



**THE INSTITUTE OF CHARTERED  
ACCOUNTANTS OF NIGERIA**

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# **PATHFINDER**

**NOVEMBER 2017 DIET  
PROFESSIONAL LEVEL EXAMINATIONS**

Question Papers

Suggested Solutions

Marking Guides

Plus

Examiner's Reports

## **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 2017**

**CORPORATE REPORTING**

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

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

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

**QUESTION 1**

The following are the financial statements of Papa, Tata and Chebe, all Plcs.as at March 31, 2017:

	<b>Papa</b>	<b>Tata</b>	<b>Chebe</b>
	<b>₦'m</b>	<b>₦'m</b>	<b>₦'m</b>
<b>Assets:</b>			
Tangible non-current assets	1,280	440	280
Investment in Tata	413	-	-
Investment in Chebe	60	-	-
Current assets	531	190	130
<b>Total assets</b>	<b><u>2,284</u></b>	<b><u>630</u></b>	<b><u>410</u></b>
<b>Equity and liabilities:</b>			
Share capital of ₦1 each	800	240	200
Share premium	150	20	30
Revaluation reserve	90	-	-
Retained earnings	390	210	94
<b>Total equity</b>	<b><u>1,430</u></b>	<b><u>470</u></b>	<b><u>324</u></b>
Non-current liabilities	640	30	16
Current liabilities	214	130	70
<b>Total equity and liabilities</b>	<b><u>2,284</u></b>	<b><u>630</u></b>	<b><u>410</u></b>

Papa acquired the following shareholdings in Tata and Chebe

	Date of acquisition	Holding acquired	Fair value of net assets N'm	Purchase consideration N'm
Tata	April 1, 2014	30%	325	120
	April 1, 2016	50%	460	260
Chebe	April 1, 2016	25%	200	60

You are also provided with the following information, which will be relevant to the consolidated financial statements of Papa Plc.

- (i) None of the companies has issued any additional share capital since April 1, 2014.
- (ii) The financial statements of Papa have not yet been adjusted for the gain or loss arising on gaining control of Tata.
- (iii) At April 1, 2014, the carrying value of the net assets of Tata was the same as their fair value of ~~N~~325million.
- (iv) Papa Plc. wishes to use the full fair value method of accounting for the acquisition of Tata, and at April 1, 2016 the estimated value of goodwill attributable to non-controlling interests was ~~N~~3million. The estimated fair value of the initial investment in 30% of the shares of Tata was ~~N~~150million at March 31, 2017.
- (v) Included in the tangible non-current assets of Tata is land, valued at cost which on March 31, 2017 had a fair value of ~~N~~25million in excess of its carrying value. There has been no subsequent significant change in that value.
- (vi) At April 1, 2016 the fair value of Chebe's land was ~~N~~16million in excess of its carrying value. There has been no subsequent significant change in that value.
- (vii) Goodwill arising on acquisition is tested for impairment at each year end. At March 31, 2017 an impairment loss of ~~N~~15million was recognised for Tata.
- (viii) There has been no impairment of the investment in Chebe.

**Required:**

Prepare the consolidated statement of financial position of Papa group as at March 31, 2017. (Total 30 Marks)

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

**QUESTION 2**

The summarised comparative financial statements of Odua Plc. for the year ended December 31, 2016 and 2015 are as follows:

**Statements of profit or loss and other comprehensive income for the year ended December 31**

	<b>2016</b>	<b>2015</b>
	<b>(N'm)</b>	<b>(N'm)</b>
Revenue	550	400
Cost of sales	<u>(400)</u>	<u>(200)</u>
Gross profit	150	200
Operating costs	<u>(72)</u>	<u>(60)</u>
Operating profit	78	140
Investment income – (Note 2)		
(Loss)/Gain on revaluation of investments held at fair value		
Profit/Loss	(10)	20
Finance costs	<u>(10)</u>	<u>(6)</u>
Profit before taxation	58	154
Income tax expense	<u>(8)</u>	<u>(30)</u>
<b>Profit for the year</b>	<b>50</b>	<b>124</b>
Other comprehensive income		
(Amounts that will not be reclassified to profit or loss)		
Revaluation losses on property plant & equipment	<u>(90)</u>	<u>-</u>
<b>(Loss)/total comprehensive income for the year</b>	<b><u>(40)</u></b>	<b><u>124</u></b>

**Statement of Financial Position as at 31 December**

<b>Assets</b>	<b>N</b>	<b>N</b>	<b>N</b>	<b>N</b>
<b>Non-current assets:</b>				
Property, plant and equipment		430		490
Investments at fair value through profit or loss		70		80
		<b>500</b>		<b>570</b>
<b>Current assets:</b>				
Inventory	80		38	
Trade receivables	104		56	
Bank	<u>-</u>	<u>184</u>	<u>20</u>	<u>114</u>
<b>Total assets</b>		<b><u>684</u></b>		<b><u>684</u></b>
<b>Equity and liabilities</b>				
<b>Equity:</b>				
Equity shares of N0.50 each		240		240

Revaluation reserve	20	110
Retained earnings	<u>180</u>	<u>130</u>
	<b>440</b>	<b>480</b>
<b>Non-current liabilities:</b>		
Bank loan	100	100
<b>Current liabilities:</b>		
Trade payables	100	78
Bank overdraft	40	-
Current tax payable	<u>4</u>	<u>26</u>
<b>Total equity and liabilities</b>	<b><u>684</u></b>	<b><u>684</u></b>

The following additional information is relevant:

- (i) The Managing Director is of the view that the company has retained its book value and therefore has not suffered any deterioration in performance from 2015 to 2016. This statement was made in the process of appraising the new strategy introduced by the company which he believes has not failed.
- (ii) Odua Plc. has traditionally been very profitable, but in recent years has been finding it difficult to keep up its sales level due to the effects of online shopping. Basically, it finds out that more customers are buying directly online from suppliers and cutting out the middleman, which includes Odua as a wholesaler. To cope with this situation, on January 1, 2016 Odua launched a  
  
strategy of cutting its prices in the hope that this would generate additional sales volume and profits.
- (iii) To support the new strategy and allow faster movement of goods, a new product movement and control system was commissioned and installed on January 1, 2016 at a cost of ₦40million. This is being depreciated over a 5 year useful economic life. The old system was disposed off for zero consideration on the same date, but had been carried at ₦15million at the date of disposal. The loss was taken to cost of sales, as well as the depreciation. No other non-current assets were acquired or disposed in either of the two years.
- (iv) The share price has declined from ₦2.80 per share on December 31, 2015 to ₦1.60 per share on December 31, 2016 and the Managing Director is unable to attribute reasons for the decline in the share prices.

**You are required to:**

Analyse the financial statement of Odua Plc. by evaluating and interpreting the underlisted ratios under relevant headings of profitability, efficiency, short term liquidity and long term solvency and stability as well as stock market performance for each financial year taking into consideration the additional information in (i) – (iv) above:

Gross Margin	Inventory Days	
Net Margin	Receivables Days	
ROCE	Payables Days	
ROE	Earnings per share	
Current Ratio	Price earnings ratio	
Acid Test	Gearing	
Interest cover		(Total 20 Marks)

### QUESTION 3

Funda Plc. is a listed entity based in Nigeria, a utility service company and is involved in the supply of water, electricity and cable services to domestic and industrial consumers. The directors of Funda Plc. have prepared draft financial statements for the year ended June 30, 2017 and have stated that these have been

prepared in accordance with IFRS. The financial statements are to be used in support of a loan application. Funda Plc. employees own 5% of the ordinary shares of the company. The employees' representatives have expressed concern about the loan application and are seeking advice on certain of the policies Funda Plc. has used in drafting the financial information.

The draft income statement for the year ended June 30, 2017 is:

	<b>₦'m</b>
Revenue	410.0
Cost of sales	<u>(275.0)</u>
Gross profit	135.0
Other operating costs	<u>(65.0)</u>
Profit before taxation	<u>70.0</u>

The employees' representatives require an explanation on the following:

#### **Sale of water filters**

Funda Plc. manufactures industrial water filters. On December 31, 2016 it sold a batch of 30 filters to a steel maker. Funda Plc. faced stiff competition to secure this

order. As part of its marketing offer, Funda Plc. provided a volume discount of 20% from the market price of the filters. A further term of the contract was that Funda Plc. has granted the steel maker a put option on the filters. The option entitles the steel company to require Funda Plc. to repurchase the filters after 6 years for 35% of the price paid on the initial transaction. The expected economic life of the filters is 10 years. At the date of the sale transaction, the repurchase option was expected to be 'in the money'. The filters normally sell for ₦625,000 each at which price Funda Plc. achieves a profit margin of 36%. The steel company has paid for the filters in full and Funda Plc. has recognised the revenue and costs of manufacture in profit or loss.

### **Connection fees**

Funda Plc. supplies electricity to domestic consumers and charges customers a connection fee before it will connect the customer to the electricity supply network. This connection fee is refundable to the customer if and when the customer decides that the electricity supply is no longer required. There is no minimum notice period that the customer must give Funda Plc. of its request to disconnect. Funda Plc. may deduct the cost of disconnecting the customer from the amount refundable. Funda Plc. has many long-established customers that are not expected to request disconnection in the foreseeable future. Fees charged in the year ending 30 June, 2017 were ₦5m (2016: ₦4m). These amounts have been credited to profit or loss.

### **Activation fees**

Funda Plc. supplies a range of digital cable services including telephone, internet access and cable TV. The company charges its customers a one-time activation fee to enable them to get a number and access to the cable network. This fee is non-refundable. ₦7m in such fees have been credited to profit or loss in 2017 (2016: ₦4m).

### **Deposits**

Funda Plc. supplies domestic electrical goods to customers. Customers must pay a deposit of 25% of the purchase price when placing an order. The remaining 75% is payable on delivery of the appliance. Funda Plc. retains the deposit if the customer cancels the order. If Funda Plc. is unable to fulfil the order the deposit is repayable in full. Funda Plc. recognises the deposits as revenue in profit or loss when the order is placed. Revenue includes ₦10m in respect of these deposits relating to orders in the year. 90% of these orders have been filled.

## Required

Prepare a report which explains the suitability of Funda Plc. accounting policies for the transactions listed above and recommend the correct treatment where appropriate. (Total 20 Marks)

## QUESTION 4

### Enugun Industries Limited

Atikun has recently been appointed as Financial Controller to Enugun Industries Limited. Until a month ago, Enugun Industries had a Finance Director, who resigned suddenly, due to ill health. Since Atikun joined the company, he has learned that his resignation was related to stress caused by a series of disagreements with the Managing Director about the performance of the business. The directors have not yet appointed a replacement.

It is now March 2015 and you have been asked to finalise the financial statements for the year ended December 31, 2014. The draft statement of profit or loss extract and statement of financial position are shown below:

#### Draft statement of profit or loss for the year ended December 31, 2014

	<b>₦'000</b>
Profit before tax	2,500

#### Draft statement of financial position as at December 31, 2014

	<b>₦'000</b>
Property, plant and equipment	12,000
Current assets	3,500
<b>Total assets</b>	<b>15,500</b>
Share capital	2,000
Retained earnings	6,000
Equity	8,000
Non-current liabilities	5,000
Current liabilities	2,500
<b>Total equity and liabilities</b>	<b>15,500</b>

During the year ended December 31, 2014 Enugun Industries entered into the following transactions.

- (i) Just before the year-end Enugun Industries signed a contract to deliver consultancy services for a period of 2 years at a fee of ₦500,000 per annum. The full amount of this fee has been paid in advance and is non-refundable.

- (ii) Enugun Industries has constructed a new factory. The construction has been financed from the pool of existing borrowings. Land at a cost of ₦1.8million was acquired on February 1, 2014 and construction began on June 1, 2014. Construction was completed on September 30, 2014 at an additional cost of ₦2.7million. Although the factory was usable from that date, full production did not commence until December 1, 2014. Throughout the year, the company's average borrowings were as follows:

	Amount	Annual interest rate
	₦	%
Bank overdraft	1,000,000	9.75
Bank loan	1,750,000	10
Loan notes	2,500,000	8

An amount of ₦450,000 has been included in property, plant and equipment in respect of borrowing costs relating to the construction of the factory. The useful life of the factory has been estimated at 20 years. No depreciation has been charged for the year. The reason for this is that the factory has only been in use for one month and that the depreciation charge would be immaterial.

- (iii) A blast furnace with a carrying amount at January 1, 2014 of ₦3.5 million has been depreciated in the draft financial statements on the basis of the remaining life of 20 years. In December 2014, the directors carried out a review of the useful lives of various significant items of plant and machinery, including the blast furnace and came to the conclusion that the useful life of the furnace was 20 years at December 31, 2014. The reasoning behind this judgement was that the lining of the furnace had been replaced in the last week of December 2014 at a cost of ₦1.4 million. Provided that the lining is replaced every five years, the life of the furnace can be extended accordingly. You have found a report, commissioned by the previous Finance Director and prepared by a firm of asset valuation specialists, which assesses the remaining useful life of the main structure of the furnace at January 1, 2014 at 15 years and the lining of the furnace at 5 years. You have also found evidence that the Managing Director has seen this report.

Atikun has had a conversation with the Managing Director who told him, "We need to make the figures look as good as possible so I hope you're not going to start being difficult. The consultancy fee is non-refundable so there's no reason why we can't include it in full. I think we should look at our depreciation policies. We're writing off our assets over far too short a period. As you know, we're planning to go for a stock market listing in the near future and being prudent

and playing safe won't help us do that. It won't help your future with this company either."

**Required:**

- a. Explain the required IFRS accounting treatment of these issues, preparing relevant calculations where appropriate. (16 Marks)
- b. Discuss the ethical issues arising from your review of the draft financial statements and the actions that you should consider.

(4 Marks)

**(Total 20 Marks)**

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

**QUESTION 5**

Tinubun Plc., a public limited company, operates two pension plans.

**Pension Plan 1**

The terms of the plan are as follows:

- (i) Employees contribute 6% of their salaries to the plan
- (ii) Tinubun Plc. contributes, currently, the same amount to the plan for the benefit of the employees
- (iii) On retirement, employees are guaranteed a pension which is based upon the number of years' service with the company and their final salary.
- (iv) This plan was closed to new entrants from October 31, 2016 but which was open to future service accrual for the employees already in the scheme.

The following details relate to the plan in the year to October 31, 2017:

	<b>₦'m</b>
Present value of obligation at November 1, 2016	200
Present value of obligation at October 31, 2017	240
Fair value of plan assets at November 1, 2016	190
Fair value of plan assets at October 31, 2017	225
Current service cost	20
Pension benefits paid	19
Total contributions paid to the scheme for year to October 31, 2017	17

Actuarial gains and losses are recognised in the Statement of Other Comprehensive Income.

### **Pension Plan 2**

Under the terms of the plan, Tinubun Plc. does not guarantee any return on the contributions paid into the fund. The company's legal and constructive obligation is limited to the amount that is contributed to the fund. The following details relate to this scheme

	<b>₦'m</b>
Fair value of plan assets at October 31, 2017	21
Contributions paid by company for year to October 31, 2017	10
Contributions paid by employees for year to October 31, 2017	10

The discount rates for the two plans are:

	<b>October 31, 2017</b>	<b>November 1, 2016</b>
Discount rate	6%	5%

### **Required:**

- a. Explain the nature of and differences between a defined contribution plan and a defined benefit plan with specific reference to the company's two schemes. (7 Marks)
  - b. Show the accounting treatments for the two Tinubun Plc. pension plans for the year ended October 31, 2017 under IAS 19 'Employee Benefits'. (8 Marks)
- (Total 15 Marks)**

### **QUESTION 6**

#### **Eko Exports Limited**

The following information pertains to Eko Exports Limited (EEL) for the financial year ended December 31, 2016:

- (i) A customer who owed ₦1million was declared bankrupt after his warehouse was destroyed by fire on February 10, 2017. It is expected that the customer would be able to recover 50% of the loss from the insurance company.
- (ii) An employee of EEL forged the signatures of directors and made cash withdrawals of ₦7.5million from the bank. Of these, ₦1.5million were withdrawn before December 31, 2016. Investigations revealed that an employee of the bank was also involved and therefore, under a

settlement arrangement, the bank paid 60% of the amount to EEL on January 27, 2017.

- (iii) EEL has filed a claim against one of its vendors for supplying defective goods. EEL's legal consultant is confident that damages of ₦1million would be paid to EEL. The supplier has already reimbursed the actual cost of the defective goods.
- (iv) A suit for infringement of patents, seeking damages of ₦2million, was filed by a third party. EEL's legal consultant is of the opinion that an unfavourable outcome is most likely. On the basis of past experience, he has advised that there is 60% probability that the amount of damages would be ₦1million and 40% likelihood that the amount would be ₦1.5 million.

**Required:**

Advise EEL about the amount of provision that should be incorporated and the disclosures that are required to be made in the financial statements for the year ended December 31, 2016.

**(Total 15 Marks)**

**QUESTION 7**

Corporate reporting by listed companies in Nigeria is evidenced by the annual report defined as a comprehensive report on a company's activities throughout the preceding year.

The directors of Mugono Plc would want to know the content of an annual report. They are not sure of the difference between mandatory and voluntary disclosures in the annual report of the company.

**Required:**

Write a report to the directors of Mugono Plc

- a. Highlighting the components included in annual report. (4 Marks)
  - b. Showing the following:
    - i. **THREE** advantages of mandatory disclosures in annual report; (3 Marks)
    - ii. **FOUR** advantages of voluntary disclosures in annual report. (4 Marks)
    - iii. **TWO** limitations of information provided on a voluntary basis. (2 Marks)
- (For clarity in presentation) (2 Marks)

**(Total 15 Marks)**

## SOLUTION 1

### PAPA PLC

#### Consolidated statement of financial position as at 31 March 2017

	₦m
<b>Assets</b>	
Tangible non-current assets (W4)	1,745
Intangible non-current assets – goodwill 45 – 15 (W3)	30
Investment in associate (W5)	95
Current assets (531 + 190)	<u>721</u>
<b>Total Assets</b>	<b><u>2,591</u></b>
<b>Equity and liabilities:</b>	
Share capital of ₦1 each	800
Share premium	150
Revaluation reserve	90
Retained earnings (W6)	<u>438</u>
	<b><u>1,478</u></b>
Non-controlling interest (W7)	99
	<b>1,577</b>
Non-current liabilities (640 + 30)	670
Current liabilities (214 + 130)	<u>344</u>
<b>Total Equity and liabilities</b>	<b><u>2,591</u></b>

#### Workings

##### (W1) Tata retained profits

	₦m
Fair value of net assets at 1 April 2016	460
Fair value adjustment for land	<u>(25)</u>
Carrying value of net assets	435
Share capital      240	
Share premium <u>20</u>	<u>(260)</u>
Therefore retained earnings at 1 April 2016	175
	₦m
Carrying value of net assets at 1 April 2014	325
Share capital      240	
Share premium <u>20</u>	<u>(260)</u>
Therefore retained earnings at 1 April 2014	65

**(W2) Gain or loss on acquiring control of Tata**

	<b>₦m</b>	<b>₦m</b>
Fair value of initial investment in Tata		150
Initial cost of investment	120	
Share of retained earnings 1 April 2014 – 1 April 2016 (= 30% × (175 – 65) – see W1	33	
Carrying value of investment in Tata as associate		153
Loss recognised on gaining control of Tata		(3)

This loss has not yet been recognised in the individual financial statements of Papa Plc; it must therefore be included in the calculation of group reserves (see Working 8).

**(W3) Goodwill in Tata at acquisition**

	<b>₦m</b>
Fair value of initial investment at acquisition	150
Cost of additional shares	<u>260</u>
Total cost	410
Fair value of net assets acquired (80% × 460)	<u>368</u>
Goodwill at acquisition attributable to Papa	42
Goodwill attributable to NCI	<u>3</u>
Total goodwill at acquisition date	<u>45</u>

Goodwill in statement of financial position: There has been impairment of ₦15 million in goodwill. This is apportioned between the interests of the equity owners of Papa and NCI in the ratio 80:20.

Impairment of goodwill attributable to parent = ₦15m × 80% = ₦12 million

Impairment of goodwill attributable to NCI = ₦15m × 20% = ₦3 million.

**(W4) Tangible non-current assets**

	<b>₦m</b>
Papa	1,280
Tata	440
Fair value adjustment	25
	<b>1,745</b>

**(W5) Net Assets of the Subsidiary - Chebe**

	Reporting Date N'M	Acquisition Date N'M	Post Acquisition N'M
Share capital of ₦1	200	200	-
Share Premium	30		30
Retained Earnings	94		94
Fair value adjustment		16	16
	<u>324</u>	<u>216</u>	<u>140</u>

**Investment in Chebe (Associate)**

	N'm
Costs	60
Share of post acquisition retained profit (25% x 140)	<u>35</u>
Investment	<u>95</u>
<b>OR</b>	<b>N'm</b>
Share of Chebe net assets (24% x 324)	81
Fair value adjustment (25% x 16)	4
Goodwill (60 – (200 x 25%))	<u>10</u>
	<u>95</u>

**(W6) Consolidated retained earnings**

	N'm
Papa (given)	390
Tata post-acquisition retained earnings (210 – 175 (W1)) × 80%	28
Loss on acquiring control (W2)	(3)
Goodwill impairment attributable to parent (W3)	(12)
Share of post acquisition profits of associate (W5)	<u>35</u>
	<u>438</u>

**(W7) Non-controlling interest in Tata**

	N'm
Book value (20% × 470)	94
Fair value adjustment (20% × 25)	5
Goodwill (3 – impairment 3) (W3)	<u>0</u>
	<u>99</u>

## EXAMINER'S REPORT

This question tests candidates' understanding of the preparation of consolidated statement of financial position involving steps acquisition and associates.

About 99% of the candidates attempted the question and the performance was below average.

Commonest pitfall is the inability of the candidates to compute goodwill on acquisition, retained earnings and non-controlling interest. Also, candidates were not able to distinguish an associate company from subsidiary company.

Candidates are advised to master all aspects of group financial statements as this is always the compulsory question in this paper. ICAN Study Text should be deeply studied to improve performance in future examinations.

### Marking guide

	Marks
i. Statement of Financial Position	10
ii. Working Notes	<u>20</u>
Total mark obtainable	<u>30</u>

## SOLUTION 2

### Computation Of Relevant Ratios For Odua Plc

Categories	Ratios	Formula	2016 ₦' m	2015 ₦' m
Profitability	Gross Profit Margin	$\frac{\text{Gross Profit}}{\text{Sales}} \times 100$	$\frac{150}{550} \times 100 = 27.27\%$	$\frac{200}{400} \times 100 = 50\%$
	Net Profit Margin	$\frac{\text{PBIT}}{\text{Sales}} \times 100$	$\frac{68}{550} \times 100 = 12.36\%$	$\frac{160}{400} \times 100 = 40.00\%$
	ROCE	$\frac{\text{PBIT}}{\text{Capital Employed}} \times 100$	$\frac{68}{540} \times 100 = 27.59\%$	$\frac{160}{580} \times 100 = 27.59\%$

			= 12.59%	
	ROE	$\frac{PAT}{Equity} \times 100$	$\frac{50}{440} \times 100$	$\frac{124}{480} \times 100\%$
			= 11.36%	= 25.83%
Short-term Liquidity	Current Ratio	$\frac{Current Asset}{Current Liability}$	$\frac{184}{144}$	$\frac{114}{104}$
			= 1.28:1	= 1.10:1
	Acid test ratio	$\frac{Current Asset - Inventory}{Current Liability}$	$\frac{184 - 80}{144}$	$\frac{114 - 38}{104}$
			=0.72:1	= 0.73:1
Long- term Liquidity	Interest Cover	$\frac{PBIT}{Finance Cost}$	$\frac{68}{10}$	$\frac{160}{6}$
			= 6.8 times	= 26.67 times
	Gearing Ratio	$\frac{Debt Capital}{Capital Employed} \times 100$	$\frac{100}{540} \times 100$	$\frac{100}{580} \times 100$
			= 18.52%	= 17.24%
Efficiency Ratio	Inventory Days	$\frac{Average Inventory}{Cost of Sales} \times 365 days$	$\frac{80}{400} \times 365 days$	$\frac{38}{200} \times 365 days$
			= 73 days	= 69 days
	Receivable Days	$\frac{Average Receivable}{Sales} \times 365 days$	$\frac{104}{550} \times 365 days$	$\frac{56}{400} \times 365 days$
			=69days	=51 days
	Payable days	$\frac{Average payable}{cost of sale} \times 365 days$	$\frac{100}{400} \times 365 days$	$\frac{78}{200} \times 365 days$
			= 91 days	= 142 days
Stock market performance	EPS	$\frac{PAT}{No of share}$	$\frac{50}{480 shares}$	$\frac{124}{480 shares}$
			=0.1042 kobo	= 0.2583kobo

Price earning ratio	$\frac{MPS}{EPS}$	$\frac{1.6}{0.104}$	$\frac{2.8}{0.258}$
		= 15.38 times	= 10.84 times

PBIT = Profit before interest and tax  
 PAT = Profit after Tax  
 MPS = Market Price Per Share

## Interpretation and discussion of the Ratios

### Profitability:

All profitability ratios declined in 2016. Gross margin dropped from 50% in 2015 to 27.27% in 2016. This implies that the cost of sales of the company has increased in 2016 than it was in 2015. There was also a drop in net profit margin from 40% in 2015 to 12.36% in 2016. Return on Capital Employed declined from 27.59% to 12.59% while ROE dropped from 25.83% in 2015 to 11.36% in 2016.

Gross profit has declined from ₦100m to ₦75m, the latter figure being ₦90m if the loss on disposal were excluded from cost of sales. This is an underlying decline of 10%. This is not a disaster. It is possible that the new strategy and system took some time to gain attraction in the market and it would be very useful to see month by month figures to ascertain if there was an improvement over the years. It is also entirely possible that the result would have been much worse had the new strategy not been implemented. After all, the real comparison is not with last year, but with what this year would have been, had the change not occurred. This is probably impossible to know.

Net margins are also down substantially (from 41% to 12.4%, the latter increasing to 17.8% excluding the loss on disposal). If we further adjust these figures to exclude the gains and losses on fair value investments, the figures are 19.6% (2016) and 36% (2015). This is a smaller decline, but still significant.

The increase in operating costs is not surprising considering that revenue has increased by 37.5% in value terms and much more in unit terms due to the reduction in prices. Hence, we can conclude that operating cost efficiency had not materially deteriorated.

### Short term Liquidity:

**The current ratio** has actually improved from 1.1:1 to 1.28:1, however the levels are still very poor. **The acid test ratio** looks even worse, declining from 0.73:1 to 0.72:1. It seems that the company's cash position is bad, with a positive ~~£~~20m cash balance turning into a negative ~~£~~40m over the year. Apart from the bank overdraft, trade payables seem to be financing much of the company's liquidity needs.

However, it is important to bear in mind that the company bore large one-off investments in 2016, particularly the new ~~£~~40m control system. This was financed from cash flow, as neither equity nor borrowings have increased.

Also, it is likely that the increase in inventory and receivable (both absorbing cash) are related to the expansion of sales levels, and may not be repeated.

However, that said, it is vital that the company examines closely its future cash flow needs and considers raising new equity or debt as protection against unexpected events. The company is dangerously exposed at present.

It would be important to know when the bank loan is due for repayment, as the company is not in a position to repay it at present. Presumably the investments could be sold if necessary. This provides a cushion of support.

### **Long term Solvency and Stability**

The interest cover of the company is about 27 times in 2015 which shows a good performance while the interest cover dropped drastically to 6.8 times in 2016 which must have arisen as a result of poor performance that occurs in the period. Furthermore, the gearing ratio of the company increased from 17.24% in 2015 to 18.52% in 2016. This still depicts a better performance of being lowly geared.

### **Efficiency:**

Although there have been significant increases in the figures for **inventory, receivables and payables**, when expressed as a percentage of revenue and cost of sales as appropriate, the increases are not that large.

The inventory days in 2016 was 73 days compared to 2015 of 69 days in 2016, while the receivable days was 69 days in 2016 which is higher compared to 2015 of 51 days. Payables are being settled more quickly than 2015, although from a very high base. It is important to guard against risks of being charged higher prices if payment is slow. In the case of inventory, obsolescence may be a risk, depending on the type of product being stored. Tighter inventory management reduces this risk.

## **Stock market performance**

Earnings per share and price earnings ratio are measures of how well the company performs in the market. The earnings per share of the company declined in 2016 when compared the figure of 0.10 kobo in 2016 with 0.26kobo of 2015. The company experienced decline in both market price and earnings per share thereby showing an increase in price earnings ratio from 10.84 to 15.38.

### **Overall Comment:**

From the analysis of the financial statements supplied and the ratios calculated, it is clear that the performance of Odua Plc has deteriorated in 2016. Therefore, the company should focus on increasing sales, maintaining its margins, and controlling liquidity very tightly through strong working capital management.

### **EXAMINER'S REPORT**

The question tests candidates understanding of ratio analysis regarding the identification of relevant ratios, computation and interpretation of identified ratios.

About 94% of the candidates attempted the question and the performance of some of them was above average.

Commonest pitfall for candidates in answering the question was their inability to appropriately classify the ratios under the specified categories. The overall comment and conclusion were ignored by most candidates.

Candidates are advised to prepare very well on this area of analysis and interpretation of the ratio as this is a required knowledge at the final level of the examination.

### **Marking guide**

	<b>Marks</b>
a. Classification	3 <sup>1</sup> / <sub>4</sub>
b. Formula	6 <sup>1</sup> / <sub>2</sub>
c. Calculation (each year)	6 <sup>1</sup> / <sub>2</sub>
d. Interpretation	3 <sup>1</sup> / <sub>4</sub>
e. Conclusion/Overall comment	<u>1</u> / <sub>2</sub>
	<u>20</u>

### **SOLUTION 3**

Date:

To: Employees representative of Funda Plc.

From: Financial Controller

**Subject: Accounting policies used by Funda Plc**

(a) **Suitability of accounting policies**

For an accounting policy to be suitable, it had to meet up with the following criteria.

- i. It has to conform with regulatory procedures of Standards Organisation of Nigeria (SON), NAFDAC, etc.
- ii. The policy must meet up with current accounting treatment as laid down in IAS, IFRS, etc. as follows: (IAS 8 - Accounting Policies, changes in Accounting Estimates and Errors). I write to explain the suitability and treatment of specific accounting policy matters which were used in the computation of the financial information meant for loan application.
  - Relevant to the decision making needs of users, and
  - Reliable in the financial statements:
  - Represent faithfully the results and financial position of the entity.
  - Reflect the economic substance of transactions and other events, and not merely the legal form;
  - are neutral. i.e free from bias
  - Are prudent; and
  - Are complete in all materials respects
- iii. Documentation procedures as specified in the operating manual and Auditors suggestions should be reflected in the accounting policies of the company.
- iv. Funda Plc accounting policies should facilitate accounting system audit.
- v. Areas of efficiency improvement in the system should be reflected in the accounting policy.
- vi. Accounting policy would aid better understanding by the users of financial statement.
- vii. Further explanations, clarifications in the treatment of specific transactions mentioned in the account.
- viii. Accounting policies should be consistently applied every year and reflect changes (if any).

- ix. Since no company operates in isolation accounting policies should form the basis of comparison with the financial statements of companies in the same industry.

**(b) Accounting treatment**

**Sales of water filter – (IAS – Leases)**

- i. It is a sale and repurchase arrangement
- ii. Volume discount should be deducted to arrive at the net income (that is ₦625,000) less ₦125,000.
- iii. Put option is an example of a financial instrument that provides finance for six years.
- iv. ₦500,000 net payment can be recognised as revenue/sales/income.
- v. Put-option can be defined as a contract that gives the purchaser the right but not the obligation to sell a specified quantity of a particular financial instrument, commodity, foreign currency etc at a specified price (strike price) during a specified period.
- vi. ₦175,000 (i.e. 35% of ₦500,000) is a premium to compensate the buyer for the risk of payment under the option.
- vii. ₦29,166.67 ( $\text{₦175,000} \div 6$ ) should be debited to Profit or Loss annually for six years in respect of a filter. This amount should be provided for and debited to Profit or Loss and such provision should be recognised as part of current liability in statement of financial position.
- viii. Depreciation should be provided and debited to Profit or Loss.
- ix. Depreciation of ₦50,000/year/unit of filter in each year for six years should be debited to Profit or Loss.  $\text{₦}(500,000 \div 10 = \text{₦}50,000)$
- x. The item is part of inventory when it is collected back at the end of six years and classified under current asset in the statement of financial position.
- xi. The inventory should be valued at ₦200,000 ( $\text{₦}500,000 - \text{₦}300,000$ ) ( $50,000 \times 6 \text{ years}$ ) = ₦300,000 at net realisable value (NRV)

**Connection fee**

- The refundable connection fee should not be credited to Profit or Loss because of its nature as refundable. (IAS 18 – Revenue)
- Only the cost of disconnection should be credited to Profit or Loss as income/revenue/sales.
- The amount of ₦4m in 2016 and ₦5m in 2017 should be recognised as contingent liability in the Statement of Financial Position (IAS 37 – Provisions, contingent Liabilities and contingent Assets).

- ## Activation fees

- ## Deposits

- ## Conclusion/Closing

Would you demand for further clarification do not hesitate to contact me

Name and Signature

## EXAMINER'S REPORT

**This question tests candidates' knowledge of report writing, suitability of the accounting policies on practical situation and correct treatment of specified transactions.**

**About 36% of the candidates attempted the question and performance was generally poor and below average.**

**The commonest pitfall was that most candidates ignored the report aspect of the question and could not explain the suitability of accounting policies.**

**Candidates are advised to pay particular attention to reporting aspect of this subject and to deeply understand the application of accounting standards to practical situations.**

## Marking guide

(a)	Report format	Mark	Mark
-	To & Fro/Date	1	
-	Subjects	1	
-	Opening	1	
-	Closing remark/comment	1	
-	Remark & signature	1	5
(b)	Suitability (Any five points mentioned)		5
(c)	Treatment 2 marks for each points		<u>10</u>
	Total		<u>20</u>

## SOLUTION 4

### (a) Scenario I

#### Criteria for revenue recognition

For revenue to be recognised the following criteria must be satisfied:

- The entity had transferred to the buyer the significant risk and reward of ownership.
- The amount of revenue is capable of being measured reliably
- The cost incurred can be measured reliably.
- The stage of completion of the transaction at the reporting date can be measured reliably.

The following criteria are not satisfied in the consultancy contract, hence, the full amount of ₦1,000,000 is to be recognised as **LIABILITY**: OR NON CURRENT LIABILITY. **NONE** is to be recognised in the REVENUE ACCOUNT

#### Scenario II

Borrowing costs directly attributable to construction of an asset which takes long period to get ready for its intended use should be capitalised as part of the cost of the asset. Although, borrowing costs were incurred throughout the year, capitalisation commences when project for which the borrowing was contracted is complete. In the case of general borrowings, the calculation of amount to capitalise is based on weighted average cost of borrowing.

Capitalisation by using Weighted Average of the borrowing costs

Type of borrowings	Amount N	Rate(%)	Hash total N
Bank overdraft	1,000,000	9.75	97,500
Bank loan	1,750,000	10	175,000
Loan notes	<u>2,500,000</u>	8	<u>200,000</u>
	<u>5,250,000</u>		<u>472,500</u>

$$\text{Capitalisation Rate} = \frac{472,500}{5,250,000} \times 100$$

$$= \underline{9\%}$$

#### Computation of interest on borrowing:

	N	N
Land @ cost		1,800,000
Interest (9% x 1,800,000 x $\frac{8}{12}$ )	108,000	
Construction work		2,700,000
Interest (9% x 2,700,000 x $\frac{4}{12}$ )	<u>81,000</u>	
Total interest capitalised	<u>189,000</u>	<u>89,000</u>
Total cost of assets		<u>4,689,000</u>

The borrowing costs capitalised is to be reduced by (450,000 – 189,000)

$$= \underline{\underline{\text{N}261,000}}$$

∴ ~~N~~261,000 is to be expended in addition to the interest charge for the year, as they are not to be capitalised with the asset acquired.

#### Computation of the depreciation to be charged

$$\text{Dep} = \frac{\text{Cost of Assets} - \text{Cost of Land}}{\text{No of years}} \times \frac{3}{12}$$

$$= \frac{4,689,000 - 1,800,000}{20} \times \frac{3}{12}$$

$$= \underline{\underline{\text{N}36,112.5}}$$

The carrying amount of assets constructed at year end

$$\text{N}(4,689,000 - 36,112.5)$$

$$= \underline{\underline{\text{N}4,652,887.5}}$$

### Scenario III

Depreciation of the blast furnace has been based on an estimated useful life of 20 years. This is at variance with a report by a qualified expert.

- Where estimates have been prepared by qualified professional, then the professional valuers estimates to be used is 15years.

Carrying amount of assets	N3,500,000
Estimated useful life	20 years
Depreciation charged	<u>N175,000</u>

Using professional valuer's estimate of 15 years the depreciation to be changed is

$$\frac{3,500,000}{15}$$

Depreciation to charges	<u>N233,333.33</u>
Depreciation undercharged =	N(233,333.33 – 175,000)
=	<u>N58,333</u>

∴ Additional depreciation of 58,333 is to be charged to the account in 2014  
The lining which was replaced in the last week of the year will not attract any depreciation for the year.

### Revised Financial Statements

Statement of Profit or Loss Extract for the year ended December 31, 2014

	N'000	N'000
Profit before tax		2,500
Consultancy agreement	1,000	
Over capitalised interest	261	
Undercharged depreciation	<u>58.33</u>	
		<u>(1,319.33)</u>
Revised profit		<u>2,180.67</u>

## Statement of Financial Position as at December 31, 2014

	Draft N'000	Adjustment N'000	Revised N'000
Property, Plant & Equipment	12,000	(319.33)	11,680.67
Current assets	<u>3,500</u>		<u>3,500</u>
Total assets	<u>15,500</u>		<u>1,518.67</u>
Share capital	2,000		2,000.00
Retained earnings	<u>6,000</u>	(1,319.33)	<u>4,680.67</u>
	8,000		6,680.67
(b) Non-current liability	5,000	500	5,500.00
Current liability	<u>2,500</u>	500	<u>3,000.00</u>
	<u>15,500</u>		<u>15,180.67</u>

### Ethical Issues

The following are ethical issues arising from the scenario above:

- Previous Financial Controller (FC) resigned as a result of pressure from Managing Director (MD).
- MD pressured the FC to compute depreciation with an unrealistically long useful life
- MD pressured FC to present the favourable financial statements in favourable light preparatory to stock market listing.

Possible courses of actions by the FC

- Discuss with the MD about compliance with reporting standards
- Explain to the MD that as a professional, you are bound by ethical code
- Consider speaking with other Directors or Audit Committee (if any)
- If all action fails, then consider resigning/seeking alternative employment.

### EXAMINER'S REPORT

The question tests the candidates' understanding and application of criteria for revenue recognition, change of accounting policies, computation of average, cost of borrowings and ethical issues confronting accountants in the preparation of financial statements.

About 57% of the candidates attempted the question but they demonstrated poor understanding of the requirement. Their performance was generally poor.

The commonest pitfall was the inability of the candidates to recognise the applicable timing of recognition for cost of borrowing and the applicable depreciable time of the acquired assets.

Candidates are advised to get acquainted with the provision of International Financial Reporting Standards (IFRS) and be able to apply them to practical situations.

### Marking Guide

		Marks
(a)	(i) Criteria	2
	Recognition of ₦1m	2
	(ii) Computation of cost of capital and Depreciation	6
	(iii) Computation of depreciation of furnace	4
	Redraft of financial statement	<u>2</u>
		16
(b)	Ethical issues	2
	Courses of action	<u>2</u>
		<u>20</u>

### SOLUTION 5

- (a) i. A **defined contribution Plan** is a post-employment plan under which an entity pays fixed contribution into a separate entity (a fund) and will have no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods.

A **defined benefit plan** is any post-employment benefit plan other than a defined contribution plan. This plan uses actuarial technique (projected unit credit method) to estimate the ultimate cost to the entity of the benefits that employees have earned in return for their service in the current and prior periods.

### Differences between a defined contribution plan and a defined benefit plan

- i. Under a defined contribution plan, there are no actuarial assumptions to make, while under a defined benefit plan actuarial technique is relevant;

- ii. Defined contribution plan does not usually affect statement of financial position whereas defined benefit plan will always affect both statement of financial position and statement of profit or loss and other comprehensive income;
  - iii. Under a defined contribution plan, the entity is ONLY responsible for the amount of annual contribution payable into the fund, whereas in a defined benefit plan the amount of benefits receivable by the employees is key;
  - iv. Under a defined contribution plan, the obligation is determined by the amount paid into the plan in each period whereas under a defined benefit plan, actuarial technique is used to estimate the ultimate cost to the entity of the benefits that employees have earned in return for their service in the current and prior periods;
  - v. In defined contribution plan, amount received by the employee is not pre-determined while under defined benefit plan, the amount received by employee is pre-determined;
  - vi. In contribution plan, the entity is not required to make good any short falls if pension doesn't have enough assets to pay whereas under benefit plan the entity i.e. employer bears the short fall if the pension funds are insufficient to pay the retirement of the employees;
  - vii. In contribution plan the employees bear the risk while in benefit plan the employer bears the risk; and
  - viii. No actuarial assumption to make in contribution plan while actuarial technique is relevant in defined benefit plan.
- (b) i. Accounting treatment for Pension Plan I: The accounting for the defined benefit plan is as follows:

**Financial position as at October 31, 2017**

	<b>31/10/2017</b>	<b>1/11/2016</b>
	<b>₦'m</b>	<b>₦'m</b>
Present value of obligation	240	200
Fair value of plan assets	<u>(225)</u>	<u>(190)</u>
	<u>15</u>	<u>10</u>

**Expense in statement of Profit or Loss for year ended 31/10/17**

	<b>N'm</b>	<b>N'm</b>
Current service cost		20.0
Net interest expense:		
Interest expense – 5% x <del>N</del> 200m	10	
Interest earned – 5% x <del>N</del> 190m	<u>(9.5)</u>	<u>0.5</u>
Total expenses		<u>20.5</u>

**Computation of Actual Gain or Loss****Actuarial Loss on Obligation (Working 1)**

	<b>N'M</b>
Present value of obligation 1/11/16	200
Interest expense (5% x <del>N</del> 200m)	10
Current service cost	20
Benefits paid out	<u>(19)</u>
	211
Present value of obligation 31/10/17	<u>(240)</u>
Actuarial loss of obligation	<u>(29)</u>

**Actuarial Gain on Plan Assets (Working 2)**

	<b>N'M</b>
Fair value on plan assets 1/11/16	190.0
Interest earned (5% x <del>N</del> 190m)	9.5
Contribution paid	17.0
Benefit paid out	<u>(19.0)</u>
	197.5
Fair value of plan assets 31/10/17	225.0
Actuarial Gain on Plan Assets	<u>27.5</u>

**Analysis of amount in statement of Other Comprehensive Income (OCI)**

	<b>N'M</b>
Actuarial loss on obligation (working 1)	29.0
Actuarial Gain on plan assets (working 2)	<u>27.5</u>
Actuarial Loss on obligation (Net)	<u>1.5</u>

### Working 3

#### **Movement in net liability in statement of financial position as 31/10/17**

	₦'M
Opening liability	10.0
Expenses	20.5
Contributions paid	(17.0)
Actuarial loss (Net)	<u>1.5</u>
Closing liability	<u>15</u>

### **Accounting Treatment for Pension Plan 2**

The accounting for a defined contribution plan is fairly simple because the employer's obligation for each period is determined by the amount that had to be contributed to the plan for that period.

The company does not recognise any assets or liabilities for the defined contribution scheme, but charges the contribution payable for the period (₦10m) to operating profit. The contributions paid for the employees will be part of the wages and salaries cost and when paid will reduce cash.

#### **Tinubun Plc**

#### **Statement of contribution paid**

	₦'m
Contribution paid by employer	10
Contribution paid by employees	<u>10</u>
	<u>20</u>

#### **Statement of Profit or Loss**

Expenses:	₦'m
Contribution paid by employer	<u>10</u>

### **EXAMINER'S REPORT**

This question tests the understanding of the concept of IAS 19, its interpretation and practical applications.

About 46% of the candidates attempted the questions and the performance was below average. Many of the candidates who attempted the question misunderstood the requirements.

The major pitfall encountered by the candidates was wrong interpretation and application of the concept of IAS 19 especially on the difference between a defined contribution plan and a defined benefit plan.

Candidates are advised to study and understand the requirement of IFRS in depth for application at this level of examination. They are to use the ICAN study texts for better performance in future examinations.

### Marking guide

	Marks	Marks
* Explanation of the Nature of a defined contribution plan and a defined benefits plan	3	
* Any 4 differences between Pension Plan I and II (i.e. contribution plan and benefit plan)	<u>4</u>	7
* Financial position as at 31/10/17 for Pension Plan I	1	
* Statement of Profit or Loss for year ended 31/10/17	1	
* Computation of Actuarial loss on obligation	$\frac{3}{4}$	
* Computation of Actuarial gain on Plan Assets	$\frac{3}{4}$	
* Statements of other comprehensive income	1	
* Movement in Net Liability in statements of financial position (workings)	1	
* Explanation of Accounting Treatment for Pension Plan 2	1	
* Statements of contribution paid – Pension Plan I	1	
* Statements of Profit/Loss – Pension Plan II	<u><math>\frac{1}{2}</math></u>	<u>8</u>
Total		<u>15</u>

## SOLUTION 6

### EKO EXPORTS LIMITED (EEL)

- i. The debt owed by the customer existed at the reporting date, but the customer's inability to pay did not exist at that point. This condition only arose on February 10, 2017. (IAS 10 - Events occurring after the reporting date)

✓ Thus, this is a non-adjusting event

However, for its materiality to the financial statements, the following disclosure should be made:

- **Nature of the event**  
i.e. a description of the fire incident on the customer warehouse and its subsequent declaration as a bankrupt.
- **An estimate of its financial effect**  
Since 50% is recoverable from insurance, the balance of 50% i.e. ₦500,000 should be disclosed as the effect of the incident by way of note.

- ii. The amount withdrawn before the year-end i.e. ₦1.5million is an adjusting event, though it was discovered after year-end, it existed at year-end. (IAS 10 – Events occurring after the reporting date).

Since 60% has been recovered (₦1.5m x 60% = ₦0.9m) therefore only ₦0.6m would be provided in the financial statements.

The further withdrawal of ₦6.0million is a non-adjusting event, as it occurred after the year-end.

For its materiality the following should be disclosed by way of note.

- Nature of event (i.e. the employee fraud)
- The gross amount of contingency (i.e. ₦6.0million)
- The amount recovered subsequently (i.e. ₦6.0m x 60% = ₦3.6m)

- iii. EEL should not recognise the contingent gain until it is realised (A contingent asset). (IAS 37- Provisions contingent liabilities and contingent Assets)

If recovery of damages is probable and material to the financial statements, EEL should disclose the following in the notes:

- Brief description of the nature of the contingency asset (i.e. description of suit for claim of damages against a vendor for supply of defective goods).
  - An estimate of the financial effect: (N1million the probable claim).
- iv. EEL should make a provision of the expected amount i.e. N1.2million (N1.0m x 60% + N1.5m x 40%) (IAS 37- Provisions contingent liabilities and contingent Assets) because
- It is a present obligation as a result of past event;
  - It is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and
  - A reliable estimate can be made of the amount.

In addition, EEL should disclose the following in the notes to the financial statements:

- Brief nature of the contingent liability (claim against EEL for infringement of patent);
- The amount of contingency (i.e. N1.2million); and
- An indication of uncertainties relating to the amount or timing of any outflows.

### **EXAMINER'S REPORT**

This question tests the application of relevant provisions of standards to a given scenario, in a real life situation where a qualified professional is expected to handle on the job.

About 58% of the candidates attempted the question and their performance was very poor as they were not able to apply the provisions of the standards to the requirements of the question.

Commonest pitfall of the candidates was inability to interpret the question as practical application of the standards. Theoretical answers were provided by majority of the candidates.

Candidates are advised to familiarise themselves with the provisions of the standards, study the financial reports of organisations for more knowledge to perform better in future examinations.

Marking guide	Marks	Marks
i. Scenario i		
Identification of non adjusting events	1	
Nature of the event	1	
Estimate of financial effect	1	
Identification IAS 10 as the required standard	<u>1</u>	4
ii. Scenario ii		
Identification of <del>N</del> 9 million as an adjusting event	1	
Calculation of amount of provisions	1	
Identification of <del>N</del> 6m as non-adjusting event	1	
Any one of materiality disclosure	1	4
iii. Scenario iii		
Identification of Contingent asset	1	
Two disclosures materiality	<u>2</u>	3
iv. Scenario iv		
Calculation of correct amount for provisions	1	
Disclosures in the financial statements(any three disclosures)	<u>3</u>	<u>4</u>
Total		<u><u>15</u></u>

## SOLUTION 7

(a) The Directors,  
Mugono Plc

Dear Sir,

Component Reports included in Annual Report

In response to your request on the above subject, below is our report:

### Mandatory disclosure reports:

1. A statement of financial position as at the end of the financial period.
2. A statement of comprehensive income for the period (made up of a statement of profit or loss and other comprehensive income).
3. A statement of changes in equity for the period.
4. A statement of cash flows.
5. Notes to the financial statement, consisting of a summary of significant accounting policies and other explanatory notes.

6. Directors' report
7. Independent Auditors' report.

**Voluntary disclosure reports**

8. Audit Committee report.
9. Corporate social responsibility report.
10. Brief description of the business activities in the financial year.
11. Chairman's report.
12. Corporate Governance report.
13. Sustainability/Environmental report.
14. Financial summary

- (b) i. **Three advantages of mandatory disclosures include:**
- The statements provide information that are of interest to users and other stakeholders;
  - The mandatory statements shows the financial position as at the end of a reporting period;
  - Mandatory reports shows the financial performance for a particular period;
  - It improves communication to stakeholders;
  - It improves public image of the company; and
  - Decision making of the stakeholders is improved with mandatory disclosures.
- ii. **Advantages of Voluntary Disclosures are as follows:**
- It protects the company against any litigation of concealment;
  - It provides the potential investors detailed information that will assist them in appraising the viability of the proposed investment;
  - It improves the fluidity of capital market towards an efficient capital allocation, thereby bringing down the average cost;
  - It provides the public with more robust view and perception of the company future performance;
  - It motivates for better performance;
  - It reinforces company's communication to shareholders;
  - It protects the entity's goodwill and reputation; and
  - It is a means of passing across the performance level of an entity's corporate social responsibility.

**iii. Limitations of information provided on a voluntary basis are as follows:**

- The entity can decide on what to include in the report and what to leave out;
- The information is often presented in a very positive form, as public relations for investors, and might not be entirely reliable;
- It increases public expectation regarding future disclosure;
- It increases the involvement of shareholders and might lead to unnecessary conflicts; and
- The information can be false if not controlled.

We are of the opinion that the above meets your request. However, do not hesitate to get in touch with the undersigned for clarification, if necessary.

Yours faithfully,

Financial Consultant

### **EXAMINER'S REPORT**

The question tests candidates' knowledge of the components of annual reports with special attention on the mandatory and voluntary disclosures requirements.

About 96% of the candidates attempted the question and their performance was above average. However, only about 50% of the candidates who attempted the questions were able to score above 50% of the allocated marks.

The commonest pitfall is the inability of the candidates to correctly state the advantages of mandatory and voluntary disclosures.

Candidates are advised to have a better understanding of all the components of Annual Report and the Mandatory disclosures. The art of report writing should also be improved upon for better performance in future examinations.

**Marking guide****Marks**

(a)	Any correct FOUR Components of Annual Report	4
(b)	i. Three advantages of mandatory disclosures	3
	ii. Four advantages of voluntary disclosures	4
	iv. Two limitations of voluntary disclosures	2
	Presentation	<u>2</u>
		<u>15</u>

**THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA**

**PROFESSIONAL LEVEL EXAMINATION - NOVEMBER 2017**

**ADVANCED TAXATION**

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

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

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

**QUESTION 1**

HUSNA Nigeria Limited was incorporated on May 13, 2015 to manufacture Adhesives using gum arabic. The company is a brainchild of Mr. Onyeocha Ben, who returned to Nigeria after about 30 years in the United Kingdom. During his stay abroad, he worked in a similar organisation for over 20 years.

However, on returning to Nigeria in 2009, he has been thinking of how to start a business that he hopes will outlive him. During various interactions, he was informed of the wide market for adhesives manufactured with gum arabic. He was also informed that the company could benefit from the provisions of the Industrial Development (Income Tax Relief) Act Cap 17, LFN 2004. The company is engaged in production, even though the Managing Director is yet to understand the tax benefits derivable from this activity. Nevertheless, the company applied for and was granted a Pioneer Certificate with Production Day certified as July 1, 2015.

The company's financial records contained the following information:

	<b>₦</b>
(i) Accumulated profit as at June 30, 2016	41,250,000
(ii) Capital expenditure incurred during Pioneer period as certified by the FIRS:	
Building	20,000,000
Property, Plant and Equipment	18,750,000
Motor vehicles	12,500,000
Furniture and Fittings	6,250,000
(iii) After the end of the pioneer period, the company adopted December 31, as its year end and the adjusted profits from the new trade were:	
	<b>₦</b>
6 months to December 31, 2016	15,000,000
Year to December 31, 2017	22,500,000

**As a tax consultant, you are REQUIRED to:**

- a. Explain briefly the conditions for granting a Pioneer Status to a company. (4 Marks)
  - b. Compute the tax liabilities of the company for the relevant years of assessment. (18 Marks)
  - c. Differentiate between Tax Audit and Tax Investigation. (8 Marks)
- (Total 30 Marks)**

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

**QUESTION 2**

Skkye Petroleum Plc. commenced operations over ten years ago and its accounting date is December 31, annually.

The following details have been extracted from the accounting records for the year ended December 31, 2016:

(i)	Crude Oil exported	-	3,500,000 barrels
(ii)	Crude oil used locally	-	1,200,000 barrels at ₦100 per barrel
			<b>₦</b>
(iii)	Incidental income from petroleum operations	-	26,750,000
(iv)	Exploration and drilling costs	-	30,000,000
(v)	Management and Administration expenses	-	240,500,000
(vi)	Non – Productive rents	-	8,300,000
(vii)	Provision for bad debts - General	-	7,500,000
	- Specific	-	11,200,000
(viii)	Depreciation	-	7,250,000
(ix)	Losses brought forward	-	13,200,000
(x)	Qualifying Capital Expenditures are as follows:		<b>₦'000</b>
	- Pipeline and Storage Tanks acquired in March 2016, located in the Continental Shelf of 190 meters water depth.		48,000
	- Plant and Machinery acquired in June 2014, located in territorial waters of 90 metres water depth.		63,800
	- Furniture and Fittings acquired in May 2013, located in territorial waters of 95 metres water depth		21,000
	- Buildings erected in April 2015, located onshore.		71,000

You were able to confirm that Management and Administration expenses comprise the following:

	<del>N</del> '000
Donations to XYZ Political Party	8,500
(ii) Expenditure relating to the purchase of information relating to the existence and extent of petroleum deposits	4,700
(iii) Companies Income Tax of an associated company	5,000
(iv) Interest on inter-company loans obtained under terms prevailing in the open market	2,600
(v) Staff salaries	175,000
(vi) Royalties on export sales	6,200
(vii) Repairs and renewals incurred on Property, Plant and Equipment for the purpose of carrying on Petroleum operations	2,900
(viii) Rents paid in respect of land and buildings occupied under an Oil Prospecting Licence	3,600
(ix) Other administrative expenses	<u>32,000</u>
	<u>240,500</u>

The International Market Price of Crude Oil in 2016 was USD \$75 per barrel and the exchange rate was USD \$1:~~N~~280.

**You are required to compute the:**

- |                           |                         |
|---------------------------|-------------------------|
| a. Assessable Profit      | (11 Marks)              |
| b. Chargeable Profit      | (5½ Marks)              |
| c. Assessable Tax         | (1 Mark)                |
| d. Chargeable Tax         | (1½ Marks)              |
| e. Tertiary Education Tax | (1 Mark)                |
|                           | <b>(Total 20 Marks)</b> |

### QUESTION 3

- a. Outline **FIVE** objectives of the Memorandum of Understanding which the Federal Government of Nigeria entered into with the Oil Producing Companies on January 1, 1986. (5 Marks)
- b. **SALIM CONSULTANTS LIMITED**, which was incorporated in 2012, is a firm of corporate advisors resident in Nigeria. In 2015, it expanded to Burundi to tap into the booming business opportunities in that country.

The directors have heard of Double Taxation Agreement with the attendant benefits, even though the company has never been a beneficiary. The directors, being highly educated executives, have tried on their own to read about and understand the concept of Double Taxation Agreement and the attendant reliefs, all to no avail.

Below is a summary of the Income Statements for the year ended December 31, 2016:

	Nigeria ₦	Burundi ₦	Total ₦
Gross Advisory fees	57,000,000	21,750,000	78,750,000
Other Income	<u>960,000</u>	<u>1,800,000</u>	<u>2,760,000</u>
	57,960,000	23,550,000	81,510,000
Deduct Expenses:			
Deal Execution Expenses	(30,225,000)	(9,750,000)	(39,975,000)
Office Rent	(1,800,000)	(675,000)	(2,475,000)
Depreciation	(5,100,000)	(2,700,000)	(7,800,000)
Loss on sale of Non- Current Assets	-	(525,000)	(525,000)
Foreign Exchange Loss Provision	(960,000)	-	(960,000)
Other Operating Expenses	<u>(3,240,000)</u>	<u>(1,380,000)</u>	<u>(4,620,000)</u>
Net Operating Profit	<u>16,635,000</u>	<u>8,520,000</u>	<u>25,155,000</u>

#### Additional information:

- (i) The sum of ₦2,130,000 was paid to the Burundi Tax Authority for the year, after claiming ₦4,800,000 Capital Allowance. Capital Allowance claimable in Nigeria was ₦7,800,000.
- (ii) Other income of ₦960,000 is profit from sale of Non-Current Assets, while ₦1,800,000 is gains from disposal of securities.

#### Required:

##### As a Tax Practitioner:-

- a. Explain briefly what is meant by Double Taxation Relief. (3 Marks)
- b. Compute the Double Tax Credit claimable by the Company assuming there is a Double Taxation Agreement with Burundi. (12 Marks)
- (Total 20 Marks)**

#### QUESTION 4

**Mr. Afolabi owns Afolabi Mining Limited**, a company based in Itakpe. The company has been in the mining business since 1999. The company has been facing financial problems in recent times. Based on advice, the directors bought a pulverising equipment on hire purchase on January 1, 2013 and paid the sum of ~~₦~~49,875,000 as a deposit on the cash purchase price of ~~₦~~78,750,000.

Afolabi Mining Limited was allowed to pay the balance in twenty monthly instalments of ~~₦~~1,750,000 each, with effect from February 1, 2013.

As the Tax Consultant of the company, **you are REQUIRED to:**

- a. Compute the Capital Gains Tax payable for the relevant Years of Assessment, assuming that the equipment was sold for:
    - i. ~~₦~~84,700,000 after the payment of instalments on November 3, 2013 payment. (5 Marks)
    - ii. ~~₦~~86,800,000 after the payment of instalments on August 5, 2014. (5 Marks)
  - b. Outline the allowable and disallowable deductions in computing Capital Gains Tax. (6 Marks)
  - c. Explain 'Year of Assessment' in the context of the Capital Gains Tax Act CAP C1 LFN 2004. (2 Marks)
  - d. Explain the term 'Connected Persons'. (2 Marks)
- (Total 20 Marks)**

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

#### QUESTION 5

**PAPA EJIMA LIMITED** has been in the business of manufacturing for both export and local sales. The company filed tax returns for 2014 Assessment Year.

Upon desk examination, the Federal Inland Revenue Service (FIRS), wrote the company to pay additional Value Added Tax (VAT) and Withholding Tax (WHT) amounting to ~~₦~~360,000 and ~~₦~~3,050,000 respectively.

Upon receipt of this letter, the Managing Director was angry, claiming that the company's returns were accurate.

The records of the company for the Accounting Year ended December 31, 2013 showed:

	N
Revenue	187,500,000
Cost of sales	<u>(102,500,000)</u>
Gross Profit	85,000,000
Other income	31,250,000
Operating expenses	(57,250,000)
Interest and similar charges	<u>(3,200,000)</u>
Profit before tax	55,800,000
Taxation	<u>(6,250,000)</u>
Profit after tax	49,550,000
Dividend	<u>(38,500,000)</u>
Retained profit for the year	<u><u>11,050,000</u></u>

Other relevant information includes:

(i) Revenue was made up of:	N
- Export sales	58,500,000
- Local sales	129,000,000
	N
(ii) Cost of sales comprises of:	
- Opening inventory (VAT inclusive)	22,800,000
- Closing stock (VAT inclusive)	37,150,000
- Purchase of raw material	90,600,000
- Freight charges	18,700,000
- Other direct materials	27,550,000
(iii) Other income includes:	N
- Foreign exchange gain	4,800,000
- Profit on sale of Non-current assets (sales proceeds is N21.5m)	8,850,000
- Management fees from subsidiary companies	17,600,000
(iv) Operating expenses are made up of:	
- Office rent	18,000,000
- Audit fees	4,000,000
- Consultancy fees to ZXY Ltd	11,000,000
- Directors' fees	7,500,000
- Other expenses	16,750,000
(v) The company purchased Non-Current Assets (VAT inclusive)	84,000,000
(vi) VAT remitted to FIRS during the year	1,976,235
(vii) WHT remitted to FIRS during the year	6,650,000

As the tax consultant of the company, you have seen the First assessment serve on your client on April 5, 2016.

**Required:**

Advise the Company on the Objection and Appeal procedures in a memo to the Managing Director. **(Total 15 Marks)**

**QUESTION 6**

Pategi and Abu are brothers based in Hackettstown in New Jersey, United States of America. In 2009, the two brothers and ten other African-Americans incorporated a Company, Pategi Telecommunications Limited whose major line of business is telecommunications. The company has a representative office in Share, Kwara State, Nigeria. In the year ended December 31, 2014, the following transactions were extracted from the books of accounts of the company:

- (i) Number of minutes of Telecommunication transactions:

	minutes
U.S. to other parts of the World	1,705,000
U.S. to Nigeria	374,000
Nigeria to U.S.	426,250
Nigeria to Canada	550,000
U.S. to Canada through Nigeria	<u>794,750</u>
	<u>3,850,000</u>

- (ii) The world-wide expenses incurred include the following:

	₦
Refurbishment	7,150,000
Rent	1,100,000
Depreciation	25,991,563
Salaries and Wages	4,065,188
Other disallowable expenses	9,658,000
Administrative expenses	<u>4,820,750</u>
	<u>52,785,501</u>

- (iii) The average charge for messages applicable during the year under review is \$0.50 per minute. The applicable rate of exchange is ₦198 to \$1.00.

**Required:**

Advise the company on the total tax liabilities for the relevant year of assessment. **(Total 15 Marks)**

## QUESTION 7

The prevailing economic condition in the Country has led to the business cessation of many Small and Medium Scale Enterprises (SMEs).

ABA FOODS LIMITED, based in Abia State, is a popular company known for producing high quality foods and beverages. However, due to unwillingness of banks to lend on a long-term basis, the company could not replace its ageing and obsolete property, plant and equipment which led to a trajectory of losses. The directors of the company and the elders of the community, where the factory is sited, pray that their products with household name of “*choice*” should continue to be popular, given the acceptability of these products in the market.

In the alternative, the directors went in search of prospective investors who might be interested in either a merger or total acquisition.

They finally initiated discussions with Chief Egodi, a prominent businessman with a vast business empire known as Ifedi Group of companies. One of the companies in the group is Ifedi Foods and Beverage Limited which produces similar products to Abia Foods Limited.

Chief Egodi who is quick-witted, understands from experience in running his other companies that such business dealings will naturally attract the attention of the Federal Inland Revenue Service (FIRS) but he is unsure of the tax implications of which of the options he chooses.

Consequently, he approached his solicitors for advice, who in turn recommended your firm, ALIYARA & Co. Chartered Accountants, for professional advice.

**You are required to make a presentation in the form of Advice:-**

- a. Explaining the tax implications of Aba Foods Limited merging with Ifedi Foods and Beverage Limited, where the latter inherits all the assets and liabilities of the merging companies. (5 Marks)
- b. Explaining the tax implications, if Ifedi Foods and Beverage Limited is re-constituted to take over the assets and liabilities of Aba Foods Limited. (5 Marks)
- c. Explaining the tax implications, if Ifedi Foods and Beverage Limited and Aba Foods enter into a Joint Venture Agreement or Partnership. (5 Marks)

**(Total 15 Marks)**

## NIGERIAN TAX RATES

### 1. CAPITAL ALLOWANCES

	Initial %	Annual %
Office Equipment	50	25
Motor Vehicles	50	25
Office Buildings	15	10
Furniture and Fittings	25	20
Industrial Buildings	15	10
Non-Industrial Buildings	15	10
- Agricultural Production	95	Nil
Plant and Machinery - Others	50	25

### 2. INVESTMENT ALLOWANCE 10%

### 3. RATES OF PERSONAL INCOME TAX

Consolidated relief allowance is computed at ~~₦~~200,000 or 1% of Gross Income whichever is higher + 20% of Gross Income.

After the Consolidated relief allowance and tax exempt items have been granted, the balance of income shall be taxed as specified in the tax table below:

	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

- |                              |                           |
|------------------------------|---------------------------|
| 4. COMPANIES INCOME TAX RATE | 30% of Total Profit       |
| 5. TERTIARY EDUCATION TAX    | (2% of Assessable Profit) |
| 6. CAPITAL GAINS TAX         | 10%                       |
| 7. VALUE ADDED TAX           | 5%                        |

## SOLUTION 1

(a) Conditions for granting Pioneer Status to any Company

The National Council of Ministers (the Council) may declare an industry a pioneer industry and products of the industry pioneer products if it is satisfied that;

- i. The industry is not being carried on in Nigeria at all; or
- ii. The industry is being carried on in Nigeria on a scale which is not suitable to the economic requirements of Nigeria; or
- iii. There are favourable prospects of further development in Nigeria of any industry; or
- iv. It is expedient in the public interest to encourage the development or establishment of any industry in Nigeria.

(b)

**HUSNA NIGERIA LIMITED  
COMPUTATION OF TAX LIABILITIES  
FOR 2015 TO 2017 ASSESSMENT YEARS**

	N	N
<b><u>2015 Assessment Year</u></b>		
Basis period (1/7/2015 – 31/12/2015)		
Assessable profit		15,000,000
Capital allowances:		
Capital allowances for the year (wk1)	25,334,375	
Relieved	<u>(15,000,000)</u>	<u>(15,000,000)</u>
Unrelieved capital allowances c/f	10,334,375	
Total profit		<u>NIL</u>
Companies Income Tax – 30% of total profit		<u>NIL</u>
Tertiary Education Tax – 2% of Assessable profit (2% of N15,000,000)		<u>300,000</u>

### **2016 Assessment Year**

Basis period (1/7/2015 – 30/6/2016)

Assessable profit ( <del>₦</del> 15,000,000 + $\frac{6}{12} \times \text{₦}22,500,000$ )	<del>₦</del>	<del>₦</del> 26,250,000
Capital allowances:		
Unrelieved b/f	(10,334,375)	
Capital allowances for the year (wk 1)	<u>(6,543,750)</u>	
	(16,878,125)	
Relieved	<u>(16,878,125)</u>	(16,878,125)
Unrelieved capital allowances c/f	<u><u>-</u></u>	

Total Profit 9,371,875

Companies Income Tax – (30% x ~~₦~~9,371,875) 2,811,562.50

Tertiary Education Tax – (2% x ~~₦~~26,250,000) 525,000

Assessable profit ÷ Profit of 6 months to 31 December, 2016 plus  
6/12 of profit to December 31, 2017

### **2017 Assessment Year**

Basis period (1/1/2016 – 31/12/2016)

Assessable profit		<del>₦</del> 22,500,000
Capital allowances:		
Unrelieved b/f	-	
Capital allowances for the year (wk1)	<u>6,543,750</u>	
Relieved	<u>(6,543,750)</u>	<u>(6,543,750)</u>
Unrelieved capital allowances c/f	<u><u>-</u></u>	

Total Profit 15,956,250

Companies Income Tax – (30% x ~~₦~~15,956,250) 4,786,875

Tertiary Education Tax – (2% x ~~₦~~22,500,000) 450,000

**NB** Company Income Tax is 30% of Total Profit.  
Tertiary Education is 2% of Assessable Profit.

## Workings

<b>HUSNA NIGERIA LIMITED</b> <b>Computation of Capital Allowances</b> <b>For 2015 to 2017 Assessment Years</b>					
	<b>Building</b>	<b>Property, Plant &amp; Equipment</b>	<b>Motor Vehicles</b>	<b>Furniture &amp; Fittings</b>	<b>Total Allowances</b>
Investment allowance	-	10%	-	-	
Initial allowance	15%	50%	50%	25%	
Annual allowance	10%	25%	25%	20%	
	<del>₦</del>	<del>₦</del>	<del>₦</del>	<del>₦</del>	<del>₦</del>
2015 YOA (1/7/2015- 31/12/2015)					
Qualifying expenditure at 1/7/2015	20,000,000	18,750,000	12,500,000	6,250,000	
Investment allowance	-	(1,875,000)	-	-	1,875,000
Initial allowance	(3,000,000)	(9,375,000)	(6,250,000)	(1,562,500)	20,187,500
Annual allowance	(850,000)	(1,171,875)	(781,250)	(468,750)	3,271,875
(6 months) WDV	16,150,000	8,203,125	5,468,750	4,218,750	25,334,375
2016 YOA (1/7/2015- 30/6/2016)					
Annual allowance	(1,700,000)	(2,343,750)	(1,562,500)	(937,500)	6,543,750
WDV	14,450,000	5,859,375	3,906,250	3,281,250	
2017 YOA (1/1/2016- 31/12/2016)					
Annual allowance	(1,700,000)	(2,343,750)	(1,562,500)	(937,500)	6,543,750
WDV C/F	12,750,000	3,515,625	2,343,750	2,343,750	

**Notes:**

- i. Capital allowances are not granted during the pioneer period; they are granted with effect from 1 July 2015 after the expiration of the pioneer period.
- ii. Husna Nigeria Limited is a manufacturing company, hence the capital allowances claimable in a year are not restricted.
- iii. The pioneer period covers 3 years (i.e. 1/7/2012 to 30/6/2015). Consequently, the accumulated profits of ₦41,250,000 are exempted from tax.
- iv. Investment allowance of 10% is granted on qualifying expenditure on property, plant and equipment. However, it is not deductible from the cost of the asset to arrive at the written down value of the asset as is the case with initial and annual allowances.

**(c) Tax Audit**

Tax Audit is an exercise carried out by tax officials from relevant tax authority (ies). The exercise is essentially meant to enable the tax authority to further satisfy itself that the audited Financial Statements and related tax computations submitted by the taxpayer agrees with the underlying records. This periodic check is usually undertaken by the Tax Audit Branch. There are two types of Tax Audit:

- (i) Desk Audit – This is the audit carried out in the tax office by an inspector, on the tax returns submitted to the tax office.
- (ii) Field Audit – This is usually a more elaborate and comprehensive exercise than a Desk Audit. It is usually carried out in the taxpayer's business premises.

**Tax Investigation**

This is an enquiry usually carried out on a company in order to ascertain any unpaid taxes by the company, resulting from any action by the company deliberate or otherwise – leading to an under-assessment of the company.

Tax investigations are distinct from tax audits. – The former arises when a taxpayers is suspected to have committed fraud in the form of tax evasion-of tax liability arising from:

- Failure to file tax returns;
- Filing of incomplete or inaccurate returns; and
- Failure to register for tax purposes, etc

The principal objective of a tax investigation is to expose all the circumstances of the fraud or tax evasion and to obtain evidence for possible prosecution for the recovery of back taxes from the taxpayer.

**Other distinguishing factors are:**

i. **Scope**

In Tax Audit, the scope of work is limited to the underlying records and it is less involving, while in tax investigation, the scope of work is wider than that of tax audit. The details of checking and the depth of work are beyond what is required in Tax Audit and a sub-set of tax investigation.

ii. **Objectives**

**Tax Audit**

The primary objectives of tax audit are to ensure that a taxpayer is tax compliant and pays appropriate amount of tax which agrees with the financial records of the taxpayers. Other secondary objectives of tax audit include discouragement of tax evasion.

**Tax investigation**

The objective of tax investigation is to discover and expose all circumstances of the matter being investigated.

iii. **Legal Requirements**

**Tax Audit**

Section 4 (34) of CITA Cap C21 LFN 2004 was introduced to empower the relevant tax authority to conduct tax audit. Tax audit legally requires a taxpayer to periodically confirm the accuracy of the self-assessment.

**Tax investigation**

This may not be required for some Tax payers for several years. Tax investigation is usually done after a tax audit.

iv. **Outcome**

**Tax audit**

This may result in additional assessment or referral for tax investigation in case Tax evasion is suspected.

## Tax investigation

This may result in criminal prosecution, especially where there is a strong evidence against the taxpayer, otherwise the investigation is terminated if evidence is weak.

## EXAMINER'S REPORT

This question tests candidates knowledge on conditions precedent on pioneer status.

Performance was above average.

The major pitfall was the inability of candidates to understand pioneer provision and differences between tax audit and tax investigation.

Candidates are advised to be more elaborate in their preparations for future examinations by making use of ICAN Study Texts and Pathfinder.

## Marking Guide

		Marks	Total Marks
(a)	Conditions for granting Pioneer Status 1 mark for any four points (1 x 4)		4
(b)	Computation of tax liabilities		
-	- Heading	1	
-	- 2015 YOA stated	$\frac{1}{2}$	
-	- Assessable profit	$\frac{1}{2}$	
-	- C/A for the year	$\frac{1}{2}$	
-	- C/A claimed	$\frac{1}{2}$	
-	- Unrelieved C/A	$\frac{1}{2}$	
-	- Total profit	$\frac{1}{2}$	
-	- Companies Income Tax (CIT)	$\frac{1}{2}$	
-	- Tertiary Education Tax (TET)	$\frac{1}{2}$	5
ii.	2016 YOA	$\frac{1}{2}$	
-	- Assessable profit	$\frac{1}{2}$	
-	- Unrelieved b/f	$\frac{1}{2}$	
-	- C/A for the year	$\frac{1}{2}$	
-	- C/A claim	$\frac{1}{2}$	
-	- Total profit	$\frac{1}{2}$	
-	- CIT	$\frac{1}{2}$	
-	- TET	$\frac{1}{2}$	4

iii.	2017 YOA	$\frac{1}{2}$	
	- Assessable profit	$\frac{1}{2}$	
	- Unclaimed b/f	$\frac{1}{2}$	
	- C/A for the year	$\frac{1}{2}$	
	- C/A claimed	$\frac{1}{2}$	
	- Total profit	$\frac{1}{2}$	
	- CIT	$\frac{1}{2}$	
	- TET	<u><math>\frac{1}{2}</math></u>	4
iv	Computation of Capital allowances for the relevant years of assessment		
2015	- Investment allowance	1	
	- Initial allowance	1	
	- Annual allowance	1	
2016	- Annual allowance	1	
2017	- Annual allowance	<u>1</u>	<u>5</u>
			22
(c)	Difference between Tax Audit and Tax Investigation		
	2 marks for each of any four points	<u>8</u>	<u>8</u>
			<u>30</u>

## SOLUTION 2

### SKKYE PETROLEUM PLC COMPUTATION OF PETROLEUM PROFITS TAX FOR 2014 ASSESSMENT YEAR

	N'000	N'000
Crude oil exported (3,500,000 x 75 x ₦280)		73,500,000
Local sale of crude oil (1,200,000 x ₦100)		120,000
Incidental income from petroleum operation		<u>26,750</u>
Total income		73,646,750
Allowable Expenses:		
Exploration and drilling costs	30,000	
Interest on inter-company loans obtained under terms prevailing in the open market	2,600	
Staff salaries	175,000	
Royalties on export sales	6,200	
Repairs and renewals	2,900	
Rents paid	3,600	
Other administrative expenses	32,000	
Non-productive rents	8,300	
Specific provision for bad debts	11,200	<u>(271,800)</u>
Adjusted Profit		73,374,950
		<u>(13,200)</u>

Losses brought forward		
Profit before Tertiary Education Tax		73,361,750
Deduct: Tertiary Education Tax (2/102 x ₦73,361,750,000)		<u>1,438,466</u>
(a) Assessable profit		<u>71,923,284</u>
Deduct: Capital allowance:		
Capital allowance for the year	40,760	
Petroleum Investment Allowance (see workings)	<u>7,200</u>	
	<u>47,960</u>	
Restricted to:		
85% Assessable profit (85% x ₦71,923,284)	61,134,791	
Less: 170% of Petroleum Investment Allowance	<u>(12,240)</u>	
	<u>61,122,551</u>	
Capital allowance claimed		<u>(47,960)</u>
(b) Chargeable profit		<u>71,875,324</u>
(c) Assessable Tax (85% of Chargeable Profit)		61,094,025
Less: Section 20 deductions		<u>-</u>
(d) Chargeable Tax		<u>61,094,025</u>
(e) Tertiary Education Tax (2% of Assessable Profit)		<u>1,438,466</u>

**Note:**

There is no indication in the question that this company operates under the Deep Offshore and Inland Basin Production Sharing Contracts, hence no Section 20 deductions are applicable.

**Workings**

Computation of Capital Allowances and Petroleum Investment Allowance

Assets	Year of Acquisition	Cost	Rate	Capital Allowance	Investment Allowance between 100m to 200m @ 15%
		₦'000		₦'000	₦'000
Pipeline and storage tanks	2014	48,000	20%	9,600	7,200
Plant & Machinery	2012	63,800	20%	12,760	-
Furniture & Fixtures	2012	21,000	20%	4,200	-
Buildings	2013	<u>71,000</u>	20%	<u>14,200</u>	-
		<u>203,800</u>		<u>40,760</u>	<u>7,200</u>

## EXAMINER'S REPORT

This question test candidates knowledge on Petroleum Profits Tax.

Majority of the student attempted the question and performance was average.

Major pitfall was the inability to calculate the offsets.

Candidates are advised to make use of the Institute's Study Texts and Pathfinder.

### Marking Guide

	Marks
Heading of solution	1
Derivation of Total Income	3
Allowable expenses ( $\frac{1}{2}$ mark each for 9 expenses)	4 $\frac{1}{2}$
Losses brought forward	$\frac{1}{2}$
Tertiary Education Tax	$\frac{1}{2}$
Assessable profit	$\frac{1}{2}$
Total Capital Allowances for the year	$\frac{1}{2}$
Petroleum Investment Allowance	$\frac{1}{2}$
Restriction of 85% of Assessable Profit	$\frac{1}{2}$
170% of Petroleum Investment Allowance	$\frac{1}{2}$
Capital Allowance claimed	$\frac{1}{2}$
Chargeable profit	$\frac{1}{2}$
Assessable Tax	1
Section 20 deduction	$\frac{1}{2}$
Chargeable Tax	1
Tertiary Education Tax	1
Capital allowance computed for each asset ( $\frac{1}{2}$ mark per asset for 4 assets)	2
Computation of Investment Allowance	$\frac{1}{2}$
	<u>20</u>

### SOLUTION 3

#### (a) Objectives of the Memorandum of Understanding (MOU)

- i. Enhancing crude oil exports.
- ii. Encouraging investments in exploration and development activities.
- iii. Encouraging investments in the area of enhanced oil recovery projects.
- iv. Encouraging investments in gas utilisation projects.
- v. Encouraging increased lifting and sale of NNPC's equity crude.
- vi. Effectively reducing the tax impact on companies engaging in petroleum operations.
- vii. MOU is a tool for encouraging, maintaining and enforcing cost Efficiency.

#### (b)

- i) Double taxation relief is a relief or credit available in the Nigeria tax law on income that has suffered foreign tax outside Nigeria. The objective is to ensure as much as possible that incomes liable to tax in Nigeria do not suffer tax twice.

The relief or credit claimable depends on whether Nigeria has a Double Taxation Agreement (DTA) with the country from which the foreign income was derived or not.

#### ii)

#### SALIM CONSULTANTS LIMITED COMPUTATION OF DOUBLE TAXATION RELIEF CLAIMABLE FOR 2015 ASSESSMENT YEAR

	Nigeria X	Burundi X	Total X
Net operating profit	16,635,000	8,520,000	25,155,000
Add back:			
Depreciation	5,100,000	2,700,000	7,800,000
Loss – sale of non-current assets	-	525,000	525,000
Exchange loss provision	<u>960,000</u>	<u>-</u>	<u>960,000</u>
	22,695,000	11,745,000	34,440,000
 Profit on sale of non-current assets	 (960,000)	 -	 (960,000)
Gain on sale of securities	<u>-</u>	<u>(1,800,000)</u>	<u>(1,800,000)</u>
 Adjusted profit	 21,735,000	 9,945,000	 31,680,000
Less Capital Allowance	<u>(7,800,000)</u>	<u>(4,800,000)</u>	<u>(12,600,000)</u>
Total profits	<u>13,935,000</u>	<u>5,145,000</u>	<u>19,080,000</u>

**SALIM CONSULTANS LIMITED**  
**COMPUTATION OF DOUBLE TAXATION RELIEF CLAIMABLE**  
**2017 YEAR OF ASSESSMENT**

(a) Assuming there is Double Taxation Agreement

Nigerian Tax Payable on Burundi Operation:		
30% of ₦5,145,000	=	<u>₦1,543,500</u>
Tax paid to Burundi Tax Authority	=	<u>2,130,000</u>
Double Taxation Relief:		
Lower of Nigerian Tax and Foreign Tax	=	<u>1,543,500</u>

(b) Assuming No Double Taxation Agreement

The lower of		
$\frac{1}{2}$ NRT = 15% x ₦5,145,000	=	<u>771,750</u>
And CWRT = 41.40% of ₦5,145,000	=	<u>2,130,000</u>

Answer Double Taxation Relief = ₦771,750

Workings: Common Wealth Rate of Tax

$$\frac{\text{Foreign Tax}}{\text{Foreign Total Profit}} \times \frac{100}{1}$$

$$\frac{\text{₦ } 2,130,000}{5,145,000} \times \frac{100}{1} = \underline{\underline{41.40\%}}$$

**EXAMINER'S REPORT**

This is a question designed to test candidates' knowledge and understanding of both the concept and objectives of the Memorandum of Understanding (Mou) between the Federal Government and the Oil Producing Companies operating in Nigeria.

The question also covered the incidence of Double Taxation Agreement and its attendant benefits by way of Tax Reliefs.

Candidates displayed above-average understanding of Part (a) of the question which deals with the MOU, but clearly did not understand how to compute related Reliefs available under the two scenarios. Some candidates also mistakenly

**computed Tax Liability – instead of the Reliefs claimable by way of Double Tax Credit claimable by the company.**

<b>Marking Guide</b>	<b>Marks</b>	<b>Total Marks</b>
(a) Objectives of MOU with Oil producing companies in JV operations (1 mark each of any 5 points)	<u>5</u>	5
(b) i. Definition and objective of Double Tax Relief (DTR)	2	
Effect on Double Tax Agreement (DTA) on relief claimable	<u>1</u>	3
(c)ii. Workings to derive Total Profit for Burundi operations – 8 figures posted correctly carry ½ mark each	<u>4</u>	4
- Correct heading for computation of relief claimable under DTA	½	½
Computing Nigerian Tax on Burundi Income	1	
Stating tax paid to Burundi Tax Authority	½	
Choosing lower of Nigerian Tax and Foreign tax paid as relief claimable	<u>1½</u>	3
Assume No DTA		
-Compute relief at ½ Nigeria Tax rate	1	
-Compute relief at Common Wealth Rate of Tax	1	
-Choosing lower of the two as Double Taxation relief claimable	<u>1½</u>	3½
Workings for computation of Common Wealth Rate of Tax		<u>1</u>
		<u>20</u>

#### SOLUTION 4

(a)

**AFOLABI MINING LIMITED  
COMPUTATION OF CAPITAL GAINS TAX  
FOR 2013 ASSESSMENT YEAR**

	₦	₦	₦
Sales proceeds of Equipment			84,700,000
<u>Cost of Equipment</u>			
Deposit paid		49,875,000	
Instalments paid (10 months @ ₦1,750,000 each)	17,500,000		
Interest portion paid	<u>(3,062,500)</u>		
		<u>14,437,500</u>	
			<u>(64,312,500)</u>
Chargeable Gains			<u>20,387,500</u>
Capital Gains Tax thereon @ 10%			<u>2,038,750</u>

(b)

**AFOLABI MINING LIMITED  
COMPUTATION OF CAPITAL GAINS TAX  
FOR 2014 ASSESSMENT YEAR**

	₦	₦	₦
Sales proceeds of equipment			86,800,000
<u>Cost of Equipment</u>			
Deposit paid		49,875,000	
Instalments paid (19 months @ ₦1,750,000 each)	33,250,000		
Interest portion paid (wk3)	<u>(5,818,750)</u>	<u>27,431,250</u>	
			<u>(77,306,250)</u>
Chargeable Gains			<u>9,493,750</u>
Capital Gains Tax thereon @ 10%			<u>949,375</u>

(wk 1)

**Calculation of Hire Purchase Interest**

Hire purchase price:	<del>₦</del>	<del>₦</del>
Deposit (1/1/2013)	49,875,000	
20 Instalments payable (February 2013 to September 2014) @ 1,750,000 per month	<u>35,000,000</u>	
		84,875,000
Cash price		<u>(78,750,000)</u>
Hire Purchase Interest for 20 months		<u><u>6,125,000</u></u>

(wk 2)

**Calculation of Hire Purchase Interest up to 1/11/2013;**

Hire Purchase Interest payable = ~~₦~~6,125,000

Hire Purchase Interest at the time of Disposal – 3/11/2013

$$\frac{\text{₦ } 6,125,000}{20} \times 10 = \underline{\underline{\text{₦ } 3,062,500}}$$

(wk 3)

**Calculation of Hire Purchase Interest up to 1/9/2014;**

Hire Purchase Interest for 19 months at the time of Disposal

(i.e. 5/8/2014) = ~~₦~~6,125,000/20 x 19 months = ₦5,818,750

**(b) Allowable deductions;**

- i. Cost of acquisition or purchase price, including all costs incidental to the purchase;
- ii. Improvement costs wholly, reasonably, exclusively and necessarily incurred;
- iii. Cost wholly, reasonably, exclusively and necessarily incurred in establishing, preserving or defending the owner's title to or a right over the asset;
- iv. Incidental cost of disposal.

**Disallowable deductions;**

- i. Sums allowable as a deduction in computing the profits or gains or losses of a trade for income tax purposes are not allowable deductions
- ii. Insurance premiums on the asset are not allowable

(c) **Year of Assessment**

A year of assessment in relation to Capital Gains Tax means, a year beginning with January 1 and ending with December 31 in the same year.

(d) **Connected Persons**

Certain persons treated as being so closely involved with each other that they have to be viewed as the same person or that transactions between them need to be treated differently from those at arm's length.

Transactions between such persons may be regarded as artificial or fictitious for the purpose of determining the tax liability arising therefrom.

Consequently, the Revenue can make whatever adjustments as it considers necessary to counteract the reduction of liability to tax that could otherwise result from such transactions.

**EXAMINER'S REPORT**

This question test candidates' knowledge of the provisions of Capital Gains Tax Act CAP C1 LFN 2004. The question is designed to test candidates' knowledge and understanding of the basic principles regarding the allowable and disallowable deductions as well as the concept of 'Connected Persons' and the relevant Year of Assessment in the process of computing Capital Gain Tax. A good number of the candidates attempted the question and performance was above average.

Some candidates had problems proffering correct solutions to parts (b), (c) and (d) of the question more specifically they displayed ignorance of the concept of "Connected Persons".

Candidates are advised to be more thorough and discerning in their preparations for future examinations.

**Marking Guide**

		<b>Marks</b>	<b>Total Marks</b>
ai	Sales proceeds of <del>N</del> 84,700,000	1	5
	Deposit paid	$\frac{1}{2}$	
	Instalments paid	1	
	Interest portion paid	1	
	Chargeable gains	$\frac{1}{2}$	
	Capital Gains Tax	<u>1</u>	
ii	Sales proceeds of <del>N</del> 86,800,000	1	
	Deposit paid	$\frac{1}{2}$	
	Instalments paid	1	

	Interest portion paid	1	
	Chargeable gains	$\frac{1}{2}$	
	Capital Gain Tax	<u>1</u>	5
bi	Allowable deductions (1 mark each for each of 3 points mentioned)	3	
ii	Disallowable deductions ( $1\frac{1}{2}$ marks for each point mentioned)	3	
c.	Explain 'Year of Assessment'	2	
d.	Explain the term 'Connected Persons'	<u>2</u>	<u>10</u>
			<u>20</u>

## SOLUTION 5

### MEMO

DATE: November 17, 2017

FROM: Managing Partner, Richard Obaloluwa & Co.

TO: The Managing Director, Papa Ejima Limited

### RE: OBJECTION AND APPEAL PROCEDURES

The additional assessment issued to a Taxpayer may be objected to. However, there are laid down procedures to be followed in order to have a valid objection and a successful appeal. Below is the summary of Objection and Appeal procedures in practice:

- (1) Notice of Objection – If any taxpayer disputes a tax assessment raised on it by the Tax Authority, it may give a notice of objection to the tax authority seeking a review of the assessment. The objection must be a valid objection, However, a valid objection must:
  - (a) Be in writing and addressed to the Chairman, Federal Inland Revenue Service;
  - (b) State the grounds of Objection; and
  - (c) Be raised within thirty (30) days of the date of service of the notice of assessment.
- (2) On receipt of the Notice of Objection, the Tax Authority has the following options:
  - (a) Review and revise the assessment to an amount that is mutually

- agreeable to both the Taxpayer and the Tax Authority and thereafter issue Notice of Revised Assessment to the Taxpayer, or
- (b) Review and refuse to revise the assessment to the amount, then issue a Notice of Refusal to Amend the Assessment to the Taxpayer

(3) Appeal to the Tax Appeal Tribunal.

Where the actions in (2) above, do not favour the Company, it has the right to proceed to the Tax Appeal Tribunal for hearing.

The Tax Appeal Tribunal will give seven (7) days notice to the Appellant and Tax Authority of the date and place fixed for hearing of the Appeal. An appeal would be heard by not less than three members of the Tax Tribunal in attendance with the Chairman or any other member, (in the absence of the Chairman), presiding.

Any member with vested interest in any matter before the Tax Appeal Tribunal must disclose such interest and abstain from attending any sitting, at which the matter is to be heard. All appeals before the Tax Appeal Tribunal are heard in public and appellant may be represented by a professional adviser or may give its evidence by written notice;

Appellant leads the case, by proving that the assessment is excessive, that is- the onus of proof is put on the appellant. However, if the representative of the Tax Authority can prove to the Tribunal that:

- (i) Appellant failed to file Returns, Audited Accounts etc, or
- (ii) The appeal is frivolous, vexatious or an abuse of appeal process; or
- (iii) It is expedient to require appellant to pay a security deposit:

The Tax Appeal Tribunal may make an order that the appellant pays a deposit to the Tax Authority on account of the tax being disputed, before the matter could be heard.

The Tax Appeal Tribunal can confirm, reduce, increase, or annul the Assessment, as deemed necessary. The Tax Appeal Tribunal's decisions are recorded in writing, by the Chairman, and a Certified True Copy is supplied to the Appellant or the FIRS on request, within 3 months of the decision.

Particulars of the extent to which the Tax Appeal Tribunal is not satisfied with the appellant's accounts, books, etc, non-compliance with precepts delivered by the Tax Appeal Tribunal by the appellant or his representative and refusal to answer questions put, should all be noted in the decision of the Tax Appeal Tribunal, and Notice of the amount of tax chargeable, as determined by the Appeal Tribunal, shall be served on the Company by FIRS.

The tax payable as determined by the Tax Appeal Tribunal is payable within One (1) month of the date of notice of assessment.

**(4) Further Appeals**

The taxpayer may proceed to the Federal High Court if dissatisfied with the decision of the Tax Appeal Tribunal. For such appeal to be valid, the following conditions must be satisfied:

- (i) Amount involved must not be less than ~~N~~400;
- (ii) The appeal must be on points of law;
- (iii) Notice of appeal must be given to the Tax Appeal Tribunal within 30 days after the date of the judgement of the Tax Appeal Tribunal.
- (iv) The grounds of law on which the decision of the Tax Appeal Tribunal is being challenged should be stated.

Further appeal against the decision of the Federal High Court shall lie with the Court of Appeal and from there to the Supreme Court.

Kindly meditate on the procedures and revert to us, if there is need to activate the procedure against the additional Assessment or more, preferably to call for a further discussion with the Tax Authority on the subject.

Yours faithfully,  
For: Richard Obaloluwa & Co,

Tax Partner

**EXAMINER'S REPORT**

This is a question designed to test candidates' knowledge and understanding of the issues that could generate the need for a Corporate Taxpayer to object to an Assessment by the Federal Inland Revenue Services (FIRS). It also tested candidates' ability to proffer a comprehensive memo to the Managing Director, on the Objective and Appeal procedures.

About half of the candidate attempted the question and performance was below average.

Candidates are advised to be more thorough in identifying the correct requirements of a question, before proffering solutions in future examinations. They are also advised to make use of ICAN's Study Texts.

MARKING GUIDE		MARKS	TOTAL MARK
1	Correct addressee	$\frac{1}{2}$	
2	Subject Introduction		
3	Objective and Appeal procedures	4	4
4	Tax Authority Options	2	2
5	Appeal to the Tax Appeal Tribunal		
	Tax Appeal Tribunal steps		
	- Notice to appellant re: date and place for hearing the appeal	$\frac{1}{2}$	
	- Minimum members of Tribunal to hear Appeal	$\frac{1}{2}$	
	- Member with vested interest must not attend such hearing	$\frac{1}{2}$	
	- All appeals are heard in public or made in writing	$\frac{1}{2}$	
	- Appellant to prove the Assessment as excessive	$\frac{1}{2}$	
	- Appeal Tribunal to make order for appellant	$\frac{1}{2}$	4
6	- Appeal Tribunal confirm, reduce, increase or annual assessment	$\frac{1}{2}$	
	- Tax payable within one month	$\frac{1}{2}$	4
7	Further Appeal to the Federal High court	$\frac{1}{2}$	
	- Conditions for further appeal	2	
	- Further appeal up to Supreme Court	$\frac{1}{2}$	3
	Close of memo, name and signature		$\frac{1}{2}$
			<u>15</u>

## SOLUTION 6

The Board of Directors  
Pategi Telecommunications Limited,  
Share,  
Kwara State

Dear Sir,

Pategi Telecommunications Limited  
Tax Liabilities for the Assessment Year 2015

We write to advise on the above.

The company will be assessed on the restricted income as determined under workings (1) – (6) and the Income Tax Payable in 2015 Year of Assessment shall be ₦26,257,532.40 if the FIRS is satisfied that:

- (i) The Tax authority in the US shall compute the Tax for Pategi Telecommunications in a manner not materially different from that in Nigeria, and
- (ii) That the US authority certifies the Adjusted Profit ratio, and the Depreciation ratio correct.

Where the above conditions do not arise, the Company shall be assessed at a Fair percentage of the Income received in Nigeria as the Assessable profit.

Should there be any need for further clarification, please do not hesitate to contact the undersigned.

We thank you for the opportunity given us to serve your organisation.

Yours faithfully  
For: XYZ & Co.

Mr. Odonngunyan A. A.

## **SCHEDULE A**

Pategi Telecommunications Limited

Computation of Tax Liabilities for 2015 Year of Assessment

	<del>₦</del>
Assessable Profit (Wk 5)	94,116,552.75
Capital Allowance (Wk 6)	<u>(6,591,444.75)</u>
Total/Taxable Profit	<u>87,525,108.00</u>
Company Income Tax @ 30% x <del>₦</del> 87,525,108	26,257,532.40

### **Advice**

The company will be assessed on the restricted income as determined in workings (1)-(6) below and the Income Tax payable in 2015 Year of Assessment shall be ~~₦~~26,257,532.40 if the FIRS is satisfied that:

- (i) The Tax Authority in the US shall compute the Tax for Pategi Telecommunications in a manner not materially different from that in Nigeria, and
- (ii) That the US Tax Authority certifies the Adjusted Profit ratio and the Depreciation Ratio as correct.

Otherwise, the Company shall be assessed at a Fair Percentage of the Income received in Nigeria as the Assessable Profit.

## **SCHEDULE B**

### **WORKINGS**

- (i) Computation of Total income:

<u>Transaction Routes</u>	<u>Minutes</u>	<u>Rates</u>	<u>Income (₦)</u>
Nigeria			Min X Rates
Nigeria to US	426,250	\$0.5/ min x <del>₦</del> 198/\$	42,198,750
Nigeria to Canada	<u>550,000</u>	\$0.5/ min x <del>₦</del> 198/\$	<u>54,450,000</u>
	<u>976,250</u>		<u>96,648,750</u>

Others			N
US to other parts of the world	1,705,000	\$0.5/ min x <del>N198/\$</del>	168,795,000
US to Nigeria	374,000	\$0.5/ min x <del>N198/\$</del>	37,026.000
US to Canada through Nigeria	<u>794,750</u>	\$0.5/ min x <del>N198/\$</del>	<u>78,680,250</u>
	<u>2,873,750</u>		<u>284,501.250</u>
Global/Worldwide income			<u>381,150.000</u>
(ii) Pategi Telecommunications Limited			
Computation of Adjusted Profits for 2015 Year of Assessment			
Income derived from Nigeria			96,648,750
Income derived from other route			<u>284,501.250</u>
Global/World Wide Income			381,150.000
Allowable deductions			
Rent		1,100,000	
Salaries and Wages		4,065,188	
Administrative Expenses		<u>4,820,750</u>	<u>(9,985,938)</u>
Adjusted Profit			<u>371,164,062</u>
(iii) Computation of Adjusted Profit Ratio (APR)			
<u>APR = Adjusted Profit before depreciation</u> x 100%			
Global or World Wide			
Income			
= <u>N371,164,062</u> x 100%	= >		<u>97%</u>
<u>N381,150,000</u>			
(iv) Computation of Depreciation Ratio (DR)			
<u>Depreciation</u> x 100%			
Global or World Wide Income			<u>6.82%</u>
= <u>N25,991,563</u> x 100%			
<u>N381,150,000</u>			
(v) Assessable Profit = APR x Income Derived in Nigeria			<u>94,116,552.75</u>
= 97.38% x <del>N96,648,750</del>			
(vi) Capital Allowance = DR x income Derived in Nigeria			
= 6.82% x <del>N96,648,750</del>			<u>6,591,444.75</u>

## EXAMINER'S REPORT

This is essentially a computational question designed to test candidates' knowledge and understanding of the Revenue/Tax Computational skills with respect to transactions that are inter-continental. A good number of candidates attempted the question. Candidates displayed poor understanding of the questions requirements. Only about 20% of the candidature scored 50% and above, of the marks allocated. Many of the candidates could not proffer their solutions in a letter or memo format. A number of candidates also had issues proffering the solutions in local currency.

MARKING GUIDE	MARKS	TOTAL MARKS
Letter to the Company:		
Address	$\frac{1}{2}$	
Opening Paragraph	$\frac{1}{2}$	
Conditions:		
First sets of conditions	<b>1</b>	
Second Condition	$\frac{1}{2}$	
Closing Paragraph	<b><u>1</u></b>	<b>3<math>\frac{1}{2}</math></b>
Schedule I		
Assessment Year	<b>1</b>	
Assessable Profit	$\frac{1}{4}$	
Capital Allowance	$\frac{1}{4}$	
Total Profit	$\frac{1}{2}$	
Tax Liability	<b><u><math>\frac{1}{2}</math></u></b>	<b>2<math>\frac{1}{2}</math></b>
Schedule II (Computation of Total Income)		
Transaction Route	$\frac{1}{2}$	
Nigeria to US	$\frac{1}{2}$	
Nigeria to Canada	<b><u><math>\frac{1}{2}</math></u></b>	<b>1<math>\frac{1}{2}</math></b>
Other Routes		
US to other parts of the World	$\frac{1}{2}$	
US to Nigeria	$\frac{1}{2}$	
US to Canada through Nigeria	$\frac{1}{2}$	<b>2</b>
	<b><u><math>\frac{1}{2}</math></u></b>	$\frac{1}{2}$
Global/World Wide Income		
Allowable Deductions:		
Rents	$\frac{1}{2}$	
Salaries & Wages	$\frac{1}{2}$	<b>1<math>\frac{1}{2}</math></b>
Admin Expenses	<b><u><math>\frac{1}{2}</math></u></b>	<b>1<math>\frac{1}{2}</math></b>
Adjusted profit		
Adjusted profit Ratio	$\frac{1}{2}$	
Computation of Depreciation Ratio	$\frac{1}{2}$	
Assessable Profit	$\frac{1}{2}$	
Capital Allowance	<b><u><math>\frac{1}{2}</math></u></b>	<b><u>2</u></b>
		<b><u>15</u></b>

## **SOLUTION 7**

Chief Egodi  
Ifedi Group of Companies  
505 Idejo Close  
Ikeja  
Lagos.

Dear Sir,

### **RE – TAX IMPLICATIONS OF VARIOUS OPTIONS IN MERGER AND ACQUISITION**

We write to advise on the above subject matter as follows:

#### **Merger**

This is an arrangement in which the Assets, Liabilities and Businesses of two or more Companies, are invested in and carried on by one Company which may not be one of the merging Companies and under a situation in which the new Company is owned by the owner of the merging Companies.

#### **Acquisition**

This is the act of acquiring effective control over assets or management of a Company by another Company by acquiring substantial Shares or voting rights of the target Company.

#### **a. TAX IMPLICATIONS OF ABA FOODS LTD. MERGING WITH IFEDI FOODS AND BEVERAGE LTD.**

- i. Ifedi Ltd, shall continue to file annual returns not later than 6 (six) months after its accounting year ends in accordance with section 55(3)a of CITA Cap C21 LFN 2004.
- ii. Commencement rules will not be applicable to Ifedo Ltd. The Company shall be assessed to tax on Preceding Year basis (PYB).
- iii. No Initial Allowance, on assets transferred.
- iv. Claims of Annual Allowance on Tax Written-Down Values (TWDV) of the assets transferred.
- v. All Fees paid will be liable to VAT and WHT.
- vi. Stamp Duties will be paid on increase in share capital.
- vii. Capital Gains tax shall be payable by shareholders of Aba Foods Ltd. For cash received for surrendering their shares to Ifedi Ltd.

- viii. Aba Foods Ltd. shall cease operations and cessation provisions will be applied in determining the assessable profit of the company for relevant years.

**b. TAX IMPLICATIONS IF IFEDI FOODS AND BEVERAGE LTD. IS RE-CONSTITUTED TO TAKE OVER THE ASSETS AND LIABILITIES OF ABA FOODS LTD.**

- i. There will be no application of the Commencement and Cessation rules.
- ii. All Assets/qualified Capital Expenditure transferred are deemed to have been made at their Tax written down value (TWDV).
- iii. In the computation of Capital Allowance, no Initial allowance may be computed while the Annual allowance would be based on the unexpired tax life of the qualifying Capital expenditure.
- iv. Any unutilised Capital Allowances transferred, are deemed to have been transferred prior to sale.
- v. Reconstituted Ifedi Ltd. shall pay Stamp Duties for any increase in Share Capital as a result of the arrangement.
- vi. Unrelieved losses of Aba Foods Ltd. shall be carried forward for relief by the reconstituted Ifedi Foods Ltd. and it shall be deemed to have been incurred by the reconstituted Ifedi Foods Ltd.

**c. TAX IMPLICATIONS, IF IFEDI FOODS AND BEVERAGE LTD. AND ABA FOODS LTD. ENTER INTO A JOINT VENTURE AGREEMENT OR PARTNERSHIP**

- 1. The Joint Venture/Partnership itself, is not chargeable to tax.
- 2. The profit chargeable to Tax in the hand of each of the Partners is the share of profit from the Partnership
- 3. Share of Loss from the Joint Venture or Partnership can only be relieved from the Profits of the Joint Venture or Partnership business.
- 4. Capital allowances on the Assets of the Joint Venture/Partnership shall be shared in the agreed profit and loss ratio.
- 5. Where any of the Companies involved in the Partnership has another line of business, the loss generated from the business will not be available for relief against the profit generated from the Partnership.

Yours faithfully,  
For: Aluya & Co.  
(Chartered Accountants)

## EXAMINER'S REPORT

This question tests candidates' understanding on the tax implications of the merger of two existing companies, where one takes over all the assets and liabilities of the other.

Many of the candidates attempted the question and performance was generally below average. Candidates are advised to be more thorough and painstaking in analysing the requirements of any question, before proffering solutions. They are also advised to make use of ICAN Study Texts.

MARKING GUIDE	MARKS	TOTAL MARKS
Address	$\frac{1}{2}$	
Topic/Title	$\frac{1}{2}$	
Definition of Merger	1	
Definition of Acquisition	<u>1</u>	3
Tax Implication		
a Inherits the Assets and Liabilities (any 4 correct points)		4
B Reconstitution of Assets and Liabilities (any 4 correct points)		4
c Enter into Joint Venture or Partnership		<u>4</u>
		<u>15</u>

# **THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA**

## **PROFESSIONAL LEVEL EXAMINATION – NOVEMBER 2017**

### **STRATEGIC FINANCIAL MANAGEMENT**

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

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

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

#### **QUESTION 1**

Lekki Plc. is a supplier of specialist engineering components to the defence and airline industries. In spite of the impact of the global recession, demand for the company's products has gone up in recent times and is expected to pick up further in the next two years.

As part of a recent strategic review, the directors have made the following projections for the years ending March 31, 2018 and 2019:

- (i) An anticipated increase in annual revenues of 8% per year in each of the years;
- (ii) An anticipated increase in operating costs (excluding depreciation) of 4% per year in each of the years;
- (iii) For the next two years, tax will continue to be paid at a rate of 21% and payable in the year in which the liability arose;
- (iv) The ratio of trade receivables to revenue will remain the same in each of the next two years as well as the ratio of trade payables to operating costs (excluding depreciation);
- (v) An anticipated increase in inventory levels of 10% in the year ending March 31, 2018 but remaining stable thereafter;
- (vi) The Non-current assets in the company's Statement of Financial Position are Lekki Plc.'s headquarters and main factory complex, both of which are freehold premises. The company's accounting policy is that these assets are not depreciated. Capital allowances on them are negligible and can be ignored;
- (vii) The company's annual dividend growth rate will remain at 6% per year. Annual dividends are declared at the year end and paid in full during the following financial year;

- (viii) To cope with the anticipated growth in business, the company will shortly purchase a new machinery at a cost of ₦8million. All the existing machinery are rented and their rental costs are included in operating costs. The company does not intend to seek any equity or long-term debt financing in respect of the machinery purchase, as it intends to accommodate the purchase within existing overdraft facilities available to the company. The new machinery will be depreciated on a straight-line basis over 8 years (assuming a residual value of ₦1million) with a full year's depreciation to be charged in the year of purchase. Capital allowances on a reducing balance basis at a rate of 18% per year will be applicable on the new machinery from the year of acquisition; and
- (ix) As a result of the machinery purchase, there will be an anticipated increase in finance costs of 50% in the year ending March 31, 2018, but remaining stable in the following year.

Extracts from the company's most recent financial statements are provided below:

**Income Statement for the year ended March 31, 2017**

	₦'000
Revenue	60,240
Operating costs	<u>(49,500)</u>
Operating profit	10,740
Finance costs	<u>(800)</u>
Profit before tax	9,940
Tax	<u>(2,286)</u>
Profit after tax	<u><u>7,654</u></u>

**Statement of Financial Position as at March 31, 2017**

	₦'000	₦'000
<b>Assets</b>		
Non-current assets		28,850
<b>Current assets</b>		
Inventories	9,020	
Trade receivables	9,036	
Cash and cash equivalents	<u>396</u>	
		<u>18,452</u>
		<u><u>47,302</u></u>
<b>Equity and liabilities</b>		
<b>Equity</b>		
Ordinary share capital	16,700	
Retained earnings	<u>12,482</u>	
		29,182
<b>Non-current liabilities</b>		
6% Debentures (2025)		8,000

**Current liabilities**

Trade payables	7,336	
Dividends	<u>2,784</u>	
		<u>10,120</u>
		<u>47,302</u>

Assume today is April 1, 2017.

**Required:**

- a. Prepare a Forecast Financial Statement (comprising Income Statement, Statement of Financial Position and Cash Flow Statement) for each of the years ending March 31, 2018 and March 31, 2019. (24 Marks)

Note: All calculations should be rounded up to the nearest ₦'000.

- b. Beyond March 31, 2019 the directors are considering a suggestion by the Finance Director that one of Lekki Plc.'s smaller subsidiaries be disposed of because, relative to most of the other company's operations, it is performing poorly. Whilst the directors are broadly supportive of the Finance Director's suggestion, they are keen to avoid liquidation of the subsidiary as they are conscious of the industrial relations problems that might arise from the consequent redundancies.

**Required:**

Discuss **THREE** methods, other than liquidation, that the firm might consider to effect the divestment of this subsidiary company. (6 Marks)

(Total 30 Marks)

**SECTION B: YOU ARE REQUIRED TO ANSWER ANY TWO OUT OF THREE QUESTIONS**  
**(40 MARKS)**

**QUESTION 2**

Raymond Plc. is a successful IT services company incorporated 10 years ago. It was listed on the Stock Exchange 3 years ago. The company has a broad customers base mainly consisting of small and medium sized companies. Raymond Plc. has achieved rapid growth in recent years by obtaining regular business from satisfied customers and also by acquiring other IT services companies.

The Directors of Raymond Plc. have identified Harold Limited, an unlisted company, as a possible acquisition target. Harold Limited has a number of large multinational clients and, in general, its clients tend to be larger than those of Raymond Plc. If successful, the acquisition would go ahead on January 1, 2018.

Forecast financial data for Raymond Plc. and Harold Limited as at December 31, 2017 are summarised below:

	Raymond Plc.	Harold Limited
Share capital (Ordinary ₦1 shares)	₦150m	₦40m
Market share price	₦4.90	N/A

N/A: Not applicable (not listed).

**Additional information:**

- (i) If Harold Limited were to remain an independent company, its Directors estimate that reported Profit After Tax would be ₦15million for 2018 and then grow by 2% yearly in perpetuity;
- (ii) If the acquisition were to go ahead, Raymond Plc.'s Directors estimate that Harold Limited's profit after tax would be 5% higher for 2018 than if the company remains an independent company and that profit after tax would then grow by 3% yearly in perpetuity;
- (iii) The average ungeared Cost of Equity for the industry is 8%;
- (iv) Both Raymond Plc. and Harold Limited are wholly equity financed; and
- (v) Profit after tax can be assumed to be a good approximation of free cash flow attributable to investors.

The Directors of Raymond Plc. are considering offering to purchase Harold 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:**

- i. The value of Raymond Plc. as at December 31, 2017.
- ii. The value of Harold Limited as at December 31, 2017 before taking the possible acquisition of the company by Raymond Plc. into account.
- iii. The overall increase in value created by the acquisition of Harold Limited by Raymond Plc. (8 Marks)

- b. i. **Explain** how value might be created by the proposed acquisition. (2 Marks)
- ii. **Comment** on the difficulties which Raymond Plc. is likely to face in realising the potential added-value, after the acquisition. (2 Marks)

**c. Evaluate** the proposed offer price of ₦7.00 per share for Harold Limited from the point of view of:

- i. Harold Limited's shareholders.
  - ii. Raymond Plc.'s shareholders. (8 Marks)
- (Total 20 Marks)**

### QUESTION 3

Peter Plc. is a large, listed manufacturing company that is currently considering how best to raise new equity finance. One option is to undertake a public issue of new shares, a course of action that was recently approved by the shareholders. Alternatively, the company is considering a 1 for 4 rights issue at a 10% discount to the current market price of ₦5.00 per share.

The company has approached a number of investment banks regarding the potential new rights issue and public issue. During these discussions, one investment bank stated that the precise timing of a rights issue would be of no consequence. The bank is of the opinion that a public issue of new shares should not be undertaken at the present time. It therefore recommended that if the company wishes to pursue a public issue, it should be deferred for a minimum of six months. The bank explained that at the present time, the stock market is significantly undervaluing Peter Plc.'s shares. Consequently, the company would have to issue far more shares to raise the required amount of finance than it would have to raise in six months.

The Finance Director of Peter Plc. is, however, uncertain about this and at a recent board meeting where the matters were discussed, she made the following statement:

'According to the Efficient Market Hypothesis, all share prices are correct at all times, with prices moving randomly when new information is publicly announced. The analysts at investment banks are unable to predict future share prices.'

#### **Required:**

- a. Calculate the theoretical ex-rights price per share and the value of the rights per existing share, assuming the company chooses this option. (2 Marks)
- b. Discuss the alternative courses of action open to the owner of 500 shares in Peter Plc. as regards the rights issue, in each case, determining the effect on the wealth of the investor. (4 Marks)
- c. Discuss the factors that will influence the actual ex-rights price per share. (4 Marks)
- d. Discuss the meaning and significance of the three forms of the Efficient Market Hypothesis and, with specific reference to these, discuss both the recommendation that the company waits for six months before undertaking a public issue and the Finance Director's statement. (10 Marks)

**(Total 20 Marks)**

#### QUESTION 4

You are the Financial Director of Kudi Limited, a Nigerian Company that imports raw materials mainly from Tiko (with T\$ as currency) and exports finished products to Katuga (with K\$ as currency). Kudi is partly financed by loan raised in the domestic market and usually hedges its foreign currency exposure by using the forward or money markets. Most customers are allowed 3 months' credit. The company has recently sold some products to a customer in Katuga for K\$20 million.

The following information is available:

Exchange rate	K\$ per ₦	T\$ per ₦
Spot rate	1.9600	1.4600
1 month forward rate	1.9580	1.4579

Central Bank base rate per annum	Nigeria	Katuga	Tiko
	5.5%	4.25%	3.75%

#### Required:

- a. Comment on the Interest Rate Parity and Purchasing Power Parity methods for estimating exchange rates. (6 Marks)

In answering each of the following questions, include appropriate calculations, where relevant, to aid your discussion:

- i. As interest rates are higher in Nigeria than in Tiko, should T\$ be depreciating against naira, hence trading at a discount? (3 Marks)
  - ii. What 3-month K\$ forward rate of exchange is implied by the information given, and therefore what naira receipts can the company expect in 3 months' time from the customer in Katuga? (3 Marks)
  - iii. Would a sensible policy be: to buy T\$ on the spot market now and place it on deposit until when needed by Kudi? (3 Marks)
- b. Discuss the concept and the significance of foreign exchange economic exposure to a multinational company. (5 Marks)

**Total 20 Marks)**

**SECTION C: YOU ARE REQUIRED TO ANSWER ANY TWO OUT OF THREE QUESTIONS**  
**(30 MARKS)**

**QUESTION 5**

Private sector companies have multiple stakeholders who are likely to have divergent interests.

**Required:**

- a. Identify **FIVE** stakeholder groups and discuss briefly their financial objectives.  
(10 Marks)
  - b. Explain ways in which companies' directors can be encouraged to achieve the objective of maximisation of shareholders' wealth.  
(5 Marks)
- (Total 15 Marks)**

**QUESTION 6**

You have recently taken up employment with Large Plc., a Nigerian company with manufacturing subsidiaries in many countries across Africa. As the Financial Analyst, you report directly to the Managing Director who currently requires briefings on the following areas:

- (i) Ethical issues and capital investment decisions,
- (ii) Options and company valuation

**Required:**

- a. Explain, with examples, ethical issues that might affect capital investment decisions and discuss the importance of such issues for Strategic Financial Management.  
(8 Marks)
  - b. Explain the circumstances in which the Black-Scholes Option Pricing (BSOP) model could be used to assess the value of a company, including the data required for the variables used in the model  
(7 Marks)
- (Note: A report format is not required) **(Total 15 Marks)**

**QUESTION 7**

- a. In the context of the selection and holding of investments, **discuss** each of the following scenarios:
  - i. An investor holding only one security needs to be concerned with unsystematic risk of that security.  
(3 Marks)
  - ii. However, an investor who holds a number of securities should take account of total risk.  
(3 Marks)

- iii. An investor should never add to a portfolio investment that yields a return less than the market rate of return.  
(3 Marks)
- b. The equity beta of KT Plc. is 1.2 and the equity alpha is 1.4. Explain the meaning and significance of these values to the company. (6 Marks)
- (Total 15 Marks)**

# Formulae

## Modigliani and Miller Proposition 2 (with tax)

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

### Asset Beta

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

### Equity Beta

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

### Growing Annuity

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

### 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  $= e^{-rT/n}$

### The Miller-Orr Model

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

Annuity Table

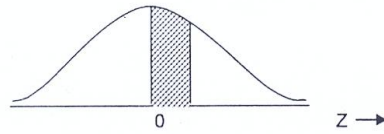
Present value of an annuity of 1 =  $\frac{1 - (1 + r)^{-n}}{r}$

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

		<i>Discount rate (r)</i>										
<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

## 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) Forecast Income Statements for the years ending 31 March**

	<b>₦'000</b>	<b>₦'000</b>
Revenue	65,059	70,264
Operating costs (excluding depreciation)	(51,480)	(53,539)
Depreciation	<u>(875)</u>	<u>(875)</u>
Operating profit	12,704	15,850
Finance costs	<u>(1,200)</u>	<u>(1,200)</u>
Profit before tax	11,504	14,650
Tax (W1)	<u>(2,297)</u>	<u>(3,012)</u>
Profit after tax	9,207	11,638
Dividends	<u>(2,951)</u>	<u>3,128</u>
Retained profit	<u>6,256</u>	<u>8,510</u>

**WORKINGS (W1)**

Tax		
Profit before tax	11,504	14,650
Add back depreciation	875	875
Capital allowances	<u>(1,440)</u>	<u>(1,181)</u>
Taxable profits	<u>10,939</u>	<u>14,344</u>
Tax@ 21%	2,297	3,012

**(ii) Forecast Statements of Financial Position as at 31 March**

	<b>2018</b>	<b>2019</b>
	<b>₦'000</b>	<b>₦'000</b>
<b>ASSETS</b>		
Non-current assets	35,975	35,100
Inventories	9,922	9,922
Receivables	9,759	10,540
Cash (balancing figure)	<u>-</u>	<u>7,449</u>
<b>TOTAL ASSETS</b>	<u><b>55,656</b></u>	<u><b>63,011</b></u>
<b>EQUITY AND LIABILITIES</b>		
Ordinary share capital	16,700	16,700
Retained earnings	18,738	27,248
Debentures	8,000	8,000
Payables	7,629	7,935
Bank overdraft (balancing figure)	1,638	-
Dividends	<u>2,951</u>	<u>3,128</u>
<b>TOTAL EQUITY AND LIABILITIES</b>	<u><b>55,656</b></u>	<u><b>63,011</b></u>

(iii) **Forecast Cash Flow Statements for the years ending 31 March**

	<b>2018</b>	<b>2019</b>
	<b>₦'000</b>	<b>₦'000</b>
Profit before tax	11,504	14,650
Depreciation	875	875
Increase in inventories	(902)	-
Increase in receivables	(723)	(781)
Increase in payables	293	306
Purchase of non-current assets	(8,000)	-
Tax paid	(2,297)	(3,012)
Dividends paid	<u>(2,784)</u>	<u>(2,951)</u>
Net cash flow	(2,034)	9,087
Cash balance brought forward	<u>396</u>	<u>(1,638)</u>
Cash balance carried forward	<u>(1,638)</u>	<u>7,449</u>

b)

- (i) **Management Buy-out:** a new company acquires either the trade and assets or the shares of the subsidiary to be sold, with the purchase usually funded by a mix of debt and equity provided by the managers (equity), venture capital providers (debt and equity) and other financiers (debt).
- (ii) **Management Buy-in:** as in (i) above, but with purchase by a group of external managers.
- (iii) **Spin-off (demerger):** shareholders are given shares in the new entity pro-rata to their shareholdings in the parent company - there is no change in ownership; with separate legal identities established; used to avoid the problems of the conglomerate discount; sometimes used as a defence against takeover of the entire business.
- (iv) **Sell-off:** The business is sold to another company usually for cash.
- (v) **Carve-out:** where shares of the subsidiary are sold to the public through initial public offer resulting in cash inflow to the holding company.
- (vi) **Split-off:** a means of re-organising an existing corporate structure in which the share of a business division, subsidiary or newly affiliated company is transferred to the shareholders of the parent company in exchange for shares in the latter.

**ALTERNATIVE SOLUTION TO A(iii)**  
**FORECAST CASH FLOW STATEMENTS FOR THE YEAR ENDING 31 MARCH -**  
**RECEIPTS AND PAYMENTS METHOD**

	<b>2018</b>	<b>2019</b>
	<b>₦'000</b>	<b>₦'000</b>
Sales collection* (K)	<u>64,336</u>	<u>69,483</u>
Payments:		
Operating costs**	51,187	53,233
Additional inventory	902	-
Non-current assets	8,000	-
Finance cost	1,200	1,200
Tax	2,297	3,012
Dividend	<u>2,784</u>	<u>2,951</u>
Total payments (T)	<u>66,370</u>	<u>60,396</u>
Excess of receipts Over payments (K – T)	(2,034)	9,087
Opening balance	<u>396</u>	<u>(1,638)</u>
Closing balance	<u>(1,638)</u>	<u>7,499</u>
Opening receivable	9,036	9,759
Sales	65,059	70,264
Closing receivable	<u>(9,759)</u>	<u>(10,540)</u>
Collection *	<u>64,336</u>	<u>69,483</u>
Balance b/f	7,336	7,629
Operating costs	51,480	53,539
Balance c/f	<u>(7,629)</u>	<u>(7,935)</u>
Amount paid **	<u>51,187</u>	<u>53,233</u>

**EXAMINER'S REPORT**

Part 'a' of the question tests the ability of the candidates to project financial statements using a given scenario, while Part 'b' deals with various methods of divestment.

Being a compulsory question, virtually all the candidates attempted the question. Although, we have some exceptionally good scripts, the average level of performance was very poor.

The key pitfalls include:

- Failure to include depreciation and finance cost in the income statement;
- Calculation of income tax based on accounting profit rather than adjusted profit (i.e. not adjusting for depreciation and capital allowances);
- Incorrect calculation of retained earnings; and

- Basing dividend cash flow on current year's dividend rather than the preceeding year's as clearly instructed in the question.

Candidates are strongly advised to practise examination-type questions.

### Marking Guide

(a) i) <b>Income statement</b>	<b>Marks</b>	<b>Marks</b>
Revenue	1	
Operating costs	1	
Depreciation	$\frac{1}{2}$	
Operating profit	1	
Finance costs	$\frac{1}{2}$	
Profit before tax	$\frac{1}{2}$	
Tax	3	
Profit after tax	1	
Dividends	1	
Retained profit	$\frac{1}{2}$	10
ii) <b>Statement of financial position</b>		
Payables	1	
Receivables	1	
Cash/overdraft	2	
Others	4	8
iii) <b>Cash flow</b>		
Dividend paid	1	
Others	5	6
		24
b) 2 points per method		6
		30

## SOLUTION 2

a)			₦m
	Pre-acquisition value:		
(i)	Raymond Plc.	$\frac{₦4.90 \times 150m}{0.08 - 0.02}$	= 735
(ii)	Harold Limited	$\frac{₦15m}{0.08 - 0.02}$	= <u>250</u>
			<u>985</u>
(iii)	Post-acquisition value:		₦m
	Harold Limited	$\frac{₦15m \times 1.05}{0.08 - 0.03}$	= 315.00
	Raymond Plc.		= 735.00
	Transaction costs		= (8.00)
	Integration costs $\frac{₦2m}{1.08}$		= <u>(1.85)</u>
	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 is possible that the directors of Raymond Plc. anticipate that there are opportunities to enhance the cash flows of Harold Limited by utilising the expertise of Raymond 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 are:
- Success depends on the extent that Harold's management and staff accept the transfer of ownership and remain committed to servicing Harold Limited's clients to the best of their ability. To overcome this challenge, Raymond Plc. should consider introducing an incentive scheme such as a bonus payment or employee's share option scheme;
  - It also depends on whether Harold's clients are happy with the new arrangement and are confident of receiving the same level of service as before; and
  - 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:

	Raymond Plc.	Harold Limited	Total value
Before the acquisition	₦735million	₦250million	₦985million
After the acquisition	₦760million	₦280million (proceeds)	₦1,040million
	= (₦1,040m - ₦280m)		
Share of synergistic benefits	₦25million	₦30million	

**Harold Limited's shareholder's perspective:** Very attractive. Harold Limited's shareholders can expect to receive 55% of the synergistic benefits of the merger which does not seem to be a fair split considering:

- Harold Limited is the smaller company and contributing less to the merger;
- Harold Limited's shareholders do not carry any of the risks that the synergistic benefits cannot be realized; and
- Harold Limited 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.

**Raymond 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: Raymond 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 Harold Limited has a higher business risk than Raymond Plc. despite being in the same industry because of the different clients profile. If one customer were to be lost by Harold Limited, then this could have a significant impact on cash flow and hence the variability of Harold Limited's cash flows is likely to be higher than for Raymond Plc. Therefore, it is possible that a higher discount rate should be used to value Harold Limited which would have the effect of reducing its value.

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

## EXAMINER'S REPORT

The question tests candidates' ability to value companies for acquisition.

About 40% of the candidates attempted the question and performance was very poor with some candidates scoring zero.

About 80 percent of the candidates that attempted the question made use of wrong formulae in discounting the given cash flows and could not carry out the required analysis of their results.

It is recommended that candidates preparing for this examination need to practise past examination questions.

Marking Guide	Marks	Marks
a) Pre-acquisition value:		
Raymond Plc.	1	
Harold Limited	2	
Post-acquisition		
- Harold Limited	2	
- Transaction costs	$\frac{1}{2}$	
- Integration costs	1	
Incremental value	<u>1½</u>	8
b) i) Sensible suggestions	2	
ii) 1 mark per explained point (max 2)	<u>2</u>	4
c) Share of synergy		
- Raymond Plc.	1½	
- Harold Limited	1½	
Evaluation – Raymond Plc.	2	
– Harold Limited	2	
Conclusion	<u>1</u>	<u>8</u>
		<u>20</u>

## SOLUTION 3

- (a) The rights issue price  $= \text{N}5.00 \times 0.90 = \text{N}4.50$   
 The theoretical ex-rights price  $= [(4 \times \text{N}5.00) + (1 \times \text{N}4.50)]/5 = \text{N}4.90$   
 The value of the rights per existing share  $= (4.90 - 4.50)/4 = \text{N}0.10$
- (b) The value of 625 shares after the rights issue  $= 625 \times \text{N}4.90 = \text{N}3,062.50$   
 The value of 500 shares before the rights issue  $= 500 \times \text{N}5.00 = \text{N}2,500.00$   
 The value of 500 shares after the rights issue  $= 500 \times \text{N}4.90 = \text{N}2,450.00$   
 The amount of cash subscribed for the new shares  $= 125 \times \text{N}4.50 = \text{N}562.50$   
 The amount of cash raised from the sale of rights  $= 500 \times \text{N}0.10 = \text{N}50.00$

### Options:

The shareholder could either do nothing, take up the rights, sell the rights or exercise his rights in respect of part of the issue and sell the remaining to pay or part pay for the issue taken up.

The effect on the shareholder's wealth depends on the action taken:

- i) If the shareholder takes up the rights, the rights issue will have a neutral effect on his wealth. As an owner of 500 shares, he will purchase an additional 125 shares and the value of the total 625 shares ( $\text{N}3,062.50$ ) will be the same as the value of 500 shares before the rights issue ( $\text{N}2,500.00$ ) plus the cash subscribed for the new shares ( $\text{N}562.50$ ). The make-up of the shareholder's wealth will have changed (less cash, more shares), but not his total wealth;
  - ii) If the shareholder sells his rights, the rights issue will also have a neutral effect on his wealth. The value of 500 shares after the rights issue ( $\text{N}2,450.00$ ) plus the cash received from selling the rights ( $\text{N}50.00$ ) equals the value of 500 shares before the rights issue ( $\text{N}2,500.00$ ). Again, the make-up of the shareholder's wealth will have changed (more cash, less shares), but not his total wealth;
  - iii) If the shareholder neither takes up the rights nor sells the rights, a loss of wealth of  $\text{N}50$  will occur, representing the difference between the value of 500 shares before the rights issue ( $\text{N}2,500.00$ ) and the value of 500 shares after the rights issue ( $\text{N}2,450.00$ ); and
  - iv) If the shareholder takes up 75 of the rights issue and sells the remaining 50 shares, it will have a neutral effect on his wealth.
- (c) Factors that may influence the actual share price following the rights issue include:
- i) The expectations of investors/the stock market regarding the company's future;
  - ii) The level of take-up of the rights issue – if the issue was not fully taken up, for example, the share price might fall;

- iii) Information regarding the use to which the proceeds will be put and the market's reaction to that information – possibly being used to restructure finances in a way that affects the company's cost of capital; or being used in a project with a positive net present value;
  - iv) General stock market conditions/sentiment at the time of the issue, or conditions/sentiment within the company's particular sector of the stock market;
  - v) The existence of specific information (positive or negative) regarding the company or its sector at the time of the issue; and
  - vi) It is assumed that the details of any new investment/strategy are communicated to and believed by, the stock market. If this is not the case, then the share price will differ from the theoretical ex-rights price. In other words, the degree of efficiency of the market could impact on the actual share price.
- (d) The three forms of theoretical stock market efficiency are **weak**, **semi-strong** and **strong**.

If a stock market has **weak form efficiency** then only past information is currently reflected in share prices. Weak form efficiency, therefore, implies that share prices fully and fairly reflect all past information about the share and investors cannot, therefore, make abnormal gains by studying and acting upon any past information.

If a stock market has **semi-strong form efficiency** then not only all past information but also all publicly available current information (eg financial statements, press reports) are currently reflected in share prices. Semi-strong form efficiency, therefore, implies that share prices fully and fairly reflect all past and current publicly available information and investors cannot, therefore, make abnormal gains by studying and acting upon any such information.

If a stock market has **strong form efficiency** then not only all past and current publicly available information but also all relevant private information (eg board minutes) is currently reflected in share prices. Strong form efficiency, therefore, implies that share prices fully and fairly reflect all past, current publicly available and private information and investors cannot, therefore, make abnormal gains by acting upon information of any sort.

The implication of all these, is that, if the stock market is efficient in all the three forms, investors cannot beat the market by having superior information as it does not, by definition, exist. However, if the stock market is not strong form efficient then abnormal gains can be made from possession of private (insider) information.

## Discussion

Empirical evidence suggests that stock markets are uncertainly not strong form efficient, so the bank's claim appears misguided. There is much empirical evidence however, that most stock markets are semi-strong efficient and so, it is unlikely that the company's shares are undervalued and certainly not to any extent that might justify deferring a public issue.

Regarding the Finance Director's statement, its accuracy depends in part, on which form of market efficiency is evident. Strong form efficiency does suggest that share prices are 'correct' (they reflect true values) at all times, but the other two forms of efficiency would not generate 'correct' share prices as they do not fully consider all information. However, even with a strong form efficient market, there may be a time lag between the emergence of new, relevant information and the market reaction to it, meaning that for a time prices will not be 'correct'.

Finally, as regards the ability of analysts to predict future share prices, if the stock market is strong form efficient then analysts will be unable to achieve consistently superior rates of return. But that does not mean they cannot predict share prices – by chance they may do so on occasions, but the implication is that they will be unable to do so consistently. However, if the market is only semi-strong form efficient, then if the analysts have access to any private information then they may be able to predict the future share price and make superior rates of return.

## EXAMINER'S REPORT

The first part of the question tests candidates' knowledge of the analysis of right issue while the second part tests the knowledge of Efficient Market Hypothesis.

More than 80% of the candidates attempted the question but, the level of performance was disappointing. It is highly troubling that candidates writing the final examination could not compute ex-right price and for those who did, they could not analyse the effect of the right issue on shareholders' wealth.

In future, candidates are advised to improve their analytical skill. They need to read widely and practise with past examination questions.

Marking Guide	Marks	Marks
(a) Ex-rights price	$\frac{1}{2}$	
Theoretical ex-rights/price	1	
Value of a right	$\frac{1}{2}$	2
(b) Analysis of wealth		
- right taken up	1	

- right sold	1	
- no action taken	1	
- Part of the right taken up and Balance sold	<u>1</u>	4
(c) 1 mark per point (max 4)		4
(d) 2 marks for each (2 x 3)	6	
Conclusion	1	
Discussion	<u>3</u>	<u>10</u>
		<u>20</u>

#### SOLUTION 4

- a) There are two important theories linking exchange rates, interest rates and inflation rates which need to be considered when determining strategies in this area.

##### Interest Rate Parity

Interest Rate Parity (IRP) is based on the hypothesis that the difference between interest rates in the two countries should offset the difference between the spot rates and the forward foreign exchange rates over the same period. Specifically, if investors can obtain a higher risk-free rate in one currency than they can in the other, the country offering the higher rate will have its currency depreciated against the other. For example, if risk-free rate in Ghana is 10% and it is 6% in Nigeria, the Cedi will depreciate against the Naira by approximately 4% per year.

The relevant formula is:

$$\text{Forward rate currency } A/B = \text{Spot } A/B \times \frac{1 + \text{nominal } A \text{ interest rate}}{1 + \text{nominal } B \text{ interest rate}}$$

Where A and B are two different countries.

##### Purchasing Power Parity

Purchasing Power Parity (PPP) states that the exchange rate between two currencies is equal to the ratio of the currencies' respective purchasing power. It states that the rate of appreciation of a currency is equal to the difference in inflation rates between the foreign and the home country. For example, if South Africa has an inflation rate of 1% and Nigeria has an inflation rate of 3%, the Nigerian Naira will depreciate against the South African rand by 2% per year.

The relevant formula is:

$$\text{Forward rate currency } A/B = \text{Spot } A/B \times \frac{1 + A \text{ inflation rate}}{1 + B \text{ inflation rate}}$$

- i) **T\$ forward rate**

- ii) The forward rate between T\$ and Naira (~~₦~~) is predicted by IRP.

$$\text{One month forward rate T\$/~~₦~~} = 1.4600 \times \frac{1 + 0.0375/12}{1 + 0.0550/12} = 1.4579$$

The difference between the spot rate and the forward rate of T\$0.0021 represents a small discount on Naira (or a premium on T\$) suggesting that the Naira is depreciating (or T\$ is appreciating).

The net effect is that a Nigerian investor can either

- Invest in Nigeria at 5.5%, or
- Invest in Country T at 3.75% but also benefit from an appreciating currency giving the same overall return.

- ii) Again IRP can be used to estimate the forward rate.

$$3 - \text{month forward rate K\$/~~₦~~} = 1.960 \times \frac{1 + 0.0425/4}{1 + 0.0550/4}$$

$$\begin{aligned} \text{With forward contract, the expected receipt} &= \text{K\$}20,000,000 \div 1.9540 \\ &= \text{₦}10,235,415 \end{aligned}$$

- iii) **Placing T\$ on deposit**

The arrangement described is **money market** hedge, buying the currency, putting it on deposit and using the principal and interest to make the T\$ payment when it falls due.

Money market hedging may be slightly more beneficial than using the forward exchange markets, but the difference is likely to be small, as the premium or discount on the forward exchange rates will reflect interest rate differentials. Money market hedging is currently a strategy that the company uses.

Therefore, the policy described above is more sensible and should be adopted.

- b) **Economic exposure** is the risk that the present value of a company's future cash flows might be reduced by unexpected adverse exchange rate movements. Economic exposure includes **transaction exposure**, that is, the risk of adverse exchange rate movements occurring in the course of normal international trading transactions.

#### **Implications of economic exposure:**

- i) **Effect on international competitiveness**

This can affect companies through its purchases (where raw materials from abroad become more expensive because of a devaluation of the home currency) or its sales (where an appreciation in the home currency

will mean that sales priced in foreign currencies will be worth less in home currency terms).

ii) **Effect on remittances from abroad**

If a subsidiary is set up in an overseas country, and that country's exchange rate depreciates against the home exchange rate, the remittances will be worth less in home currency terms each year.

iii) **Effect on accounts**

Investors will identify economic exposure as having an adverse effect on accounts if the markets are efficient.

iv) **Effect on operations and financing**

In order to hedge the adverse effects of economic exposure, companies will consider diversification of operations, so that sales and purchases are made in a number of different currencies. The financing of operations can also be done in a large number of currencies.

## EXAMINER'S REPORT

This question tests candidates' knowledge of the use of interest rate parity theorem and purchasing power parity theorem to estimate foreign exchange rate.

More than 60% of the candidates attempted the question but majority of them generated unacceptable solutions hence, performance was very poor.

Key pitfalls include:

- Failure of the candidates to cover the risk management part of the syllabus;
- Inability to identify the difference between direct and indirect quotes;
- Use of inappropriate formulae; and
- Use of annual interest rates to calculate 3-month forward rate, etc.

Candidates are reminded that questions for each examination are designed to cover all sections of the syllabus, hence, they are advised to cover all aspects of the syllabus when preparing for the examinations of the Institute.

Marking Guide		Marks	Marks
(a)	Interest parity	3	
	Purchasing power parity	<u>3</u>	6
	Calculation and conclusion		
i.	T\$ forward rate		3
ii.	R\$ 3 months forward rate	2	
	Expected receipt	<u>1</u>	3
iii.	Correctly identifying the scenario as money market hedge	2	

	Recommendation	<u>1</u>	3
(b)	Explanation of economic exposure	2	
	Implications	<u>3</u>	<u>5</u>
			<u>20</u>

## SOLUTION 5

- a) Stakeholders in a company include amongst others: shareholders; directors /managers; lenders; employees; suppliers; customers; and government. These groups are likely to share in the wealth and risk generated by a company in different ways and thus conflicts of interest are likely to exist. Conflicts also exist not just between groups but within stakeholder groups. This might be because sub-groups exist, for example preference shareholders and equity shareholders within the overall category of shareholders.

Alternatively, individuals within a stakeholder group might have different preferences (e.g. to risk and return, short term and long term returns). Good corporate governance is partly about the resolution of such conflicts. Financial and other objectives of stakeholder groups may be identified as follows:

### Shareholders

Shareholders are normally assumed to be interested in wealth maximisation. This, however, involves consideration of potential return and risk. For a listed company, this can be viewed in terms of the changes in the share price and other market-based ratios using share price (e.g. price/earnings ratio, dividend yield, earnings yield etc).

Where a company is not listed, financial objectives need to be set in terms of other financial measures, such as return on capital employed, earnings per share, gearing, growth, profit margin, asset utilisation and market share. Many other measures also exist which may collectively capture the objectives of return and risk.

Shareholders may have other objectives for the company and these can be identified in terms of the interests of other stakeholder groups. Thus, shareholders as a group may be interested in profit maximisation. They may also be interested in the welfare of their employees, or the environmental impact of the company's operations.

### Management

While executive directors and managers should attempt to promote and balance the interests of shareholders and other stakeholder groups, it has

been argued that they also promote their own individual interests and should be seen as a separate stakeholder group.

This problem arises from the divorce between ownership and control. The behaviour of managers cannot be fully observed by the shareholders, giving them the capacity to take decisions which are consistent with their own reward structures and risk preferences. Directors may therefore be interested in their own remuneration package.

They may also be interested in building empires, exercising greater control, or positioning themselves for their next promotion. Non-financial objectives of managers are sometimes inconsistent with what the financial objectives of the company ought to be.

### **Lenders**

Lenders are concerned to receive payment of interest and eventually repayment of the capital at maturity. Unlike the ordinary shareholders, they do not share in the upside (profitability) of successful organisational strategies. They are therefore likely to be more risk averse than shareholders, with an emphasis on financial objectives that promote liquidity and solvency with low risk (e.g. low gearing, high interest cover, security, strong cash flow).

### **Employees**

The primary interests of employees are their salary/wage and the security of their employment. To an extent there is a direct conflict between employees and shareholders as wages are a cost to the company and income to employees.

Performance-related pay, based on financial or other quantitative objectives may, however, go some way toward drawing the divergent interests together.

### **Suppliers and Customers**

Suppliers and Customers are external stakeholders with their own set of objectives (profit for the supplier and, possibly, customer satisfaction with the goods or services) that, within a portfolio of businesses, are only partly dependent on the company in question. Nevertheless, it is important to consider and measure the relationship in terms of financial objectives relating to quality, lead times, volume of business, price and a range of other variables in considering any organisational strategy.

**Government** – Interested in payments of tax for planning purposes and the operating environment.

- b) The directors of companies can be encouraged to achieve the objective of maximising shareholders' wealth through managerial reward schemes and through regulatory requirements.

### **Managerial reward schemes**

As agents of the company's shareholders, the directors may not always act in ways which increase the wealth of shareholders, a phenomenon called the agency problem. They can be encouraged to increase or maximise shareholders' wealth by managerial reward schemes such as performance-related pay and share option schemes. Through these methods, the goals of shareholders and directors may increase in congruence.

Performance-related pay, links part of the remuneration of directors to some aspect of corporate performance, such as levels of profit or earnings per share. One problem here is that it is difficult to choose an aspect of corporate performance which is not influenced by the actions of the directors, leading to the possibility of managers influencing corporate affairs for their own benefit rather than the benefit of shareholders, for example, focusing on short-term performance while neglecting the longer term.

Share option schemes bring the goals of shareholders and directors closer together to the extent that directors become shareholders themselves. Share options allow directors to purchase shares at a specified price on a specified future date, encouraging them to make decisions which exert an upward pressure on share prices. Unfortunately, a general increase in share prices can lead to directors being rewarded for poor performance, while a general decrease in share prices can lead to managers not being rewarded for good performance. However, share option schemes can lead to a culture of performance improvement and so can bring continuing benefit to stakeholders.

### **Regulatory Requirements/ Corporate Governance**

Regulatory Requirements can be imposed through Corporate Governance codes of best practice and stock market listing regulations.

Corporate Governance codes of best practice seek to reduce corporate risk and increase corporate accountability. Responsibility is placed on directors to identify, access and manage risk within an organisation. An independent perspective is brought to directors' decisions by appointing non-executive directors to create a balanced board of directors, and by appointing non-executive directors to remuneration committees and audit committees.

## EXAMINER'S REPORT

This question tests candidates' knowledge of stakeholder groups and their objectives.

Almost all the candidates attempted the question and performance was good with some candidates scoring all the marks. Surprisingly though, we also have some few candidates scoring zero.

Candidates are advised to cover all aspect of the syllabus in their preparation for future examinations.

Marking Guide	Marks	Marks
(a) 2 marks per well explained stakeholder (max 5)		10
(b) Managerial rewards schemes	3	
Regulatory requirements	<u>2</u>	<u>5</u>
		<u>15</u>

## SOLUTION 6

- (a) Ethics impact on many aspects of investment decisions. In theory, companies seek to maximise shareholders wealth, often subject to constraining secondary objectives. Such secondary objectives include the welfare of the public. Companies are affected by ethical standards relating to:
- (i) **Health and safety** - Employees and the public should be protected from danger, which includes working conditions, following employment laws and product safety;
  - (ii) **Environmental issues** – Environmental issues such as, controlling pollution, protecting wildlife and the countryside. Fully satisfying these issues might be an expensive element in a capital investment;
  - (iii) **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;
  - (iv) **Corporate governance** - Many examples exist of companies, e.g. Enron, where the results of investments and the true financial position have been hidden from shareholders and the public;
  - (v) **Taxation** - Companies may try to minimise their tax liability. Tax evasion is illegal, but there is an ethical question over the use of

sophisticated tax avoidance measures, especially in developing countries;

- (vi) **Wage levels** - Should a company pay low wages to maximise shareholders' wealth, especially in countries where the standard of living is very low?
- (vii) **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 net present value (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.

- b) Using the Black-Scholes Option Pricing (BSOP) 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, that is, 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 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**

**The question tests candidates understanding of ethical issues in capital investment decisions and the use of Black-Scholes option pricing model in company valuation.**

**Less than 20% of the candidates attempted the question and performance was very poor.**

**In part 'a' of the question, candidates could not offer any meaningful ethical issues. In part 'b', the very few candidates that were able to identify the key variables in Black-Scholes model failed to identify the relevant proxy for each variable within the context of company valuation.**

**We recommend that candidates should make effort to cover the entire syllabus when preparing for future examinations.**

Marking Guide	Marks	Marks
a) 2 marks per ethical issues raised and explained (max 4 points)		8
b) Circumstances of use	2	
1 mark per each valid variable identified	<u>5</u>	<u>7</u>
		<u>15</u>

## SOLUTION 7

### a. i) **Unsystematic Risk**

Unsystematic risk may be defined as the risk attached to a specific investment, in contrast to systematic risk, which is the overall market risk. As such, it is possible by the combination of a portfolio of investments to eliminate systematic risk through diversification. The investor who only holds one security will therefore bear a total risk, made up of the systematic risk of the market and the systematic risk of the investment itself.

Hence, it is incorrect to argue that an investor needs only be concerned with the unsystematic risk of that security. On the other hand, he may well be concerned about the systematic risk of the security, because of the fact that it is that portion of the risk which is present simply because he holds only one, rather than a portfolio of investments.

### ii) **Total Risk**

In holding a portfolio of investments, the rational investor will assemble the portfolio in such a way as to minimise the risk associated with the portfolio. This means that in a large portfolio it is possible to diversify away the unsystematic risk completely.

The total risk to the investor under such circumstances is only the systematic risk of the market itself. The total risk to an investor in a number of securities may therefore be made up of only systematic risk, or systematic plus unsystematic risk, depending on the extent to which the portfolio is diversified.

### iii) **Market Rate of Return**

In deciding whether to add an investment to a portfolio, the investor should determine the effect of the extra investment on the overall risk of the portfolio. If the effect is to reduce the overall risk then, assuming that the investor does seek to minimise risk, the investment should be undertaken.

An investment yielding a rate of return less than that of the market is one which is of relatively low risk or possibly risk-free. It would therefore be appropriate to add such an investment to a currently high-risk portfolio as a means of reducing the overall level of risk. It is not relative return but the effect on risk which should determine the investment decision.

- b) 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 1.2 suggests that KT. Plc's shares are more risky than the market as a whole, which has a beta of 1. If average market returns change, for example, increase by 5%, the return of KT. Plc's shares would be expected to increase to  $1.2 \times 5\% = 6\%$ .

The alpha value measures the abnormal return on a share. An alpha value of 1.4% means that the returns on KT plc's shares are currently 1.4% more than would be expected given the share's 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 1.4% 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**

The question tests candidates' understanding of some basic principles of portfolio diversification.

About 90% of the candidates attempted the question and performance was average. Part 'b' of the question was however poorly answered with some candidates describing alpha value as a risk measurement.

Alpha value is well discussed and illustrated in the ICAN Study Text. Candidates are therefore advised to make use of the ICAN Study Text and other relevant materials when preparing for the Institute's future examinations.

<b>Marking Guide</b>	<b>Marks</b>	<b>Marks</b>
(a) Discussion and explanation of:		
(i) Unsystematic risk	3	
(ii) Total risk	3	
(iii) Market rate of return	<u>3</u>	<u>9</u>
 (b) The meaning and purpose of equity beta	3	
The meaning and purpose of equity alpha value	<u>3</u>	<u>6</u>
		<u>15</u>

**THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA**

**PROFESSIONAL LEVEL EXAMINATION - NOVEMBER 2017**

**ADVANCED AUDIT AND ASSURANCE**

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

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

**SECTION A: COMPULSORY (30 MARKS)**

**QUESTION 1**

Bode, Ugo, Musa and Company is a firm of Chartered Accountants that has existed for over 20 years and achieved a strong reputation for quality audit work. The firm has expanded significantly over the past ten years - doubling its client base across the different sectors of the Nigerian economy. The firm currently audits two banks, five listed entities and over seventy other companies. It has also increased its audit staff base and grown the number of its partners from two to seven over the same period.

However in the last two years, the firm has series of regulatory reviews due to a number of instances of errors noted in some financial statements audited by the firm. One of the clients, the shareholders of NigerKap Plc, petitioned the regulator over a misstatement in the value of their investment property. This resulted in overstatement of profit and overpayment of taxes by the company based on the financial statements for the year ended December 31, 2015. The shareholders also threatened to take legal action against the firm.

The Managing Partner (MP) of the firm is apparently very concerned about this situation and has commenced internal procedures to evaluate the quality of audits performed by the firm especially for the NigerKap audit of 2015. A committee set up by him has conducted a review of a number of audit files and has noted among others, that very poor audit work was performed by the NigerKap engagement team of 2015 led by Amy Smith, one of the partners who is supposed to retire in 2018. The MP has therefore instructed that Oluwatoyin Bede-Nwokoye, a new

partner of the firm, should perform the 2016 audit of NigerKap Plc. The Statement of Financial Position of NigerKap Plc as at December 31, 2016 has been provided to the firm and some of the balances therein are shown below:

	2016 N'million	2015 N'million
<b><i>Extract from Non-current assets</i></b>		
Property, plant and equipment	2,640	2,620
Intangible assets	1,200	900
Investment property	3,700	6,150
Deferred tax*	2,800	-
<b><i>Extract from current assets</i></b>		
Inventories	1,350	1,100
Trade receivables	250	310

\*The deferred tax relates to unused tax losses that have accumulated during the past three years. Management is confident that there will be sufficient future operating profits to claim the benefit of the tax losses in full in future years.

**Required:**

- a. Discuss **FOUR** consequences of the poor audit work on the firm of Bode, Ugo, Musa and Company (Chartered Accountants). (5 Marks)
  - b. Recommend **SIX** actions that the new partner should implement to ensure that a high overall quality of the audit of 2016 financial statements of NigerKap plc is achieved. (9 Marks)
  - c. What are the **FOUR** key audit procedures that should be carried out by the engagement team to determine whether the recognition of the deferred tax asset of the company in 2016 is appropriate? (8 Marks)
  - d. What specific audit procedures should be carried out by the audit team in respect of the following balances in the financial statements of the company (other than casting and agreement of amounts per schedule to the general ledger/trial balance)?
    - i. Inventories balance (4 Marks)
    - ii. Intangible assets (4 Marks)
- (Total 30 Marks)**

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

**QUESTION 2**

Chuks Roberts Plc (CRP) operates as auto-parts manufacturing company in Nigeria and has its head office in Lagos. It has plans to manufacture drones for the distribution of parcels within Africa. To actualise this, it has just acquired Zaka Roberts Limited (ZRL), a South African company operating in Johannesburg, to make the drone production a reality.

Zaka manufactures computer-controlled equipment for university laboratories and other industries in Africa and the Middle East. It was owned by a group of five friends who graduated from a South African University and were the directors and shareholders of the company.

On February 1, 2016 they accepted CRP's offer to buy Zaka's manufacturing equipment and technology, which is protected by patent rights, the factory premises in Cape Town and the head office in Johannesburg for US\$450million, being 75 percent of the value of Zaka. Management notified the employees, suppliers, customers and other stakeholders that Zaka would cease all manufacturing undertakings on March 31, 2016.

All employees, apart from a few in the marketing, accounts and administration departments were rendered redundant, and were given one month's notice with effect from March 31, 2016.

Zaka would now operate under the new name, Chuks Zaka Limited (CZL) from its former head office in Johannesburg as a marketing company selling CRP's drones in the South African Region. To this effect, CRP will take up 55 percent of CZL, for which payment was due by February 1, 2017.

Your firm of Chartered Accountants has been the external auditors to CRP and the company has now engaged your firm to also audit its subsidiary, CZL.

**You are required to:**

- a. Analyse and evaluate the business risks that would be assessed by the management of CZL. (6 Marks)
- b. Analyse and evaluate the business risks that would be assessed by the directors of CRP. (6 Marks)
- c. Assess and advise on the financial statements' risks to be considered in planning the audit of CZL for the year ended December 31, 2016. (8 Marks)

**(Total 20 Marks)**

### QUESTION 3

Tophem Bank Nigeria Plc has been operating for 20 years and your firm took over the audit 5 years ago.

Tophem Bank's investment in Accra Insurance Limited, a foreign associate acquired during the year and accounted for by the equity method, is carried at ₦575 million on the Statement of Financial Position at December 31, 2016. Tophem's share of Accra's net income is included in Tophem's income for the year then ended. However, you were denied access to the management, auditors and the financial information of Accra Insurance Limited.

Your partner has reviewed the audit file for the year ended December 31, 2016 and has approved the issuance of a modified opinion. He drew a titular sketch of the audit report and has asked you to fill up some gaps.

NB: Assume the underlying financial reporting frameworks are applicable to Tophem Bank Nigeria Plc – Financial Reporting Council of Nigeria Act 2011, Companies and Allied Matters Act, CAP C20 LFN 2004, International Financial Reporting Standards, Banks and Other Financial Institutions Act CAP B3 LFN 2004 and other Central Bank of Nigeria guidelines and circulars.

**You are required to:**

- a. Evaluate the circumstance in which a matter could be both material and pervasive in its effect on the financial statements. (4 Marks)
- b. Explain **EIGHT** of the appropriate procedures to be followed in the audit assignment before reaching the audit opinion. (8 Marks)
- c. Draft appropriate basis of opinion paragraph suitable for inclusion in the auditor's report. (4 Marks)
- d. Draft appropriate opinion paragraph suitable for inclusion in the auditor's report. (4 Marks)

**(Total 20 Marks)**

### QUESTION 4

The management of Pony Bank Plc. and its fully owned subsidiary Ponte Micro Finance Bank Limited arranged and invented bogus loans that totalled ₦5.5 billion worthless assets which the former auditors did not detect.

The former auditors claimed that a clique of highly clever and organised swindlers among the staff of Pony Bank deceived the auditors and devoted themselves to defeating the audit and covering up their nefarious acts.

Your firm of chartered accountants, Vic Viv & Co, has just taken up the audit of Pony Bank Plc.

**You are required to:**

- a. Advise the engagement partner on the risks involved in taking up the audit. (4 Marks)
  - b. Recommend appropriate actions on the part of management and your firm to overcome the financial statements' risks. (8 Marks)
  - c. Prepare a management letter which includes two matters suitable for submission to the directors. (8 Marks)
- (Total 20 Marks)**

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

**QUESTION 5**

You are the audit manager for XYZ Bank Limited for the year ended December 31, 2016.

From your review of the Bank's Board of Directors minutes of meetings, you noted that during the year, the Board was concerned about a litigation issue involving the Bank and another company named BBB Limited, in which the Bank is the defendant.

BBB Limited had sued the Bank for converting a cheque worth ₦2.1billion and the high court has declared the Bank guilty and imposed a penalty in the sum of ₦2.1 billion (i.e. the value of the cheque) on the Bank.

From the available information, it was noted that the claimant (i.e. BBB Limited) had commenced the process to claim the judgment amount from the Bank.

The Bank was not satisfied with the case and had immediately filed for objection at the Court of Appeal. The Directors of the Bank, based on the professional legal counsel obtained, are of the opinion that the judgment issued by the Federal High Court is baseless and unjustifiable, and that a favourable judgment would be obtained at the Court of Appeal.

The summary of financial information of the Bank is as follows:

Provision for litigation (already recognised in the Bank's financial statements)

₦96 million

Number of existing litigation cases as defendant	50 cases
Number of existing litigation cases as plaintiff	10 cases

Litigation claims in favour of the Bank	₦2.7 billion
Litigation claims made against the Bank including the billion above	₦2.1 billion
	₦3.2 billion

**You are required to:**

- Discuss **FOUR** of ISA 501 Audit evidence - specific consideration for selected items requirements on the procedures the auditors can perform to obtain sufficient and appropriate audit evidence on the litigation provision. (5 Marks)
  - Comment on the adequacy or otherwise of the amount recognised as provision for litigation in the financial statements as at December 31, 2016. (5 Marks)
  - Prepare a summary disclosure of the entity's litigation status for inclusion in the notes to the financial statements as at December 31, 2016. (5 Marks)
- (Total 15 Marks)**

## **QUESTION 6**

During the course of your audit of fixed assets of Next Engineering Plc at December 31, 2016 two problems arose:

- The calculations of the cost of direct labour incurred on assets in the course of construction by the company's employees have been accidentally destroyed for the early part of the year. The direct labour cost involved is ₦20,000,000.00; and
- The company has received a government grant of ₦50,000,000.00 towards the cost of plant and equipment acquired during the year and expected to last for ten years. The grant has been credited in full to the income statement as exceptional item.

**Required:**

- Discuss the general forms of modifications available to the auditors in drafting their report in accordance with appropriate standards and state the circumstance in which each form is appropriate. (6 Marks)
  - On the assumption that you decide that a modified audit report would be necessary with respect to the treatment of government grant, prepare a draft of the section that deals with the matter (whole report not required). (5 Marks)
  - Analyse the auditor's general responsibility with regard to the statement in the directors' report concerning the valuation of land and building. (4 Marks)
- (Total 15 Marks)**

## QUESTION 7

Young Entrepreneur Trading (YET) is an on-line trading business established by Yemisi Tumfere. The business buys assorted household goods from different manufacturers locally and abroad. Orders are made on-line from suppliers. Customers also order goods on-line from YET and their invoices are processed and transmitted to the store from where the goods are dispatched to the customers through the delivery stores scattered all over the country.

YET has not been satisfied with the work of the previous auditors and has approached your firm to be appointed as the new auditors. Appropriate professional clearance has been resolved for the work to commence. You are the audit manager responsible for the engagement. You have also been assigned on the job with some new trainees who are not conversant with controls in on-line businesses.

### Required:

- a. Discuss **FIVE** of the controls an auditor should focus on to assess the effectiveness of controls in an on-line system such as YET. (5 Marks)
  - b. Evaluate **FOUR** risks associated with the business of YET in the application of electronic data interchange in an on-line business and **FOUR** effective controls that may be put in place to minimise the risks. (10 Marks)
- (Total 15 Marks)**

## SOLUTION I

- i. a. The consequences of the poor audit work could be the following:
- (i) legal damages and legal costs;
  - (ii) losing the client;
  - (iii) adverse publicity and damage to the reputation of the audit firm;
  - (iv) disciplinary proceedings by a professional body such as ICAN
  - (v) loss of high performing employees who would not wish to be associated with poor image; and
  - (vi) increased regulatory focus and the associated time lost in regulatory inspections and reporting
- b. The new engagement partner should put procedures in place to ensure that:
- (i) ethical standards are complied with and appropriate action taken if there is evidence to the contrary;
  - (ii) independence requirements are met, including:
    - identifying circumstances and relationships that might give rise to threats to independence;
    - assessing the impact of breaches of the firm's independence policies and procedures and whether such breaches create a threat to
    - independence; and
    - taking suitable action to eliminate identified threats or to withdraw from the engagement if appropriate.
  - (iii) the audit is carried out by an audit team with the appropriate competence and capabilities;
  - (iv) appropriate management of the engagement is in place, including the direction and supervision of staff and the review of audit work;
  - (v) on or before the date of the audit report, the engagement partner must, through a review of audit documentation and discussion with the audit team, be satisfied that sufficient and appropriate evidence has been obtained to support the conclusions reached.
  - (vi) adequate consultations have taken place on difficult or contentious matters and the conclusions from such consultations implemented;

- (vii) relevant specialists within the audit firm or experts to be engaged by the audit team are involved to assist in auditing relevant difficult areas of the engagement;
  - (viii) the following matters are documented:
    - issues in respect of compliance with ethical requirements and how they were resolved;
    - conclusions on compliance with independence requirements;
    - conclusions in respect of new and continuing engagements; and
    - the nature and scope of conclusions from consultations undertaken.
  - (ix) Appropriate materiality amount is determined for the financial statements as a whole and may consider lower performance materiality at account balance level, in order to focus on high risk areas and achieve improved audit quality;
  - (x) An engagement quality control reviewer is appointed and involved on the engagement to perform an objective evaluation of the significant judgements made by the audit team, the conclusions reached and to evaluate the appropriateness of the audit report;
  - (xi) Adequate planning of the audit to ensure proper coverage; and
  - (xii) Review of prior year working papers.
- c. The auditor should assess whether it is appropriate to include a deferred tax asset in the financial statements and so needs evidence about whether the tax losses will be recoverable. The procedures involved are:
- (i) Obtain a copy of the client's tax computations and agree the figures in the calculation to the accounting records. Also consider recalculating the amount to check it's accuracy;
  - (ii) Review any correspondence about tax that may exist with a view to verifying the propriety of the tax losses used in the calculation;
  - (iii) Make an assessment about whether the tax losses will be recoverable, by obtaining forecasts from the client of future profitability. The assumptions used in the forecast should be assessed for reasonableness in the context of the auditor's understanding of the client's business;
  - (iv) If the forecasts of future profitability are reasonable, the auditor should assess how long it will be before the losses are recovered in full. This

period should be checked against tax regulations, to confirm that there is no statutory limit on carrying forward tax losses;

- (v) Determine from the tests above, whether the deferred tax asset should be recognised in full or whether some amounts should not be fully recognised; and
- (vi) Check that relevant disclosures required in respect of deferred taxes have been made in the financial statements.

#### **d i Inventories**

Important specific audit procedures for inventories include the following:

- Evaluation of carrying amount of inventories to ensure that it is stated at the lower of cost and net realisable value, on an item-by-item basis;
- Evaluation of the valuation method used to estimate inventory cost to ensure that an acceptable method per IAS 2 was used (Remember that LIFO is not permitted by IAS 2.);
- Observe physical count of inventory items;
- Obtain evidence that an appropriate method has been used for the treatment of overheads (overhead absorption);
- Check that any obsolete inventory items have been isolated and written down/off; and
- Check that relevant disclosures have been made in the financial statements in respect of inventories.

#### **(ii) Intangible Assets**

Important specific audit procedures for Intangible assets include the following:

- Evaluate whether purchased intangible assets have been recognised and measured in accordance with IAS 38;
- Obtain evidence that the useful lives of intangible assets have been estimated in a reasonable way;
- Obtain evidence to support the non-amortisation of intangible assets with an indefinite useful life where applicable;
- Check that intangible assets have been appropriately subjected to annual impairment reviews and that the resulting adjustments (if any) have been appropriately determined and recorded;
- Evaluate that the relevant disclosures contained in the relevant movement schedules have been appropriately presented; and
- Obtain evidence with respect to disposals during the year and that the relevant gain or loss has been appropriately recorded in the books.

## EXAMINER'S REPORT

The question tests candidates understanding of Audit Quality.

Almost all the candidates attempted the question and performance was average.

	<b>MARKING GUIDE</b>	<b>MARKS</b>
i. a.	1¼ marks each for any four points	5
B.	1½ marks each for any six points	9
c.	2 marks each for any four points	8
d(i)	1 mark each for any four points	4
(ii)	1 mark each for any four points	<u>4</u>
	<b>TOTAL</b>	<b><u>30</u></b>

## SOLUTION 2

(a) Business risks that will be assessed by CZL's management are:

- i. The parent company operates in another country with different laws and regulations;
- ii. The parent company operates in high-tech environment and inventories might be subject to obsolescence, and this will affect the survival of CZL being a subsidiary;
- iii. CZL is now a new company selling items different from its erstwhile products. New customers would be sought and new marketing efforts would be employed, yet only skeletal staff were retained;
- iv. Staff of Zaka may sue for redundancy costs. Redundancy payments have not been made. There may be need to make provisions;
- v. Possibility of increased errors in processing accounting transactions because the skeletal staff retained may not allow for segregation of duties;
- vi. The change in line of business will affect after-sales service for customers of the old company and they may sue for damages;
- vii. Receiving products for sale only from its parent company is a limitation to going concern of the company; and
- viii. The parent company is yet to pay for its investment.

**(b) Business risks that will be assessed by the directors of CRP are:**

- i. The subsidiary company operates in another country with different laws and regulations;
- ii. The company operates in high-tech environment and inventories might be subject to obsolescence;
- iii. The factory in South Africa may have been acquired at an amount far more than its value;
- iv. The engineering expertise belonged to another company, which had ceased from existence. It might be difficult getting technical help;
- v. Moving from auto parts manufacture to the manufacturing of drones is a dramatic shift requiring new expertise in manufacturing and sales;
- vi. There is need to patronise national carriers and international organisations like DHL for economically sustainable sales to be attained since these have had arrangements with airlines for the lifting of mails and parcels; and
- vii. There are no plans yet for the distribution of the products, beyond using the subsidiary the acquisition of which is yet to be consummated by making payment.

**(c) Financial Statement risks to be considered in planning the audit of CZL includes:**

- i. Due to the possibility of rapid obsolescence, inventories in the financial statements might be overstated. Serious attention needs to be paid to net realisable value in the valuation;
- ii. The worth of the factory in South Africa may have been overstated, as it was acquired from another company. There is need to do proper valuation of the net assets acquired so as to determine the right amount of goodwill or bargain purchase as relevant;
- iii. Provision must be made for 55 percent of the value of the subsidiary CZL, (55 percent of US\$450 million) payable in February 2017.
- iv. There is need to consolidate the accounts of CZL in the financial statements of CRP;
- v. Exchange rate volatility will affect transactions between the company and its parent company; and
- vi. Risk of misstatement of opening balances.

**EXAMINER'S REPORT**

The question tests candidates understanding of analysis, assessment and evaluation of business risks.

About 95% of the candidates attempted the question but performance was poor.

Candidates' commonest pitfall is lack of understanding of the question.

Candidates are enjoined to use the Institute's study text extensively.

	Marking Guide	Marks	Marks
a	Different regulatory environment High-tech environment New product Redundancy payments Errors in accounting transactions After sales service Going concern Part of company sold on credit	1¼ marks each for any 4 points	6
b	Different regulatory environment High-tech environment Over-valued factory Technical help needed New expertise Patronage for product Distribution of product in other regions	1¼ mark each for any 4 points	6
c	Valuation of inventories Valuation of factory Payment for subsidiary – provisions Consolidated financial statements Exchange rate volatility	2 marks each for any four points	<u>8</u>
	<b>Total</b>		<b><u>20</u></b>

### SOLUTION 3

- (a) Generally, a matter will be material when it impacts the financial/economic decision of the users of the financial statements.

'Pervasive' effects on the financial statements are defined by ISA 705 as those that, in the auditor's judgement:

- i. are not confined to specific elements, accounts or items of the financial statements; or

- ii. are confined to specific elements in the financial statements, but these represent (or could represent) a substantial proportion of the financial statements; or
- iii. in relation to disclosures in the financial statements, are fundamental to users' understanding of those statements.

When a 'material' issue becomes 'pervasive' then it is significant and affects substantial proportion of the financial statements. This calls for a modification of the auditors' opinion.

## **(b) REACHING THE AUDIT OPINION**

In reaching his audit opinion, the auditor is required to evaluate whether:

- i. He has obtained sufficient appropriate audit evidence as to whether the financial statements are free from material misstatements;
- ii. Uncorrected misstatements are material, individually or in aggregate
- iii. The financial statements give a true and fair view;
- iv. The financial statements have been prepared in accordance with the relevant financial reporting framework and in particular whether:
  - The financial statements adequately describe the relevant financial reporting framework;
  - The financial statements adequately disclose the entity's significant accounting policies;
  - The significant accounting policies are appropriate and consistent with the relevant financial reporting framework;
  - Accounting estimates are reasonable;
  - The information in the financial statements is relevant, reliable, comparable and understandable;
  - The financial statements provide adequate disclosures; and
  - The terminology used in the financial statements is appropriate.

## **c. Basis for qualified opinion**

Tophem Bank Plc.'s investment in Accra Insurance Ltd, a foreign associate, acquired during the year and accounted for by the equity method, is carried at ₦575 million on the Statement of Financial Position at 31 December 2016. Tophem Bank Plc's share of Accra Insurance's net income is included in Tophem Bank Plc's income for the year then ended. We were unable to obtain sufficient appropriate audit evidence about the carrying amount of Tophem Bank Plc's investment in Accra Insurance Limited at 31 December

2016 and Tophem Bank Plc's share of Accra Insurance's net income for the year because we were denied access to the management, auditors and the financial information of Accra Insurance Limited. Consequently, we were unable to determine whether any adjustments to these amounts were necessary.

**d. Qualified opinion**

In our opinion, except for the possible effects of the matter described in the basis for Qualified Opinion paragraph, the accompanying financial statements give a true and fair view of the financial position of Tophem Bank Plc as at 31 December 2016 and the financial performance and cash flows for the year then ended in accordance with the International Financial Reporting Standards, the Companies and Allied Matters Act Cap C20 LFN 2004, the Banks and other Financial Institutions Act CAP B3 LFN 2004, the Financial Reporting Council of Nigeria Act, 2011, and other relevant Central Bank of Nigeria guidelines and circulars.

## **EXAMINER'S REPORT**

The question tests candidates understanding of the concept of materiality as regards financial statements.

About 56% of the candidates attempted the question and performance was poor.

Candidates lacked understanding of the question.

Candidates are advised to prepare adequately for the examination by reading the Institute's study text in detail.

## **MARKING GUIDE**

	<b>POINTS TO MENTION</b>	<b>Marks</b>	<b>Marks</b>
3a	Material	1	
	Pervasive	2	
	Material and pervasive- impact on Audit report	<u>1</u>	
	<b>SUB TOTAL</b>		4
3b	He has obtained sufficient appropriate audit evidence as to whether the financial statements are free from material misstatements	1 mark each for any 8	
	Uncorrected misstatements are material, individually or in aggregate	points	8

The financial statements give a true and fair view  
The financial statements have been prepared in  
accordance with the relevant financial reporting  
framework and in particular whether:

- The financial statements adequately describe the relevant financial reporting framework
- The financial statements adequately disclose the entity's significant accounting policies
- The significant accounting policies are appropriate and consistent with the relevant financial reporting framework
- Accounting estimates are reasonable
- The information in the financial statements is relevant, reliable, comparable and understandable
- The financial statements provide adequate disclosures
- The terminology used in the financial statements is appropriate

3c	Basis of Qualified Opinion – as title	1	
	Reference to foreign investment	1	
	Unable to obtain appropriate audit evidence	1	
	Denied access to the management, auditors and the financial information	<u>1</u>	
	Unable to determine the necessary adjustments	1 (Any four points)	
	<b>SUB TOTAL</b>		<b>4</b>
	Qualified Opinion – as title	0.25	
	Except for	0.5	
	Reference to Basis of Qualified Opinion	0.5	
	Accompanying financial statements	0.25	
	True and fair view	0.5	
	Name of company	0.25	
	Date of financial statements	0.25	
	Financial Position, Financial Performance & Cash flows	0.5	
	International Financial Reporting Standards	0.25	
	Companies and Allied Matters Act Cap C20 LFN 2004	0.25	
	Banks & Other Financial Institutions Act CAP B3 LFN 2004	0.25	
	Financial Reporting Council of Nigeria Act, 2011	0.25	
	<b>SUB TOTAL</b>		<b><u>4</u></b>
	<b>Total</b>		<b><u>20</u></b>

## **SOLUTION 4**

- a. The engagement partner should take cognisance of the following risks that the firm could be exposed to, if it takes up the audit:
  - i. The client's working environment has been corrupted with lack of integrity among staff leading to the creation of non-existent loans;
  - ii. Internal evidence therefore cannot be relied upon, as they have no weight; and
  - iii. The opening balances cannot be relied upon because the financial statements of prior years have been misstated.

### **b ACTIONS TO REDUCE THE RISKS**

Granted that the business risks are high and that these will create financial statements risks, the partner must take appropriate actions to reduce their effects on the financial statements.

The firm must be cautious in dealings with client's staff. External evidence should be used to corroborate whatever internal evidence that would be presented. Management representation should be obtained, covering significant matters in the financial statements.

It is important to remember that the firm has taken professional indemnity insurance. The insurance broker should be notified of this new client and legal counsel should be obtained.

The specific actions to be taken include the following:

- i. Client to conduct an investigation into the activities that created the fictitious loans;
- ii. Do a 100 percent review work on the loans and advances;
- iii. Change or modify the accounting package and give new passwords to new set of staff that would handle the general ledger;
- iv. Do a complete overhaul of the credit and marketing department;
- v. Stop inter-company loans between the bank and the subsidiary, at least in the short term. There should be no joint loan syndication within the Group; and
- vi. Obtain further information from culpable staff and block all loopholes.

### **c MANAGEMENT LETTER**

Date: 15 April, 2017

Viv Vic & Co  
(Chartered Accountants)

The Directors

Pony Bank Plc.

Dear Sir

#### MANAGEMENT LETTER

We have completed the audit of your Bank's financial statements for the year ended 31 December 2016 and we made some observations during the course of the audit. The observations are presented below.

##### 1. CREATION OF FICTITIOUS ASSETS

###### Observation

The staff of your bank and the subsidiary Micro Finance Bank colluded and created bogus loans totalling ₦5.5 billion over a period of seven years.

###### Implication

This means that assets have been overstated by N5.5 billion.

###### Recommendation

There is an urgent need to write off this fictitious asset from the books.

###### Response

##### 2. BREAKDOWN OF INTERNAL CONTROLS

###### Observation

The staff of your bank colluded to cover up fraud and gross misstatement.

###### Implication

This means that the backbone of the internal control system has been broken and it is difficult to rely on the system for the preparation of the financial statements.

###### Recommendation

There is an urgent need to overhaul the human resource of the bank. There is need for thorough investigation and those found culpable should be relieved of their positions.

Response

Conclusion

Please provide a response and action plan for each weakness identified in the report. This should be inserted in the space provided. Additional sheets could be attached for further explanation that could help us to serve you better. The contents of this letter and your response thereupon will be followed up in future audits.

Thank you.

Truly yours,

Engagement Partner.

### EXAMINER'S REPORT

The question tests candidates understanding of audit risks associated with financial statements.

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

Candidates displayed inadequate preparation, and lack in-depth knowledge of audit risks.

Candidates are advised to read the Institute's study text thoroughly before attempting the examination.

### MARKING GUIDE

	POINTS TO MENTION	Marks	Marks
4a	Client staff lacked integrity. Internal evidence cannot be relied upon. The opening balances cannot be relied upon.	2 marks each for any 2 points	
	SUB TOTAL		4
4b	The firm should: Be cautious in dealings with staff. Use external evidence to corroborate. Obtain management representation letter. Inform Insurance Broker Client should: Conduct an investigation into the fictitious loans. Change or modify the accounting package New set of staff to handle the general ledger. Do complete overhaul of credit & marketing	1 mark each for any 3 points      1 mark each for any 5	

	department.	points	
	Do a 100 percent review work on the loans and advances.		
	Stop inter-company loans or loan syndication.		
	Obtain further information from culpable staff		
	SUB TOTAL		8
4c	Letter format	0.5	
	Proper Introduction	0.25	
	First observation, Implications, recommendations	3	
	Second observation, Implications, recommendations	3	
		0.5	
	Space for management response	0.5	
	Conclusion	0.25	
	Signed by Partner		
	SUB TOTAL		<u>8</u>
	TOTAL		<u>20</u>

## SOLUTION 5

- (a) ISA 501 states that the auditor shall design and perform audit procedures in order to identify litigation and claims involving the entity which may give rise to a risk of material misstatements, including:
- i inquiry of management and, where applicable, others within the entity, including in-house legal counsel;
  - ii direct communication with the entity's external legal counsel. The auditor shall do so through a letter of inquiry, prepared by management and sent by the auditor, requesting the entity's external legal counsel to communicate directly with the auditor;
  - iii reviewing minutes of meetings of those charged with governance and correspondence between the entity and its external legal counsel;
  - iv reviewing adequacy of existing litigation provisions;
  - v) review legal expense account; and
  - vi) obtain written representation: The auditor shall request management and, where appropriate, those charged with governance to provide written representations that all known actual or possible litigations and claims whose effects should be considered when preparing the financial statements have been disclosed to the auditor and

accounted for and disclosed in accordance with the applicable financial reporting framework.

- (b) The existing provision of N96million is inadequate since it has not been updated to include the liability arising from the High Court judgment of ₦2.1 billion obtained in current year.

The auditor should consider proposing audit adjustment for an additional ₦2.1 billion to the existing litigation provision based on the following:

There is a past event - the relevant past event for the litigation provision is the event that gives rise to the claim, i.e. the high court judgment.

The adjusted litigation provision as at 31 December 2016 should then be ₦2.196 billion.

- (c) Typical disclosure on litigation in the financial statement is presented below:

“The Bank, in its ordinary course of business, is presently involved in 50 litigation cases as a defendant and 10 cases as a plaintiff. The total amount claimed in the 10 cases instituted by the Bank is estimated at ₦2.7 billion, while the total amount claimed in the 50 cases instituted against the Bank is ₦3.2 billion, for which provisions amounting to ₦2.196 billion have been made.

The Directors are of the opinion that no other significant liability will arise therefrom in excess of the provision made in the financial statements.”

## **EXAMINER'S REPORT**

The question tests candidates' understanding of the specific consideration of litigation provision of ISA 501- Audit Evidence.

About 65% of the candidates' attempted the question but performance was poor.

The commonest pitfall of the candidates was that they applied general knowledge rather than being specific. They were not familiar with ISA 501 requirement.

The extensive use of the Institute's study text is recommended for improved performance.

## MARKING GUIDE

	POINTS TO MENTION	MARKS
5a.	1 $\frac{1}{4}$ marks each for any four points	5
b.	- Existing provision of <del>₦96m</del> not adequate	2
	- Consider proposing audit adjustment for an additional <del>₦2.1b</del>	1
	- Relevant past event for the litigation provision re High Court Judgement	1
	- Adjusted litigation provision at 31 December 2016 should be <del>₦2.1966</del>	1
	SUB TOTAL	5
c.	Mentioning of -	
	- 50 Litigation cases	1
	- <del>₦2.7</del> billion in respect of litigation cases	1
	- Total amount of claim to be <del>₦3.2b</del>	1
	- Provision of <del>₦2.196b</del>	$\frac{1}{2}$
	- Directors opinion that no other significant liability will arise	1 $\frac{1}{2}$
	SUB TOTAL	<u>5</u>
	<b>TOTAL</b>	<b><u>15</u></b>

## SOLUTION 6

- a. The general forms of modifications available to the auditors in drafting their report as stated in ISA 705 are as follows:

### **Qualified Opinion**

This is issued when financial statements are materially misstated, but in the auditor's judgment, the effect of the misstatement is not considered pervasive.

OR

Issued when the auditor is unable to obtain sufficient appropriate audit evidence (limitation scope), but in the auditor's judgment, the possible effect of the misstatement is not considered pervasive.

### **Adverse opinion**

Issued when financial statements are materially misstated, and in the auditor's judgment, the effect of the misstatement is pervasive on these financial statements.

### **Disclaimer of opinion**

Issued when the auditor is unable to obtain sufficient appropriate audit evidence and the possible effect of the misstatement is material and pervasive on the financial statements.

- b **Basis for modified opinion**

"As explained in note xx an amount of ₦50,000,000 has been credited to the Income Statement and included as exceptional items. International Financial Reporting Standards require that such items should be recognised and credited to Income Statement over the expected useful economic lives of the related plant and machinery. The effect of the charge would be to make operating profit ₦<sub>yy</sub> instead of ₦<sub>zz</sub> with a corresponding change in shareholders' funds".

- c The directors are solely responsible for the Directors' report and the auditors have no general responsibility for it.  
However, they are required to consider whether the information in the Directors' report is consistent with the information in the financial statements and information they are aware of in the course of their audit.

If they are of the opinion that the valuation of land and building are inconsistent with any information given in the accounts then, they must get the directors to change that or say so in their report.

This is unlikely, but any information at all in the Directors' report which seems to the auditor as dubious would put the auditor on enquiry.

## EXAMINER'S REPORT

The question tests candidates' knowledge on Audit Report on financial statements.

About 45% of the candidates attempted the question, but performance was poor.

The commonest pitfall of the candidates was lack of practical knowledge to be applied in answering the question.

Constant use of the Institute's study text is recommended. Also reading of published financial statements to get the feel of practical approach is recommended.

## MARKING GUIDE

	POINTS TO MENTION	Marks	Marks
a.	Discussing/indicating when each form is required	2 marks each for any three points	6
b.	<ul style="list-style-type: none"> <li>- The draft of the modification section</li> <li>- Reference to IFRS</li> <li>- Reference to appropriation of plant and machinery</li> <li>- Inclusion of effect on profit</li> <li>- Description of the error and indication of right treatment</li> </ul>	( 1 mark each for any of the five (5) points)	<u>5</u>
c.	<ul style="list-style-type: none"> <li>- Disclosure of directors' responsibility</li> <li>- Auditors' duty to ensure information is consistent with financial statements and/or information already known to the auditor in the cause of the audit.</li> <li>- Stating that directors are responsible</li> <li>- Indicating the action the auditor will take, if there is inconsistency</li> </ul>	1 mark 1 mark <u>2 marks</u>	<u>4</u>
	Total		<u><u>15</u></u>

## SOLUTION 7

- a) Although on-line systems are usually efficient and effective for the users, they create additional problems for the auditor who needs to assess the effectiveness of the system's controls. There are two categories of system controls in an on-line system. These are general and application controls.

General controls in an on-line system could include the following:

- i. **Access Control** - There must be effective controls over access to the system and its file. This is because in online systems, transactions are processed as soon as they are inputted;
- ii. **Software Control** - There should be controls written into the system software to prevent or detect unauthorised changes to programs;
- iii. **Transaction Log Control** - Transaction logs should be used to create an "audit trail". The computer program should be written in such a way as to generate the audit trail for any transaction on request; and
- iv. **Internet Access Control** - Firewalls should be used for systems that have access to the internet.

Application controls in an on-line system could include the following:

- i) **Pre-processing authorisation Control** - such as logging on to the system, and the user's names and passwords;
  - ii) **Data Validation Control**  
Data validation checks is the software to check the completeness and accuracy of processing such as checking that a product code has been entered with the correct number of digits; and
  - iii) **Balancing Control** "Balancing"- checking control totals of data submitted from remote terminals before and after processing.
- b. Electronic Data Interchange (EDI) systems can improve the operational efficiency of an entity, but they may generate the following problems for the auditor who has to access the efficiency of the system controls:
- i) The lack of proper audit trail;
  - ii) An increased level of dependency on the computer systems of the organization and possibly the computer systems of other entities. Any

- failure or control weakness in one computer system may have an impact on the computer system that is being audited;
- iii) There may be a risk of loss or corruption of data in the process of transmission; and
  - iv) There will be security risk in the transmission of data.

Auditors should expect to find effective controls in place to minimise the risk inherent in EDI systems. Typically, controls will cover such matters as:

- i) Control over transmission of data such as the encryption of data before transmission, acknowledgement systems, and the use of authentication codes for senders of data;
- ii) Monitoring and checking of output;
- iii) Virus protection systems; and
- iv) Contingency plans and back-up arrangements.

## **EXAMINER'S REPORT**

The question tests candidates' knowledge of on-line real-time business audit. About 90% of the candidates attempted the question but performance was poor.

The commonest pitfall of the candidates was that their solutions tend towards controls in a Non-Electronic Data Processing.

Candidates are enjoined to read the question and interpret it correctly before attempting it. Also, the Institute's study text should be used by the candidates in preparing for future examinations.

## **Marking Guide**

a	Any 5 (five) controls, 1 mark each	5
b	Points on operational efficiency -1¼ mark each for four	5
	Any 4 (four) controls, 1¼ mark each	<u>5</u>
		<u>15</u>

# THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

## PROFESSIONAL LEVEL EXAMINATION – NOVEMBER 2017

### CASE STUDY

Time Allowed: 4 hours (including reading time)

**INSTRUCTION:** YOU ARE TO USE THE CASE STUDY ANSWER BOOKLET FOR THIS PAPER

#### TOSTOL DRINKS NIGERIA LIMITED

##### Requirement

You are Dave Chukwurah, a recently qualified Chartered Accountant and a Junior Consultant in the firm of Dauda, Eporum, Bala & Co, a firm of consulting accountants and tax practitioners. One of your Senior Partners, Jaja Eporum, has sent you an email (Exhibit 1) requiring you to prepare a report to be submitted to Joel Ramsey, Chief Executive Officer (CEO) of Tostol Drinks Nigeria Limited, one of your clients. Tostol Drinks Nigeria Limited (TDNL) has requested from your firm an advice in respect of the company's proposed strategic plan aimed at increasing the company's shareholders' value while at the same time satisfy the company's other stakeholders.

The following time allocation is suggested:

Reading	1 hour
Planning and calculations	1 hour
Drafting report	<u>2 hours</u>
	<u>4 hours</u>

## **LISTS OF EXHIBITS**

<b>EXHIBIT</b>	<b>DESCRIPTION</b>
1.	Email from Jaja Eporum, a Senior Partner in Dauda, Eporum, Bala & Co, to you Dave Chukwurah, a Junior Consultant.
2.	Email from Joel Ramsey, CEO of Tostol Drinks Nigeria Limited, one of your clients, to Jaja Eporum.
3.	Information on TDNL's Business Model and current strategic plan.
4.	Five years summarised financial statements of Tostol Drinks Nigeria Limited.
5.	Additional information on TDNL's financial statements.
6.	Five years summarised financial statements of Brilliant Bottles Nigeria Limited (BBNL).
7.	Additional information on BBNL's financial statements.
8.	Additional information on the proposed acquisition of Brilliant Bottles Nigeria Limited.

**Dauda, Eporum, Bala & Co  
Chartered Accountants**

***Email***

**From:** Jaja Eporum – Senior Partner

**To:** Dave Chukwurah – Junior Consultant

**Re:** Tostol Drinks Nigeria Limited

**Date:** April 11, 2017

Further to my discussions with you this morning in my office in respect of our above named client, I will like you to go through the attachments to this email (Exhibit 2 – 7) and prepare a report as requested by Joel Ramsey, the Chief Executive Officer (CEO) of Tostol Drinks Nigeria Limited (TDNL) for my review.

As I made it clear to you, the board of TDNL is concluding the company's strategic plan for the next five years with a central focus on "increase in shareholders' value". The board has decided to carry out a backward integration by acquiring all the shares of Brilliant Bottles Nigeria Limited (BBNL). Therefore, the board has asked our firm to carry out a financial due diligence on the financial statements of BBNL together with additional notes provided. We are also required to recommend a range of prices that TDNL can offer for the acquisition.

Further, as part of the input to the strategic plan, TDNL's board will want us to review the company's last five years financial statements with a focus on shareholders' value analysis using Economic Value Added (EVA) approach to determine how the company's shareholders' value has grown over the years to enable the board set target for the strategic plan period. The CEO of TDNL has asked us to assume a weighted average cost of capital of 15% and has availed us with the company's financial statements for the last five years with some additional information.

**Required:**

Using the attached exhibits, prepare a draft report to Jaja Eporum, your Senior Partner, for his review before forwarding same to TDNL's board. Your report should include:

1. Appraisal of TDNL's performance in the past five years based on the company's business model and this should include the additional value added to the shareholders of TDNL using EVA approach; and
2. A report on the financial due diligence of BBNL to determine its future financial performance, and whether its acquisition will result in increase in TDNL's shareholders value. You are also to recommend a range of prices that TDNL should offer to the shareholders of BBNL, based on the share valuation models agreed with the board of BBNL.

**TOSTOL DRINKS NIGERIA LIMITED**  
***Email***

**From:** Joel Ramsey – CEO, Tostol Drinks Nigeria Limited  
**To:** Jaja Eporum – Senior Partner, Dauda, Eporum, Bala & Co  
**Re:** TDNL's Strategic Plan 2018 – 2022  
**Date:** April 10 2017

Dear Jaja,

Further to my telephone conversation with you this morning, I write to confirm our Board's approval for your firm to assist us in carrying out a financial due diligence for the acquisition of BBNL which we hope to conclude before the last quarter of the year and also appraise TDNL performance.

Your firm is required to make input into our strategic plan as follows:

1. Carry out an appraisal of our financial performance in the last five years, taking into consideration our business model. We need to know how we are faring in respect of each component of our business model. You are also to determine the value that has been added to our shareholders in each of the past five years to enable us set targets for the strategic plan period. You are to use economic value added (EVA) model to determine value added in those years. I attach herewith our summarised financial statements for 2012 to 2016 together with some additional information. I also attach a summary of our business model which is at the heart of our business and also determines our key performance indicators (KPIs); and
2. In respect of our plan to acquire all the shares of Brilliant Bottles Nigeria Limited, as a step towards backward integration during the plan period, recommend whether the acquisition will result in net value added to our present performance. Enclosed herewith are the company's summarised five years financial statements with some additional information to enable you carry out a financial due diligence on the company. Your recommendation should also include the range of prices we can offer to the shareholders of the company.

I hope I can count on you, as usual, to get the report out on time.

**Joel Ramsey**  
CEO, Tostol Drinks Nigeria Limited

**TOSTOL DRINKS NIGERIA LIMITED**

**BUSINESS MODEL AND STRATEGIC PLAN**

Our vision is “to be a business organisation managed responsibly, sustainably and with passion for creating value for our shareholders, employees, customers, consumers and the communities where we do business”.

Our business model is developed along this vision. Our business model therefore, is to manage our business responsibly, sustainably and delivering superior value to our shareholders by satisfying our other stakeholders. We believe this will bring opportunity for superior business growth through our presence in emerging markets coupled with expanding margins to those achieved in the previous years.

We recognise that creating shared value for shareholders, employees, customers, consumers and the communities is critical to our long term success. We have therefore incorporated responsibility and sustainability into all aspects of our business management, making long term investments that are aimed at building value over time.

To maintain our consumers in the face of increasing campaign for healthy living, we have decided to focus on healthy, active lifestyles, while still maintaining our old range of products, thus significantly broadened our product portfolio by offering consumers a choice of soft drinks that contains zero sugar and with low calories. We are also providing more information on our products’ labels to help consumers make informed choices between our wide range of product offerings.

Our business model is at the heart of everything we do. It defines the activities we engage in, the relationships we depend on and the outputs and outcomes we aim to achieve in order to create value for all our stakeholders in the short, medium and long term. This is being achieved through constant value creation.

## VALUE CREATION

We create value for our stakeholders and our business by carefully managing the use of and return on all capitals or inputs. Also, additional values created are being shared among the various stakeholders regularly.

## VALUE SHARING

By running a profitable, sustainable and responsible business, we are yearly creating value which is partly retained in the business, making it stronger. However, the larger part is shared among all our stakeholders as follows:

**Shareholders:** Through the process of managing all inputs to our business well, we create value for our shareholders through dividend payments and increase in our share value.

**Suppliers:** As we create value, we support businesses throughout our value chain, and support job creation beyond our business.

**Employees:** By recognising, developing and rewarding talents of our people, we secure a skilled and motivated workforce that is remunerated well above the industry average.

**Customers:** We strive to produce products' efficiently and responsibly thus building value for our customers' businesses.

**Consumers:** We constantly rejuvenate our products offerings to ensure that our consumers have a wide range of products to select from while at the same time making sure they get value for every Naira spent.

**Communities:** When our business is profitable, sustainable and responsible, the communities where we operate benefit through job creation, payment of tax to the governments, useful products and services, and minimisation of environmental impact. We also consistently invest 3% of our pre-tax profits on programmes to support communities where our business operates.

All these are aimed at continuous achievement of sustainable growth through improvement in sales value, market share and profitability.

Exhibit 4

TOSTOL DRINKS NIGERIA LIMITED

SUMMARISED FINANCIAL STATEMENTS 2012 – 2016

Income Statements

Years	2012	2013	2014	2015	2016
	N'm	N'm	N'm	N'm	N'm
Revenue	979.6	1,167.1	1,330.9	1,433.3	1,594.6
Cost of sales	<u>(573.7)</u>	<u>(665.4)</u>	<u>(763.0)</u>	<u>(801.0)</u>	<u>(839.2)</u>
Gross profit	405.9	501.7	567.9	632.3	755.4
Marketing & distribution expenses	(145.3)	(188.7)	(209.3)	(216.9)	(259.0)
Administrative expenses	(45.5)	(53.1)	(60.2)	(73.4)	(76.9)
Finance expenses	<u>(3.3)</u>	<u>(9.4)</u>	<u>(21.5)</u>	<u>(47.5)</u>	<u>(44.3)</u>
Profit before income tax	211.8	250.5	276.9	294.5	375.2
Income tax expense	<u>(17.0)</u>	<u>(39.1)</u>	<u>(37.9)</u>	<u>(22.1)</u>	<u>(55.9)</u>
Profit after tax expense	<u>194.8</u>	<u>211.4</u>	<u>239.0</u>	<u>272.4</u>	<u>319.3</u>

Statement of Financial Position

Years	2012	2013	2014	2015	2016
	N'm	N'm	N'm	N'm	N'm
Assets:					
Property, plant and equipment	550.2	621.6	658.8	675.1	691.5
Current assets:					
Inventories	99.0	87.8	98.5	109.6	108.1
Trade receivables	109.8	134.6	178.8	223.3	244.5
Prepayments	2.6	3.0	3.0	4.0	5.3
Cash and cash equivalents	<u>10.7</u>	<u>38.1</u>	<u>66.5</u>	<u>37.0</u>	<u>129.3</u>
Total current assets	<u>222.1</u>	<u>263.5</u>	<u>346.8</u>	<u>373.9</u>	<u>487.2</u>
Total assets	<u>772.3</u>	<u>885.1</u>	<u>1,005.6</u>	<u>1,049.0</u>	<u>1,178.7</u>
Equity					
Share capital	4.0	4.0	4.0	4.0	4.0
Retained earnings	<u>227.0</u>	<u>278.4</u>	<u>325.4</u>	<u>389.8</u>	<u>489.1</u>
Total equity	<u>231.0</u>	<u>282.4</u>	<u>329.4</u>	<u>393.8</u>	<u>493.1</u>
Liabilities:					
Long term loans	258.7	235.6	264.7	183.9	125.3
Employee benefit	7.2	10.8	18.2	18.3	23.8
	<u>30.7</u>	<u>49.6</u>	<u>60.9</u>	<u>52.7</u>	<u>65.6</u>

Deferred tax liabilities					
<b>Total non – current liabilities</b>	<b><u>296.6</u></b>	<b><u>296.0</u></b>	<b><u>343.8</u></b>	<b><u>254.9</u></b>	<b><u>214.7</u></b>
Bank overdraft	-	49.5	-	12.4	3.1
Current tax liabilities	23.8	23.5	28.0	34.8	50.4
Short term loans	26.6	34.6	9.5	127.3	171.1
Trade and other payables	191.3	195.4	290.7	220.5	240.1
Provisions	<u>3.0</u>	<u>3.7</u>	<u>4.2</u>	<u>5.3</u>	<u>6.2</u>
<b>Total current liabilities</b>	<b><u>244.7</u></b>	<b><u>306.7</u></b>	<b><u>332.4</u></b>	<b><u>400.3</u></b>	<b><u>470.9</u></b>
<b>Total equity and liabilities</b>	<b><u>772.3</u></b>	<b><u>885.1</u></b>	<b><u>1,005.6</u></b>	<b><u>1,049.0</u></b>	<b><u>1,178.7</u></b>

Exhibit 5

**TOSTOL DRINKS NIGERIA LIMITED**  
**ADDITIONAL INFORMATION ON FINANCIAL STATEMENTS, 2012 -2016**

**1. Profit before income tax:**

Profit before income tax is stated after charging:

	2012	2013	2014	2015	2016
	₦'m	₦'m	₦'m	₦'m	₦'m
Depreciation	29.9	39.4	48.9	58.5	59.3
Personnel costs	11.3	13.2	14.5	16.3	18.8

**2. Personnel Information:**

No of staff	2,168	2,179	2,182	2,245	2,356
Retirements/resignations in the year	20	19	28	32	35
Least paid staff	₦1.4m	₦1.6m	₦1.7m	₦1.8m	₦2.0m

**3. Social responsibility report:**

Expenses on community and social services during the year	₦6.0m	₦8.0m	₦8.0m	₦7.5m	₦7.6m
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**4. Dividend declared:**

During the year (per share)	₦20.0	₦24.0	₦26.0	₦27.5	₦28.0
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**5. Authorised and issued share capital:**

Ordinary share capital of 50 Kobo each	8m	8m	8m	8m	8m
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**6. Inventories:**

Inventories comprise:

	₦'m	₦'m	₦'m	₦'m	₦'m
Finished goods	10.2	9.4	9.2	8.5	8.6
Raw materials:					
Concentrates	30.0	25.2	25.0	32.0	31.0
Sugar	16.0	8.5	14.1	15.5	15.0
Components:					
Bottles	40.5	42.3	48.1	50.4	50.5
Crown cocks	2.3	2.4	2.1	3.2	3.0

7. Retained earnings is stated after adjusting for dividend paid during the year. Details of profit after tax and dividend proposed are as follows:

Year	Profit after tax N'm	Proposed dividend N'm	Retained Profit N'm
2011	160.5	144.0	16.5
2012	194.8	160	34.8
2013	211.4	192.0	19.4
2014	239.0	208.0	31.0
2015	272.4	220.0	52.4
2016	319.3	224.0	95.3

Retained earnings as at December 31, 2011 is ₦176.2m. Tax rate of 25% is assumed.

**BRILLIANT BOTTLES NIGERIA LIMITED**  
**SUMMARISED FINANCIAL STATEMENTS 2012 – 2016**

**Income Statements**

Years	2012	2013	2014	2015	2016
	N'm	N'm	N'm	N'm	N'm
Revenue	78.4	82.5	80.6	90.5	101.2
Cost of sales	<u>(36.8)</u>	<u>(41.2)</u>	<u>(39.6)</u>	<u>(42.6)</u>	<u>(46.2)</u>
Gross profit	41.6	41.3	41.0	47.9	55.0
Marketing & distribution expenses	(10.3)	(11.5)	(12.8)	(13.9)	(15.2)
Administrative expenses	(11.2)	(14.8)	(15.1)	(16.2)	(17.0)
Finance expenses	<u>(2.0)</u>	<u>(3.1)</u>	<u>(2.5)</u>	<u>(2.1)</u>	<u>(1.8)</u>
Profit before income tax	18.1	11.9	10.6	15.7	21.0
Income tax expense	<u>(3.8)</u>	<u>(2.9)</u>	<u>(3.6)</u>	<u>(5.8)</u>	<u>(6.8)</u>
<b>Profit after tax expense</b>	<b><u>14.3</u></b>	<b><u>9.0</u></b>	<b><u>7.0</u></b>	<b><u>9.9</u></b>	<b><u>14.2</u></b>

**Statement of Financial Position**

Years	2012	2013	2014	2015	2016
	N'm	N'm	N'm	N'm	N'm
<b>Assets:</b>					
Property, plant and equipment	<u>15.0</u>	<u>13.5</u>	<u>12.0</u>	<u>10.5</u>	<u>9.0</u>
<b>Current assets:</b>					
Inventories	5.0	6.2	6.1	8.9	8.8
Trade receivables	3.0	2.8	3.2	5.1	4.6
Other receivables and prepayment	0.5	0.6	0.9	0.8	0.9
Short term deposit	-	-	5.0	5.0	12.5
Cash and cash equivalents	<u>1.5</u>	<u>1.8</u>	<u>1.6</u>	<u>1.2</u>	<u>1.7</u>
<b>Total current assets</b>	<b><u>10.0</u></b>	<b><u>11.4</u></b>	<b><u>16.8</u></b>	<b><u>21.0</u></b>	<b><u>28.5</u></b>
<b>Total assets</b>	<b><u>25.0</u></b>	<b><u>24.9</u></b>	<b><u>28.8</u></b>	<b><u>31.5</u></b>	<b><u>37.5</u></b>
<b>Equity</b>					
Share capital - 50 kobo each	10.0	10.0	10.0	10.0	10.0
Retained earnings	<u>7.8</u>	<u>8.8</u>	<u>11.1</u>	<u>11.6</u>	<u>15.8</u>
<b>Total equity</b>	<b><u>17.8</u></b>	<b><u>18.8</u></b>	<b><u>21.1</u></b>	<b><u>21.6</u></b>	<b><u>25.8</u></b>
Trade payables	3.2	2.8	3.5	3.6	4.1
Tax liabilities	3.8	2.9	3.6	5.8	6.8
Other payables and accrued expenses	<u>0.2</u>	<u>0.4</u>	<u>0.6</u>	<u>0.5</u>	<u>0.8</u>
<b>Total current liabilities</b>	<b><u>7.2</u></b>	<b><u>6.1</u></b>	<b><u>7.7</u></b>	<b><u>9.9</u></b>	<b><u>11.7</u></b>
<b>Total equity and liabilities</b>	<b><u>25.0</u></b>	<b><u>24.9</u></b>	<b><u>28.8</u></b>	<b><u>31.5</u></b>	<b><u>37.5</u></b>

**BRILLIANT BOTTLES NIGERIAL LIMITED****ADDITIONAL INFORMATION ON THE FINANCIAL STATEMENTS: 2012 – 2016****1. Retained earnings:**

Retained earnings are stated as follows:

<b>Years</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
	<b>₦'000</b>	<b>₦'000</b>	<b>₦'000</b>	<b>₦'000</b>	<b>₦'000</b>	<b>₦'000</b>
Profit after tax	-	14.3	9.0	7.0	9.0	14.2
Dividend paid during the year	-	<u>12.1</u>	<u>8.0</u>	<u>4.7</u>	<u>8.5</u>	<u>10.0</u>
Transfer to retained earnings	-	2.2	1.0	2.3	0.5	4.2
Retained earnings B/F	-	<u>5.6</u>	<u>7.8</u>	<u>8.8</u>	<u>11.1</u>	<u>11.6</u>
Retained earnings C/F	<u>5.6</u>	<u>7.8</u>	<u>8.8</u>	<u>11.1</u>	<u>11.6</u>	<u>15.8</u>

**2. Tax expense:**

Tax expense as calculated is settled on preceding year basis. The company has no outstanding tax liability other than the current year tax liability which is payable the following year. However, the Federal Inland Revenue Service (FIRS) carried out an audit of the company's income tax liabilities from 2011 to 2015 and came up with an additional tax liability of ₦10.5m. The company has objected to this tax liability within the stipulated time but the issue has not been resolved. No provision has been made in the financial statement of 2016 for this liability. It is projected that the final liability will be ₦8.5m.

**3. Personal income tax liability:**

The state government carried out tax audit on the company for 2015 and 2016 personal income tax liabilities. Additional liabilities of ₦1.45m and ₦1.02m have been raised. The company has objected to these liabilities but reconciliation meeting has not been held with the tax authority. Based on the company's tax consultant's assessment, the final liabilities are expected to be ₦0.8m and ₦0.65m for the two years respectively.

**4. Contingent liability:**

Apart from the specific potential liabilities mentioned, the company has no other contingent liability.

**ADDITIONAL INFORMATION ON THE PROPOSED ACQUISITION OF  
BRILLIANT BOTTLES NIGERIAL LIMITED**

**1. Purchase consideration:**

The acquisition will be done through payment of cash. TDNL is not under any obligation whatsoever to absorb any of the existing directors of BBNL.

**2. Valuations:**

From the preliminary discussions with the board of BBNL, the company will accept a valuation of the average of the net assets per share and 5 years profit after tax with a growth rate of 10 percent per annum. The average profit for the last five years is to be taken as the annual maintainable profit.

**3. Fair value of BBNL:**

The fair value of BBNL's property, plant and equipment is agreed to be N15m while all other assets and liabilities are considered to worth their book values.

**4. Benefits of the acquisition to TDNL:**

The following benefits are projected to be accruable from the proposed acquisition:

- a. It is estimated that the current BBNL's plant and machinery will meet TDNL's bottle requirements for the next five years. However, TDNL will make additional investment in plant and machinery of ₦15m to acquire a recycling plant to recycle used bottles in line with TDNL's business model of environmental responsible business practice; and
- b. It is projected that the acquisition will reduce the cost of bottles of TDNL by 25 per cent. The cost of bottles in TDNL's cost of sales is currently 20 per cent.

**5. Appraisal of the investment in BBNL:**

Although the proposed acquisition of BBNL is part of the current strategic plan of TDNL, the directors of TDNL want assurance that this acquisition will result in increase in the company's shareholders' value. The board has therefore agreed to evaluate this acquisition with a cost of capital of 15% as calculated by TDNL's Chief Financial Officer (CFO). The CFO has also provided the following additional information:

- a. The savings from the cost of bottles should be based on the average cost of bottles for the last five years with a growth rate of 12 per cent per annum in the next five years which is the estimated life of BBNL's production plant; and
- b. The residual value of BBNL's production plant is estimated to be ₦1.2m.

# ICAN CASE STUDY 2017

First Marking

<b>DATE</b>		<b>CADIDATE NO.</b>	
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<b>DATE</b>		<b>MARKER NUMBER</b>	
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	<b>Req 1</b>	<b>Req 2</b>	<b>Overall</b>	<b>TOTAL</b>
<b>SA</b>				
<b>CA</b>				
<b>BC</b>				
<b>NC</b>				
<b>V</b>				
<b>Total</b>	<b>8</b>	<b>8</b>	<b>4</b>	<b>20</b>

<b>SUPERVISOR SIGNATURE</b>		<b>CHECKER SIGNATURE</b>	
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Change made?

☐


## REQUIREMENT 1 - TDNL's financial analysis and shareholders' value added.

<p><b>USES DATA AND INFORMATION APPROPRIATELY</b></p> <p><input type="checkbox"/> Uses information provided in Exhibit 1</p> <p><input type="checkbox"/> Uses information provided in Exhibit 2</p> <p><input type="checkbox"/> Uses information in financial statements .</p> <p>Uses information provided in Exhibit 5 - additional information</p> <p>Uses information in exhibit 3 - information on TDNL's business model</p> <div> <div>V</div> <div>NC BC CA SA</div> </div>	<p><b>IDENTIFIES ISSUES AND OPTIONS</b></p> <p><input type="checkbox"/> Identifies that industry comparative data is not provided.</p> <p><input type="checkbox"/> Identifies that TDNL's market share is not provided.</p> <p><input type="checkbox"/> Identifies that the market size of the soft drinks industry is not provided</p> <p><input type="checkbox"/> Identifies that TDNL's position vis -a- vis its competitors in the market is not provided.</p> <p><input type="checkbox"/> Identifies that TDNL's competitive profile is not provided.</p> <div> <div>V</div> <div>NC BC CA SA</div> </div>
<p><b>USES PROFESSIONAL TOOLS AND KNOWLEDGE</b></p> <p><input type="checkbox"/> Calculates profitability ratios</p> <p><input type="checkbox"/> Calculates activity ratios</p> <p><input type="checkbox"/> Prepares trend analysis to determine growth in performance of TDNL</p> <p><input type="checkbox"/> Prepares common size analysis to show trends in the components of the financial statements.</p> <div> <div>V</div> <div>NC BC CA SA</div> </div>	<p><b>APPLIES PROFESSIONAL SCEPTICISM AND ETHICS</b></p> <p><input type="checkbox"/> Recognises that we are not told whether the summarised financial statements is from the audited accounts of TDNL.</p> <p><input type="checkbox"/> Recognises that we cannot determine whether the rate of growth in TDNL's operating performance is due to general increase in the market size or due to TDNL's operational efficiency.</p> <p><input type="checkbox"/> Recognises that we do not have the industry average figure to determine whether TDNL's performance is above the industry average or below it.</p> <p><input type="checkbox"/> Recognises that we do not have the indication on the movement in TDNL's share value.</p> <div> <div>V</div> <div>NC BC CA SA</div> </div>
<p><b>USES ANALYTICAL SKILLS (material points) written report</b></p> <p><input type="checkbox"/> Determines the rate of growth in TDNL's operating performance.</p> <p><input type="checkbox"/> Determines the key performance indicators relevant to the various aspect of TDNL's business model</p> <p><input type="checkbox"/> Understand the concept of economic value added (EVA).</p> <p><input type="checkbox"/> Determines the level of economic value added to TDNL's shareholders from 2012 to 2016.</p> <div> <div>V</div> <div>NC BC CA SA</div> </div>	<p><b>EVALUATIVE SKILLS AND JUDGEMENT</b></p> <p><input type="checkbox"/> Recognises that TDNL's performance is increasing yearly.</p> <p><input type="checkbox"/> Recognises that TDNL has followed its business model by taking care of all the stakeholders.</p> <p><input type="checkbox"/> Recognises that TDNL has a high dividend pay out ratio.</p> <p><input type="checkbox"/> Recognises that as a result of the high dividend payout ratio, the company has to result to long term borrowing to finance its growth.</p> <div> <div>V</div> <div>NC BC CA SA</div> </div>

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## CONCLUSIONS

(Draws distinct conclusions under a heading)

Concludes on the level of growth of shareholders' value

Concludes on the need to manage receivables very well to avoid bad debts and excessive cost of funds.

TDNL should try to pay its supplier as at when due so that they will not lose confidence in the company.

- ☐ Concludes on shareholders' value analysis.

V	NC	BC	CA	SA
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## RECOMMENDATIONS (commercial / relevant)

- ☐ TDNL should continuously seek improvement in operational performance.

- ☐ TDNL should find out what other firms in the industry are doing so as to know how to respond to competition.

- ☐ TDNL should continue with its business model. TDNL should strive to reduce cost of sale as much as possible.

- ☐ If possible, TDNL should reduce its dividend payout ratio to provide funds for further expansion without borrowing.

V	NC	BC	CA	SA
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SA	
CA	
BC	

		NC	
		V	

REQUIREMENT 2 -Financial Due Diligence of BBNL	
<div><div><div>USES DATA AND INFORMATION APPROPRIATELY</div><div><div><div><div><input type="checkbox"/></div></div>Uses BBNL's financial statements - Exhibit 6<div><div>- Income Statement</div><div>- Statement of financial position</div></div></div><div><div><div><input type="checkbox"/></div></div>Uses additional information on BBNL's financial statement- Exhibit 7.</div><div><div><div><input type="checkbox"/></div></div>Uses information in email provided in Exhibit 1</div><div><div><div><input type="checkbox"/></div></div>Uses information in email provided in Exhibit 2</div><div><div><div><input type="checkbox"/></div></div>Uses information provided in additional points on the proposed acquisition - Exhibit 8</div></div><div><div><div><div>V</div></div><div><div>NC</div><div>BC</div><div>CA</div><div>SA</div></div></div></div><div><div>USES PROFESSIONAL TOOLS AND KNOWLEDGE (written into report)</div><div><div><div><input type="checkbox"/></div></div>Performs appropriate calculation to determine BBNL's net assets</div><div><div><div><input type="checkbox"/></div></div>Performs appropriate calculation to determine the value of BBNL based on five years maintainable earnings.</div><div><div><div><input type="checkbox"/></div></div>Prepares expected cash flow from the acquisition by TDNL.</div><div><div><div><input type="checkbox"/></div></div>Recognises the treatment of potential liabilities of the tax audits.</div><div><div><div><input type="checkbox"/></div></div>Calculates the savings expected from the cost of bottles on TDNL's operations.</div></div><div><div><div><div>V</div></div><div><div>NC</div><div>BC</div><div>CA</div><div>SA</div></div></div></div><div><div>USESG ANALYTICAL SKILLS (material points)</div><div><div><div><input type="checkbox"/></div></div>Calculates appropriate ratios.</div><div><div><div><input type="checkbox"/></div></div>Prepares trends analysis of BBNL's financials.</div><div><div><div><input type="checkbox"/></div></div>Prepares common size analysis of BBNL's financials.</div><div><div><div><input type="checkbox"/></div></div>Calculates the net present value of cash flows to determine whether the acquisition is worthwhile.</div></div></div></div>	<div><div><div>IDENTIFIES ISSUES AND OPTIONS</div><div><div><div><input type="checkbox"/></div></div>Need to consider the state of BBNL's manufacturing plants.</div><div><div><div><input type="checkbox"/></div></div>Need to consider how to integrate BBNL's staff into the culture of TDNL.</div><div><div><div><input type="checkbox"/></div></div>Need to consider trade unions issues.</div><div><div><div><input type="checkbox"/></div></div>Need to consider how to raise fund required to pay off the shareholders of BBNL.</div><div><div><div><input type="checkbox"/></div></div>Need to consider non-financial factors</div></div><div><div><div><div>V</div></div><div><div>NC</div><div>BC</div><div>CA</div><div>SA</div></div></div></div><div><div>APPLYING PROFESSIONAL SCEPTICISM AND ETHICS</div><div><div><div><input type="checkbox"/></div></div>Considers whether the summarised financial statement is from the audited accounts of BBNL</div><div><div><div><input type="checkbox"/></div></div>Considers the correctness of the estimated tax payable on the two tax audits.</div><div><div><div><input type="checkbox"/></div></div>Considers the maintenance culture of BBNL on its manufacturing plant.</div><div><div><div><input type="checkbox"/></div></div>Ensures that other analysis &amp; evaluation are considered</div><div><div><div><input type="checkbox"/></div></div>Considers whether all the shareholders of BBNL will agree to the acquisition.</div><div><div><div><input type="checkbox"/></div></div>Considers the correctness of the cost of capital to be used for the appraisal and other estimates</div></div><div><div><div><div>V</div></div><div><div>NC</div><div>BC</div><div>CA</div><div>SA</div></div></div></div><div><div>EVALUATIVE SKILLS AND JUDGEMENT (uses analytical headings)</div><div><div><div><input type="checkbox"/></div></div>Considers the costs required to finalise the acquisition.</div><div><div><div><input type="checkbox"/></div></div>Considers use of other appraisal methods</div><div><div><div><input type="checkbox"/></div></div>Questions use of cost of capital - could be higher? lower? how derived?</div><div><div><div><input type="checkbox"/></div></div>Considers likely savings in BBNL's operating costs because of the acquisition.</div><div><div><div><input type="checkbox"/></div></div>Considers the response of competitors to this acquisition.</div></div></div>

<b>V</b>	NC	BC	CA	SA
<b>V</b>	NC	BC	CA	SA

<p><b>CONCLUSIONS</b> (Draws distinct conclusions under a heading)</p> <p><input type="checkbox"/> Concludes on net assets value of BBNL.</p> <p><input type="checkbox"/> Concludes range of prices to be offered to the shareholders of BBNL.</p> <p><input type="checkbox"/> Concludes on other financial factors not considered</p> <p><input type="checkbox"/> Concludes on other non-financial factors</p> <p><input type="checkbox"/> Concludes on whether the acquisition will add value to the shareholders of TDNL.</p> <table border="1" style="width: 100%; margin-top: 10px;"> <tr> <td><b>V</b></td> <td>NC</td> <td>BC</td> <td>CA</td> <td>SA</td> </tr> </table> <p><b>RECOMMENDATIONS (commercial / relevant)</b></p> <p><input type="checkbox"/> Recommends the range of prices to be offered for BBNs Shares.</p> <p><input type="checkbox"/> TDNL should consider the accuracy of all the estimates used.</p> <p><input type="checkbox"/> Determines and recommends whether to go on with the acquisition based on the appraisal.</p> <p><input type="checkbox"/> TDNL should determine the cost involved in the acquisition so as to consider it as part of the cash flow in the appraisal pricess.</p> <p><input type="checkbox"/> The acquisition of BBNL will increase the shareholders' valu so TDNL so TDNL should proceed.</p> <table border="1" style="width: 100%; margin-top: 10px;"> <tr> <td><b>V</b></td> <td>NC</td> <td>BC</td> <td>CA</td> <td>SA</td> </tr> </table>	<b>V</b>	NC	BC	CA	SA	<b>V</b>	NC	BC	CA	SA	<table border="1" style="width: 100%; margin-top: 20px;"> <tr><td>SA</td><td></td></tr> <tr><td>CA</td><td></td></tr> <tr><td>BC</td><td></td></tr> <tr><td>NC</td><td></td></tr> <tr><td>V</td><td></td></tr> <tr><td><b>Total</b></td><td><b>8</b></td></tr> </table>	SA		CA		BC		NC		V		<b>Total</b>	<b>8</b>
<b>V</b>	NC	BC	CA	SA																			
<b>V</b>	NC	BC	CA	SA																			
SA																							
CA																							
BC																							
NC																							
V																							
<b>Total</b>	<b>8</b>																						

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<b>Appendices</b>	<b>Main Report</b>																														
<p><b>Appendices R1: Content and style</b></p> <p><input type="checkbox"/> Shows TDNL financial ratios.</p> <p><input type="checkbox"/> Shows the TDNL's trend analysis</p> <p><input type="checkbox"/> Shows TDNL's common size financial statements.</p> <p><input type="checkbox"/> Shows the economic value added for each year.</p> <div style="display: flex; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 10px;"><b>V</b></div> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20%;">NC</td> <td style="width: 20%;">BC</td> <td style="width: 20%;">CA</td> <td style="width: 20%;">SA</td> </tr> </table> </div> <p><b>Appendices R2: Content and</b></p> <p><input type="checkbox"/> Shows the valuation of BBNL based on net assets.</p> <p><input type="checkbox"/> Shows the valuation of BBNL based on 5 years maintainable earnings.</p> <p><input type="checkbox"/> Shows the range of prices to be offered to BBNL's shareholders.</p> <p><input type="checkbox"/> Shows the net present value calculations.</p> <p><input type="checkbox"/> Shows the financial ratios of BBNL.</p> <div style="display: flex; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 10px;"><b>V</b></div> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20%;">NC</td> <td style="width: 20%;">BC</td> <td style="width: 20%;">CA</td> <td style="width: 20%;">SA</td> </tr> </table> </div>	NC	BC	CA	SA	NC	BC	CA	SA	<p><b>Report: Structure</b></p> <p><input type="checkbox"/> Sufficient appropriate headings</p> <p><input type="checkbox"/> Appropriate use of paragraphs / sentences</p> <p><input type="checkbox"/> Legible</p> <p><input type="checkbox"/> Correctly numbered pages</p> <div style="display: flex; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 10px;"><b>V</b></div> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20%;">NC</td> <td style="width: 20%;">BC</td> <td style="width: 20%;">CA</td> <td style="width: 20%;">SA</td> </tr> </table> </div> <p><b>Report: Style and language</b></p> <p><input type="checkbox"/> Relevant disclaimer (external report)</p> <p><input type="checkbox"/> Suitable language for the board</p> <p><input type="checkbox"/> Tactful / ethical comments</p> <p><input type="checkbox"/> Acceptable spelling and punctuation</p> <div style="display: flex; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 10px;"><b>V</b></div> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20%;">NC</td> <td style="width: 20%;">BC</td> <td style="width: 20%;">CA</td> <td style="width: 20%;">SA</td> </tr> </table> </div> <table border="1" style="border-collapse: collapse; margin-top: 10px; width: 100%;"> <tr><td style="width: 20%;">CC</td><td></td></tr> <tr><td>SC</td><td></td></tr> <tr><td>IC</td><td></td></tr> <tr><td>ID</td><td></td></tr> <tr><td>NA</td><td></td></tr> <tr><td>Total</td><td></td></tr> <tr><td> </td><td></td></tr> </table>	NC	BC	CA	SA	NC	BC	CA	SA	CC		SC		IC		ID		NA		Total			
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**Tostol Drinks Nigeria Limited**  
**Trend Analysis - 2012 - 2016**  
**Income Statement**  
**YEARS**

Income Statement YEARS	2013					2014					2015					2016				
	2012 N'm	2013 N'm		CHANGE N'm	%	2014 N'm	CHANGE N'm	%	2015 N'm	CHANGE N'm	%	2016 N'm	CHANGE N'm	%						
Revenue	979.6	1,167.1	-	187.5	19.1	1330.9	163.8	14.0	1433.3	102.4	7.7	1594.6	161.3	11.3						
Cost of sales	-	573.7	-	665.4	16.0	-763	(97.6)	14.7	-801.0	-38.0	5.0	-839.2	-38.2	4.8						
Gross Profit	405.9	501.7	-	95.8	23.6	567.9	66.2	13.2	632.3	64.4	11.3	755.4	123.1	19.5						

Marketing & Distribution expenses	-	145.3	-	188.7	43.4	-	29.9	-209.3	(20.6)	10.9	-216.9	-7.6	3.6	-259	-42.1	19.4
Administrative expenses	-	45.5	-	53.1	7.6	-	16.7	-60.2	(7.1)	13.4	-73.4	-13.2	21.9	-76.9	-42.1	57.4
Finance expenses	-	3.3	-	9.4	6.1	-	184.8	-21.5	(12.1)	128.7	-47.5	-26.0	120.9	-44.3	-84.2	177.3
Profit before income tax		211.8	250.5	-	38.7	18.3	-	276.9	26.4	10.5	294.5	17.6	6.4	375.2	-126.3	-42.9
Income tax expenses	-	17.0	-	39.1	22.1	-	130.0	-37.9	1.2	-3.1	-22.1	15.8	-41.7	-55.9	-33.8	152.9
Profit after income tax expenses		194.8	211.4	-	16.6	-	8.5	239.0	27.6	13.1	272.4	33.4	14.0	319.3	46.9	17.2

**Statement of Financial Position**

	2012 N'm	2013 N'm	CHANGE N'm	%	2014 N'm	CHANGE N'm	%	2015 N'm	CHANGE N'm	%	2016 N'm	CHANGE N'm	%	
Assets:														
Property, plant and equipment	550.2	622	71	13.0	658.8	37	6.0	675.1	16.3	2.5	691.5	16.4	2.4	
Current assets:														
Inventories	99	87.8	-	11	(11.3)	98.5	11	12.2	109.6	11.1	11.3	108.1	-1.5	-1.4
Trade receivables	109.8	134.6	25	22.6	178.8	44	32.8	223.3	44.5	24.9	244.5	21.2	9.5	
Prepayments	2.6	3	0	15.4	3	-	-	4	1	33.3	5.3	1.3	32.5	
Cash and cash equivalents	10.7	38.1	27	256.1	66.5	28	74.5	37	-29.5	-44.4	129.3	92.3	249.5	
Total current assets	222.1	263.5	41	18.6	346.8	83	31.6	373.9	27.1	7.8	487.2	113.3	30.3	
Total assets	772.3	885.1	113	14.6	1005.6	121	13.6	1049	43.4	4.3	1178.7	129.7	12.4	
Equity:														
Share capital	4	4	0	-	4	0	-	4	0	-	4	0	-	
Retained earnings	227	278.4	51.4	22.6	325.4	47	16.9	389.8	64.4	19.8	489.1	99.3	25.5	

Total equity	231	282.4	51.4	22.3	329.4	47	16.6	393.8	64.4	19.6	493.1	99.3	25.2
									0				
Liabilities:									0				
Long term loans	258.7	235.6	-23.1	- 8.9	264.7	29.1	12.4	183.9	-80.8	- 30.5	125.3	-58.6	- 31.9
Employee benefir	7.2	10.8	3.6	50.0	18.2	7.4	68.5	18.3	0.1	0.5	23.8	5.5	30.1
Deferred tax liabilities	30.7	49.6	18.9	61.6	60.9	11.3	22.8	52.7	-8.2	-	13.5	65.6	12.9
				-									-
Total non - current liabilities	296.6	296	-0.6	0.2	343.8	47.8	16.1	254.9	-88.9	-	25.9	214.7	-40.2
Bank overdraft	0	49.5	49.5		0	-49.5	- 100.0	12.4	12.4		3.1	-9.3	-75.0
Short term loans	23.8	23.5	-0.3	- 1.3	28	4.5	19.1	34.8	6.8	24.3	50.4	15.6	44.8
Trade and other payables	26.6	34.6	8	30.1	9.5	-25.1	72.5	127.3	117.8	1,240.0	171.1	43.8	34.4
Provisions	191.3	195.4	4.1	2.1	290.7	95.3	48.8	220.5	-70.2	-	24.1	240.1	19.6
												8.9	
Total current liabilities	3	3.7	0.7	23.3	4.2	0.5	13.5	5.3	1.1	26.2	6.2	0.9	17.0
Total equity and liabilities	244.7	306.7	62	25.3	332.4	25.7	8.4	400.3	67.9	20.4	470.9	70.6	17.6
	<b>772.3</b>	<b>885.1</b>	<b>112.8</b>	<b>14.6</b>	<b>1005.6</b>	<b>120.5</b>	<b>13.6</b>	<b>1049</b>	<b>43.4</b>	<b>4.3</b>	<b>1178.7</b>	<b>129.7</b>	<b>12.4</b>

**Tostol drinks Nigeria Limited**  
**Common Size Analysis 2012 – 2016**  
**Income Statement**

	2012	2013	2014	2015	2016
Revenue	100.0	100.0	100.0	100.0	100.0
Cost of sales	- 58.6	- 57.0	- 57.3	- 55.9	- 52.6
Gross Profit	41.4	43.0	42.7	44.1	47.4
	-	-	-	-	-
Marketing & Distribution expenses	- 14.8	- 16.2	- 15.7	- 15.1	- 16.2
Administrative expenses	- 4.6	- 4.5	- 4.5	- 5.1	- 4.8
Finance expenses	- 0.3	- 0.8	- 1.6	- 3.3	- 2.8
Profit before income tax	21.6	21.5	20.8	20.5	23.5
Income tax expenses	- 1.7	- 3.4	- 2.8	- 1.5	- 3.5
Profit after income tax expenses	19.9	18.1	18.0	19.0	20.0

**Statement of Financial Position**

	2012	2013	2014	2015	2016
<b>Assets:</b>					
Property, plant and equipment	71.2	70.2	65.5	64.4	58.7
Current assets:					
Inventories	12.8	9.9	9.8	10.4	9.2
Trade receivables	14.2	15.2	17.8	21.3	20.7

Prepayments	0.3	0.3	0.3	0.4	0.4
Cash and cash equivalents	1.4	4.3	6.6	3.5	11.0
Total current assets	<b>28.8</b>	<b>29.8</b>	<b>34.5</b>	<b>35.6</b>	<b>41.3</b>
Total assets	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Equity:					
Share capital	0.5	0.5	0.4	0.4	0.3
Retained earnings	29.4	31.5	32.4	37.2	41.5
Total equity	<b>29.9</b>	<b>31.9</b>	<b>32.8</b>	<b>37.5</b>	<b>41.8</b>
Liabilities:					
Long term loans	33.5	26.6	26.3	17.5	10.6
Employee benefir	0.9	1.2	1.8	1.7	2.0
Deferred tax liabilities	4.0	5.6	6.1	5.0	5.6
Total non - current liabilities	<b>38.4</b>	<b>33.4</b>	<b>34.2</b>	<b>24.3</b>	<b>18.2</b>
Bank overdraft	-	5.6	-	1.2	0.3
Short term loans	3.1	2.7	2.8	3.3	4.3
Trade and other payables	3.4	3.9	0.9	12.1	14.5
Provisions	24.8	22.1	28.9	21.0	20.4
Total current liabilities	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.5</b>	<b>0.5</b>
Total equity and liabilities	<b>31.7</b>	<b>34.7</b>	<b>33.1</b>	<b>38.2</b>	<b>40.0</b>
	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

<b>RATIOS ANALYSIS</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>PROFITABILITY</b>					
Gross profit margin	405.9/979.6% 41.44%	501.7/1167.1% 43.00%	567.9/1330.8% 42.70%	632.3/1433.3% 44.10%	755.4/1594.6% 47.40%
Net profit margin	211.8/979.1% 21.60%	250.5/1167.1% 21.50%	276.9/1330.8% 20.80%	294.5/1433.3% 20.50%	375.2/1594.6% 23.53%
Returns on total assets	211.8/772.3% 27.40%	250.5/885.1% 28.30%	276.9/1005.6% 27.50%	294.5/1049.0% 28.00%	375.2/1178.7% 31.80%
Returns on capital employed (ROCE)	215.1/527.6% 40.80%	259.9/578.4% 44.90%	298.4/673.2% 44.40%	342.0/648.7% 52.70%	419.5/707.8% 59.30%
Returns on equity	194.8/231.0% 84.30%	211.4/282.4% 74.90%	239.0/329.4% 72.60%	272.4/393.8% 69.20%	319.3/493.1% 64.80%
<b>LIQUIDITY</b>					
Current ratio	222.1/244.7 0.9:1.0	263.5/306.7 0.9:1.0	346.8/332.4 1.0:1.0	373.9/400.3 0.9:1.0	487.2/470.9 1.0:1.0
Quick ratio	123.1/244.7 0.5:1.0	175.7/306.7 0.6:1.0	248.3/332.4 0.7:1.0	263.3/400.3 0.7:1.0	129.3/470.9 0.8:1.0
cash ratio	10.7/244.7 00:01.0	38.1/306.7 0.1:1.0	55.5/332.4 0.2:1.0	37.0/400.3 0.1:1.0	129.3/470.9 0.3:1.0
<b>ACTIVITY</b>					
Net assets turnover	979.6/527.6 1.9	1167.1/578.4 2	1330.9/673.2 2	1433.3/648.7 2.2	1594.6/707.8 2.3
Fixed assets turnover	979.6/550.2 1.8	1167.1/621.6 1.9	1330.9/658.8 2	1433.3/675.1 2.1	1594.6/691.5 2.3
Total assets turnover	979.6/772.3 1.3	1167.1/885.1 1.3	1330.9/1005.6 1.3	1433.3/1049.0 1.4	1594.6/1178.7 1.4
Inventory turnover	573.7/99 5.8	665.4/93.4 7.1	763.0/93.2 8.2	801.0/104.1 7.7	839.2/108.9 7.7
Average days inventory	365/5.8 63days	365/7.1 51days	365/8.2 43days	365/7.7 47days	365/7.7 47days
Receivable turnover	979.6/109.8 8.9	1167.1/122.2 9.6	1330.9/156.7 8.5	1433.3/201.1 7.1	1594.6/233.9 6.8
Average days in receivable	365/8.9 41days	365/9.6 38days	365/8.5 43days	365/7.1 47days	365/6.8 54days
Payable turnover	573.7/191.3 3	665.4/193.4 3.4	763.0/243.1 3.1	801.0/255.6 3.1	839.2/230.3 3.6
Average days in payable	365/3.0 122days	365/3.4 107days	365/3.1 118days	365/3.1 118days	365/3.6 101days
<b>SOLVENCY</b>					
Debts to equity	296.6/231.0 1.28	296.0/282.4 1.05	343.8/329.4 1.04	254.9/393.8 0.65	214.7/493.1 0.44
Debts/equity+debts	296.6/527.6 0.56	296.0/578.4 0.51	343.8/673.2 0.51	254.9/648.7 0.39	214.7/707.8 0.3
Interest cover	215.1/3.3 65.2	259.9/9.4 27.6	298.4/21.5 13.9	342.0/47.5 7.2	419.5/44.3 9.5
Personnel ratios					
Staff turnover	20/2168 0.90%	19/2179 0.90%	28/2182 1.30%	32/2245 1.40%	35/2356 1.50%

Average profit after tax per staff	194.8/2168	211.4/2179	239.0/2182	272.4/2245	319.3/2356
	N0.09m	N0.10m	N0.11m	N0.12m	N0.14m
average salary per staff	N1.4m	N1.6	N1.7m	N1.8m	N2.0m
Social responsibility report( % of pre tax profit)	6/211.8%	8/250.5%	8/276.9%	7.5/294.5%	7.6/375.2%
	2.83%	3.19%	2.90%	2.55%	2.03%
	2012	2013	2014	2015	2016
	N'm	N'm	N'm	N'm	N'm
CALCULATION OF ECONOMIC VALUE ADDED					
Calculation of NOPAT					
Net profit after tax	194.8	211.4	239	272.4	319.3
Add: Interest expenses (net of taxation)	2.24	6.39	14.62	32.3	30.12
	<u>197.04</u>	<u>217.79</u>	<u>253.62</u>	<u>304.7</u>	<u>349.42</u>
CAPITAL EMPLOYED	527.6	578.4	673.2	648.7	707.8
Cost of capital at 15%	79.1	86.8	101	97.31	106.17
	<u>197.04</u>	<u>217.79</u>	<u>253.62</u>	<u>304.7</u>	<u>349.42</u>
Adjusted Net profit after tax	197.04	217.79	253.62	304.7	349.42
Less: cost of capital	79.1	79.1	86.8	101	97.31
Economic value added	<u><b>117.94</b></u>	<u><b>138.69</b></u>	<u><b>166.82</b></u>	<u><b>203.7</b></u>	<u><b>252.11</b></u>

**NOTE:**

Usually, the opening capital is used to calculate cost of capital, but because we were not given the opening capital for 2012, we have used the closing capital for 2012 calculation while for other years we used opening capital.

# APPENDICE TO REQUIREMENT 2

## Brilliant Bottles Nigeria Limited Trend Analysis - 2012 - 2016 Income Statetement

YEARS	2012 N'm		2013 N'm	CHANGE N'm	%	2014 N'm	CHANGE N'm	%		2015 N'm	CHANGE N'm	%	%
Revenue	78.4		82.5	4.1	5.2	80.6	- 1.9	- 2.3		90.5	9.9	12.3	11.8
Cost of sales	36.8	-	41.2	4.4	12.0	39.6	1.6	- 3.9	-	40.6	1.0	2.5	13.8
Gross Profit	41.6		41.3	0.3	0.7	41.0	- 0.3	- 0.7		47.9	6.9	16.8	14.8
Marketing & Distribution expenses	10.3	-	11.5	1.2	11.7	12.8	- 1.3	11.3	-	13.9	1.1	8.6	9.4
Administratfve expenses	11.2	-	14.8	3.6	32.1	15.1	- 0.3	2.0	-	16.2	1.1	7.3	4.9
Finance expenses	2.0	-	3.1	1.1	55.0	2.5	0.6	- 19.4	-	2.1	0.4	- 16.0	- 14.3
Profit before income tax	18.1		11.9	6.2	34.3	10.6	- 1.3	- 10.9		15.7	5.1	48.1	33.8
Income tax expenses	3.8	-	2.9	0.9	23.7	3.6	- 0.7	24.1	-	5.8	2.2	61.1	17.2
Profit after income tax expenses	14.3		9.0	5.3	37.1	7.0	- 2.0	- 22.2		9.9	2.9	41.4	43.4

## Statement of Financil Position

	2012 N'm		2013 N'm	CHANGE N'm	%	2014 N'm	CHANGE N'm	%		2015 N'm	CHANGE N'm	%	%
<b>Assets:</b>													
Property, plant and equipment	15.0		13.5	1.5	10.0	12.0	- 1.5	- 11.1		10.5	1.5	- 12.5	- 14.3
Current assets:													
Inventories	5.0		6.2	1.2	24.0	6.1	- 0.1	- 1.6		8.9	2.8	45.9	- 1.1
Trade receivables	3.0		2.8	0.2	6.7	3.2	0.4	14.3		5.1	1.9	59.4	- 9.8
Short term deposit	-		-	-		5.0	5.0			5.0	-	-	
Other receivables and prepayments	0.5		0.6	0.1	20.0	0.9	0.3	50.0		0.8	0.1	- 11.1	12.5
Cash and cash equivalents	1.5		1.8	0.3	20.0	1.6	- 0.2	- 11.1		1.2	0.4	- 25.0	41.7
Total current assets	10.0		11.4	1.4	14.0	16.8	5.4	47.4		21.0	4.2	25.0	35.7
Total assets	25.0	24.9		0.1	0.4	28.8	3.9	15.7		31.5	2.7	9.4	19.0

Equity:

Share capital	10.0	10.0	-	-	10.0	-	-	10.0	-	-	-
Retained earnings	7.8	8.8	1.0	12.8	11.1	2.3	26.1	11.6	0.5	4.5	36.2
Total equity	17.8	18.8	1.0	5.6	21.1	2.3	12.2	21.6	0.5	2.4	19.4
Liabilities:											
Trade and other payables	3.2	2.8	0.4	12.5	3.5	0.7	25.0	3.6	0.1	2.9	13.9
Tax liabilities	3.8	2.9	0.9	23.7	3.6	0.7	24.1	5.8	2.2	61.1	
Other payables and accrued expenses	0.2	0.4	0.2	100.0	0.6	0.2	50.0	0.5	-	0.1	16.7
Total current liabilities	7.2	6.1	1.1	15.3	7.7	1.6	26.2	9.9	2.2	28.6	18.2
Total equity and liabilities	25.0	24.9	0.1	0.4	28.8	3.9	15.7	31.5	2.7	9.4	19.0

**Common size Analysis - 2012 – 2016**
**Income Statement**
**YEARS**

	<b>2012</b>	<b>2013</b>	<b>2014</b>		<b>2015</b>	<b>2016</b>
	<b>N'm</b>				<b>N'm</b>	
Revenue	100.0	100.0	100.0		100.0	100.0
Cost of sales	- 46.9	(49.9)	- 49.1	-	44.9	(45.7)
Gross Profit	<b>53.1</b>	<b>50.1</b>	<b>50.9</b>		<b>52.9</b>	<b>54.3</b>
		-	-		-	-
Marketing & Distribution expenses	- 13.1	(13.9)	- 15.9	-	15.4	(15.0)
<b>Administrative expenses</b>	- 14.3	(17.9)	- 18.7	-	<b>17.9</b>	<b>(16.8)</b>
Finance expenses	- 2.6	(3.8)	- 3.1	-	2.3	(1.8)
<b>Profit before income tax</b>	<b>23.1</b>	<b>14.4</b>	<b>13.2</b>		<b>17.3</b>	<b>20.8</b>
Income tax expenses	- 4.8	(3.5)	- 4.5	-	6.4	(6.7)
Profit after income tax expenses	<b>18.2</b>	<b>10.9</b>	<b>8.7</b>		<b>10.9</b>	<b>14.0</b>

**Statement of Financial Position**

	<b>2012</b>	<b>2013</b>	<b>2014</b>		<b>2015</b>	<b>2016</b>
<b>Assets:</b>						
Property, plant and equipment	60.0	54.2	41.7		33.3	24.0
Current assets:						
Inventories	20.0	24.9	21.2		28.3	23.5
Trade receivables	12.0	11.2	11.1		16.2	12.3
Short term deposit	-	-	17.4		15.9	33.3
Other receivables and prepayments	2.0	2.4	3.1		2.5	2.4
Cash and cash equivalents	6.0	7.2	5.6		3.8	4.5
Total current assets	<b>40.0</b>	<b>45.8</b>	<b>58.3</b>		<b>66.7</b>	<b>76.0</b>
Total assets	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>		<b>100.0</b>	<b>100.0</b>
<b>Equity:</b>						
Share capital	40.0	40.2	34.7		31.7	26.7
Retained earnings	31.2	35.3	38.5		36.8	42.1
Total equity	<b>71.2</b>	<b>75.5</b>	<b>73.3</b>		<b>68.6</b>	<b>68.8</b>
					-	-
<b>Liabilities:</b>						
Trade and other payables	12.8	11.2	12.2		11.4	10.9
Tax liabilities	15.2	11.6	12.5		18.4	18.1
Other payables and accrued expenses	0.8	1.6	2.1		1.6	2.1
Total current liabilities	<b>28.8</b>	<b>24.5</b>	<b>26.7</b>		<b>31.4</b>	<b>31.2</b>
Total equity and liabilities	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>		<b>100.0</b>	<b>100.0</b>

	2012	2013	2014	2015	2016
<b>RATIOS ANALYSIS</b>					
<b>PROFITABILITY</b>					
Gross profit margin	41.6/78.4%	41.3/82.5%	41.0/80.6%	47.9/90.5%	55./101.2%
	53.10%	50.10%	50.90%	52.90%	54.30%
Net profit margin	18.1/78.4	11.9/82.5	10.6/80.6	15.7/90.5	21./101.2%
	23.10%	14.40%	13.20%	17.20%	20.80%
Returns on total assets	18.1/25%	11.9/24.9%	10.6/28.8%	15.7/31.5%	21.0/37.5
	72.40%	47.80%	36.80%	49.80%	56.00%
Returns on capital employed (ROCE)	20.1/17.8%	15/18.8%	13.1/21.1%	17.8/21.6%	22.8/25.8%
	112.90%	79.80%	62.10%	82.40%	88.40%
Returns on equity	14.3/17.8%	9.0/18.8%	7.0/21.1%	9.9/21.6%	14.2/25.8%
	80.30%	47.90%	33.25%	45.80%	55.00%
<b>LIQUIDITY</b>					
Current ratio	10/7.2	11.4/6.1	16.8/7.7	21.0/9.9	28.5/11.7
	1.4:1	1.9:1	2.2:1	2.1:1	2.4:1
Quick ratio	5.0/7.0	5.2/6.1	10.7/7.7	12.1/9.9	19.7/11.7
	0.7:1.0	0.9:1.0	1.4:1.0	1.2:1.0	1.7:1.0
cash ratio	1.5/7.2	1.8/6.1	6.6/7.7	6.2/9.9	14.2/11.7
	0.2: 1	0.3:1.0	0.9:1.0	0.6:1.0	1.2:1.0
<b>ACTIVITY</b>					
Net assets turnover	78.4/17.8	82.5/18.8	80.6/21.1	90.5/21.6	101.2/25.8
	4.4	4.4	3.8	4.2	3.9
Fixed assets turnover	78.4/15	82.5/13.5	80.6/12	90.5/10.5	101.2/9.0
	5.2	6.1	6.7	8.6	11.2
Total assets turnover	78.4/25.0	82.5/24.9	80.5/28.8	90.5/31.5	101.2/37.5
	3.1	3.3	2.8	2.9	2.7
Inventory turnover	36.8/5	41.2/5.6	39.6/6.1	42.6/7.5	46.2/8.8
	7.4	7.4	6.5	5.7	5.3
Average days inventory	365/7.4	365/7.4	365/6.5	365/5.7	365/5.3
	49days	49days	56days	64days	69days
Receivable turnover	78.0/3.0	82.5/2.9	80.6/3.0	90.5/3.6	101.2/4.8
	26	27.4	28.9	25.1	21.1
Average days in receivable	365/26	365/27.4	365/28.9	365/25.1	365/21.1
	14days	13days	13days	15days	17days
Payable turnover	36.8/3.2	41.2/3.0	39.6/3.1	42.6/3.6	46.2/3.8
	11.3	13.3	12.8	11.8	12.2
Average days in payable	365/11.3	365/13.3	365/12.8	365/11.8	365/12.2
	32days	27days	29days	31days	30days
<b>SOLVENCY</b>					
Liabilities/total assets	7.2/25	6.1/24.9	7.7/28.8	9.9/31.5	11.7/37.5
	0.3	0.2	0.3	0.3	0.3

BBNL VALUATION REPORT						
1	Average net assets per share:				Nm	
	Total assets at fair value	N(15+ 28.5)				43.50
	Less liabilities	11.70				
	Potential tax liabilities:					
	CIT	8.50				
	PIT	1.45				
						21.65
						21.85
	No of shares in issue					20,000,000
	Net assets per share					21,850,000/20,000,000
						N1.09
2	Five years average profit					
	Average profit:	Nm				
	2012	14.3				
	2013	9				
	2014	7				
	2015	9.9				
	2016	14.2				
		54.4	54.4/5			N10.88m
	annual maintainable profit:	Nm				
	year 1	10.88				
	year 2= 10.88x 1.1	11.968				
	year 3= 11.968 x 1.1	13.165				
	year 4 = 13.165 x 1.1	14.481				
	year 5= 14481 x 1.1	15.929				
		66.423				
	Less contingent liabilities:	9.950				
		56.473				
	No of shares in issue	20,000,000				
	Price per share	56.473/20.0				
		N2.82				
	TDNL should offer between N1.09 to N2.82 per share.					
	APPRAISAL OF INVESTMENT IN BBNL					
	Purchase consideration	N21.85m or N56.473m				
	New plant	N15.0m				
	Cash inflow for five years:	Year	Cost of sales	Cost of bottles	Savings	
			20%	25%		
			Nm	Nm	Nm	
		2012	573.7	114.74	28.685	
		2013	665.4	133.08	33.27	

	2014	763	152.6	38.15
	2015	801	160.2	40.05
	2016	839.2	167.84	41.96
Total savings				<u>182.115</u>

Average savings 182.115/5 N36.423m

Annual growth rate: N36.423m

Year 0				
Year 1	36.423 x 1.12			N40.794
Year 2	40.794 x 1.12			N45.689
Year 3	45.689 x 1.12			N51.172
Year 4	51.172 x 1.12			N57.312
Year 5	57.312 x 1.12			N64.19

	Year	cash flow Nm	DCF	NPV Nm
Purchase of BBNL	0	-21.85	1	-21.85
Purchase of new plant	0	-15	1	-15
Savings on cost of bottles	1	40.794	0.8696	35.474
Savings on cost of bottles	2	45.689	0.7561	34.545
Savings on cost of bottles	3	51.172	0.6575	33.646
Savings on cost of bottles	4	57.312	0.5718	32.771
Savings on cost of bottles	5	64.19	0.4972	31.915
Residual value of plant	5	1.2	0.4972	0.597
				<u>132.098</u>
If the purchase price of BBNL is N2.82 per share, then the NPV will be:				
		132.098 - (56.473 - 21.850)		<u>N97.475m</u>



## **EXAMINER'S REPORT**

There are two requirements the candidates are expected to address in their report on the case. The requirements are:

- (a) Evaluation of Tostol Drinks Nigeria Limited's operating performance, taking into consideration the company's business model and economic value added to its shareholders; and
- (b) Financial due diligence on Brilliant Bottles Nigeria Limited to determine whether it is worthwhile to acquire it or not. Candidates are expected to calculate net present value to determine post-acquisition additional value that will be added to Tostol Drinks Nigeria Limited.

To be able to write a good report and perform very well in the paper, candidates are expected to prepare the following appendices:

- (a) Relevant financial ratios for Tostol Drinks Nigeria Limited, including trend analysis, taking into consideration the company's business model;
- (b) Calculation of economic value added for Tostol Drinks Nigeria Limited, from 2012 to 2016;
- (c) Relevant financial ratios for Brilliant Bottles Nigeria Limited, including trend analysis for 2012 to 2016;
- (d) Valuation of Brilliant Bottles Nigeria Limited based on net assets basis and average maintainable earnings; and
- (e) Net present value calculation to show the effect of the acquisition on the performance of Tostol Drinks Nigeria Limited.

Candidates' performance was poor as only few candidates scored 50% or above.

The candidates pitfalls are:

- (a) Lack of proper understanding of the requirements of the case;
- (b) Inability to correctly calculate economic value added of Tostol Drinks Nigeria Limited;
- (c) Inability to calculate correctly the appropriate performance ratios for Tostol Drinks Nigeria Limited based on its business model;
- (d) Inability to carry out correct valuation of Brilliant Bottles Nigeria Limited based on the two indicated valuation models;

- (e) Inability to calculate appropriate ratios correctly;**
- (f) Inability to understand how to generate figures required to calculate the net present value from the financial data provided; and**
- (g) Inability to write a good report with appropriate headings and subheadings.**
- (h) Poor communication skill of the candidates.**

**Candidates are advised to go through the previous examinations' pathfinders and appraise themselves with the examiner's comments so as to properly understand how to approach Case Study examination. Also, candidates should come to terms with the fact that all the knowledge and skills they have gained in the subjects of previous examinations would be needed while dealing with Case Study examination.**