THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

PATHFINDER

MARCH/JULY 2020 DIET
PROFESSIONAL LEVEL EXAMINATIONS

Question Papers

Suggested Solutions

Marking Guides

and

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 – MARCH/JULY 2020

CORPORATE REPORTING

Time Allowed: $3^1/_4$ hours (including 15 minutes reading time)

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

SECTION A: COMPULSORY QUESTION (40 MARKS)

QUESTON 1

Dorodoro Plc. (Dorodoro) acquired 65million shares in Gorogoro Limited (Gorogoro) on January 1, 2019. An extract of the statement of changes in equity for Gorogoro Limited for the year ended December 31, 2018 is presented below:

Statement of changes in equity
For the year ended December 31, 2018

	Share capital ₦'000	Accumulated profits ₦'000	Total ₦'000
Balance, January 1, 2018	100,000	(10,000)	90,000
Profit for the year	-	(2,000)	(2,000)
Balance, December 31, 2018	**100,000**	**(12,000)**	**88,000**

Additional information:

(i) The consideration agreed for the acquisition of shares in Gorogoro Limited was as follows:
- (a) Cash payment of ₦65million;
- (b) ₦30million naira to be paid three years after the date of acquisition. The relevant discount rate is 10%;
- (c) If the group meets specified targets at a future date there will be a further payment with a fair value of ₦30million at a later date; and
- (d) Upon your review, you note that Dorodoro only recorded the cash consideration paid in (i) (a) above in its statement of financial position.

(ii) On January 1, 2019, Dorodoro also purchased all the 100,000,000 shares of 50kobo each in Asororo Limited (Asororo) for ₦55m when the accumulated profits in Asororo was ₦9.8m. Following the share purchase, Dorodoro obtained control of the board of Asororo;

(iii) Goodwill is to be calculated using the proportionate method and is subject to an annual impairment review. At the year end, goodwill on the acquisition of Gorogoro was determined to be impaired by 10%;

(iv) Plant and equipment held by Gorogoro which had a remaining useful life of 5 years had a carrying amount of ₦10m at the date of acquisition and a fair value of ₦12million at the same date;

(v) At December 31, 2019, Dorodoro current account with Gorogoro was ₦5million (debit) which did not reconcile with the equivalent balance in the books of Gorogoro. This difference is due to goods in transit sent to Gorogoro on December 27, invoiced at ₦3million. The goods had not been marked as received in the warehouse of Gorogoro until after year end and were sold to Gorogoro at cost plus 50%; and

(vi) Dorodoro issued five-year zero coupon bonds of ₦35million on January 1, 2019. The bonds are to be redeemed at ₦46,725,000. Dorodoro has recorded the net proceeds of ₦34,912,500 (par value ₦35million less issue costs of ₦87,500) in its statement of financial position.

The accounts for all companies are made up to December 31 and the draft statements of financial position for Dorodoro, Gorogoro and Asororo for 2019 are as follows:

At December 31	Dorodoro Plc. 2019	Gorogoro Ltd 2019	Asororo Ltd 2019
Non-current assets	**₦'000**	**₦'000**	**₦'000**
Property, plant and equipment	109,000	58,700	48,600
Intangible assets	24,100	35,065	2,900
Investments	120,000	-	-
Derivative financial instruments	5,050	-	-
Deferred tax assets	675	-	-
	258,825	**93,765**	**51,500**
Current assets			
Loans	2,045	-	-
Inventories	25,000	17,000	5,500
Trade and other receivables	43,500	21,400	21,800
Cash and cash equivalents	20,473	11,000	28,090
	91,018	49,400	55,390
Total assets	**349,843**	**143,165**	**106,890**
Current liabilities			
Trade and other payables	52,405	31,000	22,000
Accruals	15,900	4,345	2,100
Current tax payable	2,100	860	1,090
Provisions	21,385	6,400	-
	91,790	**42,605**	**25,190**
Non-current liabilities			
Derivative financial instruments	3,905	-	-
Zero coupon bonds	34,913	-	-
Deferred tax liabilities	16,320	3,120	1,900
	55,138	3,120	1,900
Total liabilities	**146,928**	**45,725**	**27,090**
Equity			
Ordinary share capital	150,000	100,000	50,000
Retained earnings	49,065	(2,560)	29,800
Other reserves	3,850	-	-
Total equity	**202,915**	**97,440**	**79,800**
Total liabilities and equity	**349,843**	**143,165**	**106,890**

Required:

a. Prepare the consolidated statement of financial position for the Dorodoro Group for year ended December 31, 2019. **(25 Marks)**

b. Dorodoro is considering purchasing the remaining outstanding shares in Gorogoro for a consideration of ₦50million.

Required:

Assuming the non-controlling interest is currently measured at ₦30million, determine how the directors of Dorodoro should account for this transaction. Show any journal entries required to illustrate your answer. **(5 Marks)**

c. The Conceptual Framework for Financial Reporting 2018 addresses the objective of general purpose financial reports, primary users of general purpose financial reports and the need for such financial information.

Required:
Discuss the primary users of general purpose financial reports and their needs.

(10 Marks)
(Total 40 Marks)

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

QUESTION 2

The management of Tolotolo Limited (Tolotolo) are considering the sale of an item of plant and machinery. The machine was acquired a few years ago and will be replaced by a new modern machine which is currently being manufactured. The management of Tolotolo intends to sell the machine as soon as it takes delivery of the new machine which is expected to be after the year end. Management is currently actively seeking a buyer for the existing machine while an appointment has been booked with a service centre to refurbish the machine prior to its sale. The machine is carried in the books at ₦2.45million which approximates its fair value. The current machine is being marketed to potential buyers at ₦5 million. Management has classified the machine as held for sale under IFRS 5- Non-Current Assets Held for Sale and Discontinued Operations.

A new product is currently being developed internally by the technology team at Tolotolo. The product is expected to be completed in four years with users' acceptance testing finalised. The management of Tolotolo are of the view that production phase will be in five years' time.

Tolotolo owns an accessory used in the agricultural industry which could be sold in any of two markets as follows:

	Market X	Market Y
	₦	**₦**
Sale price	650	625
Transport cost	(50)	(50)
	600	575
Transaction cost	(75)	(25)
Net amount received	525	550
Sales frequency	5,000 times	1,000 times
Sales volume	₦850 million	₦50 million

Required:

Using the information above:

a. Discuss whether the item of plant and machinery can be classified as held for sale under IFRS 5. **(7 Marks)**

b. A significant amount has been incurred in the current year on development of the new product by the technology team. Advise how the amount incurred should be treated in the year-end financial statements. **(7 Marks)**

c. Determine the fair value of the accessory in accordance with IFRS 13 – Fair Value Measurement. **(6 Marks)**

(Total 20 Marks)

QUESTION 3

Otedang Limited manufactures and sells electronic and home appliances to a nationwide customer base. All products sold come with a free three year manufacturer's warranty and additional optional warranty can be purchased by interested customers. This additional warranty is for a pre-determined fee and will extend the warranty for another two years.

At year-end 2018, the sales department had 1million products under free warranty which Otedang Limited will have to repair any manufacturing defect. The cost of repair will depend on the extent of the defect in the product sold. Major defects are expected to cost ₦2,500 to repair while minor defects will cost an estimated ₦1,000 to repair. From the historical data and past experience of products sold, 80% of the products sold have no defects, minor defects occur 18% of the time while major defects occur only 2% of the time.

Otedang Limited has estimated the warranty obligation and has recorded this obligation as a financial liability in its year-end financial statements. The recently appointed senior accountant is concerned with this accounting treatment and although this has been the accounting treatment in prior year's financial statements. She believes this treatment is inconsistent with IAS 32-Financial Instruments: Presentation.

The company's earnings and profitability have been growing in recent years beyond analysts' predictions. Due to its growth, the company has become an acquisition target for multinational companies.

As a result of becoming a target for acquisition, Otedang Limited is making the transition to International Financial Reporting Standards (IFRS) in the current year end. The company has written off a previously deferred asset of ₦3.1million to statements of comprehensive income in an attempt to be in compliance with IFRS 1- First Time Adoption of IFRS.

Required:

a. Estimate the amount of provision Otedang Limited should recognise in its books in relation to the warranty obligation at year end in accordance with IAS 37- Provisions, Contingent Liabilities and Contingent Assets. **(7 marks)**

b. Comment on the senior accountant's view that the treatment of the warranty obligation in the prior years and current year-end financial statements is inconsistent with IAS 32- Financial Instruments: Presentation. **(7 marks)**

c. Comment on the treatment of the deferred assets in the year-end financial statements. **(6 marks)**

(Total 20 Marks)

QUESTION 4

a. An asset is said to be impaired when its recoverable amount is less than its carrying amount in the statement of financial position.

From time to time an asset may have a carrying amount that is greater than its fair value but this may not necessarily be impairment as the situation might change in the future. Impairment means that the assets has suffered a permanent loss in value. There are many factors which can affect the quality of impairment accounting and disclosures.

Required:

Discuss with particular reference to group accounting, the two (2) factors which would be important when conducting impairment test under IAS 36 – Impairment of Assets. **(8 Marks)**

b. Pepenepe Plc. is an entity that regularly purchases new subsidiaries. On June 30, 2019 the entity acquired all the ordinary shares of Bobo Nigeria Limited for cash payment of ₦390million. The net assets of Bobo Nigeria Limited as at acquisition date were ₦270million and no fair value adjustment were necessary upon consolidation of Bobo Nigeria Limited for the first time.

On December 31, 2019, Pepenepe Plc. carried out a review of the goodwill on consolidation of Bobo Nigeria Limited for evidence of impairment.

The review involved allocating the net assets of Bobo Nigeria Limited into three Cash-Generating Units (CGU) and computing the Value In Use (VIU) of each unit.

The following are the carrying amount of the individual units before impairment adjustments.

	Unit 1	Unit 2	Unit 3
	₦'m	₦'m	₦'m
Patents	7.5	--	--
Property, plant and equipment (PPE)	90	45	60
Net current assets	30	37.5	30
Total net assets	**127.5**	**82.5**	**90**
Value-in use of units	**108**	**90**	**97.5**

It is not possible to allocate the goodwill on consolidation to the individual cash-generating units, but all other net assets of Bobo Nigeria Limited are allocated in the table above. The patents of Bobo Nigeria Limited have no ascertainable market value but all the current assets have a market value that is above carrying amount. The value in use of Bobo Nigeria Limited as a single cash-generating units at December 31, 2019 is ₦307.5million.

Required:

i. Discuss how the impairment loss in unit 1 will affect the carrying amount of the net assets of unit 1 (using relevant figures as illustration) in the consolidated financial statement of Pepenepe plc. **(5 Marks)**

ii. Calculate and explain the effect of the impairment review on the carrying amount of the goodwill on consolidation of Bobo Nigeria Limited at December 31, 2019. **(7 Marks)**

(Total 20 Marks)

QUESTION 5

Jiganawa Plc. is a company listed on the Nigerian Stock Exchange (NSE). In the office building where Jiganawa Plc. operates, it has an unoccupied office space of 8,000 square metres which was leased on March 1, 2017. Jiganawa decided to sublet the entire office space on January 1, 2018 to a third party. The office space will be available to be occupied on March 1, 2018 after some repair and maintenance works have been completed. The sub-lease arrangement will be for the remainder of the original lease term, March 1, 2022.

Jiganawa Plc. has until the current reporting period to measure its items of Property, Plant and Equipment (PPE) at cost less any accumulated depreciation and any accumulated impairment losses. Jiganawa Plc. has decided to measure its PPE using the revaluation model as allowed under IAS 16- Property, Plant and Equipment, for the current year end.

Jiganawa Plc. realising that the Nigerian Stock Exchange is encouraging listed companies to prepare sustainability report wants to prepare one starting from the next financial year. The directors are unsure of the difference between Global Reporting Initiative (GRI) and Sustainability Accounting Standard Board (SASB) and which of the two will meet their needs. They are clear that their focus will be a sustainability report that meets the needs of the investors.

Required:

a. Explain briefly how the sub-lease should be classified and accounted for by Jiganawa Plc. in its year-end financial statements in accordance with IFRS 16- Leases. **(7 Marks)**

b. Discuss whether the change from cost model to revaluation model represents a change in accounting policy or change in accounting estimates. **(5Marks)**

c. Briefly discuss **FOUR** differences between GRI and SASB Sustainability Reporting Frameworks and advise the directors of Jiganawa Plc. which of the two better meets their needs giving **THREE** reasons. **(8Marks)**

(Total 20 Marks)

QUESTION 6

Abakan Bank is a micro finance bank (The Bank) which has recently made the transition to IFRS 9–Financial Instruments. The Bank is working through the classification and measurement provisions under IFRS and have requested your firm to provide some guidance. You are the senior consultant on the engagement and the following notes were taken during the meeting you have just attended:

Meeting notes:

The Bank has invested in debt instruments of the Federal Government of Nigeria (FGN bonds). The Bank's strategy is to hold these instruments until maturity and receive the contractual cash flows (solely principal and interest) accruing from these debt investments. The Bank is known to sell some of these instruments prior to maturity. The last sale occurred about five years ago and all instruments held since then have been held until their maturity dates. The sale of debt instruments that occurred five years ago amount to less than 2% of the banks entire portfolio of debt investments. The directors of the Bank do not have any accounting mismatch to consider.

In addition to the investment in debt instruments, the Bank also has investments that are classified at fair value through profit or loss (FVTPL). The gains and losses on these investments are recognised in the statement of profit or loss. The directors do not recognise a loss allowance for expected credit losses on these investments.

At year end, the Bank is considering its fair value disclosures in its financial statements. A senior analyst at the bank refers you to the fair value hierarchy guidance outlined in IFRS 13- Fair Value Measurements, but is unsure how it applies to its holding of FGN bonds. The FGN bonds are issued with a set coupon. The yields on the bonds and the value of the bonds are then set in open market trading.

Required:

a. Discuss briefly how the debt investments (FGN bonds) should be classified by the Bank in accordance with IFRS 9. **(7 Marks)**

b. Comment briefly if a loss allowance for expected credit losses is to be maintained by the Bank in relation to the financial instrument measured at FVTPL. **(7 Marks)**

c. Advise the senior analyst at the Bank on the fair value hierarchy the FGN bonds will be categorised in accordance with IFRS 13- Fair Value Measurements. **(6 Marks)**

(Total 20 Marks)

Solution 1

a **Dorodoro Plc.**

Consolidated statement of financial position

as at December 31, 2019

		₦'000
Non-current assets		
Property plant &equipment	Wk 6	217,900
Intangible assets	Wk 7	62,065
Derivative instruments		5,050
Deferred tax assets		675
Goodwill	Wk 3	53,100
		338,790
Current assets		
Loans		2,045
Inventory	Wk 8	49,500
Trade & other receivables	Wk 9	81,700
Cash & cash equivalents	Wk 10	59,563
		192,808
Total assets		**531,598**
Equity and liabilities		
Equity		
Ordinary share capital		150,000
Capital reserves		4, 800
Retained earnings	Wk 5	63,079
Other reserves		3,850
Non-controlling Interest	Wk 4	34,664
		256,393
Non-current liabilities		
Derivative financial liability		3,905
Zero coupon bond	Wk 11	37,625
Deferred tax liabilities	Wk 12	21,340
Deferred consideration	Wk 13	24,750
Contingent consideration	Wk 14	30,000
		117,620
Current liabilities		
Trade payables	Wk 15	103,405
Accruals	Wk 16	22,345
Tax	Wk 17	4,050
Provisions	Wk 18	27,785
		157,585
Total equity & liabilities		**531,598**

Working notes

Wk 1. Group structure

Dorodoro

65% Control 35% NCI — Gorogoro

100% control — Asororo

Tutorial

$\frac{65,000,000}{100,000,000} \times 100 = 65\%$

Wk 2. Fair value of net asset

	Gorogoro Acquisition	**1yr**	**Reporting Date**	**Asororo Acquisition**	**Reporting Date**
	1/1/19		31/12/19	1/1/19	31/12/19
	₦'000	**₦'000**	**₦'000**	**₦'000**	**₦'000**
Ordinary shares	100,000		100,000	50,000	50,000
Retained earnings	(12,000)		(2,560)	9,800	29,800
Plant (₦12–₦10)	2,000	(400)	1,600	-	-
Total	**90,000**	**(9,040)**	**99,040**	**59,800**	**79,800**

Tutorial

Post-acquisition profit (₦99,040 – ₦90, 000) = ₦ 9,040 (₦79,800- ₦59,800) **₦20,000**

$\frac{₦2,000,000}{5}$ = ₦400,000

Wk. 3 Goodwill

	Gorogoro		Asororo
Purchase consideration	**₦'000**		**₦'000**
Cash	65,000		55,000
Deferred consideration			
₦30,000 x 0.75 $(1/1.1)^3$	22,500		
Contingent consideration	30,000		
Parent consideration	**117,500**		
Parent share of net asset			
(65% x ₦90,000)	(58,500)	100% x ₦59,800	(59,800)
Goodwill at acquisition date	59,000	(capital reserves)	(4,800)
Impairment (10% x ₦59, 000)	(5,900)		-
Goodwill at reporting date	**53,100**		**(4,800)**

Wk 4 Non-controlling Interest (NCI) in Gogogoro

		₦'000
NCI at acquisition date	(₦90,000 x 35%)	31,500
Share of post-acquisition profit	(35% x ₦9,040)	3,164
Net asset share at reporting date		**34,664**

Wk 5 Group retained earnings		**₦'000**
Parent		49,065
Deferred consideration unwinding interest		(2,250)
Dorodoro unrealised profit on inventory		(1,000)
Issuing cost reclassified		(87.5)
Interest for the year on bond	(7.5% x ₦35, 000)	(2,625)
Share of profit in Gorogoro	(65% x ₦9, 040)	5,876
Share of profit Asororo	(100% x ₦20, 000)	20,000
Impairment in Gorogoro		(5,150)
Group retained earnings at reporting date		**63,079**

Tutorial

$PV (1+r)^n = FV$

$₦35,000 (1+r)^n = 46,725$

$(1+r)^n = 46,725/ 35,000$

$(1+r)^n = 1.335$

$(1+r) = \sqrt[4]{1.335}$

$r = 1.0749 – 1$

$r = 0.0749$

$r = 7.5\%$

Wk 6- Property, plant and equipment

	₦'000
Dorodoro	109,000
Gorogoro	58,700
Asororo	48,600
Fair value adjustment on PPE	1,600
Total	**217,900**

Wk 7 Intangible assets

	₦'000
Dorodoro	24,100
Gorogoro	35,065
Asororo	2,900
Total	**62,065**

Wk 8 Inventory

	₦'000
Dorodoro	25,000
Gorogoro	17,000
Asororo	5,500
Goods in transit	3,000
Unrealised profit	(1,000)
Total	**49,500**

Tutorial

Computation of unrealised profit on Inventory

Invoice price (selling)	=	₦3,000,000
Cost price + Profit	=	100% + 50% = 150%
Therefore, if 150%	=	₦3,000,000
100%	=	(₦3,000,000/150)x100%
Cost price	=	₦2,000,000
Profit	=	(₦3,000,000 – ₦2,000,000) = ₦1,000,000

Wk 9 Trade receivables

	₦'000
Dorodoro	43,500
Gorogoro	21,400
Asororo	21,800
Intragroup transaction	(5,000)
Total	**81,700**

Wk 10 Cash& cash equivalents

	₦'000
Dorodoro	20,473
Gorogoro	11,000
Asororo	28,090
Total	**59,563**

Wk 11 – Zero coupon bond	**₦'000**
Balance as per account	34,912.5
Reclassification of issuing cost	87.5
Interest for the year (7.5% x ₦35,000)	2,625
Total	**37,625**

Wk 12 Deferred tax liabilities	**₦'000**
Dorodoro	16,320
Gorogoro	3,120
Asororo	1,900
Total	**21,340**

Wk 13 Deferred consideration	**₦'000**
$30,000 \times (1/1.1)^3$	22,500
Unwinding interest (10% x ₦22,500)	2,250
Total	**24,750**

Wk 14 Contingent consideration	**₦'000**
Total	**30,000**

Wk 15 Trade payables	**₦'000**
Dorodoro	52,405
Gorogoro	31,000
Asororo	22,000
Intragroup transaction (₦5,000 – ₦3,000)	(2,000)
Total	**103,405**

Wk 16 Accruals	**₦'000**
Dorodoro	15,900
Gorogoro	4,345
Asororo	2,100
Total	**22,345**

Wk 17 Current tax provisions	**₦'000**
Dorodoro	2,100
Gorogoro	860
Asororo	1,090
Total	**4,050**

Wk 18 Provisions	**₦'000**
Dorodoro	21,385
Gorogoro	6,400
Total	**27,785**

b. Step-acquisition of 35% in Gorogoro

This is step-acquisition where control already exists. According to IFRS 3, revised, step acquisition where control already exists should be treated as a mere share exchange between share holders. This is indicated in the following:

- Dorodoro acquired additional 35% from NCI and moved to 100%;
- NCI sold all their holdings to Dorodoro; and
- Control already exists before additional acquisition.

Therefore, there should be no further calculation of goodwill.

Adjustment in parent equity will be recognised as follows:

Dr Non-controlling interest	₦30million
Dr Other revenue loss	₦20million
Cr. Purchase consideration (Bank)	₦50million

c. Primary users of general purpose financial report and their information needs

Concept of General Purpose Financial Reports (GPFR)

General purpose financial reports provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity.

This information is also useful for decisions by those who have the right to vote on or otherwise influence management performance.

Identification of primary users of GPFR

The primary users to whom general purpose financial reports are directed are:

i. Existing and potential investors;
ii. Lenders; and
iii. Other creditors.

Information needs for primary users of GPFR

These primary users cannot require reporting entities to provide information directly to them. Thus, they rely on general purpose financial reports for much of the financial information they need despite the fact that individual primary users have different information needs.

The decisions of the primary users involve buying, selling or holding equity and debt instruments and providing or settling loans and other forms of credit.

In order to make these decisions, the users need information to help them assess the prospects for future net cash inflows to an entity.

In order to assess an entity's prospects for future net cash inflows, users need information about:

i. The resources of the entity;
ii. Claims against the entity resources; and
iii. How efficiently and effectively the entity's management discharged their responsibilities to use the entity's resources.

Examiner's report

This question in part (a) tests candidates' knowledge of group structure and preparation of consolidated statement of financial position. The (b) part of the question tests candidates' knowledge of step-acquisition while the (c) part of the question tests identification of primary users of general purpose financial report and their information needs as contained in Conceptual Reporting Framework 2018.

Being a compulsory question, all the candidates attempted it and their performance was above average.

The commonest pitfalls of the candidates are their inability to compute purchase consideration for the subsidiary using deferred and contingent considerations; also, they were unable to compute goodwill, while intercompany transactions were incorrectly treated.

Candidates are advised to do in-depth study to understand basic principles of consolidating financial statements, practise more questions and use ICAN study texts for better performance in future examinations.

Marking guide

		Marks	Marks
A	Consolidated statement of financial position	5¾	
	Group structure	½	
	Value of net assets	3	
	Computation of goodwill	2¼	
	Non-controlling interest in Gogogoro	½	
	Group retained earnings	2¾	
	Working notes	10¼	25
B	Step-acquisition of 35% in Gorogoro	2	
	Adjustment in parent equity	3	5
C	Concept of general purpose financial reports	1	
	Identification of primary users of GPFR	3	
	Information needs for primary users of GPFR	6	10
	Total		**40**

Solution 2

a. In accordance with IFRS 5-Non-Current Assets Held for Sale and Discontinued Operations, an asset could be classified as held for sale on the fulfillment of the following criteria:

i. Management is committed to a plan to sell the asset;
ii. The asset is available for immediate sale;
iii. An active plan to locate a buyer has been initiated by the management;
iv. The sale is highly probable, within 12 months of classification as held for sale;
v. The asset is being actively marketed for sale;
vi. The offer price to sell the asset is reasonable in relation to its fair value; and
vii. Actions required to complete the plan indicate that it is unlikely that the plan will be significantly changed or withdrawn.

The above principles can be applied to Tolotolo Limited as follows:

i. The management of Tolotolo Limited is actively committed to the plan to sell the item;
ii. The machine is not available for immediate sale since the expected replacement of new machine is currently being manufactured;
iii. An active programme to locate a buyer is already initiated by the management but the machine may only be available for sale after the year-end. This time frame is dependent only on the delivery of the replacement machine;
iv. The sale is not highly probable within the next 12 months of classification because it could only be available after the year-end. When this time could be is not specified in the narrative;
v. Whereas the fair price is ₦2.45million, the asset is being offered to potential buyers at ₦5million. The offer price at over 100% above the fair value is not considered reasonable; and
vi. The action required to complete the plan may indeed change if the replacement machine could not be delivered as expected for whatever reason.

Due to the reasons above, the item of plant and equipment cannot be classified as held for sale under IFRS 5.

b. The new product being developed internally by the technology team at Tolotolo falls within the ambit of internally developed intangible assets.

Under IAS 38 - Intangible Assets, an intangible asset arising from development must be capitalised if all the following can be demonstrated by the entity:

i. Existence of a market or, if to be used internally, the usefulness of the assets, that is, the economic benefits;
ii. The technical feasibility of completing the intangible assets. This is to ensure that it will be available for use or sale;
iii. Intention to complete and use or sell the asset;
iv. Ability to use or sell the asset;
v. Availability of adequate technical, financial and other resources to complete the asset; and
vi. The cost of the asset can be measured reliably.

If any of the above recognition criteria is not met, then, the expenditure must be charged to the statement of profit or loss as incurred. Note that if the recognition criteria have been met, capitalisation must take place.

Advice on the treatment of Tolotolo development costs

It appears that the company has fulfilled all the criteria to recognise the new product and capitalise the expenditure incurred in the current year. The amount incurred should therefore be treated as a capital item at the year end as follows:

	Dr	Cr
	₦'000	₦'000
Development cost – SOFP	XXX	
Bank		XXX

Being amount incurred in the current year on development of new product.

c. IFRS 13 - Fair Value Measurement, requires the assets to be sold in the principal market or the most-advantageous market where information is not available at the principal market.

In line with the above, the fair value of the accessory should be determined using the following principles:

i. The principal market is defined as the market with the highest volume and level of activity for the asset;
ii. The most advantageous market is defined as the market where the highest profit is made in the sale of the asset; and
iii. The asset would be sold in the principal market.

Therefore, the fair value derived from the principal market would be as obtained in Market X as follows:

	₦
Sale price	650
Transport cost	(50)
	600
Transaction cost	(75)
Net amount received	**525**

Examiner's report

This question tests candidates' understanding of conditions required to classify assets as held for sale, using the provisions of IFRS 5. It also tests the treatment of cost of development of new product and determination of fair value in accordance with IFRS 13.

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

The commonest pitfalls of the candidates were the demonstration of poor understanding of relevant standards and their inability to link fair value measurements to principal market or the most advantageous market options.

Candidates are advised to be conversant with the provisions of various standards and practical application of IFRS to true life situations.

Marking guide

		Marks	Marks
a	Classification of item of plant and equipment as held for sale	3	
	Applying the criteria to Tolotolo Limited	3	
	Decision on classification of Tolotolo plant and machinery	1	7
b	Classification criteria on development of new product	4	
	Treatment of Tolotolo development costs	3	7
c	Determination of fair value measurement in the principal market	3	
	Determination of fair value of the accessory	3	6
	Total		**20**

Solution 3

a. **Estimation of the amount of provisions by Otedang Limited**

The products are made up of a number of items, as such, the expected value should be calculated using the probability of all events happening.

Number of products	=	1 million
Major defects repair cost estimate	=	₦2,500
Minor defects repair cost estimate	=	₦1,000

Products defect rates:

No defects	=	80%
Major defects	=	2%
Minor defects	=	18%

Year-end estimated provision:

Expected cost of major defects provision =₦50m i.e. (2% of ₦2,500 x 1m)
Expected cost of minor defects provision =₦180m i.e. (18% of ₦1,000 x 1m)
Expected total year-end provision = (₦50m + ₦180m) = ₦230m

The risk adjustment rate is not provided which is an indication that the risk and uncertainty is immaterial.

Tutorial

The following steps are to be used to calculate and record warranty assets:

i. Determine the historical percentage of warranty expense to sales for the same types of goods for which the warranty is currently being determined;
ii. Apply the same percentage to the sales for the current accounting period to derive the warranty expense to be accrued;
iii. This amount may be adjusted to account for unusual factors related to the goods that were sold, such as initial indications that a recent batch of goods had an unusually high failure rate;
iv. Accrue the warranty expense with a debit to the warranty expense account and a credit to the warranty liability account; and
v. As actual warranty claims are received, debit the warranty liability account and credit the inventor account for the cost of the replacement parts and products sent to customers.

Thus, the income statement is impacted by the full amount of warranty expense when a sale is recorded, even if there are no warranty claims in that period. As claims appear in later accounting periods, the only subsequent impact is on the statement of financial position, as the warranty liability and inventory accounts are both reduced.

b **Comments on the senior accountants view on the treatment of warranty obligation**

The extended warranties or service type warranties, are simply insurance policies. If the customer buys the coverage, the product is insured against defect or other harm for the specified period of time. In this case, the company is making the offer in an attempt to earn extra profit. The seller hopes that the amount received for the extended warranty will outweigh the eventual repair costs. Therefore, the accounting differs here from that of an embedded warranty that was provided to encourage the sale of the product. Due to the matching principle, the anticipated expense will be recognised in the same period as the revenue generated by the sale of the product.

The performance obligation related to the service type warranty is a performance obligation that qualifies for over time recognition as it enhances an asset that is controlled by the customer at the time of performance (2 years).

The best measure of progress of this performance obligation is a time-based measure, so the revenue allocated to this performance obligation shall be recorded evenly over the two years period regardless of how many times the customer brings the item in for repairs during these two years.

These warranties give rise to a separate performance obligation, because they provide additional service to the customer and they are accounted for under IFRS 15.

Deferred expenses are not financial instruments because they will not result in the delivery or exchange of cash or other financial instruments. Provisions do not meet the definition of a financial instrument, because they do not arise as a result of contractual rights or obligations. They are therefore outside the scope of IAS 32.

IAS 32 – Presentation of Financial Instrument, defines financial instrument as instrument that gives right to asset of an entity and liability to another entity.

Customers are not receiving an asset from Otedang. It is only an obligation for the repair of any faulty asset.

c. The relevant standard for Otedang Limited transition to IFRS is IFRS 1-First Time Adoption of International Financial Reporting Standards. The standard requires an entity in transition to international financial reporting standards to:

- Recognised items that meet the criteria to be asset, but were not recognised as such in the local standards;
- Derecognised items that were recognised as asset by the local standards but do not meet the criteria to be recognised in line with IFRS; and
- Re-measure all assets in line with IFRS 13-Fair value measurement and charged fair value gain or loss to the equity (retained earnings).

The treatment of deferred assets by Otedang Limited should be in line with IAS 12.

IAS 12 states that deferred tax liability should be recognised using full liability approach, while deferred asset tax can only be recognised on the following grounds:

- Entity must recalculate the deferred tax asset;
- It should be probable that there is future profit to utilise the asset; and
- It must be measured reliably.

The derecognition of the previously deferred expense in Otedang Limited do not fulfil IFRS 1 criteria as deferred asset or liability that arise before transition to IFRS as it already exist and should be part of liability already set up.

Examiner's report

This question tests candidates' understanding of the provisions of IAS 37 on the recognition, treatment and presentation of warranty obligations in the year-end financial statements.

Few of the candidates attempted this question and their performance was poor.

The commonest pitfall was the lack of understanding of the interpretation of the question and their failure to apply IAS and IFRS to solve practical problems.

Candidates are advised to use ICAN study text to understand the provisions of various standards and practical application of IFRS to true life situation for better performance in future examinations.

Marking guide

		Marks	Marks
a	Accounting for provisions in the financial statements	3¼	
	Year-end estimated provision in Otedang Limited	3¾	7
b	Treatment of warranty obligation	2	
	Comment on the senior accountant view	5	7
c	Comment on the treatment of the deferred expense in the year-end financial statements	2	
	Application of the treatment to Otedang Limited	4	6
	Total		**20**

Solution 4

a. The two factors which would be considered important when conducting impairment test under IAS 36- Impairment of Assets, with particular reference to group accounting will include:

i. **The carrying amount of the asset**

This will be determined by the policy of the entity on subsequent measurement- cost model or revaluation model. Under the cost model, the carrying amount will be the historical cost less accumulated depreciation, depreciation for the year and less accumulated impairment, while under the revaluation model, the revalue amount becomes the carrying amount.

The carrying amount from group perspective is either the total asset without considering the liabilities or the net assets which is the equity, taking into consideration fair value adjustment and unimpaired goodwill.

ii. **The recoverable amount of the same asset.**

This is the higher of fair value less cost to sell and value in use of the assets. The value in use is the present value of all the net future cash flows including the residual value of the assets. With reference to group accounting, the recoverable amount is the amount that will be received if all the assets are sold as a disposal group in a single transaction. The allocation of the impairment, if any, must follow IAS 36 procedure.

b.

i. IAS 36-Impairment of Assets defines impairment as the amount by which the carrying amount of an asset is higher than the recoverable amount. This means an asset is said to be impaired when the carrying amount of the asset is higher than the recoverable amount.

IAS 36 also defines a Cash-Generating Unit as the smallest identifiable group of assets that are generating cash flows that are largely independent of the cash inflow from other assets or group of assets.

It requires that in the case of a Cash-Generating Unit, the impairment should be allocated to the group of assets as follows:

- Goodwill should be written off first; and
- Balance written off on pro-rata basis from the remaining assets that are not yet in their recoverable amount.

Note that any asset that is specifically impaired no longer meet the criteria to be recognised as an asset and to the extent of the impairment, it should be written off in full and then revert to the procedure above.

In unit 1, the patent has no ascertainable market value, thus, no longer meets the criteria to be recognised as an asset and should be written off completely. The balance of impairment should be charged fully to property, plant and equipment since all the net current assets have a market value that is above the carrying amount, thus indicating no impairment.

This is demonstrated below:

Unit 1

Items	**Carrying amount**	**Impairment**	**Recoverable amount**
	₦'m	**₦'m**	**₦'m**
Patent	7.5	(7.5)	-
PPE	90	(12)	78
Net current asset	30	-	30
Total	127.5	19.5	108
Recoverable amt.	108		
Impairment	19.5		

ii. It may or may not be possible to allocate the purchased goodwill to the individual units in the cash-generating unit, however, where it is not possible to allocate the goodwill to the various units of the cash generating units the impairment is carried out in two stages as follows:

- Carry out an impairment review on each of the cash generating units (excluding goodwill) and recognised any impairment losses that have arisen; and
- Then carry out an impairment review for the entity, including the goodwill.

From the CGU perspective, the impairment review will be for the whole entity, including the goodwill.

Consequently, the purchased goodwill will suffer the remaining impairment after unit 1 impairment had been allocated and the balance goodwill will be recognised separately in the non-current asset of the statement of financial position.

Computation of goodwill in Bobo Nigeria Limited

Cost of acquisition	₦270m
Purchase consideration	₦390m
Goodwill	(120m)

See the computations below:

Items	Unit 1	Unit 2	Unit 3	Total	Impairment	Recoverable Amt
	₦'m	₦'m	₦'m	₦'m	₦'m	₦'m
Goodwill				120	(93)*	27
Patent	7.5	-	-	7.5	(7.5)	-
Net current assets	30	37.5	30	97.5	-	-
PPE	90	45	60	195	(12)	183
Total				**420**	**(112.5)**	**307.5**
Recoverable amt.				307.5		
Impairment				112.5		

Tutorial

*₦93million impairment of goodwill is a balancing figure of ₦112.5million-₦19.5million impairment of unit 1 cash generating unit.

Examiner's report

This question tests candidates understanding of the important factors on the provisions of IAS 36 on impairment of assets and computation of impairment loss.

Few candidates attempted the question and their performance was poor.

The commonest pitfall was the lack of understanding of the requirements and interpretation of the question. Candidates' also demonstrated poor understanding of how to compute impairment loss.

Candidates are advised to pay more attention to the provisions and interpretation of standards when preparing for future examinations.

Marking guide

		Marks	Marks
A	Factors to consider when conducting impairment test using the carrying amount of the assets	4	
	The recoverable amount of the same assets	4	8
Bi	Application of impairment loss in Bobo Limited	2¼	
	Allocation of impairment loss to unit 1 of Bobo Limited	2¾	5
Ii	Computation of impairment loss on carrying amount of Bobo Limited	3	
	Explanation of the effect of the impairment review	4	7
	Total		**20**

Solution 5

a. Provision of IFRS 16 on classification of sub-lease

In a sub-lease arrangement whereby a lessee, leases an asset from a lessor (head lease) and the lessee then releases the same asset (as intermediate lessor) to another third party lessee (sub-lease) IFRS 16 requires an intermediate lessor (Jiganawa Plc.) to classify the sub-lease as a finance lease or an operating lease as follows:

If the head lease lease payments as an expense on a straight-line basis over the term of the lease, the sub-lease must be classified as an operating lease. Otherwise, the sub-lease must be classified by reference to the right-of-use asset arising from the head lease, rather than by reference to the economic useful life of the underlying assets (such as the item of property, plant and equipment that is the subject of the lease).

Classification of the sub-lease by Jiganawa Plc.

Right-of-use of the asset arising from the head lease has a useful life of five years. Therefore, it is a short-term lease which must have been accounted for by recognising the lease payments as an expense on a straight-line basis over the term of the lease. The sub-lease must be classified as an operating lease.

Accounting for the sub-lease in accordance with IFRS 16

For an operating lease, when the intermediate lessor enters into the sub-lease:

i. It should retain the lease liability and the right-of-use of the asset relating to the head lease in its statement of financial position

During the term of the sub-lease, the intermediate lessor:

ii. Should recognise a depreciation charge for the right-of-use asset and interest on the lease liability; and

iii. Should recognise lease income from the sub-lease.

b. Determining when there is a change in accounting policy

It could be sometimes difficult but it is important to distinguish between changes in accounting policy from changes in accounting estimates. A change in accounting policy can be established as follows. The accounting policies chosen by an entity should reflect transactions and events through:

i. recognition (e.g. capitalising or writing off certain types of expenditure);

ii. measurement (e.g. measuring non-current assets at cost or valuation); and

iii. presentation (e.g. classification of costs as cost of sales or administrative expenses).

If at least one of these criteria is changed, then there is a change in accounting policy.

The initial application of a policy to revalue assets in accordance with IAS 16 Property, Plant and Equipment or IAS 38 Intangible Assets is a change in an accounting policy. However, it is accounted for in accordance with guidance in those standards rather than in accordance with IAS 8. IAS 16-Property, Plant and Equipment allows the use of the cost model or the revaluation model for measurement after recognition. Therefore, a change in the measurement basis applied is a change in an accounting policy, and is not a change in an accounting estimate.

c. Differences between Global Reporting Initiative (GRI) and Sustainability Accounting Standard Board (SASB) Sustainability Reporting Frameworks

i. The GRI standards are designed to provide information to a wide variety of stakeholders whereas SASB standards are designed to provide information to investors in mandatory filings (financial disclosures).

ii. The GRI standards include a very broad array of topics while SASB standards focus on the sub-set of sustainability issues that are financially relevant.

iii. GRI standards are concerned about the impact that an organisation is having on the world but the concern of SASB standards is the impact of the world on the company.

iv. The SASB sets sustainability disclosure standards that are industry-specific and tied to the concept of materiality to investors. The standards are intended to capture sustainability matters that are financially material and reasonably likely to have a material impact on financial performance or condition. GRI standards consider materiality for each stakeholders and are applicable across industries.

v. GRI standards aimed at improving transparency while SASB stands aimed at improving sustainability performance.

vi. GRI standards are wider in scope while SASB are narrower and cover material and relevant sustainability issues to specific industries.

Recommendations to the company

The company, Jiganawa Plc., is advised to use the SASB sustainability reporting framework. Reasons for adoption of SASB standards are:

i. Their focus is to have a sustainability report that meets the needs of investors. SASB has investor as its focus in terms of reporting requirements;

ii. SASB has specific industry standards;

iii. It considers materiality for each industry standards;

iv. It looks at the future performance of companies; and

v. It is a better framework that gives an insight on the changes experienced by the market.

Examiner's report

This question in part (a) tests candidates understanding of classification and accounting for sub-lease using the provisions of IFRS 16. Part (b) of the question tests determination of when there is change in accounting policy or estimates and part (c) tests the distinction between GRI & SASB.

Few of the candidates attempted the question and their performance was poor.

The commonest pitfall was lack of understanding of the relevant terms, standards and current issues and development in corporate reporting.

Candidates are advised to pay more attention to the current development in financial and corporate reporting for better performance in future examinations.

Marking guide

		Marks	Marks
A	Provision of IFRS 16 on classification of sub-lease	2	
	Classification of the Sub-lease by Jiganawa Plc.	2	
	Accounting for Sub-lease in accordance with IFRS 16	3	7
B	Change in accounting policy and accounting estimates	5	5
C	Differences between GRI and SASB Sustainability Reporting Frameworks	4	
	Recommendation/advice to the company	1	
	Reasons for the choice	3	8
	Total		**20**

Solution 6

a. **Classification of financial assets in accordance with IFRS 9**

A financial asset might be an investment in debt or in equity. Its classification determines how financial assets are accounted for and in particular, how they are measured.

A company must classify financial assets as subsequently measured at:

i. Amortised cost;
ii. Fair value through other comprehensive income; or
iii. Fair value through profit or loss

This classification is made on the basis of both:

- The business model for managing the financial assets; and
- The contractual cash flows characteristics of the financial assets.

There are conditions to be met before classifying financial assets using any of the measures above. These conditions are stated below for each of the measures

Financial assets at amortised cost

A financial asset must be measured at amortised cost if both of the following conditions are met:

- The assets is held within a business model whose objective is to hold assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at fair value through other comprehensive income

A financial asset must be measured at fair value through other comprehensive income if both of the following conditions are met:

- The financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at fair value through profit or loss

Financial asset must be measured at fair value through profit or loss unless it is measured at amortised cost or at fair value through other comprehensive income. Reclassification of financial assets after initial recognition is required when an entity changes its model for managing financial assets. It is not allowed in any other circumstance.

Classification by Abakan Bank

FGN Bonds is investment in debt and given the provisions in IFRS 9 and the fact that the Bank has a policy of selling before maturity some of its investments, then this investment should be classified and measured as financial asset at fair value through other comprehensive income.

b. IFRS 9 requires recognition of expected losses. The standard identified and defines the following types of credit losses:

Credit loss: The difference between all contractual cash flows that are due to an entity in accordance with the contract and all the cash flows that the entity expects to receive (i.e. all cash shortfalls), discounted at the original effective interest rate;

Lifetime expected credit losses: The expected credit losses that result from all possible default events over the expected life of a financial instrument; and

12-month expected credit losses: The portion of lifetime expected credit losses that represent the expected credit losses that result from default events on a financial instrument that are possible within the 12 months after the reporting date.

Therefore, upon transition to IFRS 9, the Bank is advised to maintain a loss allowance for expected credit losses in accordance with IFRS 9 and the loss allowance must not be offset against the financial asset.

c. **Fair value hierarchy**

IFRS 13 establishes a fair value hierarchy to categorise inputs to valuation techniques into three levels.

Level 1: This relates to quoted prices in active markets for identical assets or liabilities that the entity can access at the measurement date. At this level, quoted prices for an identical asset or liability in an active market provide the most reliable evidence of fair value.

Level 2: This has to do with inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Here, reliable measures of fair value are the quoted price of a similar asset to the one being valued in active or inactive markets or quoted interest rate.

Level 3: This level is applicable when there is no relevant observable input such as when there is little or no market activity for the asset or liability at the measurement date. When such happens, conclusively, there is no unobservable input for the asset or liability. Cash flow projections could be a good measure of fair value but such cannot be used without adjustments.

Based on the following fair value hierarchy, the Bank should categorise investment in FGN bonds as a Level 1 input since none of the following circumstances occur:

i. Holding of large but not identical asset or liability; and
ii. No information that quoted price in active market does not represent fair value at the date of measurement.

Examiner's report

This question tests candidates' knowledge of classification debt investment in accordance with IFRS 9. It also tests recognition of expected credit losses and fair value through OCI and fair value hierarchy in accordance with IFRS 13.

Few of the candidates attempted this question and their performance was generally poor.

The commonest pitfall was lack of understanding of the provisions of IFRS 9 and IFRS 13.

Candidates are advised to widen the scope of their preparation and pay more attention to the provisions of the accounting standards for better performance in future examinations.

Marking guide

		Marks
a	Classification of financial asset in accordance with IFRS 9	7
b	Recognition of expected losses under IFRS 9	7
c	Fair value hierarchy in IFRS 13	6
	Total	**20**

THE INSTITUTE OF CHARTERED ACCOUN-TANTS OF NIGERIA

PROFESSIONAL LEVEL EXAMINATION – MARCH/JULY 2020

ADVANCED TAXATION

Time Allowed: $3^1/_4$ hours (including 15 minutes reading time)

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

SECTION A: COMPULSORY QUESTION (40 MARKS)

QUESTION 1

Trusted Partners Incorporated (TPI) is an investment advisory holding company registered in Mauritius whose currency is Rupees. The company has been operating in Nigeria since 2004 through its subsidiary, Trusted Partners Nigeria Limited (TPNL). TPI owned 90 percent of TPNL and 10 percent by the local directors of the company. TPI has operations in four other African countries under various arrangements including affiliate entities, branch operations and local agencies.

TPNL's primary business is the marketing of TPI's investment funds in Nigeria including mutual funds in capital and money market securities. TPNL sometimes undertake proprietary investment for its own account majorly in equity, government bonds and Real Estate Investment Trust (REIT) units.

The following are the typical flow of investment and business income to TPI and TPNL:

	TPNL	**TPI**
Dividends from listed equity net of withholding tax (WHT)	Yes	No
Dividend from subsidiary	No	Yes
Interest from FGN treasury bills and bonds	Yes	Yes
REIT distributions	Yes	No
Marketing fee	Yes	No
Capital gains from sale of securities	Yes	Yes
Mutual fund income	No	Yes

The Group chief finance officer (CFO) of TPNL recently became aware of the double taxation avoidance (DTA) treaty between Nigeria and Mauritius which has been signed by both countries but not yet ratified in Nigeria.

Required:

a. i. Discuss the **stages** involved in domesticating a DTA treaty so as to become enforceable in Nigeria. (3 Marks)

ii. State the likely benefits to the contracting states. (5 Marks)

b. By applying the provisions of the DTA treaty, **compute the tax savings to TPNL and TPI** based on the information below for the year ended December 31, 2018.

	TPNL	TPI
	₦'000	Rupees '000
Dividends from listed equity (net of WHT)	1,314	-
Dividend from subsidiary	-	4,500
Interest from treasury bills and bonds	3,560	2,250
REIT distributions	780	-
Marketing fees	3,370	-
Capital gains from sale of securities	685	-
Mutual fund income	-	8,450

(Show workings and state any assumptions made) (10 Marks)

c. The Group CFO of TPI also recently read from a tax alert publication by one of the accounting firms in Nigeria to the effect that franked investment income is not subject to any further tax. The group CFO would like to know what this term stands for and if it is something important to his group's investments in Nigeria.

Required:

Explain the term "franked investment income" and describe its relevance (if any) to TPI. (4 Marks)

d. TPNL has just received a notice of tax audit from the Federal Inland Revenue Service (FIRS) which alleged that TPNL qualifies as the fixed base for TPI. The FIRS has requested for the records of the non-resident company (TPI) from TPNL ahead of the tax audit. TPNL shared the audit notification letter with the Group CFO of TPI who is unsure of the likely reasons for the fixed base assumption.

Required:

i. Explain briefly the term "fixed base" or "permanent establishment" for corporate income tax purposes. (9 Marks)

ii. Outline the circumstances under which TPNL may constitute a fixed base for TPI and the possible implications for both companies. (3 Marks)

e. The intercompany transactions between TPI and TPNL are mostly in respect of mutual fund marketing fees payable from TPI to TPNL on one hand and dividends payable from TPNL to TPI on the other hand.

Required:

Advise the group whether or not the Nigeria's transfer pricing regulations apply to their intercompany transactions. (6 Marks)

(Total 40 Marks)

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

QUESTION 2

The profit or loss account of Jumbo Limited, a company with a considerable foreign equity finance shows a loss of ₦1,007,000 for the accounting period ended June 30, 2019.

This was after the deduction of the following expenses:

	₦
Purchase of non-current asset	1,000,000
Overhauling of non-current asset	572,000
Depreciation	40,000
Rent	580,000
Rates	87,000
Donation	200,000
	2,479,000

The company commenced business on April 1, 2018, after its incorporation on January 1, 2018. The accounting date is June 30 annually. Included in the revenue is the sum of ₦100,000 and ₦90,000 representing dividend and rent received respectively for the period. The General Manager, Mr. Simpson, a foreigner,is of the view that, a new business must be treated as a small business to enjoy the incentives of small business during the tutelage period. According to him, the economic climate is not business friendly, and wonders why the local government officials and state government representatives come monthly to demand for one form of tax or the other. He is complaining about multiplicity /overlapping of taxes.

The schedule of non-current assets acquired by the company is as stated below:

Qualify capital expenditure	**Cost** ₦	**Date of acquisition**
Motor vehicle	400,000	01/02/08
Plant and machinery	600,000	30/09/08
Equipment	560,000	01/05/09
Furniture and Fittings	480,000	31/05/09

You are required to compute:

a. The adjusted profit of Jumbo Limited (3 marks)

b. The tax liability and the related capital allowances for the relevant years. (17 marks)

(20 marks)

QUESTION 3

a. The Tertiary Education Trust Fund (Establishment etc.) 2011 Act, was enacted to address the funding crisis and gaps in the education sector.

The Act aims at involving the private sector being a beneficiary of the products of education, to partake in its funding through contribution to the tertiary education trust fund (TET Fund).

Required:

Explain:

i. **THREE** objectives of Tertiary Education Trust Fund (Establishment, etc.) 2011 Act. (6 Marks)

ii. **FIVE** functions of the Board of Trustees. (5 Marks)

iii. Allocation and distribution of the fund. (5 Marks)

b. Given the provisions of the Mineral and Mining Act No. 20 of 2007 and minerals and mining Regulations, 2011.

Required:

Explain the conditions stipulated for the profits earned by a mining company to be exempted from income tax after the initial tax holiday. (4 Marks)

(Total 20 Marks)

QUESTION 4

Black Oil Limited is a marginal field oil producing company. It has been operating for the past seven years ramping up daily production from its initial 3,000 barrels per day to the current level of 10,000 barrels per day.

The information below relates to the company's financial year ended December 31, 2018:

Sales - export	9,000 barrels	API gravity 36 degrees
Sales – domestic	1,000 barrels	API gravity 32 degrees
Gross posted price	US$ 55 per barrel	Price adjustment per decrease in gravity US$ 0.5

	US$	US$
Production cost		180,000
Transportation		80,000
Staff cost		58,000
Admin. expenses		15,000
Finance charges		12,000
Depreciation and impairment charges		28,000
Royalties paid		14,500
Other expenses		21,500
Capital allowances:		
- For the year	8,200	
- Petroleum investment allowance	5,000	
- Balancing allowance	1,800	
- Unutilised capital allowance b/forward	13,800	

Notes:

(i) Other expenses include provisions for accrued expenses of US$8,000, back duty tax payable of US$6,000 and loss on disposal of assets of US$5,000.

(ii) The company has capitalised intangible drilling costs in the sum of US$22,000.

(iii) Royalties paid include royalties on domestic sales of US$2,500

(iv) Average rate of exchange – ₦305 to US$1.

(v) The domestic sale was @ ₦520 per barrel.

Required:

Compute:

a. The adjusted posted price of exported crude oil (2 Marks)
b. Assessable profit (8 Marks)
c. Chargeable profit (3 Marks)
d. Assessable tax (3 Marks)
e. Chargeable tax (4Marks)

(Total 20 Marks)

QUESTION 5

Larry Limited based in Lagos, is a manufacturing company that has been producing household utensils successfully for several years. The company is planning to enter the international market but the management team has little or no information in respect of regional economic integration and trade blocs around the world.

The Managing Director of the company has just engaged your professional accounting firm to provide advice on some salient issues in this respect.

Required:

As the officer in charge of international tax matters in the accounting firm, you are to present a report to your principal partner, for his review before sending it to the client, covering the following areas:

a. Distinction between regional integration and trade blocs (4 Marks)
b. Objectives of regional integration. (4 Marks)
c. Common market and economic union as major types of regional economic integration (4 Marks)
d. Benefits of regional economic integration and trade blocs (4 Marks)
e. Disadvantages of regional economic integration and trade blocs (4 Marks)

(Total 20 Marks)

QUESTION 6

Ade and Olu are qualified members of the Institute of Chartered Accountants of Nigeria (ICAN). They have been qualified for 3 years and are up to date with both their annual subscriptions and mandatory continuing professional education credit hours.

Both Ade and Olu having been unable to secure a full time job have been working as freelance accountants assisting small and medium enterprises (SMEs) with issues ranging from bookkeeping, cost management, audit, accounting and tax. In view of the huge potential for accounting services in the SME space, they have decided to register a firm, Ade Olu & Co. and to go into full time practice with particular focus on tax services.

Coincidentally, one of the SMEs entities (Kozmoz Nigeria Limited) where Ade currently provides freelance bookkeeping services, has received a takeover bid from another entity (Didimart Nigeria Limited), where Olu works part time as the Chief Financial Officer. As part of the acquisition process, both companies will have to carry out a tax due diligence to determine any exposure that may impact on the acquisition price.

Neither Ade nor Olu has any experience in conducting tax due diligence but they believe they can figure it out once they are able to secure an engagement from either or both companies which they intend to leverage on their existing relationships.

Assume that Ade Olu & Co. has been duly registered, the partners are licensed to practise by ICAN, and that Didimart Nigeria Limited awarded the tax due diligence assignment to Ade Olu & Co.

Required:

Advise Ade Olu & Co. on the following:

a. The process involved in the registration of a corporate taxpayer with the Federal Inland Revenue Service (9 marks)

b. The documentation/data of a client to be maintained by a newly appointed tax consultant (8 marks)

c. The concept of "conflict of interest" as it relates to a tax practitioner. (3 marks)

(Total 20 marks)

Nigerian tax rates

1. Capital allowances

	Initial %	**Annual %**
Building expenditure	15	10
Industrial building expenditure	15	10
Mining expenditure	95	Nil
Plant expenditure (excluding furniture and fittings)	50	25
Manufacturing industrial plant expenditure	50	Nil
Construction plant expenditure (excluding furniture and fittings)	50	Nil
Public transportation motor vehicle	95	Nil
Ranching and plantation expenditure	30	50
Plantation equipment expenditure	95	Nil
Research and development expenditure	95	Nil
Housing estate expenditure	50	25
Motor vehicle expenditure	50	25
Agricultural plant expenditure	95	Nil
Furniture and fittings expenditure	25	20

2. Investment allowance 10%

3. Rates of personal income tax

Graduated tax rates with consolidated relief allowance of ₦200,000 or 1% of gross Income whichever is higher + 20% of gross income.

	Taxable income (₦)	**Rate of tax (%)**
First	300,000	7
Next	300,000	11
Next	500,000	15
Next	500,000	19
Next	1,600,000	21
Over	3,200,000	24

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

4. Companies income tax rate 30%
5. Tertiary education tax 2% of assessable profit
6. Capital gains tax 10%
7. Value added tax 5%

Solution 1

1(a) (i) **Stages involved in domesticating a double taxation avoidance (DTA) to become enforceable in Nigeria:**

- The following are the steps involved in domesticating a double taxation avoidance (DTA) treaty to become enforceable in Nigeria:
- Origination of the bill for the Double taxation avoidance treaty either by the Executive, Senate or House of Representatives;
- Initial review of the bill by the review committee set up by the Senate or the House of Representatives;
- Gazetting of the bill to the public that the DTA treaty is being considered;
- Readings of the bill before the Senate and House of Representatives for debate;
- Ratification of the bill through signing of the bill by the Senate and House of Representatives after debates; and
- The President then signs the DTA treaty bill into law to become enforceable.

(ii) **Benefits of double taxation avoidance (DTA):**

- The following are the double taxation avoidance (DTA) benefits to companies in the contracting states:
- Avoidance of double taxation because tax is only payable in one of the Countries;
- Clarification of taxing right of each contracting states;
- Encouragement of economic cooperation between contracting states;
- Prevention of tax evasion with anti-avoidance provision;
- Exemption of some incomes from tax as agreed in the treaty;
- Application of lower tax rates;
- Promotion of bilateral investment between contracting states;
- Encouragement of siting of head office and permanent establishment in the contracting states; and
- Reduction of cost of compliance in the contracting states.

(b) **Computation of tax savings for 2019 year of assessment**

		Note	TPNL ₦'000	TPI R'000
i	Dividend from listed equity (net of WHT)	(i)	292.00	-
ii	Dividend from subsidiary	(ii)	-	1,012.50
iii	Interest from treasury bills and bonds	(iii)	1,068.00	675.00
iv	Real estate investment trust distributions	(iv)	234.00	-
v	Marketing fees	(v)	-	-
vi	Capital gains from sale of securities	(vi)	68.50	-
vii	Mutual fund income	(vii)	-	-
	Total tax savings		1,662.50	1,687.50

Tutorial note to tax savings computation

(i) The dividend received by TPNL from listed equity net of withholding tax, is a "franked investment income" and shall be a final tax on the dividend. The dividend is exempted from further tax in the hand of TPNL. There will be tax savings of 20% (that is 30% - 10%) on the gross dividend since the 10% WHT already deducted is a final tax on the dividend, that is

20% X ($^{100}/_{90}$ x ₦1,314,000) = ₦292,000

(ii) Dividend from subsidiary (TPNL) to TPI will be subject to withholding tax of R337,500 at 7.5% instead of regular 10% according to Articles 10, 11 and 12 of the double taxation avoidance agreement between Mauritius and Nigeria. The withholding tax credit note issued to TPI shall be utilised to claim relief of the WHT when the dividend is received in Mauritius, also, in line with the provision in Mauritius-Nigeria DTA treaty. Meanwhile, the net dividend from subsidiary (TPNL) will constitute a franked investment income to TPI and exempted from any further tax. Therefore, there will be tax savings of 22.5% (that is 30% - 7.5%) on the gross dividend, that is

(30% of R4,500,000) - (7.5% of R4,500,000) = R1,012,500

(iii) Interest from treasury bills and bonds are exempted from tax in Nigeria, though Article 10, 11 and 12 of the Mauritius-Nigeria DTA treaty provides for withholding tax at 7.5% on interest.

The tax savings from such investment incomes are as shown below:

TPNL (₦3,560,000 X 30%) = ₦1,068,000
TPI (R2,250,000 X 30%) = R675,000

iv) REIT distribution is an income from unit trust. Dividends or distributions received from unit trust are exempted from tax in Nigeria. Therefore, the tax savings from the income is ₦234,000 being 30% of the distribution received (₦780,000).

(v) The marketing fee received by TPNL from TPI is a taxable income and shall be fully subject to tax when received in Nigeria. This income is not covered in the DTA agreement between Mauritius and Nigeria. There will be no tax savings on the fee.

(vi) Capital gains from sale of securities are exempted from Capital Gains Tax Act effective 1998 year of assessment. Therefore, the tax savings on the capital gains on sale of securities shall be ₦68,500 (10% X ₦685,000).

(vii) The mutual fund income is deemed derived in Nigeria and shall be liable to tax in Nigeria. Mutual fund income is not covered in the DTA agreement between Mauritius and Nigeria, hence there will be no tax savings on the income.

(c) **Concept of "franked investment income" and its relevance**

Dividend received by a company from another company after deduction of withholding tax is regarded as "Franked Investment Income" in the hands of the recipient company and shall not be subject to any further tax as part of the profits of the recipient company. The concept of franked investment income is that the dividend has been paid out of a profit that has been subjected to corporate tax.

The importance of franked investment income are:

(i) It is a final tax on the income. The withholding tax on dividend received by TPI from TPNL shall be the final tax on such dividend in Nigeria, and will not be subject to any further tax in the hand of TPI; and

(ii) Where such income is redistributed and tax is to be accounted for on the gross amount of distribution, the company may off-set the withholding tax which it has itself suffered on the same income.

TPI would have received the dividend from TPNL net of tax, hence it will not be charged to further tax. Based on the foregoing, the franked investment income should not form part of the holding company's total profits for tax purposes.

(d) (i) **Fixed base or permanent establishment for corporate income tax purposes**

The term fixed base or permanent establishment implies that the place must be easily identifiable and must possess some degree of permanence. If a non-resident corporation has a fixed base or permanent establishment from which it carries on its business or trade in Nigeria, the profits from such activities would be deemed to be derived from Nigeria.

The following constitute a fixed base:
- Facilities such as a factory, an office, a branch, a mine, gas or oil well etc;
- Activities such as building, construction, assembly, or installation, and
- Furnishing of services in connection with the activities mentioned above.

The following situations are specifically exempted and do not constitute a fixed base:
Facilities used solely for storage or display of goods or merchandise; and
Facilities used solely for the collection of information.

For an individual, the profit of an individual carrying on a trade or business in Nigeria through a fixed base shall be profit attributable to that fixed base specifically:

If the business is through a dependent agent, the profit attributable to that agent;
If the business involves turnkey project, the profit from that contract; and
If the business is through related parties, the profit determined on arm's length principle by the relevant tax authority.

Agency operation – S.11 (2) (b)
Where a non-resident company does not have a fixed base in Nigeria but habitually operates a trade or business through a person in Nigeria and the agent is:

Authorised to conclude contracts on his behalf with some other companies controlled by it or which has controlling interest in them; and
habitually maintaining an inventory of goods or merchandise in Nigeria from which deliveries are regularly made by a person on behalf of the company, then an agency arrangement is deemed to have arisen.

The profit deemed to have been derived from Nigeria is the profit attributable to the business or trade or activities carried on through the agent.

There are two types of agents, these are:

Independent agent
An agent is regarded as possessing independent status when it deals on behalf of a non-resident company in its ordinary course of business. The implication of this arrangement is that the agent carries on its own trade along with this function as an agent of the non-resident company. Therefore, if the non-resident company stops trading in Nigeria, the independent agent is not materially affected as it will continue in its own business.

Dependent agent
This occurs where the agent devotes his activities wholly or almost wholly on behalf of the non-resident company. Where a dependent agent makes an isolated sale of goods on behalf of the principal, such a transaction may not necessarily be

subjected to tax in Nigeria. Where however, the sale of goods on behalf of the principal is on a regular basis, then the agent is deemed to trade habitually in the goods and the profit derived there from, is chargeable to tax in Nigeria.

Turnkey Projects – S.11 (2) (c)

This is a trade or business or activity which involves a single contract for the surveys, deliveries, installations or construction. For Nigerian income tax purposes, the profit from such a turnkey project is considered as derived from Nigeria. Consequently, it is fully chargeable to tax in Nigerian and offshore.

(d) (ii) **Circumstances under which TPNL may constitute a fixed base for TPI and the possible tax implication for both companies**

TPNL may constitute a fixed base for TPI if it meets any of the following:

- Facilities such as factory, an office, a branch, a mine or an oil well;
- Activities such as building, construction, assembly or installation; and
- Furnishing of services in connection with the activities above

Tax implications for both companies

- TPNL is TPI's Subsidiary in Nigeria. The profits of TPNL derived from marketing of TPIs investment funds including mutual funds in capital and money market securities in Nigeria will be deemed derived in Nigeria and will be subjected to tax in Nigeria. TPI only invested in TPNL. However, the dividend distributed by TPNL to TPI when received in Mauritius is subjected to the double taxation avoidance agreement between Nigeria and Mauritius.

- TPNL sometimes undertakes proprietary investment for its own account, implying that TPI derives income habitually through TPNL. Such profit is deemed derived in Nigeria and will be subjected to tax in Nigeria. The profit will also be subjected to tax when received by TPI in Mauritius. The income earned in Nigeria shall be subjected to the tax because such profit is not covered in the double taxation avoidance treaty between Nigeria and Mauritius.

(e) **Application of transfer pricing regulations to intercompany transactions between TPI and TPNL**

The provisions of the Transfer Pricing Regulation Act 2018 covers all controlled transactions between connected taxable persons. TPI and TPNL are examples of connected taxable persons in transfer pricing regulations.

Transfer price is the price at which individuals, companies or multinationals transfer (sells or buys) goods, services and intangible properties to their members or associated enterprises. It is simply the price at which a transaction is carried out between connected taxable persons or related enterprises. For transfer pricing purposes, transaction between a permanent establishment (e.g. TPNL) and its head office (TPI) is considered as a controlled transaction.

The Transfer Pricing Regulations Act 2018, requires taxpayer to comply with arm's length principle especially for transactions with their related entities. Associated enterprises and multinationals (connected taxable persons) that enter into any transaction, must ensure that taxable profits from their transactions are consistent with arm's length principle and regulations of transfer pricing. Failure to comply with the arm's length principle or regulations of the transfer pricing may compel the revenue authority to adjust the taxable profit, where necessary in order to enforce compliance.

The mutual fund marketing fee payable by TPI to TPNL is a taxable income to TPNL in Nigeria. The FIRS will ensure that this fee is consistent with arm's length principle by comparing the fee with fee chargeable by other unrelated entities in a comparable situation. Federal Inland Revenue Service will ensure that dividends payable by TPNL to TPI do not exceed the total profit for 2019 YOA, otherwise TPNL shall be liable to income tax on dividend basis (S.19 CITA). Also, the FIRS will ensure that appropriate withholding tax on the dividend is deducted and remitted.

Marking guide

			Marks	Marks
a	i	Stages involve in domesticating a DTA to become enforceable in Nigeria (1 mark each, subject to maximum of 3 points)		3
	ii	Benefits to the contracting states (1 mark each, subject to maximum of 5 points)		5
b		Tax savings to TPNL and TPI:		
		½ mark for each correct saving	4	
		Explanation to savings ¾ mark for each correct explanation	6	10
c		Explanation of concept of franked investment income (F11)	2	
		Stating importance of F11	1	
		Re-distribution of income on F11	1	4
d	i	Definition of fixed base or permanent establishment	2	
		Explanation of fixed base (1 mark for each correct point)	3	
		Explanation of fixed base for an individual (1 mark each correct point)	3	
		Explanation of agency operation ($^1/_4$ mark for each correct point)	1	9
	ii	TPNL constituting a fixed base for TPI ($^1/_2$ mark for each correct point)	$1^1/_2$	
		Possible implication for both companies ($^3/_4$ mark for each correct point)	$1^1/_2$	3
e		Brief explanation of transfer pricing regulation	$^1/_2$	
		Definition of transfer price in relation to related parties	$1^1/_2$	
		Correct explanation of arm's length principle	2	
		Correct explanation of mutual fund	2	6
				40

Examiner's report

The question tests candidates' knowledge of double taxation avoidance treaty, domesticating the treaty with a view to becoming enforceable in Nigeria and the likely benefits to contracting states. Additionally, candidates are expected to explain franked investment income and transfer pricing.

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

The major pitfall was inability of the candidates to apply the DTA treaty rules in the computation of the tax savings for the related parties.

Candidates are advised to familiarise themselves with the ICAN Study Text.

Solution 2

(a) Jumbo Limited
Computation of adjusted profit for the period ended June 30, 2009 (15 months)

	₦	₦
Net loss		(1,007,000)
Add: disallowable expenses:		
Purchase of non-current assets	1,000,000	
Overhauling of non-current asset	572,000	
Depreciation	40,000	(1,612,000)
		605,000
Deduct:		
Dividend		(100,000)
Adjusted profit		505,000

(b) Jumbo Limited
Computation of companies income tax for the relevant tax of assessment

	₦	₦
2008 assessable profit **(wk1)**		303,000
Capital allowances:		
Capital allowance for the year (**wk3**)	593,750	
Investment allowance (**wk3**)	60,000	
Capital allowance claimable (**wk3**)	653,750	
Restricted to 662/3% x 303,000	(202,000)	(202,000)
Unclaimed capital allowance c/f	451,750	
Total profit		101,000
Companies income tax @ 30% of total profit		30,300
Less WHT on rent (10% of 90,000)		(9,000)
		21,300
Tertiary education tax @ 2% of 303,000		6,060
Total tax liability		27,360

2009: assessable profit (**wk1**)		404,000
Capital allowance		
Unclaimed capital allowance b/f	451,750	

Capital allowance for the year **(wk3)**	135,417	
Capital allowance claimable	587,167	
Restricted to 2/3 x 404,000	(269,333)	(269,333)
Unclaimed claimed allowance c/f	317,834	
Total profit		134,667
Companies income tax @ 30% total profit		40,400
Tertiary education tax @ 2% of assessable profit		8,080
Total tax liability		48,480

2010 Assessable profit (**wk1**)		404,000
Capital allowance		
Unclaimed capital allowance b/f	317,834	
Capital allowance for the year (**wk3)**	677,417	
Investment allowance	56,000	
Capital allowance claimable	1,051,251	
Restricted to $66^{2}/_{3}$% x ₦403,333	(269,331)	
Unclaimed capital allowance c/f	781,920	
Capital allowance claimed		(269,331)
Total profit		134,669
Companies income tax @ 30% of total profit		40,401
TET @ 2% of assessable profit		8,080
Total liability		48,481

Workings:

(1) Assessable profits for the relevant years of assessment (YOA)

YOA	Basis periods	Workings	Assessable profit ₦
2008	1/4/08 - 31/12/08	$^{9}/_{15}$ X ₦505,000	303,000
2009	1/4/08 - 31/03/09	$^{12}/_{15}$ X ₦505,000	404,000
2010	1/7/08 - 30/06/09	$^{12}/_{15}$ X ₦505,000	404,000

(2) Basis period for capital allowance(CA)/QCE

YOA	Basis periods	Basis periods (CA)	QCE
2008	1/4/08 - 31/12/08	1/4/08 - 31/12/08	M.V, P&M
2009	1/4/08 - 31/03/09	1/1/09 - 31/03/09	-
2010	1/7/08 - 30/06/09	1/4/09 - 30/06/09	Equip, F&F

WK3 Capital allowance (CA) for 2008 – 2010 year of assignment

	Motor vehicle	Plant & machinery	Equipment	Furniture & Fittings		Capital Allowance
Initial allowance (IA)	50%	50%	50%	25%		
Annual allowance (AA)	25%	25%	25%	20%		
Investment allowance	-	10%	10%	-		
YOA	-	₦	₦	₦		₦
2008 Cost	400,000	600,000	-	-		
IA (IA% x Cost)	(200,00)	300,000	-	-		500,000
AA (WK 4)	(37,500)	(56,250)	-	-		93,750
Investment allowance -			-	-		
(10% x 600,000)					60,000	
Capital allowance for the year		-	-	-		593,750
2009 TWDV b/f	162,500	243,750		-	-	
AA (Wk 4ii)	(54,167)	(81,250)		-	-	135,417
2010 TWDV b/f	108,333	162,500		-	-	
Additions – cost		-	560,000	480,000	-	
IA (IA% x cost)		-	(280,000)	(120,000)		400,000
AA (Wk 4ii)	(54,167)	(81,250)	(70,000)	(72,000)		277,417
Investment allowance -			-	-		
(10% x 560,000)					56,000	
Capital allowance for the year						677,417
TWDV c/f	54,166	81,250	210,000	288,000		

(WK4 i) Annual allowance (AA)

$$AA = \frac{\text{Cost} - IA}{n}$$

Motor vehicle = $\frac{₦400,000 - 200,000}{4}$ = 50,000 per annum

4 years

AA for 2008YOA = ₦50,000 x $^9/_{12}$ = 37,500

Plant & machinery = $\frac{₦600,000 - 300,000}{4 \text{ years}}$ = 75,000 per annum

AA for 2008YOA = ₦75,000 x 9/12 = 56,250

Equipment = $\frac{₦560,000 - 280,000}{4 \text{ years}}$ = 70,000 per annum

Furniture & fittings = $\frac{₦480,000 - 120,000}{5 \text{ years}}$ = 72,000 per annum

Examiner's report

The question tests candidates' knowledge of computation of adjusted/assessable profit and capital allowances.

Many candidates attempted the question. However, performance was below average. The major pitfall was the candidates' inability to determine the basis period for computing the capital allowances.

Candidates are advised to make use of ICAN Study Text and other relevant materials for future examinations.

Marking guide

		Marks	Marks
A	Adjusted profit of Jumbo Limited:		
	Net Loss	$^1/_2$	
	Disallowable expenses:		
	Purchase of non-current assets	$^1/_2$	
	Overhauling of non-current assets	$^1/_2$	
	Depreciation	$^1/_2$	
	Dividend	$^1/_2$	
	Adjusted profit	$^1/_2$	3
B	Computation of companies income tax		
	2008 assessment year:		
	Assessable profit	$^1/_2$	
	Total profit	$^1/_2$	
	Companies income tax	$^1/_2$	
	Withholding tax	$^1/_2$	
	Tertiary education tax	$^1/_2$	
	2009 assessment year:		
	Assessable profit	$^1/_2$	
	Capital allowance for the year	$^1/_2$	
	Total profit	$^1/_2$	
	Companies income tax @ 30%	$^1/_2$	
	Tertiary education tax	$^1/_2$	
	2010 assessment year:		
	Assessment profit	$^1/_2$	
	Capital allowance for the year	$^1/_2$	
	Investment allowance for the year	$^1/_2$	
	Total profit	$^1/_2$	
	Companies income tax @ 30%	$^1/_2$	
	Tertiary education tax	$^1/_2$	

(Wk) assessable profits for years of assessment:		
2008, 2009 and 2010	1	
(WK2) Basis period for capital allowance	1	
(Wk3) Capital allowances (CA) computation:		
2008 assessment year :		
Capital allowance computation		
Initial allowance	1	
Annual allowance	1	
Investment allowance	1	
2009 assessment year:		
Annual allowance	1	
2010 assessment year:		
Initial allowance:	1	
Annual allowance	1	
Investment allowance	1	17
		20

Solution 3

(a) (i) **Objectives of Tertiary Education Trust Fund (Establishment etc.) Act 2011. The objectives include the provision of :**

- Essential physical infrastructure for teaching and learning;
- Instructional material and equipment;
- Research and publication;
- Academic staff training and development; and
- Any other need which, in the opinion of the board of trustees, is critical and essential for the improvement of quality and maintenance of standards in the higher educational institutions.

(ii The board of trustees shall:

- Monitor and ensure collection of tertiary education tax by the FIRS and ensure transfer of same to the fund;
- Manage and disburse the tax imposed by this Act;
- Liaise with the appropriate ministries or bodies responsible for collection or safekeeping of the tax;
- Receive requests and approve admitable projects after due consideration;
- Ensure disbursement of funds to various public tertiary educational institutions in Nigeria;
- Monitor and evaluate execution of the projects;
- Invest funds in appropriate and safe securities;

- Update the federal government on its activities and progress through annual and audited reports;
- Review progress and suggest improvements;
- Make and issue guidelines from time to time to all beneficiaries on disbursements from the fund and the use of monies received into the fund;
- Regulate the administration, application and disbursement of monies from the fund;
- Do such other things as are necessary or incidental to the objects of the TET fund under the act or as may be assigned by the Federal Government of Nigeria.

(iii) **Allocation and distribution of tertiary education trust fund**

The total tax collected in a year is disbursed in the ratio 2:1:1 amongst the universities, polytechnics and colleges of education, as shown below:

- Universities - 50%
- Polytechnics - 25%
- Colleges of Education - 25%

The Board of Trustees shall have power to give due consideration to the peculiarities of each geo-political zone in the disbursement and management of the tax imposed by this act between the various levels of tertiary education. The Minister for Education shall, on the recommendation of the Board of Trustees and subject to approval by the President, make guidelines for the disbursement of funds under this act, as follows:

- Funding of all public tertiary educational institutions;
- Equality among the six geo-political zones of the Federation in the case of
- special intervention; and
- Equality among the States of the Federation in the case of regular intervention.

(b) The profits earned by a mining company after the initial tax holiday period may continue to be exempted from income tax under the following circumstances:

(i) If the minerals are exported from Nigeria, the proceeds from such exports are repatriated to Nigeria and used exclusively for the purchase of raw materials, plants, equipment and spares;

(ii) If the minerals produced are exclusive inputs for the manufacture of products for exports, provided the exporter gives a certificate of purchase of input to the company;

(iii) Potential full or partial exemption of interest on foreign loan from income tax, subject to the conditions stipulated under Companies Income Tax;

(iv) Where a mining company records a turnover below ₦1million within the first five years of commencement of business, it will be liable to tax at the rate of 20% on any taxable profit recorded.

(v) Any interest, rent, royalty, or dividend received by a Nigerian company from abroad, and brought into the country through any of the approved Nigerian banks, will be exempted from corporate income tax.

(vi) Interest and/or gains received from bonds issued by any government or corporate body in Nigeria, as well as from short term securities issued by the Federal Government, are exempt from income tax. This exemption is only applicable until 2022 financial year (i.e 2023 tax year). However, bonds issued by the Federal Government of Nigeria shall continue to enjoy this exemption.

(vii) The Company may be entitled to the following reliefs:

- Employment tax relief (ETR): To qualify for this relief, the company must have a minimum net employment of 10 employees in an assessment year, out of which 60% must be individuals without prior work experience and have recently graduated from a school or vocation (not older than 3 years). The ETR claimable is limited to the lower of the gross emoluments paid to qualifying employees, or 5% of the assessable profits for the year;
- Work experience acquisition programme relief: Any company with a minimum net employment of five new employees in any year, and where the company has retained the employees for a minimum of two year. This relief exempts from income tax, 5% of the assessable profits;
- Infrastructure tax relief (ITR): This relief is granted to any company that provides infrastructure of a public nature in any assessment year, including power (electricity) roads and bridges, water health care facilities, educational and sporting facilities. Such company will be entitled to claim tax exemption of 30% of the cost of the public infrastructure provided. The above reliefs are only available until 2017 financial year that is 2018 tax year.

Examiner's report

The question tests candidates knowledge of the provision Tertiary Education Trust Fund (Establishment, etc Act 2011) and the income tax exemptions granted to mining companies after the initial tax holiday.

60% of the candidates attempted the question especially part (a).
Performance was below average. The common pitfall of the candidates was their inability to differentiate between responsibility and functions of Board of Trustee and clear objectives of the Act.

Candidates should endeavour to get a clear understanding of provisions contained in the Act, and make use of ICAN Study Text.

Marking guide

		Marks	Marks
a(i)	Objectives of tertiary education trust fund:		
	($1\frac{1}{2}$ marks for a correct point – maximum of 4 points)		6
(ii)	Functions of the board of trustees:		
	(1 mark for each correct point subject to a maximum of 5 points)		5
(iii)	Allocation and distribution of the fund:		
	Universities	1	
	Polytechnics	1	
	College of education	1	
	The powers of the board of trustees	$\frac{1}{2}$	
	Disbursement criteria	$1\frac{1}{2}$	5
B	Conditions for the profits earned by a mining company to be exempted from income tax after the initial holiday		
	(1 mark for each correct point subject to maximum of 4 points)		4
			20

Solution 4

Black Oil Limited
Computation of petrole um profits tax payable for 2018 year of assessment

	₦	₦
Value of crude oil sold:		
Export sales (Wk iii)		55,105,875,000
Domestic sales (Wkiii)		5,900,225,000
		61,006,100,000
Allowable expenses:		
Production cost	54,900,000	
Staff cost	17,690,000	
Admin cost	4,575,000	
Finance charges	3,660,000	
Transportation	24,400,000	
Other expenses (Wk iv)	3,202,500	
Royalties on domestic sales	762,500	
Royalties paid	3,660,000	
Intangible drilling cost capitalizes	6,710,000	
Tertiary education tax (Wk v)	1,193,853,725	1,313,413,725
Assessable profit		59,692,686,275
Capital allowance		8,784,000
Chargeable profit		59,683,902,275
Assessable tax		
85% of 59,683,902,275		50,731,316,934
MOU		-
Chargeable tax		50,731,316,934

Working 1
Crude oil barrels:
Sales export – 9,000 barrels/day
Export (9,000 x 365 days) = 3,285,000 barrels/year
Domestic (1000 x 365 days) = 365,000 barrels/year

WK II domestic sales only	Adjusted posted price
Gross posted price	US$
	55
Adjustment:	
(API 36^0 – API 32^0) = (\$0.5 x 4) =	(2)
Adjusted posted price for domestic sales =	53

(Wk III)

Export sales (3,285,000) x 55 x ₦305	55,105,875,000
Domestic sales – 365,000 x 53 x ₦305	5,900,225,000

(Wk IV) Other expenses = 21,500 – ($6,000 + $5,000) = $10,500
($10,500 x ₦305 = 3,202,500

(Wk V) Tertiary education tax

$$(61,006,100\ 000 - 119,560,000 \times \frac{2}{102}$$

$$= \underline{\underline{1,193,853,725}}$$

(WK VI) Capital allowance

	₦
Lower of capital allowance b/f	4,209,000
Annual allowance	2,501,000
Balancing allowance	549,000
Petroleum investment allowance	1,525,000
	8,784,000
and	
85% of assessable profit	
85% of 59,692,686,275	50,731,316,934
Less	
170% of PIA	
170% of ₦1,525,000	(2,592,500)
	50,728,724,434

Allowable expenses:	US$₦	₦
Production cost	180,000 x 305	54,900,000
Transportation	80,000 x 305	24,400,000
Staff cost	58,000 x 305	17,690,000
Admin expenses	15,000 x 305	4,575,000
Finance charges	12,000 x 305	3,660,000
Depreciation and insurance charges	28,000 x 305	8,540,000
Royalties paid	14,500 x 305	4,442,500
Other expenses (Wk1)	10,500 x 305	3,202,500
Capital allowance for the year	8,200 x 305	2,501,000
Petroleum inv. allowance	50,000 x 305	1,525,000
Balance allowance	18,000 x 305	549,000
Unutilised capital allowance b/f	13,800 x 305	4,209,000

Examiner's report

The question tests candidates' knowledge of computation of tax liabilities of petroleum companies in line with the provisions of Petroleum Profit Tax Act CAP 13, 2004 (as amended). Almost all the candidates attempted the question and performance was average.

The candidates pitfall was their inability to compute posted price.

Candidates are advised to make use of the ICAN Study Text and other relevant books for future examinations.

Marking guide

		Marks	Marks
a	Adjusted posted price for exported crude oil		
	Gross posted price	½	
	Correct adjustment factor	½	
	Adjusted posted price	1	2
b	Assessable profit:		
	Export sales	1	
	Domestic sales	1	
	Allowable costs:		
	Staff cost	½	
	Production cost	½	
	Admin cost	½	
	Finance charges	½	
	Transportation	½	
	Other Expenses	½	
	Royalties paid	½	
	Intangible drilling cost	½	
	Tertiary education tax (Wkv)	1	
	Assessable profit	1	8
c	Chargeable profit:		
	Working of capital allowance (Wk vi)	2	
	Chargeable profit	1	3
d	Assessable tax:		
	(85% of chargeable profit)		3
e	Chargeable tax:		
	(Assessable tax less mou)		4
			20

Solution 5

Internal memo

Date: September 16, 2020
From: Desk Officer, International Tax Matters **To:** The Principal Partner

Re: Report on request from Larry Limited about regional integration and trade blocs

I refer to the request of the above named client in respect of regional integration and trade blocs. A summary of the findings is hereby stated below:

a. **Distinction between Regional Integration and Trade blocs**

Regional Integration
This is a process in which neighbouring states enter into an agreement in order to upgrade cooperation through common institutions and rules.
The objectives of the agreement could range from economic to political to environmental, although it has typically taken the form of a political economy initiative where commercial interests are the focus for achieving broader socio-political and security objectives, as defined by national governments.
Regional integration has been organised either via supranational institutional structures or through inter-governmental decision-making, or a combination of both.

Past efforts at regional integration have often focused on removing barriers to free trade in the region, increasing the free movement of people, labour, goods, and capital across national borders, reducing the possibility of regional armed conflict for example, through confidence and security building measures, and adopting cohesive regional stances on policy issues, such as the environment, climate change and migration.
For example, North American Free Trade Agreement, Asian Pacific Economic Cooperation Forum, etc.

Trade blocs
A trade bloc is basically a free-trade zone or near-free-trade zone formed by one or more tax, tariff, and trade agreements among two or more countries.

Some trading blocs have resulted in agreements that have been more substantive than others in creating economic cooperation.

In the past decade, there has been an increase in these trading blocs with more than one hundred agreements in place and more in the pipeline for example, The European Union (EU), Economic Community of West African State (ECOWAS), etc.

b. **Objectives of regional integration**

Regional integration is the joining of individual states within a region into a larger whole. The degree of integration depends upon the willingness and commitment of independent sovereign states to share their sovereignty.

Regional integration initiatives should fulfil at least the following eight important objectives:

i. Strengthening of trade integration in the region;
ii. the creation of an appropriate enabling environment for private sector development;
iii. Development of infrastructure programmes in support of economic growth and regional integration;
iv. Development of strong public sector institutions and good governance;
v. Reduction of social exclusion and the development of an inclusive civil society;
vi. Contribution to peace and security in the region;
vii. Building of environment programmes at the regional level; and
viii. Strengthening of the region's interaction with other regions of the world.

c. **Common market and economic union as major types of regional economic integration**

Common market and economic union

Regional economic integration has enabled countries to focus on issues that are relevant to their stage of development as well as encourage trade between neighbours. Common market and Economic union are types of regional economic integration.

Common market

Common market allows for the creation of economically integrated markets between member countries.

Trade barriers are removed, as well as any restrictions on the movement of labour and capital between member countries.

Like customs unions, there is a common trade policy for trade with non-member nations. The primary advantage to workers, is that they no longer need a visa or work permit to work in another member country of a common market. Examples are the common market for Eastern and Southern Africa (COMESA), West African Common Market (WACM), etc.

Economic union

Economic union is a type of trade blocs that allows products, services and workers to cross borders freely. The union is aimed at eliminating internal trade barriers within member countries, with the goal of economically benefiting all the member countries. Economic union requires the integration of monetary and fiscal policies so that member countries coordinate policies, taxation and government spending relating to their agreement. They also use common currency and fixed exchange rate.

d. Benefits of regional integration and trade blocs

The advantages or benefits derivable from regional economic integration and trade blocs agreements include the following:

i Trade creation - These agreements create more opportunities for countries to trade with one another by removing the barriers to trade and investment. Due to a reduction or removal of tariffs, cooperation results in cheaper prices for consumers in the bloc countries. Studies indicate that regional economic integration significantly contributes to the relatively high growth rates in the less-developed countries;

ii Employment opportunities - By removing restrictions on labour movement, economic integration can help expand job opportunities;

iii Consensus and cooperation - Member nations may find it easier to agree with smaller numbers of countries. Regional understanding and similarities may also facilitate closer political cooperation;

iv Impetus for private sector planning and investment - Regional economic integration can serve a useful economic purpose beyond the direct gains from trade liberalisation, by reducing uncertainties and improving credibility and thus making it easier for the private sector to plan and invest. Indeed, reducing uncertainty may be vital for realising gains from liberalisation. Whether or not economic benefits from a particular regional trade agreement depends on the scope and coverage of its provisions, the nature of the enforcement mechanism and the circumstances in which the agreement can be modified; and

v Other non-economic benefits - Regional economic integration may allow a member country to reap other non-economic benefits, such as peace and security.

e Disadvantages of regional integration and trade blocs

Creation of regional economic integration and trade blocs may lead to any of the following disadvantages:

i Trade diversion - The flip side to trade creation is trade diversion. Member countries may trade more with each other than non-member nations. This may mean increasing trade with a less efficient or more expensive producer simply because it is a member nation. In this sense, inefficient companies can be protected inadvertently with the trade bloc agreements, acting as a trade barrier. In essence, regional agreements have formed new trade barrier with countries outside of the trading bloc;

ii Investment diversion - One of the problems facing many smaller economies is lack of foreign investment. Investment diversion is a potential economic disadvantage of regional economic integration program. Foreign investors from non-member countries may see a member country as less attractive place to invest due to higher burden of tariffs and regulations against non-member states;

iii Employment shifts and reduction - Countries and companies in one member nation may move production to another member country with a cheaper labour market. Also, workers may move to gain access to better jobs and wages. Sudden shifts in employments can distort the resources of member countries; and

iv Loss of national sovereignty - With each new round of discussions and agreements within a regional bloc, nations may discover that they have given up their political and economic rights.

Regional integration and trade blocs are forms of trade barriers with countries which are not members of the trading bloc.

The above is for your perusal and further action.

Regards,

Anjola-Oluwa Richard

Examiner's report

The question tests candidates' understanding of regional economic integration and trade blocs around the world.

About 45% of the candidates attempted the question but performance was below average.

The pitfall was the failure of candidates to explain the main differences between regional integration and trade blocs, and the benefits and disadvantages of the two terms.

Candidates are advised to get acquainted with this topic in the ICAN Study Text for future examinations.

Marking guide

		Marks	Marks
a	Heading of the memo	1	
	Distinction between regional and trade blocs:		
	Explanation of regional integration that is socio political and security objectives and organisation via supranational institutional or inter-governmental decision making	1	
	Removal of barriers to trade, increase in free movement of people labour and goods and adopting cohesive regional stances on policy issues	1	
	Explanation of trade blocs	1	4
b	Objectives of regional integration (1 mark for each correct point subject to maximum of 4 points)		4
c	Common market and economic union:		
	Explanation on common market	2	
	Explanation of economic union	2	4
d	Benefits of regional integration and trade blocs (1 mark for each correct point subject to a maximum of 4 points)		4
e	Disadvantages of regional economic integration and trade blocs (1 mark for each correct point subject to a maximum of 4 points)		4
			20

Solution 6

The Managing Partner
Ade Olu & co.
3, Ariyo Ogunlola Street
Ojodu, Lagos

Dear Sir,

Re: Tax practice management

Further to our discussion on the above subject, please find below our advice on relevant tax management issues.

a. **The process involved in the registration of corporate tax payer with the Federal Inland Revenue Service (FIRS).**

The Federal Inland Revenue Service has standard questionnaires which are expected to be completed by taxpayers for registration under the provisions of Companies Income Tax Act (CITA), Value Added Tax (VAT), Petroleum Profits Tax Act (PPTA) and other tax legislations/Acts.

The following details, together with certified true copies (CTC) of incorporation documents (originals to be submitted for verification), will be provided in a formal letter addressed to the Tax Controller of the relevant tax authority in respect of every prospective taxpayer:

i. Name, registration number and date of incorporation/registration;
ii. The registered or residential address (as applicable);
iii. The business address;
iv. Names and addresses of the directors;
v. Names and addresses of the shareholders together with their shareholdings;
vi. Any other directorship held by the directors;
vii. The precise nature of business;
viii. Whether or not the business has any predecessor(s);
ix. The date of commencement or business;
x. The accounting year-end;
xi. Details of company secretary (where applicable);
xii. Details of the appointed auditors and tax consultants;
xiii. Details of appointed bankers; and
xiv. Any other information which may help the tax authority in this regard.

VAT registration

A vatable person or VAT agent is required to also file application for VAT registration at the nearest FIRS office. The application will be supported with the certified true copy of the registration documents.

b. **Documentation/data to be maintained by the tax consultant**

The following documentation/data, among others, will be maintained by the tax consultants in respect of each client. The documents which will either be kept in the permanent file or forwarded to the relevant tax office will include the following:

i. CTC of incorporation documents, that is, certificate of incorporation, memorandum and articles of association, details of directors (form CAC 7), shareholders, secretary, share capital details, etc.;
ii. Engagement letter;
iii. Company auditors, if different from the tax consultant;
iv. Audited financial statements, capital allowances, income tax, tertiary education tax and other computations;
v. Trial balance, detailed analysis and schedules on the financial statements;
vi. Correspondence with the client, tax authorities and third parties;
vii. Registration documents in respect of income tax, value added tax (VAT), PAYE, withholding tax and other levies;
viii. Records of billings and outstandings; and
ix. Other documents, financials and non-financials.

c. **The concept of 'conflict of interest' as it relates to a tax practitioner**

A tax practitioner is not expected to act for two opposing parties. Notice of any attempt to do this must be sent across to the parties to seek their consent. Suffice to say that the service of a tax practitioner to a party must not be performed at the detriment of the other client having the same interest in a tax issue.

Kindly let us know if you need any further clarification on the above issues.

Yours faithfully,
For: A&B ASSOCIATES

Abiok Dele
Managing Partner

Examiner's report

The question tests candidates knowledge of registration of corporate tax payers with Federal Inland Revenue Service, documents to be maintained by a newly appointed consultants and the concept of conflict of interest that may crop up while carrying out such duties.

About 80% of the candidates attempted the question and performance was above average. The main pitfall was the inability of candidates to marshall their points on conflict of interest.

Candidates should endeavour to go straight to the point in answering questions and also to make use of the ICAN study text in future examinations.

Marking guide

		Marks	Marks
A	Heading of the letter	$^1/_2$	
	Details to be supplied by corporate tax payer with Federal Inland Revenue Service		
	($^1/_2$ mark for each correct point)	$7^1/_2$	
	Vat registration	1	9
B	Documentation/data to be maintained by the tax consultant (1 mark for each correct point subject to a maximum of 8 points)		8
C	Concept of "conflict of interest" as it relates to a tax practitioners	$2^1/_2$	
	Closing remarks of the letter	$^1/_2$	3
			20

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

PROFESSIONAL LEVEL EXAMINATION – MARCH/JULY 2020

STRATEGIC FINANCIAL MANAGEMENT

Time Allowed: $3^1/_4$ hours (including 15 minutes reading time)

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

SECTION A: COMPULSORY QUESTION (40 MARKS)

QUESTION 1

Toluwalase plc (TP) is a multi-divisional company operating in many sectors of the Nigerian economy. All major capital expenditure proposals are appraised and approved (or rejected) at the group corporate head office.

At the moment, Division A and Division B have submitted the under listed projects for review.

Division A

This division manufactures household appliances for sale in Nigeria and ECOWAS sub-region. The division is considering the development of a new product with a planned selling price of ₦10,000.

It is expected that the selling price will be held constant over the initial planning period of five years.

The company is uncertain about the scale of demand (at the selling price of ₦10,000). It is estimated that two states of demand are equally likely: State A and State B. Once the state has been identified, there remains some uncertainty about the actual level of demand as a result of general economic conditions.

State A		**State B**	
Volume per annum (units)	Probability (%)	Volume per annum (units)	Probability (%)
8,000	20	12,000	20
11,000	60	15,000	60
15,000	20	19,000	20

It is possible to commission a market research to discover with certainty whether State A or State B prevails.

The manufacture of the product would require the purchase of a machine.

Two models are available, one which costs ₦80 million and has a capacity of 12,000 units per annum and one which costs ₦120 million and has capacity of 20,000 units per annum. Both models would have lives of five years and no scrap value at the end of that time. In addition to the costs of a machine, the manufacture of the product would involve variable costs of ₦5,000 per unit and an incremental annual cash fixed cost of ₦20 million.

The division has cost of equity of 20% and cost of debt, net of tax of 10%. The target debt/equity ratio is 1. Ignore taxation and inflation.

Division B

This division runs staff canteens for a number of major corporate organisations in Abuja. The meals are prepared at a central location.

The division is in the process of purchasing a new industrial dishwasher. The division has received quotes from two suppliers, Yaro and Tony, both quotes meet the necessary requirements.

Yaro is offering a dishwasher that will cost ₦9,000,000 and has an expected life of ten years, after which it is expected to have a ₦200,000 scrap value. A warranty is included for the first year, however after that, continuing maintenance is available at ₦5,400,000 for a single payment to cover the remaining nine-year period; or alternatively by an annual charge of ₦750,000, payable in advance of the year of cover.

Tony is offering a dishwasher at ₦7,350,000. This machine is only expected to last five years, after which it will have a scrap value of ₦1,100,000. The supplier offers maintenance service at an annual cost of ₦720,000, payable annually in advance. The first year's maintenance is covered by the manufacturer's warranty.
Division B's cost of capital is 6%.

The purchase of the new dishwasher is essential to comply with the new hygiene regulations introduced by central government to reduce food poisoning outbreaks.

Required:

a. For division A, assess and recommend which of the two models of the Machine should be purchased, if any. In this part, ignore the market research.

(18 Marks)

b. If the market research is undertaken, recommend the maximum sum division A should be prepared to pay for the market research survey, assuming the decision would be based on a calculation of expected net present value.

(2 Marks)

c. Explain, the major limitations of expected value criterion in a decision of this nature. (4 Marks)

d. For division B, provide an appraisal of the proposals from the two suppliers and recommend the more appropriate proposal (state any assumptions you made). (12 Marks)

e. Provide a justification why it is not appropriate to use the same cost of capital to appraise the two projects under consideration. (4 Marks)

(Total 40 Marks)

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

QUESTION 2

Mr. Big Heart is a Nigerian highly successful business man with interest in manufacturing, transportation, telecommunication and aviation. He has recently shown interest in acquiring one of the La liga league football clubs in Spain. Negotiation with the current owners of the club is now completed and price agreed.

Mr. Big Heart's group of companies have been able to raise a significant portion of the total amount needed for the purchase consideration of the club but there is a shortfall of $150 million today September 16, 2020 and the total payment for the acquisition must be made by December 16, 2020. A two-month loan of $150 million, commencing from December 16, 2020 is therefore being considered.

The group finance director (GFD) has spoken to the bankers in Madrid who have agreed to provide the $150 million needed. Given Mr. Big Heart's credit rating, the short-term loan will be at a rate of 90 basis points above LIBOR. Currently, LIBOR is at 6%. The bank has also suggested that, due to the current economic uncertainty, LIBOR may rise by 1% or even fall by 0.5% over the coming months.

With this in mind, the group treasury department has been mandated to manage this risk in a manner it thinks will best minimise the inherent interest risk. The department has obtained the following data from the money and traded derivatives markets.

Derivative contracts may be assumed to mature at the end of the month.
Three months sterling future ($500,000 contract size, $12.50 tick size)

Sept.	93.870
Dec.	93.790
March	93.680

Options on three months sterling futures
($500,000 contract size, premium cost in annual %)

Exercise price	Calls			Puts		
	Sept.	**Dec.**	**March**	**Sept.**	**Dec.**	**March**
93750	0.120	0.195	0.270	0.020	0.085	0.180
94000	0.015	0.075	0.115	0.165	0.255	0.335
94250	0	0.030	0.085	0.400	0.480	0.555

FRA prices:
3 v 6   7.01 – 6.91
3 v 5   7.08 – 7.00
3 v 8   7.28 – 7.20

Required:
Demonstrate and explain the possible ways in which the interest rate risk may be managed in relation to the purchase of the club, using the information provided. Based on your analysis, advise on an appropriate course of action.

Note: Your analysis should be based on the three derivatives identified in the scenario, that is:

- FRA
- Financial futures
- Traded options **(Total 20 Marks)**

QUESTION 3

Tanko Limited (TL) is currently evaluating two different investments (Investment 1 and Investment 2), each of which represents strategic investment in different business sectors.

At the request of the Finance Director, the Board of Directors has convened a special board meeting to consider the appropriate discount rate, or rates, to use to evaluate the two investments. Each of the two investments being considered is in a non-listed company and will be financed by 60% equity and 40% debt.

In the past, TL has used an estimated post-tax weighted average cost of capital of 12% to calculate the net present value (NPV) of all investments. The Managing Director thinks this rate should continue to be used, adjusted if necessary by plus or minus 1% or 2% to reflect greater or lesser risk than the "average" investment.

The Finance Director disagrees and suggests using the capital asset pricing model (CAPM) to determine a discount rate that reflects **the unsystematic risk of each of the proposed investments** based on proxy companies that operate in similar businesses. The Finance Director has obtained the betas and debt ratio of two listed companies (Company A and Company B) that could be used as proxies. These are:

	Equity Beta	Debt Beta	Ratio (debt: equity)
Company A (proxy for investment 1)	1.3	0.3	1:3
Company B (proxy for investment 2)	0.9	0	1:6

Other information

- The expected annual post-tax return on the market is 8% and the risk-free rate is 3%.
- Assume the debt that TL raises to finance the investment is risk-free.
- All three companies (TL, Company A and Company B) pay corporate tax at 25%.
- TL has one financial objective, which is to increase earnings each year to enable its dividend payment to increase by 4% per annum.

The Managing Director and the other Board members are confused about the terminology being used in the CAPM calculation and do not understand why they are being asked to consider a different method of calculating discount rates for use in evaluating the proposed investments.

Required:

a. Discuss the meaning of the term "systematic" and "unsystematic" risk and their relationship to a company's equity beta. (6 Marks)

b. Using CAPM and the information given in the scenario about TL and companies A and B, calculate for each of TL's proposed investments:

   i. An asset beta. (4 Marks)
   ii. An appropriate discount rate to be used in the evaluation of the investments. (4 Marks)

c. Discuss briefly, how an asset beta differs from an equity beta and why the former is more appropriate to TL's investment decision. Include in your discussion some references on how the use of CAPM can assist TL to achieve its financial objective. (6 Marks)

(Total 20 Marks)

QUESTION 4

You are the portfolio manager of Aka Asset Management Limited. You have collected the following data for three possible investments.

Stock	Price Today	Forecast Price*	Dividend	Beta
X	25	31	2	1.6
Y	105	110	1	1.2
Z	10	10.80	0	0.5

* Forecast Price = expected price one year from today.
The expected return on the market is 12 percent and the risk-free rate is 4 percent.

Required:

a. Using the security market line (SML), identify in which of the three stocks you will invest. Show all relevant calculations. (6 Marks)

Security 'A' has an expected rate of return of 12%, with a standard deviation of 32.65%.
The expected rate of return is derived from three equal possibilities

(i) that the actual rate of return will be the same as the expected rate of return;
(ii) that the actual rate of return will be higher than the expected rate of return by x%;
(iii) that the actual rate of return will be lower than the expected rate of return by x%.

b. You are required to calculate the two probable actual rates of return under (ii) and (iii) above (6 Marks)

c. What information is conveyed to a potential investor by the standard deviation statistic; (2 Marks)

d. What factors would be taken into account by an investor when deciding whether to add to his portfolio, either security 'A' or another security having lower values for standard deviation and expected rate of return. (4 Marks)

e. Given that the correlation coefficient of the return on security' A' with the return on the market portfolio is 0.25 and that the standard deviation for the market portfolio is 13.5%, you are required to calculate the Beta factor for security 'A' and to interpret the result you obtain. (2 Marks)

(Total 20 Marks)

QUESTION 5

PT is a public listed company based in Abuja, Nigeria. The company produces and sells roofing sheets in Nigeria and a number of ECOWAS countries. It has a central treasury function based in Nigeria.

PT has defined its three financial objectives as follows:

(1) To increase dividends by 10% a year;

(2) To keep gearing (Debt/(Debt + Equity)) below 40%; and

(3) To expand by internal growth and/or by horizontal integration via acquisition of companies operating in the same industry sector.

PT has identified a potential takeover candidate, Company K, which produces cement in a Central African country with currency A$. PT is considering a cash offer for K of approximately A$23,000 million but it has not yet been decided whether this would be financed by debt (at an after tax cost of 5% per annum) or equity. If equity were used then shares would be issued on the open market at the current share price of ₦2.90 per share.

Extracts from PT's latest financial statements are as follows:

	₦million
Long term borrowings	9,500
Share capital (₦1 shares)	5,000
Retained reserves	4,000

Last year PT paid a dividend of 16kobo per share, representing a dividend pay-out ratio of 40%. Earnings have grown by 8% a year on average over the last 5years and dividend pay-out ratio has been between 30% and 50% over the period.

Company K has a current market capitalisation of A$20,000 million and the current A$/₦ spot exchange rate is 9.20. K has a P/E ratio of 10 and earnings are expected to grow at 6% a year in future years.

Required:

Advise the directors of PT on:

a. The extent to which the company meets its financial objectives both before and after the proposed acquisition of Company K. (17 marks)

b. The appropriateness of the stated financial objectives of PT and how they could be improved. (3 marks)

(Total 20 marks)

QUESTION 6

Write a report to a private client covering the topics outlined below.

a. Explanation of the 'risk/return trade-off'. (6 Marks)

b. Explanation of the role of financial intermediaries and their usefulness to the private investor. (8 Marks)

c. Identification of the effects on private sector businesses of a significant public sector budget deficit. (6 Marks)

(Total 20 Marks)

Formulae

Modigliani and Miller Proposition 2 (with tax)

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

Asset Beta

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

Equity Beta

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

Growing Annuity

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

Modified Internal Rate of Return

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

The Black-Scholes Option Pricing Model

$C_0 = S_0N(d_1) - Ee^{-rt}\,N(d_2)$

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

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

The Put Call Parity

$C + Ee^{-rt} = S + P$

Binomial Option Pricing

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

$d = 1/u$

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

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

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

Annuity Table

Present value of an annuity of 1 i.e. $\dfrac{1 - (1 + r)^{-n}}{r}$

Where r = discount rate

n = number of periods

Discount rate (r)

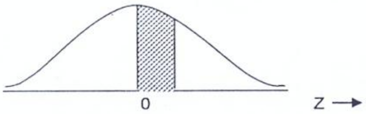
Periods

(n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0·990	0·980	0·971	0·962	0·952	0·943	0·935	0·926	0·917	0·909	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2.487	3
4	3·902	3·808	3.717	3·630	3.546	3.465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3.890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4.486	4·355	6
7	6·728	6.472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7.435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·983	8·530	8·111	7·722	7·360	7·024	6·710	6.418	6·145	10
11	10·368	9·787	9·253	8·760	8·306	7·887	7.499	7·139	6·805	6.495	11
12	11·255	10·575	9·954	9·385	8·863	8·384	7·943	7·536	7'161	6·814	12
13	12·134	11·348	10·635	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·004	12·106	11·296	10·563	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·865	12·849	11·938	11·118	10·380	9·712	9·108	8·559	8·061	7·606	15

(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0·901	0·893	0·885	0·877	0·870	0·862	0·855	0·847	0·840	0·833	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2.444	2.402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2.690	2·639	2.589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3.498	3.410	3·326	6
7	4·712	4·564	4.423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4.799	4·639	4.487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4.451	4·303	4·163	4·031	9
10	5·889	5·650	5.426	5·216	5·019	4·833	4·659	4.494	4·339	4·192	10
11	6·207	5·938	5·687	5.453	5·234	5·029	4·836	4·656	4.486	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4.439	12
13	6·750	6.424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5.468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6.462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15

NORMAL DISTRIBUTION

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



$Z=\frac{(x-\mu)}{\sigma}$	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	.0000	.0040	.0080	.0120	.0159	.0199	.0239	.0279	.0319	.0359
0.1	.0398	.0438	.0478	.0517	.0557	.0596	.0636	.0675	.0714	.0753
0.2	.0793	.0832	.0871	.0910	.0948	.0987	.1026	.1064	.1103	.1141
0.3	.1179	.1217	.1255	.1293	.1331	.1368	.1406	.1443	.1408	.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) **Division A**

Small machine – State A

Expected sales (units)

Possible Sale	Probability	Expected value
8,000	0.2	1,600
11,000	0.6	6,600
12,000*	0.2	2,400
		10,600

(* Restricted to maximum capacity of machine)

Annual contribution = 10,600 × ₦5,000 = ₦53,000,000

Small machine - State B

Expected sales (units)

Possible Sale	Probability	Expected value
12,000*	0.2	2,400
12,000*	0.6	7,200
12,000*	0.2	2,400
		12,000

(* Restricted to maximum capacity of machine)

Annual contribution = 12,000 × ₦5,000 = ₦60,000,000

Weighted average cost of capital

WACC = (20 × 0.5) + (10 × 0.5) = 15%

(**Note:** If D/E = 1, it means D = E and D/(D + E) = 0.5)

Calculation of expected net present value (ENPV)

	State A	State B
Contribution (₦000)	53,000	60,000
Fixed costs (₦000)	(20,000)	(20,000)
Net Cash flow (₦000)	33,000	40,000
Cumulative Discount Factor at 15%	3.352	3.352
Present Value (₦000)	110,616	134,080
Outlay (₦000)	(80,000)	(80,000)
NPV (₦000)	30,616	54,080
Probability	0.5	0.5
	15,308	27,040

ENPV = 15,308,000 + 27,040,000 = ₦ 42,348,000

Big machine - State A
Expected sales (units)

Possible Sale	Probability	Expected value
8,000	0.2	1,600
11,000	0.6	6,600
15,000	0.2	3,000
		11,200

Annual contribution = 11,200 × ₦5,000 = ₦56,000,000

Big machine - State B
Expected sales in units

Possible Sale	Probability	Expected value
12,00	0.2	2,400
15,000	0.6	9,000
19,000	0.2	3,800
		15,200

Annual contribution = 15,200 × ₦5,000 = ₦76,000,000

Calculation of expected net present value (ENPV)

	State A	State B
Contribution (₦000)	56,000	76,000
Fixed costs (₦000)	(20,000)	(20,000)
Net Cash flow (₦000)	36,000	56,000
Cumulative Discount Factor at 15%	3.352	3.352
Present Value (₦000)	120,672	187,712
Outlay (₦000)	(120,000)	(120,000)
NPV (₦000)	672	67,712
Probability	0.5	0.5
	336	33,856

ENPV = 336,000 + 33,856,000 = ₦34,192,000

Alternative method

After computing the expected sales in units for each state and for each model, some candidates could proceed as follows:

	Model 1	**Model 2**
Expected sales (q)	11,300*	13,200*
Annual NCF (₦'000) =5000q – 20m	36,500	46,000
CDF at 15%	3.352	3.352
PV (₦'000)	122,348	154,192
Outlay (₦'000)	(80,000)	(120,000)
ENPV (₦'000)	42,348	34,192

***Expected sales in units:**
Model 1: (10,600 x 0.5) + (12,000 x 0.5) = 11,300
Model 2: (11,200 x 0.5) + (15,200 x 0.5) = 13,200

Recommendation
In the absence of the market research, the company should buy the small machine, with ENPV of ₦42,348,000.

b) **Expected value of perfect information**
If the state of demand is known with certainty, the company will choose the machine which shows the higher NPV for that state. From the calculations in (a) above, the following summary can be prepared:

Machine	**State A**	**State B**
	₦000	**₦000**
Small	30,616	54,080
Big	672	67,712
Choice	Small	Big

ENPV with perfect information = (30,616 × 0.5) + (67,712 × 0.5) = 49,164
ENPV without information = per (a) above = (42,348)
Incremental ENPV= Value of perfect information = maximum sum payable
= 6,816

c) The limitations of expected values include:

i. The probabilities of the different possible outcomes may be difficult to Estimate. It is possible to use:
   - Objective probabilities based on past experience of similar projects; or
   - Subjective probabilities, e.g. from the results of market research, where there is no past experience, as a guide to the future;

ii. The expected value may not correspond to any of the possible expected outcomes;

iii. Unless the same decision has to be made many times, the expected value will not be achieved. It is therefore not a valid way of making a decision in 'one-off' situations unless the firm has a number of independent projects and there is a portfolio effect; and

iv. The average gives no indication of the spread of possible results, i.e. it ignores risk.

d) Yaro:- The first decision to make is the choice between a single maintenance payment of ₦5,400,000 or a series of annual payment of ₦750,000 from year 1 to year 9. The present value of ₦750,000 from year 1 to year 9 at 6% is ₦750,000 × 6.80 = ₦5,100,000. This is less than the single payment of ₦5,400,000. Therefore the annual payment of ₦750,000 is recommended. We can now determine the net present value of Yaro's offer.

Item	**Year**	**NCF**	**PVF at 6%**	**PV**
Outlay	0	(9,000,000)	1	(9,000,000)
Maintenance	1-9	(750,000)	6.80	(5,100,000)
Scrap value	10	200,000	0.56	112,000
NPV				(13,988,000)

Tony

Item	**Year**	**NCF**	**PVF**	**PV**
Outlay	0	(7,350,000)	1	(7,350,000)
Maintenance	1-4	(720,000)	3.47	(2,498,400)
Scrap value	10	1,100,000	0.75	825,000
				(9,023,400)

These two NPVs cannot be directly compared because they cover different lives. We must therefore compute the annual equivalent cost (AEC).

Supplier	**NPV**	**Annuity Factor**	**AEC**
	₦		₦
Yaro	(13,988,000)	7.36*	(1,900,543)
Tony	(9,023,400)	4.21**	(2,143,325)

* Annuity factor at 6% for 10 years ****** Annuity factor at 6% for 5 years

Recommendation:-Yaro has the lower AEC and should therefore be selected.

Assumptions

i. The two suppliers offer the same terms of payment.
ii. The two suppliers will offer the same after sales service
iii. The use of AEC assumes that there will be perpetual replacement at the same costs and terms of the dishwasher.

e) The cost of capital used to appraise a capital project should reflect both the business risk associated with the project (not necessarily the company) and the financial risk associated with the method of financing the project.

Business risk: It is not likely that the two projects have the same business risk as they belong to two different business sectors. Division A, operating in the manufacturing sector, will be expected to have higher asset beta (higher business risk) than Division B that operates in food sub-sector.

The higher business risk of Division A will demand higher rate of return.

Financial risk: We know the target debt/equity ratio of Division A but that of Division B is not given. If the funding of the two projects results in the two Divisions having different financial leverage, their financial risk will not be the same. This will result in different equity beta and different required return.

Thus, for organisations operating in different industrial sectors, a different divisional cost of capital will be required – reflecting their different business risk and financial risk.

Examiner's Report

This was a five-part question that tests the candidates' understanding investment decision.

The question covers NPV analysis, treatment of risk and uncertainly, calculation of value of perfect information and calculation of WACC.

Being a compulsory question, virtually all the candidates attempted the question but performance was extremely disappointing. Candidates lost considerable marks due to:

- Inability to handle the capacity limitation of the small machine when calculating expected sales in units;
- Disorderly presentation of calculations;
- Failure to recognise the need to calculate equivalent annual cost in part (d); and
- Inability to calculate the required WACC in part (a);

It is highly recommended that candidates presenting themselves for the Institute's examinations should cover the entire syllabus and practise past examination questions.

Marking guide

		Marks	Marks
a.	Calculation of expected sales (units):		
	Small machine - State A	1	
	- State B	1	
	Calculation of WACC	1	
	Computation of ENPV – Small machine – State A	3	
	Small machine – State B	3	
	Calculations of expected sales (units)		
	Big machine - State A	1	
	- State B	1	
	Computation of ENPV – Big machine – State A	3	
	Big machine – State B	3	
	Recommendation	1	18
b.	Determination of the choice of machine to chose		
	with perfect information - State A	0.5	
	- State B	0.5	
	Calculation of ENPV with perfect information:	0.5	

	Determining the incremental ENPV i.e. value of perfect information	0.5	02
c.	Limitations of expected values: 1 mark per valid point, max 4 points		04
d.	Determination of the best maintenance payment to accept for Yaro	1	
	Calculation of the NPV of Yaro's offer	3	
	" " " Tony's offer	3	
	Computation of the Annual Equivalent Cost (AEC) of Yaro's offer	1	
	Tony's offer	1	
	Recommendation based on the result of the AEC	1	
	Assumption 1 mark per valid point mentioned, max 2 points	2	12
e.	Mentioning the fact that the cost of capital for appraising capital project should reflect a combination of both business and financial risk	0.5	
	Acceptable justification relating cost of capital to inherent risk: Business risk	1.5	
	Financial risk	1.5	
	Conclusion	0.5	04
	Total		40

Solution 2

The treasury department could take the following two strategies to manage the short-term interest rate risk:

- Lock or fix the rate today. This will remove both upside and downside movement in LIBOR. This can be achieved by using a FRA or an interest rate future; and

- Create a cap or ceiling rate. The department will then know what the maximum interest rate on the loan will be. They will use an appropriate interest rate option to create the ceiling rate.

FRA

Today (16/09/2020)
Big Heart will obtain a $150 million FRA 3 v 5 at a rate of 7.08% p.a. from OTC market. This will **lock** the LIBOR at that annual rate.
September 15, 2019

Irrespective of whether LIBOR rises or falls, the effective annual cost of the short-term finance will be 7.08 + 0.9 = **7.98%**

Financial Future

September 16, 2020:

* **Sell December** contracts at 93.79%.
* Number of contracts:

$$\frac{\$150\text{m}}{\$0.50\text{m}} \times \frac{2}{3} = 200 \text{ contracts}$$

*Basis
Today June 15

LIBOR (cash market)	6.00%
Less futures (100 – 93.790)	(6.21)
Current basis	–0.21

Basis will reduce to zero by the expiry date of the contract (December 31). Assuming basis reduces in a linear manner, the basis at December 16, when the hedge is lifted is:

$\frac{0.5}{3.5} \times (-0.21) = -0.03$

Lock-in rate	%
Current futures implied as above	6.21
Outstanding basis	– 0.03
Spread over LIBOR	0.90
Lock-in rate	7.08

The lock-in rate is the same irrespective of the actual LIBOR rate at the point of borrowing.

Note: The lock-in rate could alternatively be calculated as follows:

LIBOR (6 – 0.5)	**5.50%**	(6 + 1)	**7.00%**	
Expected closing price of futures: 100 – 5.5 – 0.03	94.47	100 – 7 – 0.03	92.97	
Original price	93.79		93.79	
	$			$
Cost of borrowing in the cash market:				
(5.50 + 0.9)% × 2/12 × $150m	(1,600,000)	(7+0.9)% × 2/12 × $150m		(1,975,000)
(Loss)/Gain on futures:				
(9379 – 9447))× $12.50 × 200	(170,000)	(9379–9297)×$12.50× 200		205,000
Net cost of borrowing	(1,770,000)			(1,770,000)
Effective cost of borrowing:				
$\frac{1,770,000}{150,000,000} \times \frac{12}{2} \times 100\%$	7.08%			7.08%

(Note: Either of the approaches could be used but the former is preferred because it saves time)

Traded Options

Today September 16:

There are various ways in which the company can choose a rate at which to cap the interest rate. One method is to choose an option, which caps the value at the current LIBOR of 6%.

Therefore, we should buy December put at 94,000.

* Number of contracts will be as for futures above = **200**
* The premium payable now is
  0.255% × 200 × $500,000 × 3/12 = $63,750

Evaluation

LIBOR	**5.500%**		**7.00%**
Expected future price as per futures above	94.470		92.970
Implied interest rate (100 - 94.47)	5.530%	(100 – 92.970)	7.030%
Exercise price	6.000%		6.000%
Exercise?	No		Yes
Gain	–	(7.030–6.000)	1.030

Actual interest cost % (5.5 + 0.9)	(6.400)	(7 + 0.90)	(7.900)
Premium (%)	(0.255)		(0.255)
Net cost of loan (%)	(6.655)		(7.125)

Summary and Advice

LIBOR (%)	5.5		7.00
No hedge (5.5 + 0.9)	6.40	(7 +0.9)	7.9
FRA	7.98		7.98
Futures	7.08		7.08
Options	6.655		7.125

The facility is needed for a short period of time. Locking the rate will provide the company with certainty. The treasury department will know what the cash cost of the loan will be and can plan accordingly. The FRA is more expensive in this case compared to futures.

However, the options will provide an element of flexibility should rates fall.

Examiner's report

The question tests the candidates' knowledge of the risk management aspect of the syllabus. Specifically, candidates were required to analyse the following derivative interest rate risk hedging techniques:

- FRA
- Financial futures; and
- Traded options.

Like in the previous examinations, less than 5% of the candidates attempted the question and the performance was extremely disappointing.

For the three derivatives, the candidates lost marks due to the following reasons:

- Failure to identify the appropriate 'maturing' date to use;
- Inability to analyse the selected derivatives;
- Providing unnecessary and time-wasting calculations; and
- In the case of traded options, inability to identify whether to make use of 'put' option or 'call' option.

Due to very high volatility in the global financial market, it should be very apparent to discerning candidates, that the risk management aspect of the syllabus has come to stay in the Institute's examination! Future candidates are therefore expected to pay greater attention to this part of the syllabus.

Marking guide

	Marks	Marks
FRA		
Determination of the FRA rate	02	
Determination of the effective annual cost of the short-term finance	02	
Financial futures:		
Decision to **SELL** and the applicable month **DEC**	01	
Computation of number of contracts	01	
Determination of the current basis	0.5	
Determination of the basis at December 16 when the hedge is to be lifted	0.5	
Calculation of the lock-in rate	03	
Traded options:		
Decision to **BUY** (put option) and when (**DEC**)	01	
Determination of the number of contracts	01	
Calculation of the immediate premium	01	
Computation of expected future price and decision to exercise or not	02	
Calculation of net cost of loan	02	
Summary and advice	03	20
Total		**20**

Solution 3

a) **Systematic and unsystematic risk**

Risk that cannot be diversified away is called systematic risk. This risk is due to economic factors which affect the economy as a whole (such as interest rates, recession etc.).

Risk that can be reduced by diversifying the securities in a portfolio is unsystematic risk. This risk relates to factors which are unique to a company or of the industry in which it operates.

Total risk is the combination of systematic and non-systematic risk. The total risk of a share can be measured by its standard deviation. Systematic risk of a share is measured by its equity beta.

Beta is the measurement of systematic risk estimated by considering the volatility of an individual share price movement against the movement in the market as a whole. This is usually undertaken by plotting on a graph movements over time of the individual share price on the vertical axis against movements in the market over the same time period on the horizontal axis. Regression analysis is used to estimate the slope of the line, which is then referred to as beta.

An entity with an equity beta greater than 1 would be expected to have systematic risk proportionately greater than the risk of the market. Conversely an equity beta which is less than 1 would suggest systematic risk for that company proportionately less than the risk of the market. However, to use betas it is necessary to assume that betas calculated on the basis of historic information are reliable indicators of current and future risks.

b) **Calculations of beta and discount rates**

Step 1: "Ungear" the equity beta of the two proxy companies using:

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

Company A

$$\beta_A = \frac{1.3 \times 3}{3 + 1(1-0.25)} + \frac{0.3 \times 1(1-0.25)}{3 + 1(1-0.25)} = 1.10$$

Company B

$$\beta_A = \frac{0.9 \times 6}{6 + 1(1-0.25)} + 0 = 0.8$$

Step 2: To reflect the financial risk of the method of financing; the above asset betas must now be "regeared".

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

Investment 1 (Proxy Company A)

β_E = 1.1 + (1.10 - 0) (2/3)(1 – 0.25) = 1.65

Investment 2 (Proxy Company B)

β_E = 0.8 + (0.8 - 0)(2/3)(1 – 0.25) = 1.20

The 'regeared' betas can now be used in the CAPM formula to calculate the relevant cost of equity capital.

$k_E = R_F + \beta_E(R_m - R_f)$

Investment 1: $k_E = 3 + 1.65(8 - 3) = 11.25\%$

Investment 2: $k_E = 3 + 1.20(8 - 3) = 9.0\%$

Next, we compute the WACC for each investment. We are not given cost of debt. We therefore make use of the post-tax risk-free rate of 3%.

Investment 1: WACC = $(0.6 \times 11.25) + (0.4 \times 3) = 7.95\%$

Investment 2: WACC = $(0.6 \times 9) + (0.4 \times 3) = 6.6\%$

c) **Explanation of asset and equity betas, investment appraisal and objectives**

An equity beta is the beta that is attached to a company's shares; it is this beta that is published. An asset beta reflects business risk, assuming a company is ungeared.

An asset beta is more useful than an equity beta in Proxy companies A and B because it incorporates the total business risk inherent in those companies, but tripping out the impact of the financing structures of the individual companies. Companies A and B have been selected as proxy companies primarily because they have the same business risk characteristics as Investments 1 and 2.

However, the asset beta does not take into account the financing structure of the investments, therefore the asset beta needs to be adjusted. This is achieved by regearing the asset (that is, the ungeared) beta and inserting it in the CAPM formula to obtain a geared cost of equity which reflects both

- The business risk of the investment (based on the business risk of the proxy company); and
- The long-term financing structure.

Using CAPM-derived rates could help determine if TL's current use of 12% for all investments is appropriate. For example, the CAPM-derived rates calculated in part (b) suggest that for the investments under consideration lower rates, i.e. less than 12% would be more appropriate. TL would have rejected investment opportunities that would have been profitable and therefore contributed to the achievement of its objective.

On the other hand if the CAPM had suggested rates above 12% then TL would not be fully compensating shareholders for the risks inherent in its investments, which in the long term might threaten the viability of its business and not just its dividends.

Examiner's report

The question tests the following:

- Systematic risk vs unsystematic risk
- How the above relate to equity beta
- Calculation of project specific risk-adjusted cost of capital.

Most of the candidates attempted the question with very few of them scoring very high marks in part (a). However, no candidate was able to relate the concepts to equity beta!

In the part (b), fewer numbers of the candidates successfully calculated the risk-adjusted cost of capital. This is very disappointing because this topic has been tested consistently in every examination in the last few years.

For the candidates that attempted the question, the common mistakes include:

i. Mixing up systematic risk and unsystematic risk;

ii. Inability to correctly apply the relevant formulae of asset beta and equity beta;

iii. Inability to distinguish between asset beta and equity beta, etc.

It is recommended that candidates should cover the syllabus comprehensively and practise past examination questions when preparing for future examination.

Marking guide

a.	Discussion of systematic risk	2	
	Discussion of unsystematic risk	2	
	Discussion of the relationship of both systematic risk and unsystematic to a company's equity beta	2	6
bi.	Calculation of company's A asset beta	2	
	Calculation of company's B asset beta	2	04
ii.	Computation of equity beta for proxy company A (Inv. 1)	0.5	
	Computation of equity beta for proxy company B (Inv. 2)	0.5	
	Calculation of cost of equity capital (Inv. 1)	0.5	
	Calculation of cost of equity capital (Inv. 2)	0.5	
	Usage of post-tax risk free rate of 3% in the computation of WACC for each investment	1.0	
	Computation of WACC for Inv. 1	0.5	
	Computation of WACC for Inv. 2	0.5	04

c.	Discussion of the differences between equity beta and asset beta	2.0	
	Discussion of the appropriateness of asset beta of TL's investment decision	2.0	
	References on how the use of CAPM can assist TL to achieve its financial objective	2.0	06
	Total		**20**

Solution 4

a) In the context of the SML, a security is underpriced if the required return is less than the holding period (or expected) return, it is overpriced if the required return is greater than the holding period (or expected) return, and it is correctly priced if the required return equals the holding period (or expected) return.

The holding period returns and the required returns are computed as follows:

Holding period (expected) return

$$= \frac{\text{closing price} + \text{dividend}}{\text{opening price}} - 1$$

$$\text{Stock X} = \frac{31+2}{25} - 1 = 32\%$$

$$Y = \frac{110+1}{105} - 1 = 5.7\%$$

$$Z = \frac{10.80+0}{10} - 1 = 8\%$$

Required return

$R_i = R_f + \beta_i(R_m - R_f)$

X $4 + 1.6(12 - 4) = 16.8\%$

Y $4 + 1.2(12 - 4) = 13.6\%$

Z $4 + 0.5\ (12 - 4) = 8\%$

Next, we compute the alpha value of each stock:

Stock	Expected return	Required return	Alpha Value
X	32%	16.8%	15.20%
Y	5.7%	13.6%	-7.9%
Z	8%	8%	0%

Conclusion: Stock Y has a negative alpha value. This means it is undervalued. I will therefore buy stock Y.

b) Expected rate of return 12%

Standard deviation 32.65%

Variance = $(32.65)^2$ 1,066.0225

Return	Probability	Expected Value	Deviation	Variance
R	P	RP	$R-\vec{R}$	$P(R-\vec{R})^2$-
12	1/3	4	4	0
12 + x	1/3	$4+\frac{x}{3}$	+ x	$\frac{1}{3}x^2$
12 -x	1/3	$4-\frac{x}{3}$	- x	$\frac{1}{3}x^2$
Expected return = $\vec{R}$ =12				$\frac{2}{3}x^2$

$\frac{2}{3}x^2$ must also equal the variance so:

$\frac{2}{3}x^2 = 1{,}066.0225$

$X^2 = 1{,}600$

X =40 or -40

The two probable actual returns therefore are

12 +40 =52%

12 – 40 = -28%

c) The standard deviation statistic is a measure of dispersion from an average, a measure of spread. The standard deviation of an investment shows the potential investor the spread of the possible returns from the expected return for that investment. It conveys to the investor a measure of the risk of the investment.

d) The aim of rational investors is to reduce the risk of their portfolio of investments whilst still maintaining an acceptable rate of return. Therefore an investor might compare security 'A' and another security and decide to invest in the other security as it had a lower standard deviation, therefore lower risk, but still an acceptable rate of return.

However, under portfolio theory the investor would not choose between the two investments by simply comparing their relative risks and returns. The objective is to reduce the risk of the investor's overall portfolio, and his investment taken together. The risk of the whole portfolio does not depend on the standard deviation or risk of the individual security but on the effect that those securities will have on the risk of the portfolio as a whole.

Therefore the investor should look at the combination of security 'A' with his present portfolio and the combination of the other security with his portfolio to decide which combination reduces his overall risk.

It may be that, although security' A' has a higher standard deviation or risk, in combination with the existing portfolio the overall standard deviation or risk is reduced. This would be because the returns from security' A' move in the opposite direction to the portfolio returns i.e. they are negatively correlated to the portfolio returns, and therefore, will reduce the overall risk.

e)

$$\beta = \frac{(r_{A,m})(\sigma_A)}{\sigma_M} = \frac{(0.25)(0.3265)}{0.135} = 0.6$$

Beta factor of 0.60 means that if the market return moves up or down by say 4% then the return from security 'A' will move by 0.6 × 4% = 2.40%

Examiner's report

The question tests a number of key principles in CAPM and portfolio theory. About 70% of the candidates attempted the question but the performance was disappointing.

In part (a), the candidates could not calculate the expected return of the stocks and therefore, could not estimate the alpha value of each of the stocks.

Part (b) offered the greatest challenge to the candidates as they could not decode the question.

In part (d), it is surprising that candidates could not make reference to the use of correlation in portfolio selection.

We strongly recommend that future candidates really need to practise past examination questions when preparing for this examination.

Marking guide

a. Calculation of holding period (expected) return:			
	Stock X	1	
	Stock Y	1	
	Stock Z	1	
Computation of required return:			
	Stock X	0.5	
	Stock Y	0.5	
	Stock Z	0.5	
Computation of the alpha values of stocks XYZ		0.5	
Conclusion		1.0	6
b. Calculation of variance of the two probable rate of returns		4.5	
Solving for x		1.0	
Substituting the solved figure for x to determine the two probable returns		0.5	6
c. Interpretation of standard deviation			2
d. Explanation of acceptable relevant factors			4
e. Calculation of the beta factor for security A		1.0	
Interpretation of the result obtained		1.0	2
Total			20

Solution 5

a) Financial objective 1: To increase dividends by 10% a year

Before the acquisition, PT's earnings have grown by 8% per annum on average. The target growth in dividends of 10% is therefore not sustainable over the long term without significant growth in earnings in the future.

Company K's long term earnings growth prospects are lower at 6% per year and so the acquisition risks reducing long term earnings growth.

However, the target earnings growth of 10% can be expected to be achieved in the year of acquisition due to the addition of K's earnings. Growth in earnings is expected to be boosted by 4.6% if funded by debt and by 10.85% if funded by equity (see workings).

Note that the impact on earnings per share varies considerably according to how the deal is financed. If financed by equity, earnings per share can be expected to fall as a result of the acquisition due to the greater number of shares in issue.

Workings: Earnings per share calculations

- **Pre-acquisition**

Earnings		₦'m
PT	0.16/40% x 5,000million shares	2,000m
K	A$20,000/10 = A$2,000	217m
EPS: PT	…… ₦0.16/40%	0.40

- **Post-acquisition: Funded by debt**

	₦'m
Current earnings of PT	2,000
Current earnings of K	217
Interest on loan on purchase consideration converted to naira = 5% × 23,000/9.2	(125)
	2,092
EPS = 2,092/5,000 shares	41.84kobo
Percentage increase in:	
earnings (2,092/2,000) – 1	4.6%
EPS (41.84/40) – 1	4.6%

- **Post-acquisition: Funded by equity**

	₦'m
(Note: We assume no change in share price 1)	
Total earnings (see above) 2,000m + 217m	2,217
Total number of shares:	
5,000 + [(23,000 ÷ 9.2) ÷ ₦2.90]	5,862
EPS = ₦2,217m/5,862million shares	38kobo
Percentage increase in earnings $\left(\frac{2,217}{2,000}\right)$ -1	10.85%
Percentage decrease in EPS (38/40) – 1	5%

Financial objective 2: To keep gearing below 40%

Based on market values the current gearing is 39.6%, which is only just under the target level of 40%. Gearing exceeds the limit if the acquisition is funded by debt (at 45%) but falls markedly to 35.8% if funded by equity (see workings below).

Using book values of equities, the gearing target is exceeded in all cases. Gearing improves if the acquisition is funded by equity but remains well above the target level of 40%.

Workings: Gearing calculations

- **Pre-acquisition**

  - Using market value 39.6%
    9,500/[9,500 + (5,000 × 2.90)]
  - Using book value:
    9,500/(9,500 + 5,000 + 4,000) 51.4%

- **Post-acquisition**

	₦'m
– Debt funding	
** Using market value	
Existing debt	9,500
New debt to pay for acquisition	
(A$23,000/9.2)	2,500
Total value of debt	12,000
Total value of equity (5,000 + ₦2.90)	14,500
Gearing ratio = 12,000/(12,000 + 14,500)	45.3%
** Using book value	
Gearing ratio = 12,000/(12,000 + 9,000)	57.1%

	₦'m
– Equity funding:	
** Using market value	
Existing equity	14,500
New issue (A$23,000/9.2)	2,500
Total value of equity	17,000
Debt (no change)	9,500
Gearing ratio = 9,500/(9,500 + 17,000)	35.8%
** Using book value	
Gearing ratio = 9,500/(9,500 + 2,500 + 9,000)	45.2%

Financial objective 3: To expand by internal growth and/or by horizontal integration via acquisition of companies operating in the same industry sector.

The acquisition clearly helps towards the growth target. Company K represents horizontal integration in the same broad energy industry sector.

b) The financial objectives are a rather strange combination. Dividend growth is a useful target but appears to be too high at 10% per annum and is not linked to company performance. It may be better replacing this objective with a lower minimum dividend growth figure coupled with a dividend payout target and an earnings or earnings per share growth target.

A dividend growth target without an earnings target could lead to payment of dividends in excess of what the company can afford – it is an easy target to meet if sufficient retained profits and cash are available or investments are cut but is not sustainable over the longer term if not underpinned by earnings growth.

The gearing target objective is reasonable, although it would be better if it defined whether gearing is based on book values or market values. Debt covenants may require this target to be met. Interest cover may also be important to lenders and may be stated in debt covenants. PT should consider adding an interest cover target to its financial objectives.

The general growth target does not have any number attached. An earnings growth target or a growth in market capitalisation target could be added in order to enable this target to be quantified and success measured in financial terms.

Examiner's report

The question tests the candidates' ability to appraise a set of corporate objectives, assess the success of an acquisition, manipulate foreign currency conversion, etc.

About 80% of the candidates attempted the question but performance was very poor.

In analysing the first objective, candidates were expected to calculate the EPS, before and after acquisition, and determine the growth rate in EPS. More than 90% of the candidates attempted the question with very low level of performance.

In part (b), candidates were expected to assess the impact of acquisition on financial leverage. Candidates performed poorly because they could not logically analyse the impact of the method of financing the acquisition on the value of debt and value of equity.

We recommend that candidates should pay significant attention to examination standard questions in their revision.

Marking guide

		Marks	Marks
Mentioning financial objective 1 – To increase dividend by 10% a year		2.0	
Calculation of pre-acquisition earnings:			
	PT	0.5	
	K	0.5	
	EPS	0.5	
Computation of post-acquisition – Funded by debt:			
Current earnings of PT		0.5	
Current earnings of K		0.5	
Conversion of interest on loan to Naira on purchase		1.0	
Calculating EPS – Post acquisition		0.5	
Determination of percentage increase in:			
	Earnings	0.25	
	EPS	0.25	
Computations of Post acquisition – Funded by equity			
	Total earnings	0.5	
	Total number of shares	0.5	
	EPS	0.5	
Percentage increase in earnings		0.25	
Percentage decrease in EPS		0.25	
Financial objective decision 2-To keep gearing below 40%		1.0	
Calculation of gearing – Pre-acquisition:			
	Using market value	0.5	
	Using book value	0.5	
Post acquisition – Using market value of existing debt		0.5	
- Using new debt		0.5	
Total value of equity		0.5	

Calculation of gearing ratio using market value or book value	1.0	
Calculation of equity funding using market value or book value:		
Existing equity	0.5	
New issue	1.0	
Recognition of no change in debt	0.5	
Computation of gearing ratio	1.0	
Mentioning financial objective 3 i.e. to expand by internal growth	1.0	17
1 Mark per valid point, max 3 points		03
Total		**20**

Solution 6

a) **Report Format**
The risk/return trade-off

There is a trade-off between risk and return. Investors in riskier assets expect to be compensated for the risk. In the case of ordinary shares, investors hope to achieve their return in the form of an increase in the share price (a capital gain) as well as from dividends.

An investor has the choice between different forms of investment. The investor may earn interest by depositing funds with a financial intermediary who will lend on to, say, a company, or it may invest in loan notes of a company. Alternatively, the investor may invest directly in a company by purchasing shares in it.

The current market price of a security is found by discounting the future expected earnings stream at a rate suitably adjusted for risk. This means that investments carrying a higher degree of risk will demand a higher rate of return. This rate of return or yield has two components:

i. **Annual income** (dividend or interest); and
ii. **Expected capital gain**

In general, the higher the risk of the security, the more important is the capital gain component of the expected yield.

b) **The role of financial intermediaries**

A financial intermediary is an institution that links lenders with borrowers, by obtaining deposits from lenders and then re-lending them to borrowers. In Nigeria, the intermediaries include:

i. Commercial banks;
ii. Merchant banks;
iii. Finance houses; and
iv. Insurance companies.

Benefits of financial intermediation

- **Reduction of risk through pooling**
  Since financial intermediaries lend to a large number of individuals and organisations, losses suffered through default by borrowers or through capital losses are effectively pooled and borne as costs by the intermediary. Provided that the intermediary is itself financially sound, the lender should not run the risk of losing his investment. Bad debts are borne by the financial intermediary in its re- lending operation.

- **Maturity transformation**
  An example of this is the mortgage banks, which allows depositors to have immediate access to their savings while lending to mortgage holders for 25 years. The intermediary takes advantage of the continual turnover of cash between borrowers and investors to achieve this.

- **Convenience**
  They provide a simple way for the lender to invest, without him having personally to find a suitable borrower directly. All the investor has to decide is for how long the money is to be deposited and what sort of return is required; all he then has to do is to choose an appropriate intermediary and form of deposit.

- **Regulation**
  There is a comprehensive system of regulation in place in the financial markets that is aimed at protecting the investor against negligence or malpractice.

- **Information**
  Intermediaries can offer a wide range of specialist expert advice on the various investment opportunities that is not directly available to the private investor.

c) **A public sector budget deficit**

A public sector budget deficit arises when government expenditure exceeds the revenue. The government will be forced to raise money to finance the deficit, either through borrowing or issuing securities. The effects of a higher level of government spending and the need of the government to raise money to finance the deficit will affect private sector businesses in a number of ways.

i) A proportion of the higher spending is likely to be with private sector businesses. Thus a high level of public spending can boost demand in the economy and have a positive impact on business either directly or through the multiplier effect.

ii) If the deficit is financed by government borrowings this will put upward pressure on interest rates and thus increase the financing costs of private sector business, as well as putting pressure on their cash flow and restricting the funds available for new investment.

iii) A further effect of high interest rates may be to depress share prices, thereby reducing the ability of businesses to raise new capital for investment.

iv) The additional level of demand in the economy may boost inflationary pressures. Expectations of higher inflation will generally cause a fall in the level of optimism about the economy and place pressure on private sector investment.

(v) High domestic interest rates are likely to strengthen the exchange rate making it harder for businesses to export. At the same time imports will become cheaper thus increasing competitive pressures in the home market.

Examiner's Report

The question tests candidates' knowledge of:

- Risk/return trade-off;
- Role of financial intermediaries; and
- The effects on private sector businesses of public sector budget deficit.

Being a theoretical question, almost all the candidates attempted it. However, only few candidates were able to score average marks in the question. Common problems indentified include:

- Lack of understanding of the concept of risk/return trade-off;
- Not answering the question asked;
- Complete lack of knowledge of government budget deficit and
- Poor use of English!

It is recommended that candidates should always cover the Institute's syllabus and practise past examination questions.

Marking guide

a.	Explanation of the risk/return trade-off		4
b.	Explanation of financial intermediaries with relevant examples	2	
	Stating the benefits of financial intermediaries - 2 Marks per point, max 3 points	<u>6</u>	8
c.	Explanation of the meaning of public sector budget deficit	2	
	Stating the effects a higher level of government spending will have on private sector business 1 Mark per valid point, max 4 points	<u>4</u>	6
	General: Setting of report		
	From i.e. Officer reporting	0.25	
	Addressee of report	0.25	
	Subject matter: Title of the report	1.00	
	Date	0.25	
	Signature of officer reporting	<u>0.25</u>	<u>2</u>
	Total		**<u>20</u>**

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

PROFESSIONAL LEVEL EXAMINATION – MARCH/JULY 2020

ADVANCED AUDIT AND ASSURANCE

Time Allowed: $3^1/_4$ hours (including 15 minutes reading time)

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

SECTION A: COMPULSORY QUESTION (40 MARKS)

QUESTION 1

1. You are a Senior Manager at DARTH, a firm of chartered accountants, responsible for reviewing quality control and ethical matters which arise with regards to the firm's portfolio of clients.

During recent investigations, you identified the following matters:

(i) **Dotun Limited**

The company's audit committee has asked whether one of DARTH's audit partners can be appointed as a non-executive director and serve on the audit committee. The audit committee lacks a financial reporting expert, and the appointment of an audit partner would bring much needed knowledge and experience.

(ii) **Kate Nigeria Limited**

Kate Nigeria Limited is currently a non-audit client of your firm and has provided a range of non-audit services to the company including bookkeeping, payroll and tax computation, and advice. The company recently applied for additional financing from its bankers, the amount requested is significant and the purpose of the loan is to finance the growth aspirations of the company.

The management of Kate Nigeria Limited has ambitious plans for growth which they believe will result in revenue tripling within one year and then continuing to grow at a 50% growth rate for at least the next five years.

As a pre-requisite for approving the additional financing request, the bankers have asked the directors of Kate Nigeria Limited to audit the financial statements by a big accounting firm, hence, Kate Nigeria Limited has asked if your firm will become the company's auditors, as well as continuing to provide the existing services. This will include auditing the financial statements for the year ended December 31, 2019 at the request of the new financers.

(iii) **Bucket Group Limited**

Bucket Group Limited is an audit client. An investigation into the group's tax affairs started in January 2019. The tax authorities are investigating the possible underpayment of taxes by each of the companies in the group, claiming that tax laws have been breached. The group's tax planning was performed by another firm of accountants, Ada & Co, but the group's audit committee has asked if your firm will support the group by looking into its tax position and liaising with the tax authorities in respect of the tax investigation on its behalf. Ada & Co has resigned from their engagement to provide tax advice to the Group. The matter is to be resolved by a tribunal which is scheduled to sit in March 2020.

(iv) **Danladi Nigeria Limited**

Danladi Nigeria Limited is an audit client of your firm. The management team of the company has asked you to perform a valuation of the shares of another audit client, Moko Nigeria Limited, with a view to buying the entire shareholding. Moko Nigeria Limited is a private company whose shares are owned entirely by the original founder, Mrs Janet Moko.

Required:

From the scenario above, discuss the ethical and other professional issues raised, and recommend any actions which should be taken in respect of:

a.	Dotun Limited	(10 marks)
b.	Kate Nigeria Limited	(10 marks)
c.	Bucket Group Limited	(10 marks)
d.	Danladi Nigeria Limited	(10 marks)
		(Total 40 marks)

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

QUESTION 2

Ode Nigeria Limited provides an on-line trading platform which connects buyers and sellers in the country, and around the world. The platform provides an avenue for the sale and purchase of goods and services. In addition to providing a platform, it assists sellers in invoicing and collating data on transactions done on the platform.

On receipt of sales orders, sellers are responsible for processing and transporting the orders to customers. Customers also pay directly to the sellers but through the platform. Ode collects a fee from the sellers for the use of the platform and for the invoicing services.

Ode has decided to change its auditors in line with the requirements of the Code of Corporate Governance because they have had the auditors for over 10 years and has approached your firm to be appointed as the new auditors. Appropriate professional clearance has been obtained and work is set to commence.

You are the Audit Manager responsible for the engagement. You have met with your team members and noted that there are some trainees in the team who are not conversant with controls in on-line businesses.

Required:

a. Evaluate **FOUR** risks associated with 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. (8 marks)

b. Discuss the main categories of general IT controls that an auditor can expect to find in a computer-based information system. (12 marks)

(Total 20 Marks)

QUESTION 3

You are a Senior Manager at Haggai Partners, a firm of chartered accountants. In your capacity as an engagement quality control reviewer, you have been asked to review the audit files of Handel Nigeria Limited, with a financial year ended June 30, 2019. However, the audit is nearing completion.

Handel Nigeria Limited is a producer of canned tomatoes and pepper, selling its products to wholesalers and supermarkets. From your review of the audit working papers, you have noted that the level of materiality was determined to be ₦170 million at the planning stage, and this materiality threshold has been used throughout the audit. There was no evidence in the audit file that this threshold has been reviewed during the course of the audit.

From your review of the audit planning, you noted that a building was acquired in March 2019 by Handel at a cost of ₦205 million and was recognised in the draft statement of financial position at a carrying amount of ₦210 million as at June 30, 2019.

The building is located in Akure and was acquired for the purpose of housing the employees working in the company's factory in Akure. The building has not been physically verified by any member of the audit team. Based on the audit working papers, it was concluded that '*we have obtained the sales agreement in relation to the building, and therefore can conclude that the asset is appropriately valued and that it exists. In addition, the Factory Manager of the Akure factory has confirmed in writing that the building is located within their premises and it is in good condition. No further work is required in respect of this item.*'

Inventory was recognised at ₦290 million in the draft statement of financial position. You have reviewed the results of audit procedures performed at the inventory count, where the test counts carried out by the audit team indicated that the count of some items performed by the company's staff was not correctly done but the team did not consider the discrepancies to be material.

The audit senior spoke to you yesterday about his concern regarding the review of the audit working papers. Apparently, the audit manager's review and the partner's review occurred concurrently. The partner only asked the audit senior if there were any residual issues on the audit, scanned through the audit documentation and signed off in the working papers.

Required:
Comment on the quality of the audit performed, discussing the quality control issues raised. **(20 marks)**

QUESTION 4

You have been approached by Suppy Nigeria Limited, a retail company, to provide audit and tax services. In response, you have written to the outgoing auditor to ask if there are any matters which you should be aware of which might prevent you from accepting the assignment. Despite a number of follow up telephone calls, you have not been able to obtain a response from the outgoing audit firm.

On discussing this with the management team of Suppy Nigeria Limited, you are aware that the previous auditor resigned due to a dispute over audit fees for the last audit which have not been paid. The management of the company also expressed the view that the previous auditors were too materialistic.

Required:

a. Analyse the professional issues noted with regards to accepting the audit. (10 marks)

b. Describe the information that International Standard on Quality Control (ISQC) 1 requires the firm to consider before accepting an audit engagement. (4 marks)

c. Describe the matters that ISQC 1 requires the firm to consider before assigning personnel to audits. (6 marks)

(Total 20 Marks)

QUESTION 5

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

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

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

Required:

a. Develop a work plan necessary for the task in accordance with the requirements of ISAE 3400 – *The Examination of Prospective Financial Information.* (5 marks)

b. Evaluate the considerations to be made and the procedures to be followed before accepting the engagement, in accordance with ISAE 3400 – *The Examination of Prospective Financial Information.* (5 marks)

c. Prepare an outline of the report to be presented on the engagement. (10 marks)

(Total 20 marks)

QUESTION 6

Emtex Engineering and Construction Company Limited, is a company having a significant long term civil engineering contracts in the troubled North Eastern part of the country. The accounting year-end of the company is December 31, every year. For the year ended December 31, 2018, the Finance Director informed you that a substantial part of the work on the contract, equipment and materials on site were destroyed on January 18, 2019 as a result of insurgent activities in that area. It was also discovered that part of the facilities on site were looted by unknown persons.

On December 31, 2018, the contract was not yet completed but profit would be recognised in accordance with IFRS 15 – *Revenue From Contracts With Customers.* The contract was due for completion in three years to the end of February 2021. Based on the telephone discussions, a meeting has been arranged to evaluate the circumstances ahead of the audit for the year and to ensure proper and smooth completion of the audit process.

You have been directed by your partner in charge of the audit to develop an outline for your firm's meeting with the company's team including the Finance Director and points to note for your audit.

Required:

a. Discuss the details of the additional background information you would require in assessing the extent of loss occasioned by the destruction, and its impact on the financial statements of the company. (7 marks)

b. Discuss the technical accounting considerations of the situation in accordance with the requirements of IAS 10 – *Accounting for Post Balance Sheet Events.* (3 marks)

c. Explain the accounting and disclosure requirements giving due consideration to IAS – 10 for possible scenarios involving whether the contract is onerous and whether the incident poses a threat to the company's going concern assumption. (4 marks)

d. According to IFRS 15 – *Revenue From Contracts with Customers*, revenue is recognised as control is passed, either over time or at a point in time.

   i. Explain some of the benefits relating to the asset in the context of IFRS 15. (3 marks)

   ii. Explain the criteria given in IFRS 15, of which one must be met for an entity to recognise revenue over time. (3 marks)

(Total 20 marks)

Solution 1

a. **Dotun Limited**

The assurance team's independence may be threatened if a director or other senior employee at the DARTH's office is employed by DOTUN Limited. There may be self-interest, familiarity and intimidation threats, particularly if close connections remain between the individual and the assurance firm. Such treats include:

i. **Self-interest threats** - This arises when the accountant or the audit firm had a financial interest or other interest in a matter. Typically this means that the accountant's decisions may be influenced by self-interest and the accountant will therefore not act with objectivity and independence.

ii. **Self-review threats** - This occurs when an accountant is required to review or re-evaluate (for a different purpose) a previous judgment he had made or action that he had taken. Self-review threats can also apply to audit firms. For example, if an audit firm prepared the financial statements for a client and then acted as auditor, it would be reviewing its own work and would be reluctant to criticise or question it. This would be a threat to objectivity and independence;

iii. **Advocacy threats** - This occurs when the accountant is in a position where he is expected to defend or justify the position of the client, and act as an 'advocate' for the client's position or point of view. This would be a threat to objectivity and independence;

iv. **Intimidation threats** - This occurs when the accountant is deterred from acting with objectivity due to threats against him or his firm. This may be a threat by the client to terminate the auditor's appointment, unless it agrees with the point of view of the client management; and

v. **Familiarity threats** - This occurs when the accountant becomes too sympathetic to the client's position due to close relationships. For example this may occur due to a long association over many years in carrying out the annual audit.

However, it may be possible to reduce the threat with safeguards, such as involving an independent third party to review the audit file.

In respect of audit clients, a key audit partner should not accept key management position from their clients until at least two years after the conclusion of the audit.

Self-interest threats may also arise if a member of the assurance team has reason to believe that they might soon be employed by the assurance client, for example, if they had applied for a job there. This threat can be avoided by having disclosure policies within the firm if an employee is entering into employment negotiations with an assurance client.

b. **Kate Limited**

The points to note are as follows:

i. Independence threats;
ii. Objectivity threats;
iii. Use of separate audit team;
iv. Use of separate departments in the audit firm;
v. New engagement letter; and
vi. Ensure no management decision is taken by the auditors

Appropriate safeguards to be put in place are as follows:

i. Dividing the work of the audit firm into different functions. Employees involved in audit work should not be the same as those involved in providing consultancy advice to the same client;

ii. Legally separating the consultancy department from accounting/ auditing arm of the firm to preserve auditor's objectivity and independence; and

iii. Ensuring that different members of staff and partners are responsible for different services provided to clients.

c. **Bucket Group Limited**

The points to note are as follows:

i. Potential threat of professional competence;
ii. Due care; and
iii. Lack of/or incomplete information

A member invited to undertake recurring or non-recurring work, which is additional to and related to continuing work carried out by another chartered accountant or adviser should normally notify that other chartered accountant (Ada & Co) of the work he has been asked to undertake.

It is generally in the interest of the client that the existing auditor (DARTH) be aware of the nature of the additional work being undertaken. The existing chartered accountant will be provided with the opportunity to communicate with the member to provide information, absence of which, might otherwise prevent the additional work from being carried out effectively. Additionally, such notification could affect the way an existing chartered accountant discharges his continuing responsibilities to his client.

Notification should always be given to the existing chartered accountant.

It should be noted that the application of accounting standards or principles clearly requires particular sensitivity to avoid adversarial positions between an auditor and other chartered accountants wherever possible.

d. **Danladi Limited**

The points to note are as follows:

i. Objectivity threats;
ii. Lack of independence;
iii. Confidentiality threats;
iv. Conflicts of interest;
v. Advocacy threats; and
vi. Self review threats

Advise to clients involved in take-over bids or share issues

Auditors are often asked to give advice. However, where clients are involved in a contested take-over bid, the auditors could find themselves in a position where they are potentially acting for both parties where the situation arises:

i. There is a danger that the firm cannot give objective professional advice in the best interest of both parties due to a possible lack of independence; and

ii. The firm may be in possession of confidential information relating to each party, with a risk that the information may inadvertently become available to the other party due to a possible breach of confidentiality.

Guidelines in this area are as follows:

i. There is no reason, in principle, why firms should not act for both parties when a contested takeover bid occurs. However, a firm should not be the sole or main advisor to both parties;

ii. If the accountants are in possession of material confidential information and feel that their position in this respect is questionable, they should take advice from the appropriate financial regulatory authority for example, the stock exchange involved in the take-over or the national regulator of the financial market; and

iii. Conflicts of interest may arise in connection with issues of shares to the public because the accountants may be advising both the company issuing the shares and potential investors, such as companies interested in buying the shares.

Examiner's report

The question tests candidates' knowledge on ethical and other professional issues relating to audit engagements.

Most of the candidates attempted the question, but performance was poor.

The common pitfall was the candidates' poor knowledge of the requirements of the question.

Candidates are enjoined to read ICAN Study Text properly before attempting future examinations.

Marking guide

		Marks	**Marks**
a.	Explaining ethical issues involved if a director in DARTH takes up employment in DOTUN Limited	2	
	Stating and explaining the threats	5	
	Stating how threats can be reduced	1	
	Stating how self-interest threats may arise	2	10
b.	Kate Nigeria Limited - Independence threats, - Objectivity threats, - Use of separate audit team - Use of separate departments in the audit firm - New engagement letter, - Auditor not making management decision		10
c.	Bucket Group Limited		10
d.	Danladi Nigeria Limited		10
		Total	**40**

Solution 2

a.

The risk associated with Electronic Data Interchange (EDI) systems are as follows:

i. Lack of paper audit trail;

ii. An increased level of dependency on the computer systems of the organisation 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. Risk of loss or corruption of data in the process of transmission; and

iv. Security risks in the transmission of data.

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

i. Controls over the 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.

b. **General IT controls**

General IT controls are controls over the environment in which the computer-based information system is designed, developed, operated and maintained.

The main categories of general IT control that an auditor would expect to find in a computer-based information system are summarised in the table below:

Control area	Controls
Development of computer-based information systems and applications	i. Appropriate standards should be established and enforced for designing, developing, programming and documenting each new system. ii. Suitable testing procedures should be carried out on each new system. iii. The design of a new system should be approved formally by the management of the system user. iv. There should be a segregation of duties between system designers and system testers (to reduce the risk of errors or fraud). v. There should be suitable staff training in the design and testing of systems.
Documentation and testing of program changes	i. Formal testing procedures should be applied for any change to a current program. ii. There should be formal authorisation procedures for program changes. iii. There should be suitable staff training in making and testing program changes.
Prevention or detection of unauthorised program change	i. There should be a segregation of duties between programmers and computer system operators. ii. All program changes must be fully documented. iii. Access to program files must be restricted. iv. Program logs should be used to record access to program files and programs. v. There should be anti-virus software and back-up copies of program files should be kept, to prevent, detect or deal with 'malicious' changes to programs.

Control area	Controls	
Prevention of the use of incorrect programs or data files	i.	Standard operating procedures should be established and operations should be performed by suitably trained staff.
	ii.	The scheduling of 'jobs' for a computer centre should specify the program files and data files to be used.
	iii.	There should be effective supervision of computer centre operations.
	iv.	Reviews of operations should be carried out regularly by management.
Prevention of unauthorised amendments to data files	i.	There must be restricted access to data files and limited to authorised personnel.
	ii.	Transaction logs should be kept of all uses of data files and these should be reviewed by management.
Ensuring continuity of operations	i.	Secured back-up copies should be kept of program files and data files.
	ii.	Measures should be implemented for the protection of equipment against fire, power failure and other hazards.
	iii.	Disaster recovery programmes should be in place, in the event of major disaster that puts the main computer system out of action.
	iv.	There should be suitable maintenance and service agreements for all major externally-acquired software.

These general IT controls should apply to most or all of the entity's computer-based information system applications, not just to computerised accounting systems. If general controls are weak, it is unlikely that the processing work undertaken by the system will be complete and accurate.

The auditor should review and test the general IT controls in order to reach a conclusion about their effectiveness. This will enable him to assess the control risk attached to the entity's computer-based information systems as a whole.

Examiner's report

The question tests candidates' knowledge of Electronic Data Interchange/Computer based information system in an online business.

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

The common pitfall of the candidates was their poor understanding of the requirements of the question.

Candidates are advised to read ICAN Study Text before sitting for future examinations.

Marking guide

		Marks	Marks
a.	Risk associated with application of EDI	4	
	Stating effective controls that an auditor expects to find in place	4	**8**
b.	Categories of general IT controls		12
	Total		**20**

Solution 3

Comments on the quality of the audit performed by Haggai Partners include the following:

a. **Materiality**

ISA 320 requires the auditor to apply the concept of materiality when planning an audit. Auditors must consider materiality at the planning stage of the audit because it helps them to determine which items to test which is a good control in determining sample size. As the audit progresses, ISA 320 requires the auditor to review the materiality of ₦170m set at the planning stage and should not used throughout the audit. For example, the building cost of ₦205m was recognised as ₦210m resulting in a difference of ₦5m. The auditor may regard this as not material and not carry out test to confirm the difference.

There is the possibility of low audit quality if the auditor fails to carry out test on the carrying amount of ₦210m as at June 30, 2019.

The same principle is applied to inventory counts. The fact that proper counting was not carried out by management staff indicates the possibility of material misstatement in the inventory balance as at the end of June 2019.

Materiality at the final stage of the audit helps the auditor in determining the reasonableness of the audit carried out and at what level the audit report will be modified. Therefore, failure to review materiality as the audit progresses may result to very low audit quality and this may also result to high audit risk. If the auditor had used a lower materiality level than the ₦170m set, the auditor will be able to carry out many tests on inventory, thereby reducing the risk of detection and invariably overall audit risk.

b. **Building**

The building acquired during the year should be categorised as non-current asset and as such the following detail substantive tests need to be carried out by the firm so as to confirm financial statements assertion as relate to cost, authorisation, valuation, existence, beneficial ownership and its presentation in the statement of financial position. Absence of evidence of all these assertion in the current audit working papers of the firm would be regarded as poor audit work on verification of building.

Taking the above listed financial statement assertions one after the other, the audit firm should confirm the following:

i. **Cost**

The building was acquired during the year. Relevant documents such as sales invoice and original receipt obtained from the vendor should be sighted by the firm and a copy should be kept in the current audit working papers file.

ii. **Authorisation**

Evidence of the authority to purchase the building by the company should be obtained and also reviewed in the minutes of meetings of the board of directors. Also, the payment voucher in respect of this newly acquired building should also be reviewed and a copy should be kept in the audit file.

iii. **Valuation**

The initial cost of the building was ₦205m but was recognised in the draft statement of financial position at a carrying amount of ₦210m. The reason for this may be that the building must have been revalued and based on this; the audit firm should have ascertained the following:

- Whether or not the valuation was carried out by the company or by an external valuer;
- If the valuation was carried out by the company, the firm should have ascertained the basis of valuation; and

- If the valuation was carried out by an external valuer, the firm should ascertain the reputation, experience and independence of the external valuer.

iv. Existence

The audit team did not carry out physical confirmation of where the building is located. They only relied on sales agreement and confirmation in writing from the Factory Manager in respect of the building.

To actually confirm the existence of this building, physical confirmation needs to be carried out.

v. Beneficial ownership

The audit firm needs to confirm whether or not the acquired building is being used for the purpose and benefits of the company. This can be done by checking relevant documents relating to its usage, such as checking expenses in respect of repairs and maintenance of the building.

vi. Presentation

The statement of the financial position should be reviewed as a whole to confirm whether or not the building has been properly classified and presented in accordance with relevant accounting standard.

Comments

It is obvious from the review of the current audit working papers file that all the above assertions were not carried out and as such, the quality of the audit was very poor.

c. Inventory

Inventory of ₦290m was recognised in the draft statement of financial position. This amount is considered to be a material figure and since the audit team has indicated that the count of some items by the company's staff was not correctly done, there is need for the firm to do the following:

i. Order a recount of the inventory items while representative of the audit firm will be in attendance to observe the procedures;

ii. The valuation method used should be confirmed whether or not it is in line with relevant accounting standard;

iii. The condition and obsoleteness of the inventory items should be considered;

iv. The cut-off procedures in relation to the inventory should be reviewed;

v. Relevant documents such as purchase invoices and receipts should be checked so as to confirm the ownership of the inventory; and

vi. The firm should review the available internal control put in place by the management of the company on the existence and movement of the inventory.

Comments

The firm needs to do more audit work as per the above procedures in relation to inventory.

d. Review by the engagement partner and audit manager

As discussed above, before the audit report is issued, the engagement partner needs to be satisfied that sufficient appropriate audit evidence has been obtained to support the conclusions reached and for the audit report to be issued, he should therefore:

- Review the audit documentation; and
- Hold discussion with the audit team.

This process is usually referred to as the partner's review. It should be scheduled into the audit plan towards the completion of the audit.

Before the partner's review, the audit senior should ensure that every file is complete and cross-referenced in order to cut down the number of points that might be raised by the partner's review.

The partner's review will usually be preceded by a manager's review, in the hope that the audit manager will identify some matters that can be resolved before they come to the attention of the engagement partner, but in electronic environment, it is possible to do it concurrently.

Quality control issues include:

i. Poor or inadequate planning of the audit, such as failure to identify the key audit risks;
ii. Giving complex audit work to relatively inexperienced member of the audit team;
iii. Inadequate supervision; and
iv. Inadequate review of the audit working papers by the audit manager.

Examiner's report

The question tests candidates' knowledge on quality control issues in an audit engagement.

About 50% of the candidates attempted the question and performance was slightly below average.

The common pitfall of the candidates was their poor knowledge of the requirements of the question.

Candidates are advised to read and understand the requirements of questions before attempting them.

Marking guide

		Marks
Discussing materiality in line with IAS 320		2
Discussing matters relating to building such as cost, authorisation, valuation, existence, beneficial ownership and presentation		5
Giving comments		1
Stating any five points relating to Inventory		6
Giving comment on Inventory		1
Stating what to do on the review by the engagement partner and manager concurrently		2
Quality control issues		3
	Total	**20**

Solution 4

a. **Professional issues to be noted before accepting a new audit appointment**

Before accepting an appointment, the audit firm should take the following steps:

i. Assess whether or not there are any professional problems attached to accepting the engagement. These might include, for example, problems of lack of independence, or a lack of technical expertise, or a conflict of interest;

ii. Ensure that resources are available to complete the audit assignment; in particular, it must ensure that there will be sufficient staff of the right level of expertise available at the right time;

iii. Take up references on the proposed client company and its directors, if they are not already known to the auditors. This is usually referred to as client screening; and

iv. Communicate with the existing auditors, if any, to discuss the appointment, the client and the audit work. The method of communication is referred to in ICAN's Code of Conduct as **professional enquiry**.

Client identification

In order to comply with anti-money laundering regulations, the audit firm should carry out client identification procedures. The purpose of these procedures is to confirm that the client 'is who he says he is' and there are no grounds for suspicion that the client may be involved in money laundering activities. The procedures include:

i. If the client is a company or other business entity, document of the identity of the entity should be obtained, for example, a certificate of incorporation in the case of a company;

ii. Evidence should also be obtained to confirm the address of the entity, such as letter head;

iii. If the client is an individual, evidence of identity can be obtained from an international passport or driver's licence and evidence of address from recent utility bill;

iv. The audit firm should consider whether or not the business of the potential new client 'makes commercial sense', for example, it would not make sense for a very large company to be engaged in operating a number of dry cleaning shops because the size of the company would be too large for the nature of its business operations. When this happens, the client's declared business may simply be a front or cover for hidden illegal activities.

In most cases, the client identification procedures should be a formality and the client may be surprised that they are necessary. The audit firm should explain the regulatory purpose of client identification, to remove any doubt or concerns that the new client may have.

Professional enquiry

The firm should communicate with the current auditor, if any, to establish if there are any matters that it should be aware of when deciding whether or not to accept the appointment. Although, this is partly a matter of courtesy between professionals, this will involve discussion of the appointment, the client and the audit work. Such discussion will allow the firm to decide if the client is someone for whom it would wish to act.

The following points should be noted when communicating with the current auditor:

i. When a member is first approached by a prospective client to act or be nominated, he should explain that he has a professional duty to communicate with the existing auditor;

ii. Client permission is required for any such communication. If the client refuses to give its permission, the appointment as auditor should not be accepted;

iii. If the client does not give the current auditor permission to reply to any relevant questions, the current auditor should communicate this fact to the prospective auditor who should subsequently not accept appointment;

iv. If the current auditor does not provide any information relevant to the appointment, the new auditor should accept or reject the engagement based on other available knowledge;

v. The existing auditor should answer without delay the communication from the prospective auditor. If there are no matters of which the latter should be aware, the existing auditor should write to say that this is the case;

vi. If, however, there are such matters, he should inform the prospective auditor of those facts within his knowledge of which, in his opinion, the prospective auditor should be aware. It is not sufficient to state that unspecified facts exist;

vii. The existing auditor might prefer to explain these facts orally and the prospective auditor should be prepared to confer with the existing auditor if the latter so desires and each should make his own record of such discussion;

viii. If an issue of conflicting viewpoints between the client and himself has been raised by the existing auditor in the reply, the prospective auditor should discuss the conflict with the client and satisfy himself either that the client's view is one which he can accept as reasonable or that the client will accept that the incoming auditor might have to express a contrary opinion;

ix. Where the existing auditor does not respond within a reasonable time, the prospective auditor should endeavour to contact the existing auditor by some other means, for instance, by telephone or email;

x. Should this fail, and where the prospective auditor has no reason to believe that there are untoward circumstances surrounding the change, he should send a final letter by recorded delivery service stating that unless he receives a reply within a specified time he will assume that there are no matters of which the existing auditor is aware that should be brought to his attention. A member who accepts nomination in such circumstances is not precluded from complaining to the Institute that the existing auditor did not respond to his letter of enquiry; and

xi. If the prospective auditor is satisfied that he can properly act, and is prepared to accept nomination/appointment, he should so inform the client in writing.

Unpaid fees

A member in public practice should not accept an audit assignment previously carried out by another member, without first ensuring that the other member has been properly removed from office as auditor and that all outstanding fees due to the other member have been fully paid.

b. Acceptance of an audit engagement

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

i. Is competent to perform the engagement;

ii. Has the capabilities and necessary resources to do so;

iii. Can comply with the relevant ethical requirements; and

iv. Has considered the integrity of the client and does not have information which would lead it to conclude that the client lacks integrity.

The policies and procedures should include requiring the firm to:

i. Obtain sufficient information to make such decisions (for new or existing engagements);

ii. Consider potential conflicts of interest and therefore whether or not it should accept the engagement; and

iii. Document all identified issues and how they were resolved.

These requirements mean that there should be a review of proposed new clients and (at regular intervals) of existing clients, to make sure that the firm will be independent, that there are no conflicts of interest and the firm has the technical competence to do the audit work.

When an audit firm accepts an audit engagement from a new client, suitable procedures should therefore be carried out to ensure that:

i. The firm will be independent and there are no conflicts of interest;

ii. The firm has the technical competence to do the work;

iii. Professional clearance has been obtained from the previous auditors of the new client; and

iv. Appropriate anti-money laundering procedures are performed.

Before the start of the audit each year, the engagement partner for the audit should:

i. Ensure that all members of the audit team are independent of the client and there are no conflicts of interest; and

ii. Be satisfied with the ethical integrity of the client entity and its management; and

c. Matters to be considered before assigning personnel to audits as required by ISQC 1

i. ISQC 1 requires the firm to ensure:

- It has sufficient personnel with the competence, capabilities and commitment to ethical principles to meet its overall quality control objectives, and

- That for each engagement, an appropriate engagement partner and team are assigned.

ii. Policies should, therefore, exist for the recruitment, training and development of staff. The firm should ensure compliance with ISQC1 and audit staff should have a good knowledge of accounting standards and local/national statutory accounting regulations;

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

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

- Experience of audits of a similar complexity; and

- An ability to apply professional judgement.

v. Policies and procedures are required to include:

- Those to promote consistent quality engagement performance;

- Supervision responsibilities; and

- Review responsibilities on the basis that more experienced team members review the work of less experienced team members.

vi. Guidance on consultation to ensure that:

- Appropriate consultation takes place on difficult or contentious Matters;

- Sufficient resources are available for such consultation;

- The nature, scope and conclusions of the consultation are documented by both parties; and

- Conclusions arising from the consultation are implemented.

vii. Guidance on engagement quality control reviews to ensure that:

- An engagement quality control review is required for audits of all listed entity clients;

- Criteria are established to determine which other engagements should be subject to an engagement quality control review;
- The review covers certain procedures;

- Engagement quality control reviewers are eligible to carry out such reviews via technical qualifications, experience, authority and objectivity from the engagement; and

- Engagement quality control reviews are properly documented.

Examiner's report

The question tests candidates' knowledge on issues of acceptance of audit assignment and quality control matters to be considered before accepting an audit engagement.

About 70% of the candidates attempted the question and performance was poor.

Candidates were at a loss as to the requirements of the question. Their solutions were not detailed enough to garner sufficient marks.

Candidates are enjoined to read the study text very well and understand the requirements of questions before attempting them.

Marking guide

		Marks	Marks
a.	Procedure before accepting a new audit appointment	2	
	Client identification	2	
	Professional enquiry	5	
	Unpaid fees	1	10
b.	Acceptance of an audit engagement		
	ISQC 1 requirements	1	
	Policies and procedures	1	
	After acceptance	1	
	What to do before audit starts	1	4
c.	Requirements of ISQC 1 on human resources	2	
	Policies and procedures required in engagement performance	4	6
	Total		**20**

Solution 5

a. Development of work plan in accordance with ISAE 3400

i. ISAE 3400 - *The Examination of Prospective Financial Information (PFI)* provides guidance on

- The examination of PFI; and
- Reporting on PFI

It focuses mainly on numerical information and numerical forecasts or predictions.

ii. Many of the points relevant to deciding whether to accept any audit or assurance engagement will apply to accepting a PFI assurance engagement. Issues to consider will include, for example:

- The availability of resources and staff with the necessary expertise;

- The timescale for the completion of the engagement; and

- Agreeing a fee for the work with the client.

iii. The accountant should also establish with the client the form that the assurance report should take. It is particularly important that the client should understand that in a review of forward-looking information, only negative assurance can be provided.

iv. The client should also be informed that the audit firm will comply with the requirements of ISAE 3400 when reviewing the prospective financial information.

v. An engagement letter should be agreed and signed by both parties before the work is actually started.

b. Procedures to be followed in a PFI assurance engagement

There are several specific points that might apply to PFI engagements which include:

i. Understanding the nature of the information to be examined;

ii. Establishing the intended use of the information and the intended recipients of the final report;

iii. Establishing whether the information will be for general distribution or limited distribution to a small number of users;

iv. The nature of the assumptions that have been made by management whether or not they are best estimate assumptions for a forecast, or hypothetical assumptions for the purpose of making a projection; and

v. The time period covered by this information.

When deciding the nature, timing and extent of the procedures required to complete a PFI assurance engagement, the auditor should consider the following issues:

i. The likelihood of material misstatement in the forecast or projection;

ii. The knowledge that the auditor has obtained during any previous similar engagements;

iii. The competence of the client's management with regard to the preparation of PFI;

iv. The extent to which the PFI is affected by management's judgment, in other words, to what extent does the PFI depend on judgment about best estimates or hypotheses; and

v. The adequacy and reliability of the underlying data and assumptions that have been used as the basis for preparing the prospective financial information.

The general approach to the assurance work should be similar to the approach for audit work or other assurance work, but with some modifications to allow for the specific nature of the work.

Procedures will include the following:

i. Where the audit firm has no previous knowledge of the entity, it should obtain sufficient knowledge of the entity and its environment;

ii. If best estimate assumptions have been used in preparing the PFI (a forecast), the auditor should seek evidence to support these estimates;

iii. If hypothetical assumptions have been used to prepare a projection, the auditor should assess whether they are realistic and sensible, and whether the full implications of the hypothetical assumptions have been properly reflected in the PFI;

iv. The auditor should assess whether the PFI contains all the relevant material items and that nothing of significance has been omitted; and

v. If part of the 'future period' in the forecast or projection has already passed, the auditor should review the actual results for that part of the period, and compare actual results with the forecast or projection. The differences will help the auditor to assess the reliability of the forecast or accuracy of the projection.

c. Reporting outline on PFI engagement

A report from the audit/accountancy firm on PFI should contain the following elements:

i. Title;

ii. Addressee;

iii. Identification of the PFI, for example, by page references to pages in same document as the report, where the PFI can be found;

vi. A reference to ISAE, 3400;

v. A statement that management is responsible for the PFI, including the assumptions on which it is based;

vi. A reference to the purpose of the PFI and/or the restricted distribution of the report to a limited number of users;

vii. A statement of negative assurance as to whether the assumptions that management have made provide a reasonable basis for the PFI;

viii. An opinion as to whether or not the PFI is properly prepared on the basis of these assumptions, and whether or not the PFI is presented in accordance with the relevant financial reporting framework;

ix. The report should also contain warnings that the PFI is a forecast or projection, and the results indicated by the PFI might not be achieved; and

x. Date, address and signature of the accountant/auditor.

Marking guide

			Marks	Marks
a.	Guidance provided by ISAE 3400		2	
	Issues to consider when deciding to accept PFI engagement		3	5
b.	Procedures in a PFI assurance engagement			5
c.	Outlines of a report in respect of PFI			10
		Total		**20**

Examiner's report

The question tests candidates' knowledge of prospective financial information engagement.

About 30% of the candidates attempted the question and performance was poor.

The common pitfall of the candidates was that they were neither able to develop a work plan nor evaluate procedures to be carried out before accepting the engagement.

Candidates are advised to read widely, particularly ICAN Study Text before attempting future examinations.

Solution 6

Emtex Engineering and Construction Company Limited

a. Details of the additional background information required to assess the extent of loss occasioned by the destruction, and its impact on the financial statements of the company include:

i. Determine Expected Outcome of the Contract - Costs and revenue should be accounted for using stage of completion method;

ii. Calculate the stage of completion - Completion is due in three years, that is, end of February 2021. This is done by valuing the work certified as completed as a percentage of total contract price;

iii. Determine the amounts to be recognised in income statement for profit, revenue and cost, recognising that substantial part of the work on the contract, equipment and materials were destroyed early in the contract period;

iv. When stage of completion is calculated using value based method, revenue to be recognised is equal to the value of work certified as complete. Profit is calculated based on the percentage of completion of the contract whereas cost recognised in the income statement is the balancing amount arrived at by calculating the difference between revenue and profit;

v. Calculate amounts to be recognised in the statement of financial position for gross amounts due to/from customers and trade receivables;

vi. Consider going concern issues due to destruction of equipment and materials.

vii. Trade receivables are calculated by finding the difference between amount billed to the customer for progress payments and the amount of progress payments received from the customer;

viii. Prepare extracts of financial statements in respect of the construction contracts; and

ix. Prepare construction contract control account.

b. **Technical accounting considerations as per IAS 10**

These include:

i. Defining events after the reporting period (as defined by IAS 10) has been properly applied;

ii. Ensuring that correct distinction between adjusting and non-adjusting events after the reporting period has been made;

iii. Ensuring that adjustments have been made correctly for adjusting events, in accordance with the appropriate IAS/IFRS; and

iv. Confirmation that non-adjusting events have been adequately disclosed.

c. **Disclosures for non-adjusting events after the reporting period**

These include:

i. Non-adjusting events after the reporting period are treated differently. A non-adjusting event relates to conditions that did not exist at the end of the reporting period; therefore, the financial statements must not be updated to include the effects of the event.

IAS 10 states quite firmly: 'An entity shall NOT adjust the amounts recognised in its financial statements to reflect non-adjusting events after the reporting period';

ii. However, IAS 10 states that if a non-adjusting event is material, a failure by the entity to provide a disclosure about it could influence the economic decisions taken by users of the financial statements. For material non-adjusting events, IAS 10, therefore, requires disclosure of:

- The nature of the event; and
- An estimate of its financial effect or a statement that a reasonable estimate of the effect cannot be made.

This information should be disclosed in a note to the financial statements.

IAS 10, gives the following examples of non-adjusting events;

i. A fall in value of an asset after the reporting period, such as a large fall in the market value of some investments owned by the entity, between the end of the reporting period and the date the financial statements are authorised for issue;

ii. The acquisition or disposal of a major subsidiary;

iii. The formal announcement of a plan to discontinue a major operation.

iv. The announcement or commencement of the implementation of a major restriction; and

v. The destruction of a major plant by fire insurgent activities after the reporting period.

d. i. **Benefits relating to the asset in the context of IFRS 15**

If a performance obligation is not satisfied over time, an entity satisfies the performance obligation at a point in time. To determine the point in time at which a customer obtains control of a promised asset and the entity satisfies a performance obligation, the entity shall consider the requirements for control. In addition, an entity shall consider indicators of the transfer of control, which include, but are not limited to, the following:

- The entity has a present right to payment for the asset
  If a customer is presently obliged to pay for an asset, then that may indicate that the customer has obtained the ability to direct the use of, and obtain substantially all of the remaining benefits from, the asset in exchange;

- The customer has legal title to the asset
  Legal title may indicate which party to a contract has the ability to direct the use of, and obtain substantially all of the remaining benefits from, an asset or to restrict the access of other entities to those benefits. Therefore, the transfer of legal title of an asset may indicate that the customer has obtained control of the asset. If an entity retains legal title solely as protection against the customer's failure to pay, those rights of the entity would not preclude the customer from obtaining control of an asset;

- The entity has transferred physical possession of the asset

The customer's physical possession of an asset may indicate that the customer has the ability to direct the use of, and obtain substantially all of the remaining benefits from the asset or to restrict the access of other entities to those benefits. However, physical possession may not coincide with control of an asset, for example, in some repurchase agreements and in some consignment arrangements, a customer or consignee may have physical possession of an asset that the entity controls. Conversely, in some bill-and-hold arrangements, the entity may have physical possession of an asset that the customer controls;

- The customer has the significant risks and rewards of ownership of the asset
  The transfer of the significant risks and rewards of ownership of an asset to the customer may indicate that the customer has obtained the ability to direct the use of, and obtain substantially all of the remaining benefits from the asset. However, when evaluating the risks and rewards of ownership of a promised asset, an entity shall exclude any risks that give rise to a separate performance obligation in addition to the performance obligation to transfer the asset. For example, an entity may have transferred control of an asset to a customer but not yet satisfied an additional performance obligation to provide maintenance services related to the transferred asset;

- Collection of consideration to which an entity is entitled;

- Commitment of parties to performance of obligation; and

- The customer has accepted the asset
  The customer's acceptance of an asset may indicate that it has obtained the ability to direct the use of, and obtain substantially all of the remaining benefits from, the asset over time.

ii. **Criteria given in IFRS 15 that must be met for an entity to recognise revenue over time.**

According to IFRS 15, the criteria that must be met for revenue to be recognised are as follows:

- Identification of the contract to a client;
- Identification of the performance obligation in the contract;
- Determination of transaction (contract) price;
- Allocation of contract price to each performance obligations; and

- Recognition of revenue when or as each performance obligation is satisfied.

Marking guide

		Marks	Marks
a.	Background information required to assess the extent of loss occasioned by the destruction of the company		7
b.	Technical accounting consideration as required by IAS 10		3
			10
c.	Disclosures required for non-adjusting events after the reporting period as per IAS 10	2	
	Information to be disclosed in a note to the financial statements as per IAS 10	2	4
d.	i. Benefits relating to the assets in the context of IFRS 15	3	
	ii. Conditions to be satisfied for revenue recognition as stipulated by IFRS 15: Identify the contract to a client; Identify the performance obligations in the contract; Determine transaction (contract) price; Allocate contract price to each performance obligation; Recognise revenue when or as each performance obligation is satisfied	3	6
	Total		**20**

Examiner's report

The question tests candidates' knowledge on the requirements of IAS 10 – Accounting for Post Balance Sheet Events, and IFRS 15 – Revenue from Contracts with Customers in an Audit Engagement.

About 10% of the candidates attempted the question and performance was woeful.

The common pitfall was that the candidates were unable to apply the requirements of IAS 10 and IFRS 15 to the given business scenarios.

Candidates are enjoined to read ICAN Study Text properly before embarking on future examinations.

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA
PROFESSIONAL LEVEL EXAMINATION – MARCH/JULY 2020

CASE STUDY

Time Allowed: 4 hours (including reading time)

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

This case material is issued prior to the examination to enable candidates familiarise themselves with the case scenario and to undertake any research and analysis as necessary. This pre-seen part of the Case Study examination was published on the Institute's website: www.ican.org/students.

Candidates **MUST NOT** bring this case material to the Examination Hall. On receipt of the material, candidates are to spend few days to the examination to familiarise themselves with the information provided, carry out additional research and analysis about the industry and analyse the financials provided in preparation for the examination. Candidates should note that the use of pre-seen part of the Case Study will not significantly help them in their preparation for this examination. It is essential that they carry out sufficient study and analysis on their own in order to have a good understanding of the pre-seen part of the case scenario.

At the start of the examination, candidates will receive the complete case scenario which will include both the pre-seen and the unseen which includes the requirements. Candidates must use the answer booklet provided by ICAN in the Examination Hall. Any solution presented with other papers **WILL NOT** be marked.

Assessment of the Case Study

The marks in the Case Study examination are awarded for professional skills and are approximately allocated as follows:

▸ Assimilating and using information	20%
▸ Structuring problems and solutions	20%
▸ Applying judgement	20%
▸ Drawing conclusions and making recommendations	20%
▸ Demonstrating integrative and multidisciplinary skills	10%
▸ Presenting appropriate appendices	10%

Of the total marks available, approximate 10% for the relevant discussion of ethical issues within your answer to the requirements. Although ethical issues do not form a specific requirement, as this has been deemed to have been tested in other subjects of the professional examination, but will be tested within a requirement which may include the following areas:

- Lack of professional independence or objectivity;
- Conflicts of interest among stakeholders;
- Doubtful accounting and/or creative accounting practice;
- Unethical business/commercial practice; and
- Inappropriate pressure to achieve a reported result.

Candidates should note that marks are not awarded for just simply restating facts from the case scenario but marks are awarded for demonstrating professional skills and technical depth. Therefore, to succeed, candidates are required to:

- Show sufficient evidence of knowledge of the case scenario;
- Be able to carry out appropriate analysis of the issues involved and suggest feasible solutions to the problems identified;
- Demonstrate ability to make informed judgement on the basis of analysis carried out; and
- Generate reasoned conclusions upon which relevant recommendations are made.

Candidates that omit any one of these will have a slim chance of success in the examination.

March/July 2020 Case Study:

List of exhibits

1 About you (John Adepoju) and your employer, Chartered Institute of Business Advisors (CIBA)

2 Chartered Institute of Business Advisors (CIBA)

3 Chartered Institute of Business Advisors' (CIBA's) 4- year financial summary

4 Request from the management of Dalop University's Business School (DUBS)

5 Extract from the 21st President's acceptance speech

Exhibit 1

About you (John Adepoju) and your employer, Chartered Institute of Business Advisors (CIBA)

You are John Adepoju, a final-year trainee Chartered Accountant working as Manager - Finance at the secretariat of the Chartered Institute of Business Advisors (CIBA). You report to Frank Eboka, the Finance and Accounts Director of the Institute.
Your responsibilities include:

- Preparing detailed financial analyses and reports on the performance of the Institute's revenue streams;
- Preparing the Institute's annual budget and the monthly report on the Institute's budgetary performance;
- Assessing operational and strategic business opportunities to see how each aligns with the Institute's mission, its impact on business and professional risks;
- Assessing the Institute's financial and business forecast together with the assumptions upon which they are based to form judgements and recommendations to the Council; and
- Drafting reports for the Finance and Accounts Director to be submitted to the Council on the result of the Institute's financial, operational and strategic business analyses that you have carried out.

Your responsibilities demand that you keep yourself abreast with the profession, both nationally and internationally, so as to be able to carry out the above tasks effectively.

Exhibit 2

Chartered Institute of Business Advisors (CIBA)

The Chartered Institute of Business Advisors was set up in 1979 by a group of consultants that specialises in business advisory services. The need for the Institute arose from the perceived benefits of having a body to regulate the practice of business advisory services in Nigeria. The Institute was first registered as a company limited by guarantee in 1979 but later received a government charter in 1985 and is saddled with the responsibility of regulating business advisory services in Nigeria.

Vision

To take business advisory services in Nigeria to a world - class level.

Mission statement

To produce world-class business advisors, regulate and continually enhance high ethical standards and technical competence in business advisory services.

Council and management

The Institute is run by a Council of 20 members who are drawn from members of the Institute with proven records of high – level business advisory services in the public and private sector of the country. Council members are elected by members of the Institute and they are to serve for a period of four years. They have opportunity to re-contest after the expiration of their terms, however, a council member cannot serve more than a period of 16 years, i.e. four terms.

The most senior member of the council is usually appointed as the President of the Institute and has a term of two years. The President has no executive power, as he/she is just a ceremonial president. All the activities of the Institute are run on the basis of committees. The committees are made up of members of the Institute and do not receive any remuneration for their services, other than transport and incidental expenses. The secretariat of the Institute is run by appointed career officers and it is headed by a Registrar/Chief Executive officer. The secretariat is structured along the following departments:

- Finance and Accounts;
- Technical and Business Research;
- Membership/Student Affairs;
- Examination;
- Information, Communication and Technology (ICT);

- Support Services (Administration, Marketing, Secretarial/Legal services and Corporate communication).

The current management staff of the Institute are:

• Registrar/Chief Executive	Dr. Daniel Ighodalo
• Director – Technical and business research	Dr. Tayo Adedun
• Director – Examination	Dr. Yaya Garuba
• Director – Finance and accounts	Frank Eboka
• Director – Support services	Josephine Duru
• HOD – Membership/students affairs	Thomas Okechukwu
• Head ICT	Oluwole Adetoro

Membership

The membership of the Institute is through two routes, as follows:

a. Direct membership:
   - A qualified professional in any of the business areas, such as accountancy, insurance, taxation, management or finance is admitted as a member of the Institute, provided she/he has acquired five years cognate experience in business advisory services, working in recognised consulting firms; and

   - A person with at least a Master's degree in any of the business courses, such as accounting, finance, insurance, marketing, business administration, management, taxation and allied disciplines.

b. Membership through examination:
   A graduate of any discipline that wants to go into business advisory services will have to take and pass examination in twelve subjects arranged under three levels, Preliminary; Technical and Professional, each with four subjects.

Other programmes

Apart from its examinations, the Institute normally runs three other programmes. These are:

- **Members' Continuing Education (MCE):** This is a programme aimed at improving members' technical knowledge and ensures members are up to date in the profession and could cope with the global challenges of business advisory. The programmes are run throughout the year and are normally on various areas of interest. Members are free to enrol for any of the programmes during the year. As part of their continuing membership, they are expected to have attended at least three of such programmes in any particular year.

- **Academy for Business Advisors (ABA):** This programme is directed at young graduates who are presently working in consulting firms or are generally interested in business consulting. The purpose of the academy is to equip these young graduates with the rudiments of business advisory. It will assist them to perform better in their various offices. Also, people working in organisations who are required to provide technical advice to other executives in their organisations will benefit from the programme of the academy. The academy usually runs three short programmes of three months each year. A certificate is issued to participants after successfully completing the programme and passing a written examination.

- **Business Seminars for Corporate Organisations (BSCO)**: These are special seminars organised for business entities on request. The seminar could be held in an in-house facility in the organisation or at the secretariat of the Institute, depending on the preference of the business entities.

Revenue streams

The Institute derives its revenues from the following streams:

- Members subscriptions
- Examinations fees
- Members' Continuing Education (MCE)
- Academy for Business Advisors (ABA)
- Business Seminars for Corporate Organisations (BSCO)

Development in the country

The country recently experienced a rare plague that causes strange sickness that has no known cure. This plague made the government to restrict social, business, educational and religious gatherings. This restriction has affected all sectors of the economy, including the educational sector. As a result, the Institute has not been able to conduct its examinations this year, which usually comes up twice in a year, March and September. Furthermore, the Institute has not been able to run all its other programmes

Exhibit 3

Chartered Institute of Business Advisors (CIBA)
Financial statements summary
Year ended: 31 December

	2018	2017	2016	2015
	₦million	₦million	₦million	₦million
Statement of financial position				
Assets				
Property, plant and equipment	202.1	200.5	208.0	214.9
Intangible assets	1.4	0.2	-	-
Available for sale financial assets	3.7	4.9	3.6	3.2
	207.2	205.6	211.6	218.1
Current assets				
Inventories	5.6	6.4	4.4	3.5
Receivables	12.1	14.4	11.5	9.3
Prepayments	5.5	1.3	1.5	1.9
Financial assets held to maturity	234.9	43.8	18.8	-
Cash and cash equivalents	11.9	13.5	10.5	45.9
	270.0	79.4	46.7	60.6
Total assets	**477.2**	**285.0**	**258.3**	**278.7**
Funds and reserves				
Accumulated fund	381.4	220.4	185.4	219.4
Building fund	41.3	30.5	23.2	10.4
Other funds	31.0	16.7	35.9	16.7
Fair value reserves	0.9	2.1	0.8	0.5
Total funds and reserves	454.6	269.7	245.3	247.0
Current liabilities				
Payables	9.3	3.4	4.1	8.7
Other payables	1.0	4.1	3.5	7.1
Deferred income	12.3	7.8	5.4	15.9
	22.6	15.3	13.0	31.7
Total funds, reserves & liabilities	**477.2**	**285.0**	**258.3**	**278.7**

	2018	2017	2016	2015
	₦million	**₦million**	**₦million**	**₦million**
Statement of income & expenditure and other comprehensive income				
Fees and subscriptions	677	419	462	476
Self – financing programmes	606	432	404	475
Publications	32	20	37	9
Investment income	47	71	5	14
Other income	63	56	71	53
Total income	1,425	998	979	1,027
Expenditure				
Personnel cost	303	282	270	287
Affiliations' costs	24	23	28	15
Administrative expenses	581	464	469	443
Depreciation & amortisation	131	125	117	91
Impairment charges	213	82	132	142
Total expenditure	1,252	976	1016	978
Operating surplus/deficit for the year	173	22	(37)	49
Other comprehensive income				
Items that may be reclassified to income and expenditure				
Changes in financial assets at fair value through other comprehensive income	(12)	13	3	(10)
Total comprehensive surplus/deficit for the year	161	35	(34)	39

Exhibit 4

Request from the management of Dalop University's Business School

Thank you for the meeting we had at your secretariat yesterday in respect of the above.

This correspondence is to reinforce our discussions during the meeting. Dalop University is interested in contracting the running of its business school to your institute for a period of five years. During this period, we expect that the school would have been on its footing and could run on its own as an arm of the University.

As discussed, your institute will be responsible for providing tuition materials and faculty members, while the university will provide all other infrastructural facilities and administrative set up for the school.

The school will be run online during the period and intends to continue to run online after the expiration of the contract period. You will be responsible for designing and installing the online platform on which the school will run during the contract period, as we could not accommodate the school's programmes on the current platform the university is using for its mainstream students.

The following courses are programmed to run during the contract period:

- Master of Business Administration, specialising in General Management, Finance and Accounts Management, Marketing Management, Human Resources Management and Supply Chain Management;
- Master of Science degree in Accounting, Management, Taxation and Fiscal Policy, Insurance and Business Administration; and
- Bachelor of Science degree programmes in Accounting, Finance, Insurance, Business Administration, Management and Taxation.

It is agreed that the tuition fees payable by the students of the school will be shared in the ratio 4:6 between the University and the Institute.

We have obtained the required approval from the National Universities Commission, the regulatory body for universities in Nigeria.

I look forward to your final decision on this.

Thank you.

Thompson Jones

Registrar

Exhibit 5

Extract from the 21st President's acceptance speech

As I agreed to take the mantle of leadership of this great Institute, as its 21st President, it is my intention to take the Institute to a higher height within the two years of my presidency. Specifically, I intend to achieve the following milestones:

- Take the Institute to a level where it can compete effectively with all similar global Institutes;
- Grow the Institute's financial indicators by 25 % from its current level;
- Achieve a 25% increase in its membership, for students, associates and fellows of the Institute;
- Collaborate with fellow professional bodies in the country to enhance professional practice; and
- Collaborate with similar Institutes in the continent so as to establish a continental body for business advisors.

UNSEEN

March/July 2020 Case Study: Chartered Institute of Business Advisors (CIBA)

List of additional exhibits

The following exhibits are newly provided and did not form part of the material provided as pre-seen:

6 Email from Frank Eboka to John Adepoju

7 Introduction of online platform

8 Cost structure of the Institute's programmes

9 Cost estimates to run Dalop University Business School (DUBS)

10 Projected enrolment and fees payable by students of Dalop University Business School (DUBS)

11 Summarised financial statements - 2019

12 Additional notes on summarised financial statements for 2015 – 2019

13 Highlight of financial plan for 2020 – 2021

Chartered Institute of Business Advisors (CIBA): Case Study requirement

You are John Adepoju, a final-year trainee Chartered Accountant working as Manager - Finance at the secretariat of Chartered Institute of Business Advisors (CIBA). You report to Frank Eboka, the Finance and Accounts Director.

Requirement

You are required to prepare a draft report, as set out in the email dated 20 August 2020 from Frank Eboka to you (exhibit 6). Your report should comprise the following:

- An executive summary
- Responses to the two detailed requirements set out in exhibit 6, including appropriate appendices.

State clearly any assumptions you have made. All workings should be attached to your answer.

The following time allocation is suggested:

Reading and planning	1 hour
Performing calculations and financial analysis	1 hour
Drafting report	2 hours

Marks allocation

All marks in the Case Study are awarded for the demonstration of professional skills, allocated broadly to the four elements of your report described above as follows:

Assimilating and using information	20%
Structuring problems and solutions	20%
Applying judgement	20%
Drawing conclusions and making recommendations	20%
Demonstrating integrative and multidisciplinary skills	10%
Presenting appropriate appendices	10%
	100%

Ensure that you address the two requirements in your report. Failure to address any requirement including not submitting an executive summary will affect your chances of success. In addition, as indicated above, all four skills areas will be assessed under each of the four elements of your report. Accordingly, not demonstrating your judgement or failing to include appropriate conclusions and/or recommendations in each of your report will affect your chances of success.

Exhibit 6

Email from Frank Eboka to John Adepoju

From: Frank Eboka
Sent: 20 August, 2020
To: John Adepoju
Subject: Council meeting

No doubt, you are aware that we are preparing for the first council meeting after the investiture of the new President, where the strategic thrust of the new President will be considered and also, new business proposals approved. As part of the new President's preparation for his presidential term of two years, he will like us to carry out a detailed analysis of the financial performance of the Institute for the past five years, this will enable him set his own benchmark for the presidential term. We also need to provide for him a detailed financial appraisal of the new proposal he forwarded to us recently for appraisal and recommendation to council.

Therefore, I will like you to carry out:

(i) A detailed review of the Institute's key financial ratios for the past five years and the proposed financial plan for 2020 - 2021 presidential period. You are to comment on these ratios, especially the noticeable trend in performance, liquidity and financial strength for the period. Your comments should include an appraisal of the financial plan, stating whether it is in line with the President's aspirations or not, as set out in exhibit 5.

(ii) An analysis and report that will assist the Council of the Institute to decide whether or not to go ahead with the proposed online programmes. Your report should show the net contribution from the project. Also, the Institute is considering accepting the proposal from Dalop University. Advise the Institute whether to recruit new lecturers or use its members for lecturing students of the University on part time basis. You are to discuss any ethical and business trust challenges that each of these two proposals may have.

I attach herewith exhibits 7 - 13 to assist you. You can find, in your file, the summarised financial statements of the Institute for the previous four years while the summary of the financial statements for the just concluded year and the financial plan for the 2020 – 2021 form part of the attachments to this email.

Please draft for my review, a report to be submitted to the Council. Your report should comprise:

1. An appraisal of the Institute's key financial ratios reflecting financial performance, liquidity and financial strength in the past five years to December 2019, exhibits 3, 11 and 12, together with the 2020 – 2021 financial plan of the Institute, exhibit 13. Comment on the trend of the financial ratios. Based on your analyses, conclude whether the financial plan will meet the President's aspirations and if not, make appropriate recommendations; and

2. An appraisal of the two new business proposals, exhibits 7 – 10. You are to include a concise commentary on the financial viability of the projects contained in the proposals. Your comment should include ethical and business trust issues the Council needs to be aware of.

I look forward to receiving your draft report.

Frank

Exhibit 7

Introduction of online platform

As a fall out of the plague that has made physical training/classes impossible, the Institute wants to introduce an online platform to cater for the following programmes it is running:

- Members Continuing Education (MCE)
- Academy for Business Advisors (ABA); and
- Business Seminars for Corporate Organisations (BSCO).

Two options are open to the Institute for acquiring the platform as follows:

a. Subscribe to a cloud solution service from Zoom, MS Teams or their equivalents. This will require 3 administrators, one each for the three programme streams, to manage schedules for lecture and access to the meetings/virtual classrooms. The cost for this is as follows:

   - Cost of subscription to the requisite software will be USD 12 per month per participant. It is assumed that 25% of expected participants will be on-line at every point in time during the year.
   - In addition to the existing internet access facility, the Institute will need to spend ₦100, 000 on internet access.
   - 3 Administrators @ ₦3m each per annum;

   The Institute will, however, only have access to the functionality rolled out by the cloud collaboration software provider.

b. The second approach is to invest in building a proprietary cloud infrastructure, to be developed in-house or by a development consultant. This will take a period of three months before the programmes will be up and running. However, this would provide the Institute the opportunity to roll out bespoke functionality on their learning and collaboration software.

   To develop it in-house, the Institute does not currently have the requisite expertise to handle the development project, so the Institute will need to hire the following expertise:

   - 2 software designers @ ₦450, 000 each per month
   - 4 front-end developers @ ₦600, 000 each per month
   - 2 back-end developers @ ₦600, 000 each per month
   - 1 Dev-Ops Engineer @ ₦600, 000 per month

   These appointments will, however, be for a short term of six months, after which the Institute will only need 3 administrators as in (a) above.

The Institute will also require the following infrastructure on a monthly basis:

- Additional internet access ₦100, 000
- Cloud Infrastructure storage per month ₦150, 000
- Cloud Application Hosting per month ₦350, 000

To outsource the development to a software development consultant, the Institute will pay an initial fee of ₦24m and subsequently, a retainership fee of ₦2.4m per year. The Institute will employ a solutions architect to work with the development consultancy @ ₦800,000 per month while also investing in cloud infrastructure @ ₦350,000 per month and additional internet access of ₦100,000 per annum.

The Institute wants to know whether to subscribe to a cloud platform such as "Teams", "Zoom" or other equivalents, or build its own platform in house or by outsourcing.

(Exchange rate of Naira to the dollar should be taken to be ₦450/$1.)

Exhibit 8

Costs and revenue structure of the Institute's programmes

Costs structure

The cost structure of each of the programmes is as follows:

- Facilitator: ₦100,000 per session, average of 3 sessions per programme, except the academy that has 27 sessions in total for each of the three streams per year;
- Accommodation: ₦50,000 allocated cost per programme;
- Feeding: ₦2,500 per participant per day;
- Materials: ₦5,000 per participant; and
- Secretariat support: ₦50,000 allocated cost per programme.

However, it is believed that the cost of accommodation, cost of producing the materials and feeding will not be incurred if the online system is adopted.
Furthermore, it is envisaged that the participants will be allowed 10% off the normal fees to take care of their data and feedings at home during the period of each programme.

Revenue structure

Existing fees for each of the programmes are as follows:

- MCE: ₦50,000 per participant;
- ABA: ₦200,000 per participants for 3 months;
- BSCO: ₦40,000 per participant, plus accommodation and feeding charges if the programme takes place at the Institute's secretariat; and
- Each programme runs for a day, except ABA that runs for a total of 9 days during each stream.

The projected annual participants are as follows:

Attendance	**High(25%)**	**Medium(50%)**	**Low(25%)**
• MCE	600	450	300
• ABA	150	100	100
• BSCO	240	200	160

It is estimated that these will grow at the rate of 10% in year 2, 15% in year 3, 25% in year 4 and remain at this level in year 5.

Exhibit 9

Cost estimates to run Dalop University Business School (DUBS)

Dalop University has contracted its Business School to the Institute to manage for the next 5 years. The Institute will have to provide lecturers who are capable of lecturing online and also manage students' assignment online. The Institute will use its own online platform for the project. For this, the Institute has two options:

- To recruit new lecturers for the period of the contract; or
- To make use of qualified members of the Institute on part time basis.

The following are the cost implications for each of the above

a. Appointment of fulltime lecturers on five years contract:

   The following lecturers will be appointed:
   - Five Professors on a consolidated salary of ₦7.2m each per annum;
   - Ten Senior lecturers on a consolidated salary of ₦5.6m each per annum;
   - Fifteen Lecturers on a consolidated salary of ₦3.6m each per annum
   - Ten Assistant lecturers on a consolidated salary of ₦2.4m each per annum

   At the end of the five years, each of the faculty members will receive end of contract benefit, equivalent to his or her annual consolidated salary. No other pension benefit or gratuity is payable.

b. Part time lecturers will be engaged as follows:
   - Professors on an honourarium of ₦500,000 per semester for each course taught;
   - Senior lecturer on an honourarium of ₦350,000 per semester for each course taught;
   - Lecturers on an honourarium of ₦250,000 per semester for each course taught; and
   - Assistant lecturers on an honourarium of ₦150,000 per semester for each course taught.

   Each of the Masters programmes will have an average of 6 courses per semester, at least 3 of these courses will be taught by professors while the rest will be taught by senior lecturers.

   The undergraduate programmes will have an average of 8 courses per semester, out of which 2 will be taught by professors and they will be assisted by an assistant lecturer each. Senior lecturers will teach 4 of the courses and will be assisted by an assistant lecturer each while the rest two courses will be taught by lecturers. Each programme, whether masters or bachelor will require an assistant lecturer as tutorial facilitators. Their function is not to teach but to lead discussions during tutorials.

If full time lecturers are employed, the Institute can use the fulltime lecturers on some of its normal programmes and will save the Institute 50% of its facilitators' fees.

The Institute is currently considering online platform for all its programmes, once on stream, it will be available for running Dalop University Business School (DUBS) programmes.

Exhibit 10

Projected enrolment and fees payable by students of Dalop University Business School (DUBS)

Enrolment

Estimated number of students on each programme is projected as shown below:

Programme	Best(25%)	Good(60%)	Poor(15%)
MBA	60	100	40
M Sc	30	50	20
B Sc.	150	300	100

Fees Payable by each student per session

Tuition fees:

MBA	₦750,000;
M Sc	₦700,000; and
B Sc	₦450,000.

Examinations fees:

MBA	₦20,000;
M Sc	₦20,000; and
B Sc	₦15,000.

Exhibit 11

Chartered Institute of Business Advisors (CIBA)
Summarised financial statement

Year ended: 31 December	**2019**
	₦million
Statement of financial position	
Assets	
Property, plant and equipment	200.4
Intangible assets	0.7
Available for sale financial assets	3.2
	204.3
Current assets	
Inventories	10.8
Receivables	14.0
Prepayments	2.7
Financial assets held to maturity	381.6
Cash and cash equivalents	12.5
	421.6
Total assets	**625.9**
Funds and reserves	
Accumulated fund	500.4
Building fund	53.8
Other funds	38.6
Fair value reserves	0.4
Total funds and reserves	593.2
Current liabilities	
Payables	15.5
Other payables	0.5
Deferred income	16.7
	32.7
Total funds, reserves & liabilities	**625.9**

Statement of income & expenditure and other comprehensive income	**2019** **₦million**
Fees and subscriptions	714
Self – financing programmes	675
Publications	19
Investment income	84
Other income	61
Total income	1,553
Expenditure	
Personnel cost	352
Affiliations' costs	24
Administrative expenses	757
Depreciation & amortisation	117
Impairment charges	179
Total expenditure	1,429
Operating surplus/deficit for the year	124
Other comprehensive income	
Items that may be reclassified to income and expenditure	
Changes in financial assets at fair value through other comprehensive income	(5)
Total comprehensive surplus/deficit for the year	119

Exhibit 12

Additional notes on summarised financial statements – 2015 – 2019

Breakdown of income from revenue streams:

YEAR	**2015**	**2016**	**2017**	**2018**	**2019**
	₦m	**₦m**	**₦m**	**₦m**	**₦m**
Fees and subscriptions:					
Examinations	276.1	240.2	222.1	406.2	428.4
Subscriptions	199.9	221.8	196.9	270.8	285.6
	476.0	462.0	419.0	677.0	714.0
Self – financing programmes:					
MCE	237.5	210.1	194.4	333.3	351.0
ABA	95.0	88.9	108.0	145.4	141.8
BSCO	142.5	105.0	129.6	127.3	182.2
	475.0	404.0	432.0	606.0	675.0

Breakdown of administrative costs:

YEAR	**2015**	**2016**	**2017**	**2018**	**2019**
	₦m	**₦m**	**₦m**	**₦m**	**₦m**
Examinations	93.0	117.3	106.7	139.9	179.8
MCE	39.9	51.6	44.1	61.0	79.5
ABA	42.1	46.0	52.2	57.8	74.6
BSCO	36.3	41.0	41.8	43.9	67.4
Others	231.7	213.1	219.2	278.4	355.7
	443.0	469.0	464.0	581.0	757.0

Breakdown of membership:

YEAR	**2015**	**2016**	**2017**	**2018**	**2019**
Associate	2,399	2,662	2,963	3,034	3,247
Fellow	1,598	1,774	1,975	2,022	2,165
Student	3,994	4,436	4,938	5,056	5,412
Total	7,996	8,872	9,876	10,112	10,824

Exhibit 13

Highlight of financial plan for 2020 – 2021

Chartered Institute of Business Advisors

Statement of income & expenditure and other comprehensive income	**2020 ₦million**	**2021 ₦million**
Fees and subscriptions	805	944
Self – financing programmes	752	788
Publications	25	25
Investment income	90	95
Other income	65	70
Total income	1,737	1,922
Expenditure		
Personnel cost	396	435
Affiliations' costs	26	28
Administrative expenses	840	939
Depreciation & amortisation	120	120
Impairment charges	205	225
Total expenditure	1,587	1,747
Operating surplus/deficit for the year	150	175
Other comprehensive income		
Items that may be reclassified to income and expenditure		
Changes in financial assets at fair value through other comprehensive income	(7)	(10)
Total comprehensive surplus for the year	143	165

ICAN CASE STUDY MARCH/JULY 2020

First Marking

DATE		CANDIDATE NO.	
TIME		MARKER NUMBER	

	Req 1	Req 2	Overall	TOTAL
SA				
CA				
BC				
NC				
V				

Total	8	8	4	20

SUPERVISOR SIGNATURE		**CHECKER SIGNATURE**	

Changes made? ☐

Executive Summary: CIBA

1. General

- States the purpose of the report
- States the summary of the two requirements
- States the assumptions
- States reservations, e. g. scepticism
-

V	NC	BC	CA	SA

2. Requirement 1: Conclusions

- Finacial indicators not stable.
- Revenue streams' contributions seem sound.
- Strong financial stability.
- Strong liquidity.
- 2020 - 2021 projections inline with President's plan.

V	NC	BC	CA	SA

3 Requirement 1: Recommendations

- Costs control and cost reduction measures needed.
- Guide the Institute's financial strenght.
- Maintain current liquidity position.
- Evaluate returns from financial assets constantly.

NC	BC	CA	SA

4. Requirement 2: Conclusions

- Existing platform is the most profitable option.
- Only employing part time faculty is profitable.

Estimates and projections need further consideration for genuiness.

-
- Regulatory approval for running Dalop Business School should be obtained from Dalop University.
-

5. Requirement 2: Recommendations

Double check estimates for online programmes..

Double check estimates and projections re - Dalop University contract.

- NUC approval necessary for accepting Dalop University contract.
- Existing online platform most profitable.
- Part time faculty is the only profitable option.

V	C	BC	CA	SA

REQUIREMENT 1 - CIBA's financial statement analysis

USES DATA AND INFORMATION APPROPRIATELY

- Uses information on exhibit 3 - financial statements for 2015 - 2018
- Uses information on exhibit 11 - financial statements for 2019
- Uses information on exhibit 12 - additional notes on summarised financial statements for 2015 - 2019
- Uses information on exhibit 13 - highlight of financial plan for 2020 - 2021
- Uses information from exhibit 5 on the 21st President's speech.

V	NC	BC	CA	SA

IDENTIFIES ISSUES AND OPTIONS

- Identifies that the Institute's return on assets is flunctuating from year on year.
- Identifies that the Institute's return on total funds and reserve is fluntuating without any parttern.
- Identifies that the income from the revenue streams is flunctuating and on downward trend.
- Identifies that the Institute's projections for 2020 - 2021 will meet the new President's aspiration.
- Identifies that BSCO gives the best returns out of the revenue streams.

V	NC	BC	CA	SA

CONCLUSIONS

(Draws distinct conclusions under a heading)

- Concludes that the Institute profitability indicators do not follow a particular pattern.
- Concludes that the returns from each of the revenue streams is good.
- Concludes that the Institute has a very strong financial stability.
- Concludes that the Institute has a very strong liquidity indicator.
- Concludes that from the highlight of financial projections for 2020 and 2021, the Institute will be able to meet the new President's aspiration at the end of his tenure.

V	NC	BC	CA	SA

USES PROFESSIONAL TOOLS AND KNOWLEDGE

- Calculates returns on assets
- Calculates returns on total funds and reserves
- Calculates contribution per revenue stream
- Calculates current ratio
- Calculates liabilities to total assets

V	NC	BC	CA	SA

APPLIES PROFESSIONAL SCEPTICISM AND ETHICS

- Recognises that we are not told if the summarised financial statements of the Institute have been audited.
- Recognises that there is a need for explanations why the Institute has a negative return in 2016.
- Recognises that investment income for each has no relationship with the financial assets held to maturity for the respective years.
- Recognises that from 2018 impairment charges has been on an upward trend
-

V	NC	BC	CA	SA

RECOMMENDATIONS (commercial / relevant)

- Recommends that the Institute needs to institute cost control measures so as to shore up its profitability.
- Recommend that the Institute should continue to maintain its financial strength.
- Recommends that the Institute should review its financial assets to ensure it is getting the best returns from them.
- Recommend that the Institute should strive to continue to maintain its liquidity position.

V	NC	BC	CA	SA

USES ANALYTICAL SKILLS (material points) written report

- Determines that returns on assets of the Institute has been flunctuating without a discernible pattern.
- Determines that returns on total funds and reserves of the Institute have been flunctuating without a discernible pattern.
- Determines that income per members has been growing steadily with the exemption of 2017.
- Determines that MCE gives the best and most stable contribution.
- Determines that the current ratio of the Institute is good.
- Determines that the Institute's financial strenght is very strong.

V	NC	BC	CA	SA

EVALUATIVE SKILLS AND JUDGEMENT

- Recognises that the Institue's total income increased in 2018 and 2019.
- Recognises that BSCO has been having a very good return although it is on downward trend.
- Recognises that the Institute has a very strong liquidity.
- Recognises that the Institute has a good financial strength.
- Recognises that the Institute's projected profitability in 2020 and 2021 will meet the new President's aspiration of increasing the Institute's financial indicators by 25% at the end of his tenure.

V	NC	BC	CA	SA

REQUIREMENT 2 - Appraisal the introduction of the online programmes and Dalop University contract

USES DATA AND INFORMATION APPROPRIATELY

- Uses information in exhibit 2 to understand the Institute programmes.
- Uses information in exhibit 2 to understand the Institute . prograr revenue streams
- Uses information in exhibit 4 on request from Dalop University.
- Uses information in exhibit 6 on the case requirements.
- Uses information in exhibit 7 about the online platform.
- Uses information on exhibit 10 on projected enrolment and fees collectible from Dalop Univesity Business School.
- Uses information on exhibit 8 on the Institute cost and revenue structure.
- Uses information in exhibit 9 on cost estimates to run Dalop University's Business School.

V	NC	BC	CA	SA

USES PROFESSIONAL TOOLS AND KNOWLEDGE
(written into report)

- Determines the expected participants in CIBA's programmes.
- Determines the expected revenue from CIBA programme s per annum.
- Determines contribution from the online programmes using already available cloud solution.
- Determines contribution from the online programmes using own cloud infractructure developed internally.
- Determines contribution from the online programmes using cloud solution developed by a development consultant.
- Determines contribution from Dalop University Business School using full time faculty
- Determines contribution from Dalop University Business School using part time faculty.

V	NC	BC	CA	SA

USESG ANALYTICAL SKILLS (material points)

- Calculates expected participants in each of CIBA programmes..
- Calculates total revenue from the three CIBA programmes per annum.
- Calculates total cost of CIBA programmes using existing cloud infrastructure, such as Teams, Zoom, etc.
- Calculates total cost of CIBA programmes using existing cloud infrastructure developed internally.
- Calculates total cost of CIBA programmes using cloud infrastructure developed by a development consultant.
- Calculates total cost of running Dalop University Business School using full time faculty.
- Calculates total cost of running Dalop University Business School using part time faculty.

V	NC	BC	CA	SA

IDENTIFIES ISSUES AND OPTIONS

- Identifies that people may not likely respond to CIBA online programmes because they prefer physical programmes.
- Identifies that the 10% reduction on fees for CIBA programmes may not be strong enough to make people consider online programmes because of challenges that are connected with them.
- Identifies that estimated enrolment for Dalop University Business School programmes may not be actually realised.
- Identifies that development of cloud infrastructure internally may be more difficult than planned.
- Identifies the fact that NUC may not be predisposed to a third party running its approved programmes for Dalop University.

V	NC	BC	CA	SA

APPLYING PROFESSIONAL SCEPTICISM AND ETHICS

- Discusses the veracity of the various estimates used in the calculation of CIBA programmes, especially the number of participants.
- Discusses the correctness of the cost estimates for cloud infrastructure development.
- Discusses the correctness of cost estimates for running Dalop Business School programmes.
- Discusses the possible refusal of NUC for CIBA running Dalop University Business School.
-
-

V	NC	BC	CA	SA

EVALUATIVE SKILLS AND JUDGEMENT
(uses analytical headings)

- Evaluates the expected contribution from CIBA programmes using existing cloud infrastructure.
- Evaluates the expected contribution from CIBA programmes using internally developed cloud infrastructure.
- Evaluates the expected contribution from CIBA programmes using cloud infrastructure developed by a development consultant.
- Evaluates the net contribution from running Dalop University Business School using full time falculty.
- Evaluates the net contribution from running Dalop University Business School using part time falculty.

V	NC	BC	CA	SA

CONCLUSIONS
(Draws distinct conclusions under a heading)

- Concludes that running CIBA's online programmes by subscribing to an existing online platform such as Teams is the most profitable option.
- Concludes that running Dalop Business School programmes with part time faculty is the only profitable option.
- Concludes that CIBA has to recheck the various estimates associated with the calculations used in the evaluation of the online programmes.
- Concludes that CIBA needs to be double sure of the estimates used in evaluating Dalop University contract
- Concludes that CIBA needs to be sure that NUC will allow a third party to run the approved programmes for Dalop University.

V	NC	BC	CA	SA

RECOMMENDATIONS (commercial / relevant)

- Recommends that CIBA should recheck the various estimates and projections for the online programmes.
- Recommends that CIBA should recheck the various estimates and projections for Dalop University programmes.
- Recommends CIBA should inform Dalop University to get approval from NUC for it to accept the contract to run the Business School.
- Recommends that CIBA should not venture into development of cloud infrastructure but should use one of the existing online platforms, such as Zoom, Teams etc.
- Recommends that CIBA should run the Dalop University Business School contract with part time faculty, if accepted.

V	NC	BC	CA	SA

Appendices	Main Report
1. Appendices R1: Content and style	**3. Report: Structure**
• Calculates profitability ratios	• Sufficient appropriate headings
• Prepares contribution per revenue streams	• Appropriate use of paragraphs / sentences
• Prepares liquidity ratio	• Legible/clear hand writing
• Prepares financial strenght ratio	• Correctly numbered pages
V | NC BC CA SA	V | NC BC CA SA
2. Appendices R2: Content and style	**4. Report: Style and language**
• Calculates contribution from online programme using existing platform such as, Zoom, Teams, etc.	• Relevant disclaimer (external report)
• Calculates contribution from online programme using proprietory infractructure built in house	• Suitable language for the board
• Calculates contribution from online platform using platform developed by a development consultant.	• Tactful / ethical comments
• Calculates contribution from Dalop Business school contract, when full time lecturers are employed	• Acceptable spelling and punctuation
• Calculates contribution from Dalop Business school contract, when part time lecturers are employed	
V | NC BC CA SA	V | NC BC CA SA

CC	
SC	
IC	
ID	
NA	
Total	

Appendice 1
Chartered Institute of Business Advisors
Financial appraisal
Performance

	2015	**2016**	**2017**	**2018**	**2019**	**AVERAGE**	**2020**	**2021**
Return on assets	49/278.7%	(37)/258.3%	22/285.0%	173/477.2%	124/625.9%		150/775.9%	175/950.9%
=	17.6%	-14.3%	7.7%	36.3%	19.8%	13.4%	19.3%	18.4%
Return on total funds and reserves	49/247%	(37)/245.3%	22/269.7%	173/454.6%	124/593.2%		150/743.2%	175/918.2%
=	19.8%	-15.1%	8.2%	38.1%	20.9%	14.4%	20.2%	19.1%
Income per member	199,900,000/7,996	221,800,000/8,872	196,900,000/9,876	270,800,000/10,112	285,600,000/10,824			
=	₦25000	₦25000	₦19472	₦26780	₦26386			
Return per revenue streams:								
Examination	276.1 - 93/276.1%	240.2 - 117.3/240.2%	222.1 - 106.7/222.1%	406.2 - 139.9/406.2%	428.4 - 179.8/428.4%			
	66.3%	51.2%	52.0%	65.6%	58.0%			
MCE	237.5 - 39.9/%	210.1 - 51.6/210.1%	194.4 - 44.1/194.4%	333.3 - 61.0/333.3%	351.0 - 79.5/351.0%			
	83.2%	75.4%	77.3%	81.7%	77.40%			
ABA	95.0 - 42.1/95.0%	88.9 - 46.0/88.9%	108.0 - 52.2/108.0%	145.4 - 57.8/145.4%	141.8 - 74.6/141.8%			
	55.7%	48.3%	51.7%	60.2%	47.4%			
BSCO	142.5 - 36.3/142.5%	105.0 - 41.0/105.0%	129.6 - 41.8/129.6%	127.3 - 43.9/127.3%	182.2 - 67.4/182.2%			
	74.5%	61.0%	67.7%	65.5%	63.0%			
Liquidity								
Current ratio	60.6 :31.7	46.7 : 13.0	79.4: 15.3	270 : 22.6	421.6 : 32.1			
	1.91 : 1	3.59 : 1	5. 2 : 1	11.95 : 1	13.13 : 1			
Financial strength								
Liabilities to total assets	31.7/278.7%	13/258.3%	15.3/285%	22.6/477.2%	32.7/625.9%			
	11.4%	5.0%	5.4%	4.7%	5.2%			

Appendice 2
Chartered Institute of Business Advisors
Evaluation of online programmes

CALCULATION OF EXPECTED PARTICIPANTS

Programme	Expected attendance	Total attendance	Nos of sessions
MCE	600X.25 + 450X.5 + 300X.25	450	54
ABA	150X.25 + 100X.5 + 100X.25	113	81
BSCO	240X.25 + 200X.5 + 160X.25	200	24
Total for all programmes		763	
Expected online daily	763x25%	191	

CALCULATION OF REVENUES FROM PROGRAMME

		₦000
MCE	450X50,000X.9	20,250
ABA	113X200,000X.9	20,340
BSCO	200X40,000X.9	7,200
		47,790

CALCULATION OF OPERATIONAL COSTS

a. Using a cloud solution:

Zoom/Teams	12X450X191	1,031.4
Administrators	3X3	**9,000.0**
Internet		100.0
		10,131.4
Other costs:		
Facilitators		15,900.0
Accommodation		-
Feeding		-
Materials	(450+113+200)X5000	-
Secretariat support	50 x 3	150.0
		16,050.0
Total costs		**26,181.4**
Revenue		**47,790.0**
Contribution per annum		**21,608.6**

b. If Building own cloud infrastructure in house

Software designers	450 x 2 x 6		5,400.0
Front - end developers	600x 4 x 6		14,400.0
Back -end developers	600 x 2 x 6		7,200.0
Dev - operations engineer	600 x 1 x6		3,600.0
Total development cost			**30,600.0**
Yearly armotisation	30600/5		**6,120.0**
Operational costs:			
Additional internet access	100 x 12	**1,200.0**	
Cloud infrastructure storage	150 x 12	**1,800.0**	
Cloud application hosting	350 x 12	**4,200.0**	7,200.0
Operating cost per annum			**13,320.0**
Other costs:			
Motivators	3 x 3,000		9,000
Facilitators			15,900.0
Accommodation			-
Feeding			-
Materials	(450+113+200)X5000		-
Secretariat support	50 x 3		150.0
			25,050.0
Total costs			38,370.0
Contribution per annum	47,790 - 38,370		**9,420.0**

c. If development consultant is used

Cost of development		24,000.0
Amortisation per annum	24,000/5	4,800.0
Yearly retainership fee		2,400.0
Solution architect	800 x 3	2,400.0
Additional internet facility		100.0
Cloud infrastructure	350 x 12	4,200.0
		13,900.0
Other costs		
Facilitators		15,900.0
Accommodation		-
Feeding		-
Materials	(450+113+200)X5000	-
Secretariat support	50 x 3	150.0
		16,050.0
Revenue		**47,790.0**