with governance of the component entity;
- viii. Any other matter that may be relevant to the group audit; and
- ix. The component auditor's overall findings, conclusions or opinion.

### EXAMINER'S REPORT

The question tests candidates' understanding of consolidated financial statements and joint audit.

About 90% of the candidates attempted the question and performance was good.

### MARKING GUIDE

	<b>MARKS</b>
a. Conditions under which a parent company need not present consolidated financial statements in line with the requirement of IFRS 10 (1½ marks each for any two points)	3
b. Conditions that must be met for an investor to control an investee as stated in IFRS 10 (1½ marks each for any two points)	3
c. Matters that the engagement team needs to consider in obtaining an understanding of the component auditor (1mark each for any four points)	4
d. Communication matters relevant to the group engagement teams' conclusion with regards to the group audit (2 marks each for any five points)	
<b>Total</b>	<u>10</u> <b>20</b>

### SOLUTION 3

- a. **The Internal Audit function has been defined as**  
'An appraisal system established by management for the review of the accounting and internal control systems as a service to the entity:'

There are several parts to this definition as follows:

- i. Internal auditing is an appraisal system;

- ii. It is established by management as a service to the entity;
- iii. It involves the review of accounting systems; and
- iv. It also involves the review of internal control systems, which are systems for financial controls, operational controls and compliance controls.

Internal auditing is separate and distinct from accounting. The role of internal auditing has become more significant in larger entities and is now regarded as an important management tool.

- b. The internal audit function is a service to management generally. However, the external auditors can rely on some of the functions of the internal audit, if it meets the requirements and criteria that guarantee objectivity, competence and independence of the functions.

**Some of the functions of the internal audit are:**

- i. Documentations of the accounting and internal control systems;
- ii. Audit of inventory and work in progress;
- iii. Circularization of payables and receivables;
- iv. Provision of schedules, breakdown and analysis required by the external auditors, and
- v. Providing the outcome of the review of the accounting and internal control systems that are in existence within an entity.

- c. **The following factors should be considered by the external auditor in making the assessment of internal audit:**

- i. The status of the internal audit department within the entity, in particular, the **objectivity** of the internal audit department. The external auditors will be more willing to rely on the internal auditor if the internal audit department has a considerable degree of operational independence, for example, in deciding the nature of the audit work it will carry out, and in reporting to an 'independent' senior person or body within the entity, such as the audit committee (rather than the finance director).

The external auditors will also need to consider the scope of the internal audit work and any restrictions placed by senior management on the scope of its work and whether management act on recommendations in internal audit reports. If management ignores recommendations in internal audit reports, the external auditor cannot have much confidence in the ability of internal auditors to ensure the effectiveness of internal control;

- ii. The **technical competence** and **due professional care** of the internal auditor. The external auditors must be satisfied that the internal audit staff have sufficient technical competence and take a professional approach towards their work; and
- iii. There will need to be **effective communication** between the external and internal auditors with meetings held at appropriate intervals and each notifying the other of any significant matters that might affect the other's work.

In addition to the **general** assessment of the internal audit, ISA 610 also requires the external auditors to **evaluate each specific piece of work** performed by internal audit before it is used as external audit evidence.

- d. Because the external auditors are fully responsible for the audit opinion, he will need to test the work performed by the internal auditor. **Before using specific work** of internal audit, the external auditors are required to evaluate whether or not;
  - i. The work was performed by an internal auditor with adequate technical training and proficiency;
  - ii. The work was properly supervised, reviewed and documented;
  - iii. Adequate audit evidence was obtained;
  - iv. Appropriate conclusions were reached, consistent with any reports prepared; and
  - v. Any exceptions or unusual matters were properly resolved.

**Procedures to achieve this might include:**

- i. Examining items already examined by internal audit;
- ii. Examining other similar items; and
- iii. Observing procedures performed by internal audit.

The external auditor's evaluation of the internal audit function and its work should be fully documented in the external auditor's working papers.

**EXAMINER'S REPORT**

The question tests candidates' understanding of internal audit.

About 90% of the candidates attempted the question and performance was good.

**MARKING GUIDE**

		<b>MARKS</b>
a.	Giving definition of internal audit function	2
b.	Functions of internal audit 1 mark for each function, maximum of 4 points	4

c.	<p>Factors to be considered by the external auditors in making the assessment of internal audit Two marks per points, maximum three points. Issues to be mentioned.</p> <ul style="list-style-type: none"> <li>i. Objectivity;</li> <li>ii. Technical Competence and due professional care;</li> <li>iii. Effective communication.</li> </ul> <p><b>(1 mark each for a point subject to a maximum of 2 points=2 Marks</b> <b>(2 marks for explaining any 2 points=4 Marks</b></p>	6
d.	<p>Evaluation of the work of the internal auditor by the external auditor. <b>(2 mark each for any 4 points)</b></p>	8
<b>Total</b>		<b><u>20 Marks</u></b>

#### SOLUTION 4

- a. **The purpose of audit review is to check whether:**
- i. The audit work was carried out to proper professional standards;
  - ii. The objectives of the audit have been achieved; and
  - iii. The work carried out during the audit and the audit evidence is suitably documented, and that the audit evidence supports the conclusions that have been reached.
- b. **The following are various types of audit reviews :**
- i. **Peer review-** This is a review carried out by an audit firm on another audit firm of comparable size and standard.
  - ii. **Engagement quality control review (EQCR)-** A peer review performed before the audit report is signed as required by ISQC1 during the audit of a listed or public interest entity. An EQCR forms part of the quality control procedures specific to an individual assignment;
  - iii. **Hot review-** Similar in substance to an EQCR except that the hot review is not performed as a direct requirement of ISQC1, for example, when an engagement partner on a non-listed/public interest entity audit wants a second opinion or to monitor the work of a new partner during probation.
  - iv. **Monitoring review** (also called a 'cold review')- This is a peer review performed after the audit report is signed. A cold review forms part of the monitoring of quality control procedures.

**c. Requirements of ISQC 1 on the system of controls that a firm should address include:**

**i. Leadership responsibilities for quality**

**ISQC 1** requires the firm to establish policies and procedures designed to promote an internal culture recognising that quality is essential. Ultimate responsibility for quality control policies and procedures should rest with the firm's CEO (or equivalent) or managing board of partners (or equivalent). Any person who has operational responsibility for quality control should have appropriate experience and ability and the necessary authority.

**ii. Ethical requirements**

**ISQC 1** requires the firm to establish policies and procedures to provide it with reasonable assurance that the firm and its staff:

- Comply with relevant ethical requirements;
- Maintain independence where required to do so by those requirements;
- Communicate its independence requirements to staff; and
- Identify and evaluate circumstances and relationships that create threats to independence, assessing the impact of such threats and applying safeguards or withdrawing from the engagement if appropriate.

**The policies and procedures should include requiring:**

- Staff to notify the firm of circumstances and relationships that might create a threat to independence;
- Staff to notify the firm of any breaches of independence of which they have become aware;
- The firm to communicate such breaches to the engagement partner and other relevant staff; and
- The engagement partner to advise the firm of actions to be taken.

**iii. Acceptance and continuance of engagements**

**ISQC 1** requires the firm to establish policies and procedures to provide it with reasonable assurance that the firm will only take on or continue work where the firm:

- Is competent to perform the engagement;
- Has the capabilities (including the necessary resources) to do so;
- Can comply with the relevant ethical requirements; and
- Has considered the integrity of the client and does not have information which would lead it to conclude that the client lacks integrity.

The policies and procedures should include requiring the firm to:

- Obtain sufficient information to make such decisions (for new or existing engagements);
- Consider potential conflicts of interest (and therefore whether it should accept the engagement); and
- Document all identified issues and how they were resolved.

iv. **Human resources**

**ISQC 1** requires the firm to ensure:

- It has sufficient personnel with the competence, capabilities and commitment to ethical principles to meet its overall quality control objectives; and
- That for each engagement, an appropriate engagement partner and team are assigned.

Policies should therefore exist for the recruitment, training and development of staff. The firm should ensure compliance with ISAs and audit staff should have a good knowledge of accounting standards and local/national statutory accounting regulations.

The firm's technical auditing procedures should be set out in a manual and reinforced by training. Newsletters and/or meetings could be used as a means of ensuring that professional staff are kept up-to-date on current developments.

Work should be assigned to staff that are competent to perform that work. There should be procedures for ensuring that an audit team collectively has the appropriate level of technical knowledge for the audit engagement and includes individuals with:

- Experience of audits of a similar complexity; and
- An ability to apply professional judgment.

v. Engagement performance policies and procedures are required to include:

- Those to promote consistent quality engagement performance
- Supervision responsibilities;
- Review responsibilities (on the basis that more experienced team members review the work of less experienced team members);
- Guidance on consultation to ensure that:

- ix. Appropriate consultation takes place on difficult or contentious matters;
- x. Sufficient resources are available for such consultation;
- xi. The nature, scope and conclusions of the consultation are documented (by both parties); and
- xii. Conclusions arising from the consultation are implemented.

- **Guidance on engagement quality control reviews to ensure that:**
- ✓ An engagement quality control review is required for audits of all listed entity clients;
- ✓ Criteria are established to determine which other engagements should be subject to an engagement quality control review;
- ✓ The review covers certain procedures (the same as set out in ISA 220);
- ✓ Engagement quality control reviewers are eligible to carry out such reviews via technical qualifications, experience, authority and objectivity from the engagement; and
- ✓ Engagement quality control reviews are properly documented (again, as also set out in ISA 220).

vi. **Monitoring of quality control procedures**

The firm is required to establish a monitoring process designed to provide it with reasonable assurance that its quality control system is relevant, adequate and operating effectively. This process should include inspecting, on a cyclical basis, at least one completed engagement for each engagement partner.

Responsibility for the monitoring process should be given to a partner or other appropriate person with sufficient experience and authority. When monitoring reviews (also referred to as 'cold reviews') are carried out they should not be performed by those involved with the engagement or the engagement quality control review.

The firm should:

- Evaluate the effect of deficiencies found to determine if they indicate a failing in the firm's quality control system; and
- Communicate such deficiencies to relevant personnel, together with appropriate remedial action.

vii. **Documentation of quality control procedures**

The following matters are required to be documented:

- Evidence of the operation of each element of the system of quality control;
- Complaints and allegations made against the firm and how these were resolved; and
- Documentation must be retained for a sufficient period of time, as a minimum to comply with relevant laws and regulations.

## **EXAMINER'S REPORT**

The question tests candidates' knowledge of the review of audit working papers.

About 60% of the candidates attempted the question and performance was poor.

The commonest pitfall of the candidates was lack of understanding of the requirements of ISQC 1 as they relates to the system of controls.

Candidates are enjoined to study the Institute's study text properly for future examinations.

### MARKING GUIDE

		MARKS	MARKS
a.	Mentioning any two purposes of audit review ( $\frac{1}{2}$ mark each maximum of two)		1
b.	Mentioning the four types of audit review, with explanations:-It is essential to mention:- i. Peer review ii. Engagement quality control review iii. Hot review iv. Monitoring review/cold review ( $\frac{1}{2}$ mark each for mentioning) ( $\frac{1}{2}$ mark each for explaining)	2 <u>2</u>	4
c.	Discussing the requirements of ISQC 1 on the system of controls that a firm should have: i. Leadership responsibility for quality- - Establish policies and procedures - Responsibility rests with CEO - Appropriate experience for necessary authority  ii. Ethical requirements iii. Acceptance and continuance of engagement. iv. Human resources v. Engagement performance policies and procedures vi. Monitoring of quality control procedures vii. Documentation of quality control procedures  3 marks for each point subject to a maximum of five points.		<u>15 Marks</u>
		<b>Total</b>	<u><b>20 Marks</b></u>

### SOLUTION 5

- a. The following are the work plans to be carried out in examining the prepared prospective financial information (PFI):
- i. Where the audit firm has no previous knowledge of the entity, it should obtain sufficient knowledge of the company and its environment;

- ii. If best estimate assumptions have been used in preparing the PFI (a forecast), the auditor should seek evidence to support these estimates;
  - iii. The auditor should also check the arithmetical accuracy and consistency of the projected financial information that has been prepared;
  - iv. The auditor should obtain representations from management on:
    - Management's acceptance of responsibility for the information;
    - The intended use of the information; and
    - The completeness of the assumptions that were made to prepare the PFI;
  - v. If hypothetical assumptions have been used (to prepare a projection), the auditor should assess whether they are realistic and sensible, and whether the full implications of the hypothetical assumptions have been properly reflected in the PFI;
  - vi. The auditor should assess whether the PFI contains all the relevant material items and that nothing of significance has been omitted; and
  - vii. If part of the 'future period' in the forecast or projection has already passed, the auditor should review the actual results for that part of the period, and compare actual results with the forecast or projection. The differences will help the auditor to assess the reliability of the forecast or accuracy of the projection.
- b.** In accordance with ISAE 3400 – The consideration to be made and the procedures to be carried out before accepting the engagement of the examination of prospective financial information include:
- i. The availability of resources and staff with the necessary expertise;
  - ii. The timescale for the completion of the engagement; and
  - iii. Agreeing a fee for the work with the client.

The accountant should also establish with the client the form that the assurance report should take. It is particularly important that the client should understand that in a review of forward-looking information, only negative assurance can be provided. The client should also be informed that the audit firm will comply with the requirements of ISAE 3400 when reviewing the prospective financial information. An engagement letter should be agreed and signed by both parties before the work is actually started.

**There are several specific points that might apply to PFI engagements and these include:**

- i. Understanding the nature of the information to be examined;
  - ii. Establishing the intended use of the information (and the intended recipients of the final report);
  - iii. Establishing whether the information will be for general distribution or limited distribution to a small number of users;
  - iv. The nature of the assumptions that have been made by management (whether they are best estimate assumptions for a forecast, or hypothetical assumptions for the purpose of making a projection); and
  - v. The time period covered by the information.
- c. The following are the outlines of the report to be presented on the engagements of prospective financial information:
- i. Title;
  - ii. Addressee;
  - iii. Identification of the PFI (for example by page references to pages in same document as the report, where the PFI can be found);
  - iv. A reference to the ISAE;
  - v. A statement that management is responsible for the PFI, including the assumptions on which it is based;
  - vi. A reference to the purpose of the PFI and/or the restricted distribution of the report (and the PFI) to a limited number of users;
  - vii. A statement of negative assurance as to whether the assumptions that management have made provide a reasonable basis for the PFI.
  - viii. An opinion as to whether the PFI is properly prepared on the basis of these assumptions, and whether the PFI is presented in accordance with the relevant financial reporting framework;
  - ix. The report should also contain warnings (caveats) that the PFI is a forecast or projection, and the results indicated by the PFI might not be achieved;
  - x. Date, address and signature of the accountant/auditor.

#### **EXAMINER'S REPORT**

**The question tests candidates' understanding of ISAE 3400- The Examination of Prospective Financial Information.**

**About 75% of the candidates attempted the question, but the performance was poor.**

**The commonest pitfall of the candidates was their misinterpretation of the question, by applying general audit plan to PFI audit.**

Candidates are advised to read and understand the requirements of the question before attempting to answer it and also read the study text in depth before future examination.

#### MARKING GUIDE

		<b>MARKS</b>	
a.	Development of work plan (1 mark each for any five points)	<b>5</b>	
b.	Consideration for acceptance of engagement (1 mark each for any five points)	<b>5</b>	
c.	Outline of report (1 mark each for ten points)	<b><u>10</u></b>	
<b>Total</b>		<b><u>20</u></b>	<b>Marks</b>

#### SOLUTION 6

a(i) It is well established that independence is fundamental to the credibility of the audit process. Much of the current thinking on independence has been developed by the Securities and Exchange Commission (SEC) in the United States of America (USA). The work of the SEC was a fall out from the corporate scandals in the USA in 2001 and 2002 such as Enron and Worldcom.

In 2003 the SEC adopted rules to implement the Sarbanes-Oxley Act 2002 on corporate governance. The rules aim to strengthen auditors' independence and require additional disclosures to investors about the services provided to a corporation by an independent accountant.

(ii) According to Sarbanes-Oxley Act, the following services may impair the independence of auditors:

- **Book-keeping or other services related to the accounting records or financial statements of the audit client-** This rule prohibits an accountant from auditing the book-keeping work performed by his or her accounting firm on behalf of a client;
- **Financial information systems design and implementation-** The rules prohibit a firm from providing any service related to the information systems of the audit client, unless it is reasonable to conclude that the results of these services will not be audited. These rules do not prevent a firm from working on the hardware or software systems of an audit client, if these are unrelated to the client's financial statements or accounting records and provided that the provision of these services by the firm is approved in advance by the audit committee;

- **Appraisal or valuation services, fairness opinions, or contribution-in kind reports-** All these activities are services involving a report from an accountancy firm on the valuation used in a transaction. The rule prohibits an accounting firm from providing such services, unless the results of these services will not be audited as part of the audit of the financial statements;
- **Actuarial services-** The rule prohibits an accounting firm from providing any actuarial advisory service to an audit client that involves a decision about amounts to be recorded in the financial statements (and related accounts) of the audit client. Such a service may apply, for example, to the valuation of pension funds (which is connected to the valuation of pension fund liabilities). An accounting firm may, however, assist a client in understanding the methods, models, assumptions and inputs used in computing an amount;
- **Internal audit outsourcing services-** The rules prohibit the accounting firm from providing any internal audit service that has been outsourced by the audit client, where the internal audit work relates to the audit client's internal accounting controls, financial systems or financial statements. This means that internal audit work relating to operational controls and compliance (operational audits, Value for Money (VFM) audits and compliance audits) by the accounting firm are permissible;
- **Management functions or human resources-** The rules prohibit an accounting firm from:
  - ✓ Acting (even in a temporary capacity) as a director, officer or employee of an audit client;
  - ✓ Performing any decision-making, supervisory, or ongoing monitoring function for the audit client;
  - ✓ The independence of an accounting firm will also be impaired if the firm aids the audit client in connection with any senior level management appointment. An accountant's independence is impaired with respect to an audit client when the accountant;
  - ✓ Seeks out prospective candidates for managerial, executive or director positions within the client company;
  - ✓ Acts as negotiator, on the audit client's behalf, with any person who has applied for a senior management position;
  - ✓ Under this rule, an accountant's independence will also be impaired when the accountant;
  - ✓ Engages in psychological testing or other formal testing or evaluation programmes; or
  - ✓ Recommends or advises the audit client to hire a specific candidate for a specific job.

- **Broker or dealer, investment adviser, or investment banking services-** Acting as a broker-dealer, promoter or underwriter on behalf of an audit client will make the accountant an advocate for the audit client and will impair his independence.
- **Legal services-** An accounting firm is prohibited from providing to an audit client any service that could be provided only by someone qualified to practice law in the jurisdiction in which the service is provided; and
- **Expert services unrelated to the audit-** The rules prohibit an accounting firm from providing expert opinions to an audit client, for the purpose of advocating that audit client's interests in litigation or in any regulatory or administrative proceeding or investigation.

**b. Advantages of providing non-audit services by the auditors for their clients-**  
The accounting firm is in an excellent position to provide its client with non-audit services. This is because:

- i. It already has an extensive knowledge of its client, the client's business and its systems; and
- ii. It should therefore be able to provide the additional non-audit services to the client at a lower cost than other accountancy firms, and with less disruption to the client.

Non-audit work also makes accounting firms more attractive in the recruitment market, because a wider range of work experience can be offered to trainees.

#### **Disadvantages of providing non-audit services by the auditors for their clients**

There are some obvious disadvantages for providing non-audit services:

- i. The accounting firm may be seen by the world at large to lack independence from the client, because of the huge fees it receives for audit and non-audit work. This was a criticism levelled at the Houston office of accounting firm Andersens, following the collapse of Enron; and
- ii. Accountants from the accounting firm may find themselves in a position where they are making management decisions. If so, their independence is impaired.

**c. Arguments in favour of mandatory audit firm rotation are:**

- i. In a long-term audit relationship, the auditors may become too close to management of the client company. This may weaken their professional scepticism and independence. They may be more likely to compromise when disagreements with management occur, in order to preserve the relationship; and

- ii. Even if rotation would not protect the independence of the accounting firm, it improves the public perception of independence, and so may increase confidence in the quality of external audits.

**Arguments against mandatory audit firm rotation include:**

- i. There may be negative effects on audit quality and effectiveness in the first years following a change. This is because the new auditors may take several years to familiarise themselves with their new client and its procedures. There is some evidence to suggest that there may be a higher instance of audit failures in the first years following a change of auditors. If this evidence is valid, the connection between company failures and a change of auditors might reflect an inability of the newly-appointed auditor to identify problems in the client company;
- ii. There are also substantial costs from changing auditors regularly, as the auditor attempts to familiarize himself with the new client. More management time is also needed to assist the new auditor to learn about the client company, its operations and its systems;
- iii. There is no evidence that compulsory audit firm rotation has a positive impact on auditor independence and audit quality; and
- iv. The market for auditing listed companies is dominated by the 'Big Four' accountancy firms. If this domination of the audit market continues (which is probable), it may be difficult to change auditors easily. The other large firms may not have available resources to take on the audit or may not be 'independent' because of other non-audit services that they already provide.

**EXAMINER'S REPORT**

**The question tests candidates' knowledge of the independence of the auditor.**

**About 90% of the candidates attempted the question and performance was good.**

## MARKING GUIDE

		<b>MARKS</b>	<b>MARKS</b>
<b>a.</b>	i. current position on independence of the auditor The reference to the cases and the explanation of Independence	4	
		Reference to Sarbane-Oxley Act	2
	ii. Services that may impair independence of the auditor: Any 6 non-audit services: mentioned - $\frac{1}{2}$ mark each) Discussed - $\frac{1}{2}$ mark each	3	
		<u>3</u>	<b>12</b>
<b>b.</b>	Evaluation of advantages of providing non-audit services to an audit client (1 mark each for any two)	<b>2</b>	
	Disadvantages of providing non-audit services to an audit client (1 mark each for any two)	<u>2</u>	<b>4</b>
<b>c.</b>	Arguments in favour of audit firms rotation (1 mark each for any two)	<b>2</b>	
	Arguments against audit firm rotation (1 mark each for any two)	<u>2</u>	<b>4</b>
			<b>20 Marks</b>

**THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA**

**PROFESSIONAL LEVEL EXAMINATION – NOVEMBER 2019**

**CASE STUDY**

**Time Allowed: 4 hours (including reading time)**

**INSTRUCTION: YOU ARE TO USE THE CASE STUDY ANSWER BOOKLET FOR THIS PAPER**

**Pre-seen**

This material is issued prior to the examination date to enable candidates familiarise themselves with the case scenario so as to undertake any research and analysis they think fit. This pre-seen part of the Case Study examination is published on the Institute's website: [www.ican.org/students](http://www.ican.org/students).

You **MUST NOT** bring this material with you to the Examination Hall. On receipt of the material, you are to spend the few days to the examination date to familiarise yourself with the information provided, carry out additional research and analysis about the industry and analyse the financials provided, in preparation for the examination. Candidates should note that the use of pre-seen part of the Case Study will not significantly help them in their preparation for this examination. It is essential that they carry out sufficient study and analysis on their own in order to have a good understanding of the pre-seen part of the case scenario.

At the start of the examination, candidates will receive the complete case scenario which will include both the pre-seen and the unseen which includes the requirements. You must use the answer paper provided by ICAN in the Examination Hall. Any solution presented with other papers **WILL NOT** be marked.

**Assessment of the Case Study**

The marks in the Case Study examination are awarded for exhibition of expertise and are approximately allocated as follows:

- |  |     |
|--|-----|
| ▶ Assimilating and using information                     | 20% |
| ▶ Structuring problems and solutions                     | 20% |
| ▶ Applying judgement                                     | 20% |
| ▶ Drawing conclusions and making recommendations         | 20% |
| ▶ Demonstrating integrative and multidisciplinary skills | 10% |
| ▶ Presenting appropriate appendices                      | 10% |

Of the total marks available, 20% is awarded for the executive summary and approximately 10% for the relevant discussion of ethical issues within your answer to the requirements. Although ethical issues do not form a specific requirement, as it is deemed to have been tested in other subjects of the ICAN professional examination. It will be tested within a requirement which may include the following areas:

- ▶ Lack of professional independence or objectivity;
- ▶ Conflicts of interest among stakeholders;
- ▶ Doubtful accounting and creative accounting practice;
- ▶ Unethical business/commercial practice; and
- ▶ Inappropriate pressure to achieve a reported result.

Candidates should note that marks are not awarded for just simply restating facts from the case scenario but are awarded for demonstrating professional skills and technical depth. Therefore, to succeed, candidates are required to:

- ▶ Show sufficient evidence of knowledge of the case scenario;
- ▶ Be able to carry out appropriate analysis of the issues involved and suggest feasible solutions to the problems identified;
- ▶ Demonstrate ability to make informed judgement on the basis of analysis carried out; and
- ▶ Generate reasoned conclusions upon which relevant recommendations are made.

A candidate that omits any one of these would have a slim chance of success in the examination.

## **NOVEMBER 2019 CASE STUDY: DETOY FARMS AND FARM PRODUCTS LIMITED**

### **LIST OF EXHIBITS**

1. About you (**Chukwura Alli**) and your employer, **Oluwole, Ibrahim, Ezeife & Co, (Chartered Accountants)**
2. Agribusiness: Constraints and opportunities in Nigeria
3. Detoy Farms and Farm Products Limited: history, operations, board and management
4. Detoy Farms and Farm Products Limited: Business opportunities
5. Detoy Farms and Farm Products Limited's Management accounts 2017 - 2018
6. Press articles

### **Exhibit 1**

#### **About you (Chukwura Alli) and your employer (Oluwole, Ibrahim, Ezeife & Co)**

You are Chukwura Alli, writing the Professional level of ICAN examination. You are working in the Lagos office of **Oluwole, Ibrahim, Ezeife & Co (chartered accountants)** which has its offices in all the state capitals of the country. You are reporting to James Oluwole, the partner in charge of the business advisory unit of the firm. Your responsibilities include:

- Preparing detailed financial analyses and reports on the performance of your business advisory clients;
- Analysing your clients' financial statements to identify areas of weakness and proffering solutions to correct the anomalies;
- Assessing operational and strategic business proposals submitted by clients to see how each aligns with the client's objectives and its impact on its business and financial risks;
- Assessing clients' financial and business forecasts together with the assumptions upon which they are based to form judgements and recommendations to your partner; and
- Drafting reports to be submitted to clients on the result of clients' financial, operational and strategic business analyses you have carried out.

Your responsibilities demand that you keep yourself abreast of your clients' industries and external operating environment so as to be able to carry out the above tasks effectively.

## **Exhibit 2**

### **Agribusiness: Constraints and opportunities in Nigeria**

There was a time when the African continent was known as the agrarian hub of the entire world. In Nigeria for instance, before crude oil was discovered, agriculture accounted for more than three-quarters of the country's export income and almost half of its GDP. The country fed its populace with ease and had surpluses in rubber, cocoa, groundnuts and palm oil for export.

Urbanisation and industrialisation have turned the tide on this and made the country one of the top food importers globally. Consequently, Nigeria became dependent on import to sustain her people. However, in the recent past, this African economic giant has started taking steps to rectify this anomaly.

### **Why Agribusiness is lucrative in Nigeria**

There are many compelling reasons why agricultural business is lucrative in Nigeria. These are:

#### **Population**

Nigeria is famed for being the most populous nation in Africa and the seventh most populous in the world. It has a population of about 200 million people and this offers two major advantages. First, getting affordable labour to help with agricultural production is quite easy, which will ensure low production capital for agricultural investors and translate to lower prices for the end product.

Secondly, as a result of the huge population, there will always be a ready market for farm produce.

#### **Government support**

The government has recently put measures in place to support economic diversification. To this end, it is incentivising farmers and helping them get access to government as well as non-government agencies that deal in agricultural production. This has created a huge opportunity for existing farmers and also serves as a morale booster for new investors in the sector.

#### **Arable land**

Nigeria measures more than 900,000 sq.km and 70% of this is fertile land, viable for agriculture. This expanse of land is among the biggest in the entire continent and most of it is black cotton soil, greatly renowned for high productivity.

### **Growth potential**

The fact that the Nigerian economy had for a long-time placed agribusiness on the back burner makes it look like a completely new venture. As with all new business ideas, the growth potential for the sector is currently very high. This would make it a great time to take advantage of it as it grows.

### **Financing opportunities**

The publicity level that the agricultural sector is currently enjoying has led to another major advantage. More institutions are to provide financing for potential and existing investors in the industry. Government support in this regard has also made it quite easy to secure loans and grants, and provided favorable repayment options. The Vice President recently announced the Federal Government's readiness to increase agricultural financing.

### **Agribusiness opportunities in Nigeria**

The following are the various types of agricultural business that are very lucrative in Nigeria and are in short supply:

#### **Rice farming**

Nigeria is one of the largest rice importers in the world. It only comes second to Asian countries, since rice is the most popular staple food on the Nigerian table. Local rice production only accounts for a fraction of what the population requires for sustenance. Local demand stands at 5 million tons annually and grows by more than 5% every year. This means that investing in rice farming in Nigeria is guaranteed to yield substantially, since the demand surpasses supply. It also implies that a farmer will not have to invest so much into marketing as the product will sell very fast off the shelves.

The government is also keen on supporting rice farmers in order to reduce the import burden currently being experienced. This makes it very easy to embark on rice farming as a business and build it to success.

#### **Poultry farming**

It is a known fact that poultry business is highly lucrative in Nigeria and Africa as a whole. The sector still remains largely untapped. Chicken, turkey and eggs are all-time favorites in the country and the local production cannot meet the nation's current demand. This is the reason millions of tons of poultry and poultry products are imported into the country every year.

Apart from the overwhelming demand, another factor that makes this a viable opportunity is the reproduction and growth rate of the birds. Chickens, for instance, take about 28 weeks to mature and make their debut into the market. Eggs ordinarily take about 3 weeks to hatch, but with modern incubation facilities, they take even shorter time. Additionally, layers produce at least one egg every two days, making them highly profitable.

The poultry industry is not only limited to raising birds for sale or egg production, it also involves such aspects as poultry feed, medicine and equipment production. This makes it possible for investors to identify a suitable niche and return a profit from it. The business is however relatively capital intensive and requires some skills to keep the birds healthy and productive.

### **Tomato farming**

Nigeria imports tomato paste worth more than \$500 million annually. This is again the result of the fact that the demand for tomatoes far exceeds the local supply. Interestingly, not so many farmers are into tomato farming. Some shy away from the opportunity because the sensitive nature of the crop makes it require extra care.

This presents the rare advantage of low competition for any investor who is willing to venture into the business. The biggest challenges after the sensitive growth period are proper handling, keeping the produce fresh for as long as possible and transporting it to the selected market. Figuring these details out is crucial to success in tomato farming.

### **Cassava farming**

Cassava is yet another staple food for Nigerian families. Popular foods like bread, *'fufu'* and *'garri'* require cassava as the key ingredient and are consumed in most homes on a daily basis. It is also used to prepare some traditional alcoholic beverages and starch for the dry-cleaning industry.

The limitless uses of the product coupled with its limited supply are sufficient reasons for a potential investor to consider cassava farming.

## **Challenges facing agribusiness entrepreneurs in Nigeria**

### **Post-harvest loss**

This is one of the biggest challenges facing farmers in Nigeria and Africa as a whole. It is the result of a combination of factors. Foremost is the poor infrastructure that marks most of the rural regions of the country, where most of its farming takes place. There are few good road networks, limited electricity supply and poor transport facilities. In addition, the post-harvest infrastructure is also very limited, meaning that a huge percentage of produce gets spoilt when in storage and before getting to the consumers.

### **Attitude**

Majority of the country's population still undermine agriculture and remain blind to its true potential. The sector has therefore been left for the peasant who not only has limited access to resources, but also has not kept pace with the industry's evolution. This presents major problems in terms of limiting the extent to which farming techniques can take advantage of developments in the field. It also means that the true potentials can never be realised unless there is a change in this respect.

## **Climate change**

This is one of the biggest problems that have limited agricultural development in Nigeria and the continent as a whole. Research has shown that Africa has been the most vulnerable continent to the impact of climate change. This is because the continent is almost wholly reliant on rain-controlled farming. The yield from this type of farming has been reducing consistently and is expected to fall to 50% by 2020.

## **The future of agribusiness in Nigeria**

Currently, agribusiness can rightly be considered a major player in the Nigerian economy. More than 70% of the country's population rely on the sector in one way or the other, but this is mostly at a subsistence level, over the years. A number of government administrations in

the country have initiated projects to restore Nigeria to its former glory in agriculture. This is in a bid to commercialise it and maximise on its potential.

Some of the imperatives that have been formulated to this end include a gradual paradigm shift and policy changes to favour the sector. The country has sought to implement commercial agricultural systems to replace the existing subsistence ones. This is aimed at taking advantage of modern technologies in agriculture to reduce cost and increase productivity. It also intends to reduce the current over-reliance on rain-fed systems that are subject to fluctuation. Policy revisions meant to improve infrastructure, control market prices and restructure the entire agribusiness framework are also likely to yield great results, if implemented faithfully.

## **Exhibit 3**

### **Detoy Farms and Farm Products Limited: History, operations, board and management**

In response to the government's call to private investors to invest in agricultural business and the various incentives offered to agricultural business by the government, Dr Solomon Adetoye decided to go into agricultural business in 2015. He registered Detoy Farms and Farm Products Limited in January, 2015 and thereafter, acquired 200 hectares of land along the Lagos – Ibadan expressway.

Dr Adetoye visited Nigerian Institute of Social and Economic Research (NISER) and held business discussions with the Institute's management for assistance in realising his objectives of having a modern farm that caters for the needs of the middle class of the society. The aim of Dr. Adetoye is to go into animal production

and vegetable farming. Therefore, he started with the following sections in his farm:

- Cattle ranch, for breeding cows, rams, goats and sheep;
- Poultry, for production of eggs and chickens for sale;
- Fishery, for production of different species of fish; and
- Vegies farm, for tomatoes, cucumber, and other vegetables.

The company is growing steadily and has become a household name among the elites who buy their various protein and vegetable needs from supermarkets, stores and retail malls in Lagos and Ibadan. The company has also been providing retail services to individual customers who visit the farm to buy any of its products. The company therefore, maintains a small shop on the farm to meet the needs of such customers. However, as a matter of policy, the company sells only live animals such as, fish and chickens on the farm. Other products such as eggs and vegetables can be purchased from the farm store on kilogram basis.

## **Board and management**

### **Board**

The farm is being supervised by a board of six directors. These are:

- Dr. Solomon Adetoye - Chairman
- Dr. John Ajuluchukwu - Managing director/ CEO
- Mr. Garba Sanusi - Technical director
- Mrs Susan Adetoye - Non- executive director
- Sylvester Akapio - Non – executive independent director
- Dr. Lekan Mohammed - Non – executive director (from NISER)

The managing director is responsible to the board for the day to day running of the farm, without any interference from the chairman, though he has hundred percent holdings of the farm. Dr. John Ajuluchukwu is a well experienced agriculturalist who has lectured for many years before becoming the Director of Farm Settlements in the Federal Ministry of Agriculture, from where Dr. Adetoye engaged him to manage his farm. The technical director, Mr. Garba Sanusi, is an experienced animal production engineer, who has worked in different Federal Government farm settlements and other privately-owned farms across the nation. Therefore, Deto Farms (for short) has a formidable team in the areas of business policy and strategy formulation.

### **Management**

The management of Deto farms comprises the following:

- Dr John Ajuluchukwu - Managing director
- Mr. Garba Sanusi - Technical director
- Mr. Olaolu Adeola - Finance controller
- Mrs Janet Idemudia - Marketing controller
- Alh. Sanni Yusuf - Human resources/community relations controller

Each member of the management team is qualified and experienced in his/her position and has been allowed to operate independently in the running of his/her department.

Management meetings are held every Monday morning, by 9:00 am, to review the previous week's operations and to plan for the current week. Management and financial decisions affecting the company and its various departments are made during these meetings. New opportunities are reviewed, approved, rejected or kept in view during such meetings.

#### **Exhibit 4**

##### **Detoy Farms and Farm Products Limited: Business opportunities**

There are currently two proposals for business opportunities before the board of Detoy farms. Details of these business opportunities are stated below.

##### **Retail contract with "The Shop"**

"The Shop" is a retail mall catering for the middle and high classes of the society. It has its various stores in different locations within the cities of Lagos, Ibadan and Abeokuta, all within 50 kilometres of Detoy Farms. "The shop" retails virtually everything that meets the need of its teeming customers, from fashion to household domestic needs such as drinks, spirits, utensils, meat and vegetables.

"The Shop" has contacted Detoy Farms, through its marketing department for a business relationship. "The Shop" is willing to enter into a long-term contract with Detoy Farms for constant supply of fresh farm products, such as meat, poultry, fish and vegetables to its various shops. These products are currently being imported from South Africa by "The Shop". If this contract sails through, Detoy Farms will be supplying "The Shop" with these farm products and The Shop will stop all importation. However, these products are to be supplied in kilograms and packed in special packages that will be specified by "The Shop".

If Detoy Farms accepts the contract, it will necessitate Detoy Farms installing an integrated meat processing plant on the farm to be able to meet the specification of "The Shop". Incidentally, this is in line with Detoy Farm's strategic plan for the coming year.

##### **Installing an integrated meat processing plant**

In view of the various enquiries Detoy Farms has been receiving from its customers, the board is currently considering the installation of an integrated meat processing plant on the farm. The plant will be capable of processing various meat from cattle to poultry. It will comprise of slaughtering slabs, de-skinning/de-feathering to packing the meat in various kilograms packs.

The plant will be expected to supply fresh meat to the various meat retail stores within 50 kilometres radius of the farm. The installation of the plant will also help Detoy Farms to supply fresh meat to its various customers who have been wishing to be able to buy their meat supplies fresh from the farm but cannot afford to buy whole live animals, as they are currently being sold by the farm.

The farm currently has a portion of the farmland that could be used for this project. However, the farm would have to construct a new structure to house the plant and procure the following:

- Meat processing machinery;
- Equipment; and
- Motor vehicles.

### Exhibit 5

#### Detoy Farms and Farm Products Limited's Management accounts 2017 - 2018

##### Detoy Farms and Farm Products Limited Management accounts for the year ended 30 September Statement of profit or loss for the year ended 30 September

		2018 ₦000	2017 ₦000
	<b>Note</b>		
<b>Revenue</b>	<b>1</b>	90,560	77,623
Cost of sales	2	<u>(69,963)</u>	<u>(59,945)</u>
<b>Gross profit</b>		<b>20,597</b>	<b>17,678</b>
Selling and administrative expenses	3	<u>(15,448)</u>	<u>(13,241)</u>
<b>Operating profit</b>		<b>5,149</b>	<b>4,437</b>
Interest payable and finance charges		<u>(1,039)</u>	<u>(713)</u>
<b>Profit before taxation</b>		<b>4,110</b>	<b>3,724</b>
Taxation		<u>(785)</u>	<u>(673)</u>
<b>Profit after taxation</b>		<b><u>3,325</u></b>	<b><u>3,051</u></b>
<b>Statement of financial position</b>			
<b>As at 30 September</b>			
	<b>Notes</b>	<b>2018 ₦000</b>	<b>2017 ₦000</b>
<b>Non-current assets</b>			
Tangible assets	4	<u>7,821</u>	<u>9,551</u>
<b>Current assets:</b>			
Inventories	5	3,640	2,860
Trade and other receivables	6	<u>6,166</u>	<u>5,875</u>
		<b><u>9,806</u></b>	<b><u>8,735</u></b>

<b>Total assets</b>		<b><u>17,627</u></b>	<b><u>18,286</u></b>
<b>Shareholders' equity:</b>			
Called up share capital		1,000	1,000
Retained earnings		<u>6,667</u>	<u>3,616</u>
<b>Total shareholders' equity:</b>		<u>7,667</u>	<u>4,616</u>
<b>Non-current liabilities</b>		-	-
<b>Current liabilities:</b>			
Trade and other payables	7	6,310	7,602
Bank overdraft		<u>3,650</u>	<u>6,068</u>
		<u>9,960</u>	<u>13,670</u>
<b>Total equity and liabilities</b>		<b><u>17,627</u></b>	<b><u>18,286</u></b>

## Notes to the management accounts

### Note 1: Revenue

	<b>2018</b>	<b>2017</b>
	<b>₦000</b>	<b>₦000</b>
Fishery	18,677	16,009
Poultry	40,965	35,113
Cattle	15,794	13,538
Vegies	15,124	12,963
	<b>90,560</b>	<b>77,623</b>

### Note 2: Cost of sales

	<b>2018</b>	<b>2017</b>
	<b>₦000</b>	<b>₦000</b>
Production personnel costs	10,562	9,031
Materials: Vet drugs, etc.	13,075	11,207
Materials: Feeds	22,839	19,577
Logistics	17,659	15,136
Processing costs	<u>5,828</u>	<u>4,994</u>
	<b><u>69,963</u></b>	<b><u>59,945</u></b>

### Note 3: Selling and administrative expenses

	<b>2018</b>	<b>2017</b>
	<b>₦000</b>	<b>₦000</b>
Selling and marketing	6,773	5,805
Staff costs	2,902	2,488
Establishment costs	4,175	3,578
General administrative expenses	<u>1,598</u>	<u>1,370</u>
	<b><u>15,448</u></b>	<b><u>13,241</u></b>

### Note 4:



**Note 6: Trade and other receivables**

	2018	2017
	N000	N000
Trade receivables	4,856	4,625
Other receivables and prepayments	<u>1,310</u>	<u>1,250</u>
	<u><b>6,166</b></u>	<u><b>5,875</b></u>

**Note 7: Trade and other payables**

	N000	N000
Trade payables	4,876	6,277
Other payables and accruals	1,434	1,325
	<u><b>6,310</b></u>	<u><b>7,602</b></u>

**Revenue stream summary**

	2018				
	Fishery	Poultry	Cattle	Vegies	Total
	N000	N000	N000	N000	N000
<b>Revenue</b>	<u><b>18,677</b></u>	<u><b>40,965</b></u>	<u><b>15,794</b></u>	<u><b>15,124</b></u>	<u><b>90,560</b></u>
<b>Cost of sales</b>					
Production personnel costs	1,142	4,332	2,037	3,051	10,562
Materials: Vet drugs.	2,178	8,033	1,615	1,249	13,075
Materials: Feeds	9,334	10,158	3,347	-	22,839
Logistics	2,308	4,282	2,108	8,961	17,659
Processing costs	1,361	4,467	=	=	<u>5,828</u>
	<u>16,323</u>	<u>31,272</u>	<u>9,107</u>	<u>13,261</u>	<u>69,963</u>
<b>Gross profit</b>	<u><b>2,354</b></u>	<u><b>9,693</b></u>	<u><b>6,687</b></u>	<u><b>1,863</b></u>	<u><b>20,597</b></u>
Selling and administrative expenses					<u>(15,448)</u>
<b>Operating profit</b>					<u><b>5,149</b></u>

**Revenue stream summary**

	2017				
	Fishery	Poultry	Cattle	Vegies	Total
	N000	N000	N000	N000	N000
<b>Revenue</b>	<u><b>16,009</b></u>	<u><b>35,113</b></u>	<u><b>13,538</b></u>	<u><b>12,963</b></u>	<u><b>77,623</b></u>
<b>Cost of sales</b>					
Production personnel costs	979	3,714	1,746	2,592	9,031
Materials: vet drugs.	1,867	6,885	1,384	1,071	11,207
Materials: feeds	8,001	8,707	2,869	-	19,577
Logistics	1,978	3,670	1,807	7,681	15,136
Processing costs	<u>1,166</u>	<u>3,828</u>	=	=	<u>4,994</u>
	<u>13,991</u>	<u>26,804</u>	<u>7,806</u>	<u>11,344</u>	<u>59,945</u>
<b>Gross profit</b>	<u><b>2,018</b></u>	<u><b>8,309</b></u>	<u><b>5,732</b></u>	<u><b>1,619</b></u>	<u><b>17,678</b></u>
Selling and administrative expenses					<u>(13,241)</u>
					<u><b>4,437</b></u>

## Exhibit 6

### Press articles

*6 September 2019  
This Day (Lagos)*

#### **Nigeria: Osinbajo Promises Farmers Access to Affordable Loans, Equipment**

Recently, the Vice President, Yemi Osinbajo, said the Federal Government was committed to facilitating increased credit to farmers at affordable interest rate.

He said the government would also ensure that farmers have access to mechanised agriculture and affordable production inputs in a determined move to spike the growth of the sector and sustain development.

Speaking in Abuja at the 2019 Agriculture Summit-Africa with the theme: "Agriculture - Your Piece of the Trillion Dollar Economy," organised by Sterling Bank Plc, the Vice President said government was also committed to promoting foreign and local partnerships to advance the present level of trade and investments in the sector as a veritable strategy for economic diversification.

Represented by the Minister of State for Agriculture and Rural Development, Hon. Mustapha Baba-Shehuri, Osinbajo said the present administration would facilitate the review of the Land Use Act and land tenure system, as well as, implement the agro-rangers project to secure lives and properties of farmers.

This came as the Managing Director/Chief Executive, Sterling Bank Plc, Mr. Abubakar Suleiman, disclosed that the bank had spent over ₦55 billion in the last seven years to boost the production of three major crops, invested in human resources as well as established partnerships which have opened up the agricultural sector.

Osinbajo specifically commended the Bank for using the summit to create a convergence of private and public sector players, investors and agricultural practitioners across the entire value chain.

He said: "I want to sincerely commend the consistency, commitment and innovativeness of the management of Sterling Bank Plc in their desire to parley with the Federal Government to diversify the economy through agriculture as the mainstay and cash cow of the nation's economy."

He noted that this year's theme had been inspired by a projection by the World Bank that the agricultural sector would exceed \$1 trillion within a decade and would address key issues around access to capital by investors across the value chain, access to electricity, better technology and digitisation method as well as irrigated land to grow high-value nutritious food.

The Vice President said the present administration is committed to getting every Nigerian involved in agriculture in order to develop an export-led economy, adding that the government's agenda was to guarantee the vibrancy of the sector and ensure that agriculture is seen as business and haven for investment.

## UN-SEEN

### NOVEMBER 2019 CASE STUDY: DETOY FARMS AND FARM PRODUCTS LIMITED (DFFP)

#### List of exhibits

The following exhibits are newly provided and did not form part of the material provided as Pre-seen:

- 7 Email from James Oluwole to Chukwura Alli
- 8 Email from Mr. Olaolu Adeola to James Oluwole
- 9 Detoy Farms and Farm Products Limited: management accounts for the year ended 31 December 2018
- 10 Email from Toun Aderogba: "The Shop"
- 11 Detoy Farms and Farm Products Limited: Reaction to "The Shop" contract terms
- 12 Detoy Farms and Farm Products Limited: Proposed installation of integrated meat processing plant

#### Detoy Farms and Farm Products Limited (DFFP): Case Study requirement

You are Chukwura Alli, a final-year trainee Chartered Accountant, working in the Lagos office of **Oluwole, Ibrahim, Ezeife & Co** (chartered accountants). One of your clients is Detoy Farms and Farm Products Limited, a company which runs agricultural farms and distributes farm products in Ogun State, Nigeria. You report to James Oluwole, partner in charge of the business advisory unit of the firm.

#### Requirement

You are required to prepare a draft report for the DFFP board, as set out in the letter dated 6 November 2019 from James Oluwole to you (**Exhibit 7**). Your report should comprise the following:

- ▶ An executive summary
- ▶ Responses to the two detailed requirements set out in exhibit 7, including appropriate appendices.

State clearly all assumptions you have made. All workings should be attached to your answer.

The following time allocation is suggested:

- |  |         |
|--|---------|
| ▶ Reading and planning                           | 1 hour  |
| ▶ Performing calculations and financial analysis | 1 hour  |
| ▶ Drafting report                                | 2 hours |

### **Marks allocation**

All of the marks in the Case Study are awarded for the demonstration of professional skills, allocated broadly as follows:

Applied to the four elements of your report (as described above)

- |  |            |
|--|------------|
| ▶ Assimilating and using information             | 20%        |
| ▶ Structuring problems and solutions             | 20%        |
| ▶ Applying judgement                             | 20%        |
| ▶ Drawing conclusions and making recommendations | <u>20%</u> |
|  | 80%        |

Applied to your report as a whole

- |  |             |
|--|-------------|
| ▶ Demonstrating integrative and multidisciplinary skills | 10%         |
| ▶ Presenting appropriate appendices                      | <u>10%</u>  |
|  | <u>100%</u> |

Of the total marks available, 20% is awarded for the executive summary and approximately 10% for the relevant discussion of ethical issues within your answer to the requirements.

Ensure that you address the two requirements in your report or failure to address any requirement including not submitting an executive summary will affect your chances of success. In addition, as indicated above, all four skill areas will be assessed under each of the four elements of your report. Accordingly, not demonstrating your judgement or failing to include appropriate conclusions and/or recommendations in each of the requirements will affect your chances of success.

## Exhibit 7

### Email from James Oluwole to Chukwura Alli

#### *Email*

**From:** James Oluwole  
**To:** Chukwura Alli  
**Subject:** Detoy Farms and Farm Products Limited  
**Date:** 6 November 2019

As usual, Detoy Farms and Farm Products Limited (DFFP) has just completed another successful year of business operation and has asked us to evaluate its performance in the past year and at the same time analyse the financial impact of its new business opportunities. DFFP has been approached by 'The Shop' to provide contract supply services and has also identified a strategic new business. I am attaching exhibits 8 to 11 which include DFFP's management accounts for the year ended 30 September 2019 and the two business proposals.

You are to carry out a detailed analysis of the management accounts and prepare a report for DFFP's board. You are also required to carry out an evaluation and appraisal of the business proposals and recommend appropriate course of actions to be taken by DFFP.

Please draft for my review, a report addressed to the board of DFFP. The report should comprise:

1. A review of DFFP's management accounts for the year ended 30 September 2019 as presented in exhibit 9. Your review should comprise of analysis of the key changes in revenue, costs and overheads across its revenue streams in comparison with the previous two years. You should evaluate the impact of these changes on DFFP's operating profit. In addition, please comment on reasons for DFFP's bank overdraft at the end of each year despite the huge profit in each year.
2. An assessment of the contract supply service as contained in exhibits 10 and 11. You are also required to critically evaluate the proposed strategic business opportunity, the installation of meat processing plant by DFFP as contained in exhibit 12 and discuss broader commercial and ethical considerations as well as the risks that may be associated with accepting/venturing into these business proposals.

I look forward to receiving your draft report.

## Exhibit 8

### *EMAIL*

**From:** Mr Olaolu Adeola – Detoy Farms and Farm Products Limited  
**To:** James Oluwole – Oluwole, Ibrahim, Ezeife & Co  
**Subject:** Detoy Farms and Farm Products Limited  
**Date:** 4 November 2019

James,

We have just completed another successful year of business operation and as usual, our board would like you to carry out a review of our performance during the year. Your review should comprise an analysis of key changes in revenue, costs and expenses, across our revenue streams in comparison with the two previous years. The board would also like you to explain the reasons for the bank overdrafts at the end of each year, despite the huge profits.

We have just received a proposal from “The Shop” (TS), (comprising a chain of multi-purpose stores for the society’s elite) for a contract supply of fresh farm products. It is great to receive this interest from “The Shop”, more so, as this seems to be in tandem with our strategic plan. Therefore, our board would like you to evaluate the terms of the proposed contract and advise on its possible effect on DFFP’s future revenue and highlight any ethical and business thrust you would want our board to consider.

I also attach a new strategic business proposal, the installation of an integrated meat processing plant on the farm. I have given you some details about this proposal in the attachment, our board would like you to evaluate the financial implications of this proposal in addition to its ethical and business thrust.

Thanks for your continued support,

Olaolu

## Exhibit 9

### Detoy Farms and Farms Products Limited: management accounts for the year ended 30 September 2019

#### Detoy Farms and Farm Products Limited Management accounts for the year ended 30 September Statement of profit or loss

		2019 ₹000
	<b>Note</b>	
<b>Revenue</b>	<b>1</b>	107,810
Cost of sales	<b>2</b>	<u>(83,258)</u>
<b>Gross profit</b>		<b>24,552</b>
Selling and administrative expenses	<b>3</b>	<u>(18,390)</u>
<b>Operating profit</b>		<b>6,162</b>
Interest payable and finance charges		<u>(1,485)</u>
<b>Profit before taxation</b>		<b>4,677</b>
Taxation		<u>(935)</u>
<b>Profit after taxation</b>		<b><u>3,742</u></b>
<b>Statement of financial position</b>		
<b>As at 30 September</b>		
	<b>Notes</b>	<b>2019 ₹000</b>
<b>Non-current assets</b>		
Tangible assets	<b>4</b>	<u>8,366</u> 8,366
<b>Current assets:</b>		
Inventories	<b>5</b>	6,382
Trade and other receivables	<b>6</b>	<u>9,488</u>
		<u>15,870</u>
<b>Total assets</b>		<b><u>24,236</u></b>

<b>Shareholders' equity:</b>	
Called up share capital	1,000
Retained earnings	<u>10,448</u>
<b>Total shareholders' equity</b>	<b>11,448</b>

<b>Non-current liabilities:</b>	
<b>Bank loan</b>	7,000
<b>Current liabilities:</b>	
Trade and other payables	7 3,836
Bank overdraft	<u>1,952</u>
	<u>5,952</u>
<b>Total equity and liabilities</b>	<b><u>24,236</u></b>

### Notes to the management accounts

#### Note 1: Revenue

	<b>2019</b>
	<b>₦000</b>
Fishery	22,235
Poultry	48,768
Cattle	18,802
Veggies	<u>18,005</u>
	<b><u>107,810</u></b>

#### Note 2: Cost of sales

	<b>2019</b>
	<b>₦000</b>
Production personnel costs	12,543
Materials: Vet drugs, etc.	15,565
Materials: Feeds	27,190
Logistics	21,023
Processing costs	<u>6,937</u>
	<b><u>83,258</u></b>

#### Note 3: Selling and administrative expenses

	<b>2019</b>
	<b>₦000</b>
Selling and marketing	8,063
Staff costs	3,455
Establishment costs	4,970
General administrative expenses	<u>1,902</u>
	<b><u>18,390</u></b>

**Note 4:**

Non-current assets Tangible assets	2019			
	Lease Improvements	Plant, IT & Machinery	Vehicles	TOTAL
Costs	₦000	₦000	₦000	₦000
At 1 October 2018	2,211	10,398	1,208	13,817
Additions	-	1,845	445	2,290
Disposals	-	-	(50)	(50)
<b>At 30 September 2019</b>	<b><u>2,211</u></b>	<b><u>12,243</u></b>	<b><u>1,603</u></b>	<b><u>16,057</u></b>
<b>Depreciation</b>				
At 1 October 2018	1,436	4,150	410	5,996
On disposals	-	-	(35)	(35)
Charge for the year	<u>276</u>	<u>1,250</u>	<u>204</u>	<u>1,730</u>
<b>At 30 September 2019</b>	<b><u>1,712</u></b>	<b><u>5,400</u></b>	<b><u>579</u></b>	<b><u>7,691</u></b>
<b>Carrying amount</b>				
At 30 September 2018	775	6,248	798	7,821
<b>At 30 September 2019</b>	<b><u>499</u></b>	<b><u>6,843</u></b>	<b><u>1,024</u></b>	<b><u>8,366</u></b>

**Note 5: Inventories**

	2019
	₦000
Raw materials	822
Bottles and packaging	3,319
Finished goods	<u>2,241</u>
	<b><u>6,382</u></b>

**Note 6: Trade and other receivables**

	2019
	₦000
Trade receivables	8,470
Other receivables and prepayments	<u>1,018</u>
	<b><u>9,488</u></b>

**Note 7: Trade and other payables**

	2019
	₦000
Trade payables	2,964
Other payables and accruals	<u>872</u>
	<b><u>3,836</u></b>

Revenue stream summary	2019				Total #000
	Fishery #000	Poultry #000	Cattle #000	Vegies #000	
Revenue	<u>22,235</u>	<u>48,768</u>	<u>18,802</u>	<u>18,005</u>	<u>107,810</u>
Cost of sales					
Production personnel costs	1,360	5,158	2,425	3,600	12,543
Materials: Vetenary drugs, etc	2,593	9,562	1,923	1,487	15,565
Materials: Feeds	11,112	12,093	3,985	-	27,190
Logistics	2,748	5,098	2,510	10,667	21,023
Processing costs	1,620	5,317	=	=	<u>6,937</u>
	<u>19,433</u>	<u>37,228</u>	<u>10,843</u>	<u>15,754</u>	<u>83,258</u>
Gross profit	2,802	11,540	<u>7,959</u>	<u>2,251</u>	24,552
Selling and administrative expenses					<u>(18,390)</u>
Operating profit					<u>6,162</u>

#### Exhibit 10

#### Email from Toun Aderogba: "The Shop"

#### *Email*

**From:** Toun Aderogba – "The Shop"  
**To:** Janet Idemudia – Detoy Farms and Farm Products Limited  
**Subject:** Contract supplies  
**Date:** 25 August 2019

Further to the meeting we had in my office yesterday, I am sending this mail to recap our discussions.

"The shop" will like to enter into a supply contract with Detoy Farms on the following terms:

1. Detoy Farms will produce the following for "The Shop":
  - Poultry products – eggs and chicken;
  - Fresh vegies – tomatoes, cucumber and other vegetables; and
  - Meat: cattle and goat.
2. The above will be packaged according to specification to be supplied by "The Shop";
3. Detoy Farms will not put any label on the packages as "The Shop" will label the packages itself. This is because, "The Shop" does not want its customers to know that these products are locally produced;

4. "The Shop" will carry out a regular inspection of Detoy Farms and its facilities to ensure that the farm is following international best practices;
5. "The Shop" will determine the type of fertiliser to be used in the farm;
6. "The Shop" will settle Detoy Farms on a monthly basis;
7. Detoy Farms will always evacuate any vegetable and meat unsold at the end of every week from "The Shop" and supply fresh ones; and
8. "The Shop" is not bothered about pricing, as it believes that it can get its customers to accept given prices.

Please let me know your management's reaction to the above terms in good time as "The Shop" is ready to firm up this contract as soon as possible.

**Toun**

### **Exhibit 11**

#### **Detoy Farms and Farm Products Limited: Reaction to "The Shop" contract terms**

The management of Detoy Farms, after due consideration has agreed to the terms of the contract, but will follow the following paths:

- Detoy Farms will add additional 25% mark up to its normal mark up for all sales to "The Shop". This will take care of the cost of any vegetable and meat that may not be sold at the end of every week.
- Detoy Farms will repackage all returned vegetables and meat from "The Shop" and sell them to its regular customers as fresh farm products.

### **Exhibit 12**

#### **Detoy Farms and Farm Products Limited: Proposed installation of integrated meat processing plant**

The following are the projections for the plant:

- Project cost:**
1. The total cost of the project, i.e. factory building, plant and equipment, is ₦100 million.
  2. There will be ₦10 million investment in working capital.

**Revenue projection:** The plant's projected revenue per annum is as follows:

Estimated revenue (₦m)	Probability (%)
20	25
25	20
30	30
35	25

**Cost of capital:** The cost of capital is projected at 15% per annum.

**Note:** It is estimated that the plant will have a life of five years and then be scrapped with a scrap value of ₦10m.

**EXECUTIVE SUMMARY: Detoy Farms and Farm Products Limited**

General	4. Requirement 2: Conclusions
<ul style="list-style-type: none"> <li>• States the purpose of the report.</li> <li>• States the summary of the two Requirements.</li> <li>• States reservations e.g. scepticism.</li> </ul> <p>V C BC CA SA</p>	<ul style="list-style-type: none"> <li>• The contract terms from “The Shop” should be negotiated to make it more favourable.</li> <li>• The decision of Detoy Farms’ management to repackage unsold products from “The shop” should be reconsidered.</li> <li>• The proposed integrated meat processing plant has a negative NPV.</li> </ul> <p>V C BC CA SA</p>
<p><b>2. Requirement 1: Conclusions</b></p> <ul style="list-style-type: none"> <li>• Revenue is growing.</li> <li>• Gross margin is stable.</li> <li>• Overhead rate to revenue is stable.</li> <li>• Returns on capital employed is decreasing rapidly.</li> <li>• Working capital has improved drastically.</li> </ul> <p>V C BC CA SA</p>	<p><b>5. Requirement 2: Recommendations</b></p> <ul style="list-style-type: none"> <li>• Renegotiate the terms of “The Shop’s” contract.</li> <li>• Explore possibility of expunging the clause on evacuation of unsold products from the contract.</li> <li>• The management of Detoy Farms should not undertake the project – integrated meat processing plant.</li> <li>• The project should be reevaluated after the contract from “The Shop” is signed.</li> </ul> <p>V C BC CA SA</p>
<p><b>3. Requirement 1: Recommendations</b></p> <ul style="list-style-type: none"> <li>• Control cost of sales to improve gross margin.</li> <li>• Expand cattle and poultry businesses.</li> <li>• Continue to plough back profit to eliminate bank borrowing.</li> <li>• Watch the growth in receivables.</li> </ul> <p>V C BC CA SA</p>	<p>V C BC CA SA</p>

**REQUIREMENT 1 – Detoy Farms and Farm Products Limited’s financial statement analysis**

<p><b>USES DATA AND INFORMATION APPROPRIATELY</b></p> <ul style="list-style-type: none"> <li>• Uses information on exhibits 5 and 9 – income statements to show trend of Detoy Farms’ operating performance.</li> <li>• Uses information in exhibits 5 and 9 – statement of financial position to calculate the various ratios.</li> <li>• Uses information on exhibits 5 and 9 – notes to management accounts to show trend in performance of each revenue stream.</li> <li>• Uses information in exhibits 5 and 9 to explain reasons for the overdraft at the end of the year.</li> </ul> <p style="text-align: center;">V      C      BC      CA      SA</p> <p><b>USES PROFESSIONAL TOOLS AND KNOWLEDGE</b></p> <ul style="list-style-type: none"> <li>• Calculates gross margin ratios for Detoy Farms.</li> <li>• Calculates gross margin ratios for fishery.</li> <li>• Calculate gross margin ratios for poultry.</li> <li>• Calculates gross margin ratios for cattle.</li> <li>• Calculates gross margin ratios for veggies.</li> <li>• Calculate operating profit margin for Detoy Farms.</li> <li>• Calculates net profit margin for Detoy Farms.</li> <li>• Calculates return on capital employed for Detoy Farms.</li> <li>• Calculates returns on equity for Detoy Farms.</li> </ul> <p style="text-align: center;">V      C      BC      CA      SA</p> <p><b>USES ANALYTICAL SKILLS (material points) written report</b></p> <ul style="list-style-type: none"> <li>• Discusses trend in Detoy Farm’s revenue.</li> <li>• Discusses trend in Detoy Farm’s gross margin.</li> <li>• Discusses trend in gross margin by revenue streams.</li> <li>• Discusses trend in Detoy Farms’ working capital ratio.</li> <li>• Discusses Detoy Farms’ dependent on bank borrowings.</li> <li>• Discusses Detoy Farms’ profit plough back policy.</li> </ul>	<p><b>IDENTIFIES ISSUES AND OPTIONS</b></p> <ul style="list-style-type: none"> <li>• Identifies that Detoy Farm’s revenue has been growing steadily.</li> <li>• Identifies that Detoy Farms’ costs of sales ratio has remained constant.</li> <li>• Identifies that gross margin has also remained constant.</li> <li>• Identifies that interest has been going up, thus eroding net profit margin.</li> <li>• Identifies that cattle revenue stream is contributing, more than the other revenue streams, to profitability.</li> </ul> <p style="text-align: center;">V      C      BC      CA      SA</p> <p><b>APPLIES PROFESSIONAL SCEPTICISM AND ETHICS</b></p> <ul style="list-style-type: none"> <li>• Recognises the threat that the continuous use of bank borrowing pose to the operation of Detoy Farms.</li> <li>• Recognises that Detoy Farms should strive to expand its production and sale of cattle and poultry products as both are contributing better than the other revenue streams.</li> <li>• Recognises that receivable is growing.</li> <li>• Recognises that Detoy Farms has been improving upon its working capital ratio.</li> <li>• Recognises that Detoy Farms has been ploughing back profits made into the business, so as to reduce dependence on bank borrowings.</li> <li>• Recognises that increase in capital employed has not translated into proportionate increase in revenue.</li> </ul> <p style="text-align: center;">V      C      BC      CA      SA</p> <p><b>EVALUATIVE SKILLS AND JUDGMENT</b></p> <ul style="list-style-type: none"> <li>• Identifies that Detoy Farms’ revenue have been increasing from year to year.</li> <li>• Identifies that rate of cost of sales to revenue has remained stable over the years.</li> <li>• Identifies that Detoy Farms’ gross margin has remained stable.</li> <li>• Identifies that Detoy Farms’ rate of expenses to revenue have remained stable over the years.</li> <li>• Identifies that return on capital employed has been dropping yearly, possibly due to increase in capital employed.</li> </ul>
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**CONCLUSION**

(Draw distinct conclusions under a heading)

- Concludes that DetoY Farms management should watch carefully its bank borrowing.
- Concludes that DetoY Farms revenue is growing steadily year on year.
- Concludes that gross margins appeared relatively stable.
- Concludes that returns on capital employed has been dropping, partly because of investment in assets.
- Concludes that DetoY Farms' cost of sales in high.

V C BC CA SA

**RECOMMENDATIONS (Commercial/relevant)**

- Recommends that DetoY Farms should strive to depend less on bank borrowing so as to improve on net profit margin.
- Recommends that DetoY Farms should continue its policy of ploughing back profits into the business to eliminate bank profit borrowings.
- Recommends that DetoY Farms should introduce cost control measures so as to reduce the ratio of cost of sales to revenue.
- Recommends that DetoY Farms should expand its cattle and poultry revenue streams as both have high gross margin

V C BC CA SA

**REQUIREMENT 2 – Appraisal of new business proposals**

<p><b>USES DATA AND INFORMATION APPROPRIATELY</b></p> <ul style="list-style-type: none"> <li>• Uses information in exhibit 4 and 10 to evaluate The Shop’s supply contract proposal.</li> <li>• Uses additional information in exhibit 11 to evaluate The Shop’s business.</li> <li>• Uses additional information in exhibits 4 to evaluate the proposed integrated meat processing plant.</li> <li>• Uses information in exhibit 12 to evaluate the proposed integrated meat processing plant.</li> </ul>	<p><b>IDENTIFIES ISSUES AND OPTIONS</b></p> <ul style="list-style-type: none"> <li>• Identifies that the clause on The Shop contract that requires Deto Farms to evacuate all unsold vegies and meat and replace them with fresh ones is very loose as the level of returns cannot be determined, so revenue from the contract is uncertain.</li> <li>• Identifies that Deto Farms cannot properly evaluate the contract as cost of packaging to be used has not been determined.</li> <li>• Identifies that Deto Farms cannot evaluate the contract as the cost of fertiliser to be used has not been determined.</li> <li>• Identified that the proposed integrated meat processing plant is not viable as it has a negative NPV.</li> <li>• Identifies that, it is possible that the project becomes viable if the supply contract from the shop comes on stream.</li> </ul>
<p>V C BC CA SA <b>USES PROFESSIONAL TOOL AND KNOWLEDGE (Written into report)</b></p> <ul style="list-style-type: none"> <li>• Identifies the unfavourable clauses in The Shop contract.</li> <li>• Determines the method of appraising the proposed integrated meat processing plant.</li> <li>• Explains that the supply contract from The Shop’s contribution to revenue could not be determined as many clauses on the contract are not certain.</li> <li>• Explains that the effect The Shop’s contract could have on the viability of the proposed integrated meat processing plant, if concluded.</li> </ul>	<p>V C BC CA SA <b>APPLYING PROFESSIONAL SCEPTICISM AND ETHICS</b></p> <ul style="list-style-type: none"> <li>• Queries the ethics of The Shop labelling Deto Farm’s products as imported products.</li> <li>• Queries Deto Farm’s management decision to repackage unsold products from The Shop and resell them as fresh ones to customers.</li> <li>• Queries the reliability of the probabilities used in calculating the expected revenue from the proposed integrated meat processing plant.</li> <li>• Expresses doubt on the risk involved on The Shop’s contract as a result of many uncertain clauses embedded in the contract.</li> </ul>
<p>V C BC CA SA <b>USES ANALYTICAL SKILLS (Material points)</b></p> <ul style="list-style-type: none"> <li>• Calculates expected revenue from the integrated meat processing plant.</li> <li>• Calculates the present value of the integrated meat processing plant.</li> <li>• Corrects interpretation of the NPV.</li> <li>• Evaluates the terms of the supply contracts from “The Shop”</li> </ul>	<p>V C BC CA SA <b>EVALUATE SKILLS AND JUDGMENT (Uses analytical headings)</b></p> <ul style="list-style-type: none"> <li>• Evaluates The Shop’s contract.</li> <li>• Evaluates the viability of the proposed integrated meat processing plant.</li> <li>• Shows the expected revenue from the proposed integrated meat processing plant.</li> <li>• Discusses that the proposed integrated meat processing plant may become viable if the shop contract comes on stream.</li> </ul>

<p><b>CONCLUSION</b>  <b>(Draws distinct conclusions under a heading)</b></p> <ul style="list-style-type: none"> <li>• Concludes that the uncertain terms in The Shop contract should be reconsidered.</li> <li>• Concludes that the clause in The Shop contract that requires evacuation of unsold veggies and meat is one sided.</li> <li>• Concludes that the management of Detoy Farms' decisions to repackage the unsold veggies and meat from The Shop and sell them to its customers as fresh ones is unethical.</li> <li>• Concludes that the proposed integrated meat processing plant is not viable.</li> <li>• Concludes that the proposed integrated meat processing plant may become viable if the contract from The Shop is concluded and come on stream.</li> </ul> <p>V      C      BC      CA      SA</p> <p><b>RECOMMENDATIONS (Commercial/relevant)</b></p> <ul style="list-style-type: none"> <li>• Recommends that the management of Detoy Farms should discuss the uncertain clauses with The Shop before signing the contract.</li> <li>• Recommends that Detoy Farms management should discuss with The Shop the possibility of expunging the clause on evacuation of unsold products weekly.</li> <li>• Recommends that the proposed integrated meat processing plant is not viable based on the data provided as it has a negative NPV.</li> <li>• Recommends that the project may become viable if the contract from The Shop comes on stream and it increases revenue from meat processing.</li> </ul>	
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**Apprentices**

**Main Report**

<p><b>Appendices R1: Content and style 1</b></p> <ul style="list-style-type: none"> <li>Shows trend of Deto Farm's operating performance-income statement.</li> <li>Shows trend in performance by revenue streams.</li> <li>Shows appropriate performance ratios.</li> <li>Shows return on capital employed.</li> <li>Shows analysis of cashflow for 2018 and 2019.</li> <li>Shows return on equity.</li> <li>Shows working capital ratio.</li> <li>Shows rate of assets turnover</li> </ul> <p>V C BC CA S</p> <p><b>Appendices R1: Content and style 2</b></p> <ul style="list-style-type: none"> <li>Shows calculation of expected revenue.</li> <li>Shows calculation of present value of revenue.</li> <li>Shows the discount factors.</li> <li>Shows net present value of project.</li> </ul> <p>V C BC CA S</p>	<p><b>Report: Structure 3</b></p> <ul style="list-style-type: none"> <li>Sufficient appropriate headings.</li> <li>Appropriate use of paragraphs/sentences.</li> <li>Legible/clear hand writing.</li> <li>Correctly numbered pages.</li> </ul> <p>V C BC CA S</p> <p><b>Report: style and language 4</b></p> <ul style="list-style-type: none"> <li>Relevant disclaimer (external report).</li> <li>Suitable language for the board.</li> <li>Appropriate placement of executive summary.</li> <li>Acceptable spelling and punctuation.</li> </ul> <p>V C BC CA S</p>
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## Appentice 1

Financial statement analysis							
Detoy Farms and Farm Products Limited	2017 Nm	2018 Nm	CHANGE Nm	CHANGE %	2019 Nm	CHANGE Nm	CHANGE %
Revenue	77,623	90,560	12,937	16.7	107,810	17,250	19.0
Cost of sales	<u>-59,945</u>	<u>-69,963</u>	<u>-10,018</u>	<u>16.7</u>	<u>-83,258</u>	<u>13,295</u>	<u>19.0</u>
Gross profit	17,678	20,597	2,919	16.5	24,552	3,955	19.2
Selling & Admin expenses	13,241	-15,448	-2,207	16.7	-18,390	-2,942	19.0
Operating profit	<u>4,437</u>	<u>5,149</u>	<u>712</u>	<u>16.0</u>	<u>6,162</u>	<u>1,013</u>	<u>19.7</u>
Interest payable & finance charges	<u>-713</u>	<u>-1,039</u>	<u>-326</u>	<u>45.7</u>	<u>-1485</u>	<u>-446</u>	<u>42.9</u>
Net profit before tax expenses	<u>3,724</u>	<u>4,110</u>	<u>386</u>	<u>10.4</u>	<u>4,677</u>	<u>567</u>	<u>13.8</u>

	2017 N'000	2018 N'000	2019 N'000
<b>Fishery</b>			
Revenue	16,009	18,677	22,235
Cost of sales	13,391	16,323	19,433
Gross profit	2,018	2,354	2,802
Gross margin (%)	12.61	12.60	12.60
<b>Poultry</b>			
Revenue	35,113	40,965	48,768
Cost of sales	26,804	31,272	37,228
Gross profit	8,309	9,693	11,540
Gross margin (%)	23.66	23.66	23.66
<b>Cattle</b>			
Revenue	13,538	15,794	18,802
Cost of sales	7,806	9,107	10,843
Gross profit	5,732	6,687	7,959
Gross margin (%)	42.34	42.3	42.33
<b>Vegies</b>			
Revenue	12,963	15,124	18,005
Cost of sales	11,334	13,261	15,754
Gross profit	1,619	1,863	2,251
Gross margin (%)	12.49	12.32	12.50

<b>Detoy Farms</b>			
Gross profit	17.678/77,623%	20,597/90,560%	24,552/107,810%
	22.77%	22.74%	22.77%
Operating profit margin	4,437/77,623%	5,159/90,560%	6,162/107,810%
	5.72%	5.70%	5.71%
Net profit margin	3,724/77,623%	4,110/90,560%	4,677/107,810%
	4.80%	4.54%	4.34%
Return on capital employed	4,437/18,286%	5,149/17,627	6,162/24,236%

	24.26%	29.21%	25.42%
Return on equity	3,051/4,616%	3,325/7,667%	3,742/11,448%
	66.10%	43.37%	32.69%
Working capital ratio	8,735: 13,670	9,806:9,960	15,870:5,788
	0.64: 1.00	0.98:1.00	2.74: 1.00
Revenue to assets employed	77,623: 18,286	90,560:17,627	107,810:24,236
	4.2	5.1	4.4

## EXAMINER'S REPORT

The case scenario is on an agricultural business. The case scenario is in two parts, the pre-seen, which was previously sent to the candidates two weeks to the examination and the unseen. Candidates were expected to write a report based on two requirements of the case, as follows:

1. A review of the company's management accounts for the three years ended 30 September 2019, as presented in the case scenario. The review is expected to include the key changes in revenue, costs and overheads across the company's revenue streams. Candidates were also required to evaluate the impact of these changes on the company's operating profit, and to further comment on reasons for bank overdraft at the end of each year, despite the huge profit made by the company each year.
2. An assessment of the contract supply service from a retail store, "The Shop". Candidates were also required to critically evaluate the company's proposed strategic business opportunity, the installation of meat processing plant, and discuss any broader commercial and ethical considerations as well as the risks that may be associated with accepting/venturing into these business proposals.

Candidates demonstrated lack of understanding of the requirements of the case, most especially, requirement 2. Candidates seemed to have the notion that they must carry out SWOT or PESTEL analysis in each Case Study paper, not minding the requirements of the case. Therefore, candidates' performance was poor as only few candidates scored 50% or above.

The major pitfalls of the candidates were:

1. Not dealing appropriately with requirement 2 of the case requirements. Almost all the candidates carried out SWOT analysis despite the fact that there was nothing in the case requirements that demanded for it;
2. Lack of understanding on how to write an executive summary; and

3. Inability to arrange their reports appropriately. Most candidates demonstrated lack of awareness of where to place the executive summary in their reports. Many of the candidates wrote the executive summary as part of the body of their report.

Candidates are advised to ensure that they:

1. Concentrate on the requirements of each Case Study paper, as any work done outside the requirements will not earn the candidates any point.
2. Go through the Case Study text prepared by the Institute, especially, the chapter on writing a professional report, when preparing for future examinations. This will help the candidates to know how to write an executive summary and how to arrange their reports.