THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

PATHFINDER

MAY 2021 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 – MAY 2021

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)

QUESTION 1

a. Feedme Limited is a company that has been in operations for over two decades producing "Trobomao" a natural cocoa powder beverage, produced from cocoa beans. Five years ago, the company acquired 100% interest in Butane Nigeria Limited a company that specialises in the importation of cocoa beans from Cote d'ivoire.

In 2016, Feedme Limited acquired 40% interest in a competitor company: Food Co. limited and on January 1, 2019 it acquired 75% interest in Shawama Supermarket Limited.

The draft consolidated financial statements of Feedme Limited group are as follows:

Draft consolidated statement of financial position as at December 31, 2019

Year	**2018**		**2019**	
	₦'000	**₦'000**	**₦'000**	**₦'000**
Assets				
Non-current assets:				
Freehold buildings at carrying amount		33,000		31,125
Plant and equipment – (Cost)	21,000		45,000	
Accm. depreciation	(16,500)		(18,000)	
		4,500		27,000
		37,500		58,125
Goodwill		--		1,500
Investment in associates		15,000		16,500
Financial assets		6,150		6,150
		58,650		82,275

Current assets:				
Inventories	15,000		29,625	
Trade receivables	19,125		27,750	
Cash and cash equivalents	27,300		67,725	
		61,425		125,100
		120,075		207,375
Equity and liabilities:				
Equity				
Ordinary share capital at 25k		30,000		59,100
Share premium account		31,425		43,245
Retained earnings		37,500		51,675
Total equity		98,925		154,020
Non-controlling interests		--		1,725
Non-current liabilities:				
Lease obligation	2,350		10,650	
Loan notes	7,500		21,900	
Deferred tax	395		450	
		10,245		33,000
Current liabilities:				
Trade payables	4,200		7,500	
Lease obligation	3,000		3,600	
Income tax	3,255		6,930	
Accrued interest and finance charges	450		600	
		10,905		18,630
		120,075		207,375

Draft consolidated statement of profit or loss and other comprehensive income for the year ended December 31, 2019

	₦'000	₦'000
Revenue		130,650
Cost of sales		(108,375)
Gross profit		22,275
Share of associates profit after tax		5,250
Income from financial assets		3,000
Interest expense		(2,250)
Profit before taxation		28,275
Income tax expense	(5,865)	--
Deferred tax	(1,560)	
Tax attributable to investment income	(675)	
		(8,100)
Profit for the year attributable to:		20,175
Owner of the parent		18,675
Non-controlling interest		1,500
		20,175

Additional information:

i. There had been no acquisition or disposal of freehold buildings during the year.

ii. Information relating to the acquisition of Shawama Supermarket Limited is as follows:

	₦'000
Plant and equipment	2,475
Inventories	480
Trade receivables	420
Cash and cash equivalents	1,680
Trade payables	(1,020)
Income tax	(255)
	3,780
Non-controlling interests	(945)
	2,835
Goodwill	1,500
	4,335
2,640,000 shares issued as part consideration	4,125
Balance of consideration paid in cash	210
	4,335

iii. Loan notes were issued at a discount in 2019 and the carrying amount of the loan as at December 31, 2019 included ₦600,000 representing the finance cost attributable to the discount and allocated in respect of the current reporting period.

Required:

Prepare a consolidated statement of cash flows for Feedme Limited Group for the year ended December 31, 2019 in accordance with IAS 7 using indirect method.

(25 Marks)

b. The Directors of Feedme Limited Group are happy about the result for the year ended December 31, 2019 in terms of profitability as the group recorded over ₦20 million profit during the year which is an improvement over that of year 2018.

They are of the opinion that net cash generated from operating activities of the group is likely to be very low.

They have suggested to the group accountant to find a way of treating proceeds from sales of plant and equipment and issue of loan notes as part of cash generated from operating activities as these would enhance the 'cash health' of the group and make the shareholders more comfortable at the next Annual General Meeting (AGM).

Required:
Discuss the ethical issues involved on the treatment of proceed from sales of plant and equipment and the issue of loan notes as suggested to the group accountant and how he/she should handle the above in line with ICAN code of professional ethics. (5 Marks)

c. Ngono Plc. has a financial year end of September 30. The Company buys property, plant and equipment for its office in Nigeria from a foreign supplier Omaha Inc. in USA. On June 30, 2020, Ngono Plc. took delivery of PPE from Omaha Inc. with invoice value amounting to $100,000 and is due for settlement in equal instalments on August 30, 2020 and November 30, 2020.

Clearing cost and import duty paid on the acquisition of the PPE amounted to ₦1,250,000.

It is the policy of Ngono Plc to depreciate PPE at 20% on cost using the straight –line method. The depreciation is provided in full in the year of acquisition and none in the year of disposal.

Both Ngono Plc. and Omaha Inc. honoured their own part of the agreement in the transaction.

Movement recorded in the exchange rate were as follows:

	₦ to $1
June 30, 2020	450
August 30, 2020	455
September 30, 2020	470
November 30, 2020	468

Required:
Show the journal accounting entries to record the above transaction in the books of Ngono Plc. (10 Marks)

(Total 40 Marks)

SECTION B: (60 MARKS)

INSTRUCTION: YOU ARE REQUIRED TO ANSWER ANY THREE OUT OF FIVE QUESTIONS IN THIS SECTION

QUESTION 2

a. IFRS 8 on Operating Segments establishes principles of reporting information by operating segments, that is, information about the different business activities of an entity and the different economic environment in which it operates.

Required:
Discuss the principles in IFRS 8 on Operating Segments for the determination of a company's reportable operating segments. (4 Marks)

b. The advisors of Amaka Limited have requested for various types of information from the company to facilitate the preparation of prospectus and other financial information in view of the fact that Amaka Limited is about to be listed on the Nigerian Stock Exchange.

As the Chief Accountant of the company, the CEO has requested that you provide the advisors with necessary information of your company that you use to allocate resources and assess performance of the company in year 2019.

You have therefore identified the following potential segments that could be reported on, based on the areas of location of the company's operations in West Africa.

	Revenue	**Profit/(loss)**	**Assets**	**Liabilities**
	₦'000	**₦'000**	**₦'000**	**₦'000**
Gambia	93,600	19,440	98,460	75,600
Ghana	25,200	(7,740)	14,400	13,500
Nigeria	317,340	21,240	258,210	74,970
Togo	41,400	(1,440)	21,600	14,400
Total	**477,540**	**31,500**	**392,670**	**178,470**

Required:

i. Explain how the principles highlighted in (a) above would be applied to Amaka Limited using the information provided. (12 Marks)

ii. Discuss other disclosure requirements which Amaka Limited should include in the financial statements for the year ended December 31, 2019 as required by IFRS 8. (4 Marks)

(Total 20 Marks)

QUESTION 3

The Chief Executive Officer (CEO) of Agege Plc. has forwarded the draft financial statements of Somolu Limited through an e-mail to you as the company's financial consultants.

In the e-mail, the CEO informed you that Agege Plc. is planning to acquire Somolu Limited. Somolu Limited is a private limited company that has recently applied for additional funds which was rejected from its current bankers on the basis that the company has insufficient assets to offer as security.

The draft financial statements of Somolu Limited as at December 31, 2019 are as follows:

Somolu Limited
Statement of profit or loss and other comprehensive income for the year ended December 31, 2019

	2019	2018
	₦'m	₦'m
Revenue	6,400	3,700
Cost of sales	(4,100)	(2,600)
Gross profit	2,300	1,100
Other income	100	40
Distribution cost	(460)	(400)
Admin. expenses	(920)	(500)
Finance cost	(80)	(40)
Profit before tax	940	200
Income tax expense	(100)	(20)
Profit for the year	**840**	**180**

Somolu Limited
Statement of financial position as at December 31, 2019

	2019	2018
	₦'m	**₦'m**
Assets:		
Property, plant and equipment	400	360
Intangible assets	40	20
	440	380
Current assets:		
Inventories	1,300	1,200
Trade receivables	460	320
Cash and cash equivalents	--	40
	1,760	1,560
Total assets	2,200	1,940
Equity and liabilities		
Equity		
Ordinary share capital at ₦1 each	560	560
Retained earnings	740	600
Total equity	1,300	1,160
Non-current liabilities		
Loan notes	440	400
Current liabilities		
Trade and other payables	360	380
Bank overdraft	100	--
	460	380
Total equity and liabilities	**2,200**	**1,940**

Required:

a. Carry out a critical analysis of the financial performance and position of Somolu Limited together with recommendations as to whether Agege Limited should consider the investment in Somolu Limited. (14 Marks)

b. The Chief Executive Officer (CEO) of Agege Plc also informed you that as a member of the Institute of Chartered Accountants of Nigeria (ICAN), he recently attended the Mandatory Continuous Professional Education (MCPE) of the Institute. One of the papers presented was in the area of how to improve quality of information that companies report at year-end.

Required:
As the financial consultant to Agege Plc., identify and discuss **THREE** limitations of financial reporting (prepared in accordance with IFRS) and the extent to which integrated reporting might improve the usefulness of the annual reports.

(6 Marks)
(Total 20 Marks)

QUESTION 4

a. Fair value is a market based measurement not an entity - specific measurement. It focuses on assets and liabilities and on exit (selling) price. It also takes into account market conditions at the measurement date. In other words, fair value measurement look at the amount for which the holders of an asset could sell it and the amount which the holder of a liability would have to pay to transfer it.

Required:

i. Discuss the view that fair value is a more relevant measure to use in corporate reporting than historical cost. (4 Marks)

ii. Discuss the valuation techniques in fair value measurement in accordance with IFRS 13. (4 Marks)

b. Bakatari Plc is a public limited company that is reviewing the fair valuation of its assets in line with the provisions of IFRS on fair value measurement.

The company has assets that are traded in different markets and is uncertain as to which valuation to use. The assets have to be valued at fair value under International Financial Reporting Standards. Bakatari Plc., currently only buys and sells the assets in market 'C'.

The data relating to the assets are set out below:-

Year to December 31, 2019	Market A	Market B	Market C
Volume of market (units)	12 million	6 million	3 million
Price per unit	₦19	₦16	₦22
Cost of entering the market per unit	₦2	₦2	₦3
Transaction cost per unit	₦1	₦2	₦2

Required:

i. Explain the three-level hierarchy for fair value measurement used in IFRS 13. (6 Marks)

ii. Discuss with relevant computations how Bakatari Plc should value the above assets under IFRS 13. (4 Marks)

c. Kantala Limited is a company based in Abeokuta, the Ogun State capital. It uses the revaluation model for is non-current assets. Kantala Limited has several plots of farm land which are unproductive.

The company feels that the land would have more value if it were used for residential purposes.

There are several potential purchasers for the land but planning permission has not yet been granted by the Abeokuta Planning Authority for use of the land for residential purpose.

However, preliminary enquiries with the planning authority seems to indicate that the planning permission may be granted. Additionally, the Ogun State Government has recently indicated that some agricultural land should be used for residential purposes.

Required:
Advise Kantala Limited on how to measure the fair value of the land in its financial statements. (2 Marks)

(Total 20 Marks)

QUESTION 5

a. International Accounting Standard (IAS) 37 on Provisions, Contingent Liabilities and Contingent Assets sets out the principles of accounting for these items. The inappropriate use of provisions had been an area where companies had been accused of manipulating financial statements and engaging in creative accounting.

Required:
What is Provisions and how is it employed by management to engage in creative accounting? (7 Marks)

b. Gama Plastic Limited owns a number of plastic recycling plants in various parts of the country which supply most of the raw material used by Gama Plastic Limited for its production of household and corporate plastic products.

On December 1, 2015 the directors of Gama Plastic Limited announced publicly that it intends to voluntarily reduce the level of harmful emission from its recycling plants through modifications of the plants.

The average useful economic life of these plants as at December 31, 2015 was 15 years. Gama Plastic Limited charges depreciation in relation to the recycling plants to cost of sales on a straight line basis.

The directors believe that while the modifications will be effective from early 2016 onward, the actual cash costs of the modifications will be as follows:

	₦'000
December 31, 2016	100,000
December 31, 2017	80,000
December 31, 2018	140,000

No contract was signed until 2016 but Gama Plastic Limited prides itself on its excellent public image and has a well-known reputation for meeting both legal and constructive obligations.

The directors of Gama Plastic Limited believe that it is appropriate to use discounted cash flow techniques and that an appropriate rate would be 10% with the following discount factors.

Years	**PV Factors**
1	0.909
2	0.826
3	0,751
4	0.683
5	0.620
6	0.564

Required:
Assuming the actual cash cost of the modification is a reliable estimate, calculate the provisions that should be included in the statement of financial position and the charges to the statement of profit or loss of Gama Plastic Limited in respect of the proposal for each of the years 2015 and 2016. (7 Marks)

c. According to IAS 10 on Events After the Reporting Period, events after the reporting period are those events, favourable or unfavourable that occur between the end of the reporting period and the date when the financial statements are authorised for issue.

On December 31, 2014 Shawarma Limited was involved in a court case. The company is being sued by one of its major suppliers. On March 15, 2019 the court decided that Shawarma Limited should pay the supplier the sum of ₦90million in settlement of the dispute.

The financial statements of Shawarma Limited for the year ended December 31, 2018 were authorised for issue on April 18, 2019.

Required:
Prepare a brief note advising on the accounting treatments and disclosure required as a result of the event(s) after the reporting date. (6 Marks)

(Total 20 Marks)

QUESTION 6

Awa Publish has just recently acquired 18% of the shareholding in Tunbe, making it the second largest single shareholder. The majority shareholder has 58% voting shares, while the remainder of the shares is held by ten other shareholders with none holding more than 5% voting shares. The board of directors of Tunbe is made up of 12 members with Awa Publish having 3 members and the majority shareholder having 7 members. Awa Publish was able to negotiate its representation on the board due to its strategic importance in Tunbe operations and expansion plans. The directors of Awa Publish accounted for its investment in Tunbe as an equity investment. The directors feel that Tunbe should not be accounted for as an associate, because Awa Publish does not have 20% of the voting interest and thus does not exercise significant influence over Tunbe.

Tunbe has been making losses for the past three years and has only returned a taxable profit once in the last five years. The projection is that Tunbe will return to making taxable profits in another five years. As part of the acquisition of shares in Tunbe, deferred tax assets for deductible temporary differences arose. The directors of Awa Publish are unsure how to account for this deferred tax asset.

Awa Publish has an item of equipment which cost it ₦56 million. This item of plant and equipment currently has a carrying amount in the financial statements of ₦39.2 million. Awa Publish expects the operation of the equipment to generate undiscounted cash flows of ₦7 million per year for the next five years. Awa Publish could generate immediate cash flow of ₦40 million if it sold the equipment today. However, if it did go ahead with the sale, it will have to pay a sales commission of 8.5%. The directors of Awa Publish are performing an annual impairment review and understand that determining the recoverable amount is an important part of this exercise.

Required:

a. Discuss how the investment in Tunbe should be accounted for in the financial statements of Awa Publish. (7 Marks)

b. Advise the directors of Awa Publish how the deferred tax asset that has arisen should be accounted for. (7 Marks)

c. Assist the directors of Awa Publish to determine the recoverable amount of the equipment. You may assume a discount rate of 10% or five year annuity rate of 3.791, if relevant). (6 Marks)

(Total 20 Marks)

SECTION A

SOLUTION 1

a.

Feedme Limited
Group statement of cash flow as at 31/12/2019

	₦'000	₦'000
Operating activities		28,275
Profit before tax		
Add/less cash/non cash adjustments:		
Share of profit in associate		(5,250)
Finance cost		2,250
Dep: freehold building		1,875
Plant and equipment		1,500
Cash before working capital		28,650
Movement in working capital:		
Inventory	(14,145)	
Trade receivables	(8,205)	
Trade payables	2,280	
		(20,070)
Cash before interest and tax		8,580
Finance cost paid (wk. 2)		(1,500)
Cash before tax		7,080
Tax paid (wk. 3)		4,625)
Net operating activities:		**2,455**
Investing activities		
Subsidiary acquired (1,680 -210)		1,470
Plant and equipment acquired		(12,625)
Dividend received from associate		3,750
Net investing activities		(7,405)
Financing activities		36,795
Dividend paid- NCI (wk 4)		(720)
Dividend paid- Parent (wk. 5)		(4500)
Loan note issued (wk. 11)		13,800
Net financing activities		**45,375**
Net cash flow for the year 2019		40,425
Cash at the beginning of the year		27,300
Cash at the end of the year		**67,725**
Closing balance as per question		**67,725**

Workings

Wk 1 Investment-Associate

	₦'000		₦'000
Balance b/d	15,000	Dividend received	3,750
P or L	5,250	C/d	16,500
	20,250		20,250
Balance b/d	16,500		

Wk 2 Finance cost

	₦'000		₦'000
Cash	1,500	Balance b/d	450
Balance c/d	600	P or L	1,650
	2,100		2,100
		Balance b/d	600

Wk 3 Taxation

	₦'000		₦'000
Cash	4,625	Balance b/d C/T	3,255
		D/tax	395
		P or L	5,865
		D/tax	1,560
		Associate	675
		Subsidiary	255
c/d	6,930		
c/d	450		
	12,005		12,005
		Balance b/d	6,930
		Balance b/d	450

Wk 4 Non-controlling interests

	₦'000		₦'000
Dividend paid	720	Sub. acq	945
Balance c/d	1,725	Share of profit	1,500
	2,445		2,445
		Balance b/d	1,725

Wk 5 Retained earnings

	₦'000		₦'000
Cash	4,500		
		Balance b/d	37,500
c/d	51,675	PAT (attributable to parent company)	8,675
	56,175		56,175
		Balance b/d	51,675

Wk 6 Plant and equipment

	₦'000		₦'000
Balance b/d	21,000		
Subsidiary	2,475		
Lease	8,900		
Cash	12,625	c/d	45,000
	45,000		45,000
Balance b/d	45,000		

Wk 7 Inventories

	₦'000		₦'000
Balance b/d	15,000		
Subsidiary	480		
Cash	14,145	Balance c/d	29,625
	29,625		29,625
Balance b/d	29,625		

Wk 8 Trade receivables

	₦'000		₦'000
Balance b/d	19,125		
Subsidiary	420		
Cash	8,205	Balance c/d	27,750
	27,750		27,750
Balance b/d	27,750		

Wk 9 Trade payables

	₦'000		₦'000
		Balance b/d	4,200
		Subsidiary	1,020
Balance c/d	7,500	Cash	2,280
	7,500		7,500
		Balance b/d	7,500

Wk 10 Lease obligation

	₦'000		₦'000
		Balance b/d	2,350
		Balance b/d	3,000
Balance c/d	3,600	Lease	8,900
Balance c/d	10,650		
	14,250		14,250
		Balance b/d	3,600
		Balance b/d	10,650

Wk 11 **Loan notes**

	₦'000		₦'000
		Balance b/d	7,500
		P or L	600
c/d	21,900	Cash	13,800
	21,900		21,900
		Balance b/d	21,900

Wk 12 **Ordinary share capital account**

	₦'000		₦'000
Balance c/d	59,100	Balance b/d	30,000
Share premium	11,820	Sharwama	4,125
		Cash	36,795
	70,920		70,920
		Balance b/d	59,100

Wk 13 **Share premium**

	₦'000		₦'000
		Balance b/d	31,425
Balance c/d	43,245	Share capital	11,820
	43,245		43,245
		Balance b/d	43,245

b. The subject matter here is the unethical directive by the directors to the group accountant to find a way of treating the "proceeds of sales of plant and equipment and issue of loan notes as part of cash generated from operating activities to enhance the cash health of the group and make the shareholders more comfortable at the Annual General Meeting".

This instruction is in breach of the ICAN code of professional ethics as it contravenes the fundamental principle of integrity, objectivity, professional competence, professional behaviour and due care. Professional behaviour and confidentiality must always be displayed no matter the situation a Chartered Accountant finds himself/herself. In line with ICAN code of ethics, Chartered Accountants must behave ethically in order to sustain the trust bestowed on them by the general public.

The group accountant should treat the proceeds from the sales of property, plant and equipment as cash generated from investing activities and those from issue of loan notes as cash generated from financing activities in line with IAS 7 (statement of cash flows) to reflect Generally Acceptable Accounting Principle and faithful representation being the substance of the transaction.

Accountants should ensure that they do not prepare financial information in a way that is misleading or that does not show a true and fair view of the entity's operation. They are expected to always try to behave in the right way and continually perform their duties in the best of public interest and not involve in any act that is capable of bringing the institute to disrepute.

The group accountant should arrange a meeting with the directors to remind them that professional accountants are bound by certain fundamental principles as contained in the ICAN Code of professional ethics. Should the director further contend with the ideal treatment as prescribed above, the group accountant has an option to consider resignation in line with the ICAN Code of Professional Ethics.

In conclusion, the directors should be sent to attend a professional ethical training if they are so important to the organisation for mis-representing actual position of cash flow to shareholders.

Accountants should always uphold ethical standards at all times in order to enhance public trust, by presenting the substance of the transaction, uphold fair presentation and presentation of all transactions in line with applicable standards.

c.

Ngono Plc.

Journal entries to record the property, plant and equipment (PPE) in the book:

Initial recognition of cost of PPE purchased at delivery on June 30, 2020

		₦'000	₦'000
Dr	PPE $100,000 @₦450	45,000	
Cr	Omaha Inc.		45,000
	Being the invoice value payable for PPE		

Clearing cost and import duty paid on the acquisition of PPE ₦1,250,000

		₦'000	₦'000
Dr	PPE	1,250	
Cr	Cash		1,250

Being the clearing cost and import duty paid

Tutorial note

Cost of PPE is the invoice cost plus directly attributable cost e.g. clearing cost and import duty.

Cost of PPE = ₦45,000,000 + ₦1,250,000 = ₦46,250,000

Subsequent measurement of the asset

Depreciation= ₦46,250,000 x 20% =₦9,250,000

		₦'000	₦'000
Dr	P or L	9,250	
Cr	Prov. for dep.		9,250
	Being annual depreciation change on PPE		

Subsequent measurement of the liability

In line with IAS 21 –The Effect of Changes in Foreign Exchange Rates, monetary assets must be retranslated at reporting dates and exchange gain or loss recognised in the statement of profit or loss.

Payment of 1st instalment August 30, 2020 $50,000 @₦455 = ₦22,750,000

Journal entries		₦'000	₦'000
Dr	Omaha Inc.	22,500,000	
Dr	P or L	250,000	
Cr	Bank		22,750,000
	Being 1st instalment paid and exchange loss		

Year-end at September 30, 2020 $50,000 @₦470 = ₦23,500,000

Foreign exchange loss (₦470 – ₦450) = ₦20x $50,000 = ₦1,000,000

Journal entries		₦'000	₦'000
Dr	P or L	1,000	
Cr	Omaha Inc.		1,000
	Being foreign Exchange loss at year end		

Payment of second Instalment at November 30, 2020 $50,000 @₦468 = ₦23,400,000

Journal entries		₦'000	₦'000
Dr	Omaha Inc.	23,500	
Cr	Bank		23,400
Cr	P or L- Exchange gain		100
	Being 2nd Instalment paid and exchange gain		

Examiner's report

Part (a) of the question tests candidates' knowledge of preparation of consolidated statement of cash flows in accordance with IAS 7, using indirect method. Part 'b' of the question tests candidates' knowledge of the ethical issues involved in the treatment of sale of non-current asset and issue of loan notes in accordance with ICAN Code of Professional Ethics. Part 'c' of the question tests accounting entries to record subsequent measurement of asset and liability in accounting for foreign exchange transactions.

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

The commonest pitfalls of the candidates were the lack of clear understanding of how to prepare group statement of cash flows using indirect method, inadequate knowledge ICAN Code of Professional Ethics and their inability to show correct accounting entries for foreign exchange transactions.

Candidates are advised to do an in-depth study to understand basic principles of consolidating statements of cash flows, understand the ethical issues, practise more questions and use ICAN Study Texts for better performance in future examinations.

Marking guide

		Marks	Marks
a.	Group statement of cash flows	12	
	Working notes:		
	Investment in associates	1	
	Finance cost	1	
	Taxation	2¼	
	Non-controlling interests	1	
	Retained earnings	1	
	Other workings	6¾	25
b.	Directors' directive as unethical	½	
	Ethical issues in contention as stated in ICAN code of	2	
	ethics Accounting to uphold ethical standards	2½	5
c.	Initial recognition of Property, Plant and Equipment	3½	
	(PPE) Subsequent measurement of the asset	2	
	Subsequent measurement of liability	4½	10
	Total		**40**

SECTION B

SOLUTION 2

a. IFRS 8 requires an entity to identify its operating segments and afterwards report segment information if they are reportable segments. An operating segment is a component of an entity:

- That engages in revenue earning business activities;
- Whose operating results are regularly reviewed by the chief operating decision maker; and
- For which discrete financial information is available.

Not every branch of an entity is necessarily an operating segment. Once an operating segment has been identified, the entity needs to report segment information if the segment meets any of the following quantitative thresholds:

- Its reported revenue (external and inter-segment) is 10% or more of the combined revenue, internal and external, of all operating segments;

- Its reported profit or loss is 10% or more of the greater, in absolute amount, of the combined profit of all operating segments that did not report a loss and the combined loss of all operating segments that reported a loss, or

- Its assets are 10% or more of the combined assets of all operating segments.

- IFRS 8 also requires that total revenue of reportable segments to be 75% or more of the total revenue or else additional operating segment must be identified as reportable segment.

b.i **Application of IFRS 8 provisions to Amaka Ltd**

Evaluation of operating segments that meet the quantitative thresholds highlighted in 'a' above as outlined in IFRS 8 are:

(i) Revenue of the operating segments is 10% or more of the combined revenue (₦477,540,000). OR

(ii) The absolute profit or loss of the operating segment is 10% or more of the greater of:

- The combined absolute reported profit of all operating segments that did not report a loss (i. e. ₦19,440,000 + ₦21,240,000) = ₦40,680,000; and
- The combined absolute reported loss of all operating segments that reported a loss (i. e. ₦7,740,000 + ₦1,440,000) = ₦9,180,000.
- The greater of the two figures considered is ₦40,680,000.

(iii) The assets of the operating segments are 10% or more of the combined assets (₦392,670,000) of all the operating segments.

Conclusion:

From the analysis below, Gambia, Ghana and Nigeria are reportable segments in accordance with the provisions of IFRS 8.

Also, IFRS 8 requires total sales revenue of reportable segments to be 75% or more of the total sales revenue or else additional operating segment must be identified as reportable segment. This requirement is also met

Total revenue from reportable segments are:

₦93,600,000 + ₦25,200,000 + ₦317,340,000 = ₦436,140,000

₦436,140,000 as a percentage of company's total sales revenue is

$\frac{₦436,140,000}{₦477,540,000} \times \frac{100}{1} = \underline{\underline{92\%}}$

Therefore, Amaka Ltd will prepare segment reports on Gambia, Ghana and Nigeria which are the identified reportable segments in line with IFRS 8.

The computations of the revenue, profit or loss, and assets of each operating segments as follows:

	Revenue criteria	Asset criteria	Profit/(Loss) criteria	Remark
Gambia	93,600/477,540 X 100 = 19.6%	98,460/392,670 X 100 = 25.1%	19,440/40,680 X 100 = 47.8%	Reportable segment
Ghana	25,200/477,540 X 100 = 5.3%	14,400/392,670 X 100 = 3.7%	7,740/40,680 X 100 =19.0%	Reportable segment
Nigeria	317,340/477,540 X 100 = 66%	258,210/392,670 X 100 = 65.8%	21,240/40,680 X 100 =5 2.2%	Reportable segment
Togo	41,400/477,540 X 100 = 8.7%	21,600/392,670 X 100 = 5.5%	1,440/40,680 X 100 = 3.5%	Not a reportable segment

b. ii **Other disclosure requirements to be included in the financial statement of Amaka Ltd**

IFRS 8 disclosures include:

- Factors used to identify the operating segments;
- Explanations on the types of products or services from which each reportable segment derives its revenues;
- How much of the segment information is reviewed by the chief operating decision-maker;

- Interests income and expense are required, unless net interest is used by management as basis for decision making;
- A measure of profit or loss for each reportable segment;
- A measure of total assets and liabilities for each reportable segment;
- A reconciliation of total segment revenue, reported profit or loss, segment assets, segment liabilities and other material items in financial statements of Amaka Ltd;
- An analysis of revenue and certain non-current assets by geographical area; and
- information about transactions with certain major customers.

Examiner's report

This question tests candidates' knowledge of the principles in IFRS 8 on Operating Segments, determination of a company's reportable operating segments and the disclosure requirements in the financial statements.

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

The commonest pitfalls of the candidates are their inability to state the criteria for identifying a reportable segments; also they were unable to apply IFRS 8 provisions correctly to practical situations.

Candidates are advised to do an in-depth study to understand basic principles in each accounting standards.

Marking guide

		Marks	Marks
a.	Determination of reportable operating segment	1	
	Identification and description of operating segment	1	
	Criteria for identifying a reportable segment	2	4
bi.	Application of IFRS 8 provisions to Amaka Ltd	2	
	Computations of the different criteria for each branch	8	
	Conclusion on number of reportable segments	2	12
ii.	Disclosure requirements in the financial statement		4
	Total		**20**

SOLUTION 3

a. Identification of relevant categories of ratios

Report writing

Introduction

A potential acquirer (Agege Limited), as we have in this case, needs information about an entity's profitability and whether or not the entity is managed efficiently. The acquirer's management is likely to focus on profit margins, return on capital employed, asset turnover and working capital ratios.

Categories of ratios assessing growth in revenue, profitability, efficiency, financial position; liquidity in the short term and long term are all relevant in this circumstance.

This analysis is based on the financial statement of Somolu limited, provided by the Chief Executive Officer (CEO) and the ratios computed as presented in the appendix attached together with recommendation as to whether or not Agege limited should consider the investment in Somolu limited.

Percentage growth in sales/revenue
Revenue increased by 73% in the year which could be due to the company adopting new marketing strategies.

Profitability
Gross profit margin improved from 29.7% in year 2018 to 36% in year 2019.

Operating profit margin of the company also improved from 5.5% to 15.9%.

Return on capital employed increased from 15.4% to 58.6% primarily due to the increase in profit margin and increase in assets turnover.

Efficiency
The asset turnover has considerably increased from 2.4 times in 2018 to 3.7 times in 2019. Similarly, the inventory, trade receivables and payables periods have all improved significally, indicating that Somolu Ltd., is efficient in the management of its working capital. This scenario suggests that Somolu's working capital is not under pressure.
Inventory ratio declined from 168 days to 116 days indicating that Somolu Ltd., is selling inventories more quickly. This could be efforts at meeting increasing demand in sales revenue.

Trade Receivable days is lower for 2019 which is 26 days compared with 32 days for 2018. Trade Payable days improved from 53 days in 2018 to 32 days in 2019.

Liquidity

The short-term liquidity position of Somolu limited is not impressive as the current and quick ratios are above the generally acceptable threshold of 2:1 and 1:1 respectively. The current ratio declined from 4.1:1 in 2018 to 3.8:1 in 2019. Also, the entity's cash position declined in 2019 compared to 2018.

Considering long-term liquidity, Somolu limited is lowly-geared and the financial risk has declined marginally from 25.6% in 2018 to 25.2% in 2019.

More significantly, the interest cover improved from 6 times in 2018 to about 13 times in 2019. The decrease in the gearing position could be traceable to about 12% increase in the equity.

Conclusion

From the analysis above, there is a strong case for investing in Somolu Ltd. due to the following:

- The business is innovative and growing;
- The company is currently growing and profitability is improving from year to year;
- The company is efficient in the use of its resources, with good liquidity status and meeting the expectation of the investors;
- One concern is about the reliance on bank overdraft but this can be resolved by improving working capital management; and

Recommendation

Therefore, it is recommended that Agege limited should consider the investment in Somolu limited.

Appendix
Somolu Limited
Financial statement analysis
for the year ended December 31, 2019.

			2019		2018
	Profitability Ratios		**2019**		**2018**
i.	Percentage growth in sales	(6,400-3,700)/3,700 X 100	73%	-	-
ii.	ROCE (%) =PBIT/C.E X100 = C.E=TA-CL or E+D	(940+80)/2,200-460)	58.6%	(200+40)/(1,940-380)	15.4%
iii.	Gross Profit (GP) margin (%) =GP/Revenue x 100	2,300/6,400 X 100	35.9%	1,100/3,700 x 100	29.7%
iv.	Operating Profit Margin (%)=PBIT/Revenue x 100	(940+80)/6,400 x 100	15.9%	(200+40)/3,700 x 100	6.5%
v.	ROE (%) = (PAT-NCI-Pref dividend)/(equity-NCI) x 100	840/1,300 x 100	64.6%	180/1,160 x 100	15.5%
vi.	ROA (%) = (PAT-NCI-Pref dividend)/Total Assets x 100	840/2,200 x 100	38.2%	180/1,940 x 100	9.3%
	Efficiency Ratios:				
i.	Asset turnover (times) = Revenue/capital employed x 100	6,400/1,740	3.7 times	3,700/1,560	2.4 times
ii.	Inventory holding period (days)=av. Inventory/cost of sale x365	1,300/4,100 x 365	116 days	1,200/2,600 x 365	168 days
iii.	Trade receivable period (days)= Av receivable revenue x 365	460/6,400 x 365	26 days	320/3,700 x 365	32 days
iv.	Trade payable payment period (days)= Av. payable/credit purchase or cost of sales	360/4,100 x 365	32 days	380/2,600 x 365	53 days
	Working capital / short term liquidity ratios				
i.	Current ratio=Current asset/Current liabilities	1,760/460	3.8:1	1,560/380	4.1:1
ii.	Quick ratio=(current asset-inventory)/current liabilities	1,760-1,300/460	1.0:1	1,560-1200/380	0.9:1
Iii.	Cash ratio=cash and cash equivalent/current liabilities	0/460	0:1	40/380	0.1:1
	Long term liquidity Gearing Ratios:				
i.	Capital gearing (%) = Debt/(debt +equity) x 100	440/(440+1,300) x 100	25.2%	400/(400+1,160) x 100	25.6%
ii.	Interest gearing (interest cover) in times=PBIT/Interest expense	(940+80)/80	12.75 times	(200+40)/40	6 times

b i. **Limitations of current financial reporting model under IFRS**

There are certain limitations attached to financial statements prepared in accordance with IFRS; these include:

- **Dependence on historical costs:**
  Statement of financial position records all transactions at cost. In case of assets, depreciation is provided and deducted from cost to arrive at carrying amount. Financial statements can therefore be misleading, if assets are recorded at historical costs.

- **Ignores effect of inflation**:
  This again applies to non-current assets and liabilities. If the rate of inflation is high, the amounts associated with assets and liabilities in statement of financial position will appear very low as they are not adjusted for inflation.

- **Issue of comparison**:
  It is not necessary that users would be able to compare financial statements of a business with competitors because of applicability of various accounting practices. This issue of comparison however can be resolved by making use of disclosures and notes to financial statements.

  Susceptibility to Fraud:
  There are various circumstances under which financial statements can be made subject to planned manipulation. Financial statements are prone to window dressing by the management itself and this can becloud the judgement of all the related stakeholders.

- **Non-consideration of non-financial aspects**:
  Financial Statements only record monetary transactions i.e. related to money. It completely ignores the qualitative aspects of business.

- **Errors and omissions**:
  Financial statements are concise form of all the financial data accumulated during the year. The bookkeeping is done at the junior level officers and may be subject to errors and omissions on their part unknowingly. Hence, whatever the financial information is processed, these will be reflected in the financial statements on whole and furthermore, auditors are not able to detect all the errors as the audit procedure is largely based on sampling.

- **Focus on single economic bottom line**:
  It emphasises maximisation of profit.

- **Ignores social and environmental externalities** that cannot be easily quantified
- **Materiality consideration is used to make decisions as to whether or not** to include items in financial statements
- **Discounting of future liabilities** for inclusion in financial statements or impairment testing does not make sense in the context of providing for environmental and social impacts.
- **Allowance for doubtful debts**
  Financial Statements make use of estimates which are subjective.
- **Problem of measurability**
  Reasonable accuracy is not possible for many social and environmental impacts and so they are not recognised.
- **Disclosures are based on legal requirement**
  This may not represents commercial reality of transactions and events.
- **Myoptic focus on Information**
  Financial accounting has myopic focus on information needs of suppliers of capital and those making resource allocation decisions.
- **Missing link**
  The investors believe that the information provided to them is inadequate to evaluate the financial health, as there is a missing link between current reporting, risk and business strategy.
- **Harmonisation of information**
  There should be better harmonization of financial information and non-financial information, because the current non-financial reporting is insufficient and not relevant.
- **Qualitative policy statement**
  Qualitative policy statements are critical in evaluating financial materiality, but preference is given to quantitative Key Performance Indicators (KPIs.)
- **Accountability mechanism**
  There is no accountability mechanism in non-financial reporting, when there is a need to have one. Organisations can incorporate this mechanism in its non-financial reporting with the help of a new board oversight mechanism, shareholders approval at AGMs or through third party assurance.

bii. **Improving quality or usefulness of financial statements through integrated reporting (IR).**

Integrated reporting was developed because of the increasing concerns that existing reporting frameworks and conventions do not enable a company to fully reflect how they create long-term value or help companies adequately connect all the value creating activities within their organisations. The aim of integrated reporting is not just about providing information. It is about providing better and relevant information. Integrated Reporting it is far more than just a reporting framework. The proponents of integrated reporting cited a number of significant benefits to both companies and investors. These include:

- One of the most important and most common benefits that organisations experience is a new and better understanding of how they create or destroy value.
- The disclosure of key risks and opportunities as management views them enables investors to assess the short-, medium- and long-term impacts.
- It helps a company to communicate in a clear and concise way on how value is created, both internally and externally, in such a way that it will win trust and secure the company's reputation by encouraging better relationships with investors, employees and their stakeholders.
- Integrated Reporting (IR) enhances the way organisations think, plan and report the activities of their business.
- IR is an approach that helps businesses think holistically about their strategy and plans, make informed decisions, manage key opportunities and risks to build investors and stakeholders confidence.
- Organisations of all sizes can use IR to build understanding and trust in their businesses.

  In addition to improving internal management processes, IR can also lead to other significant benefits, including:

- Maximising the potential to transfer, sell or hand over the business by providing a better basis for valuation;
- Securing finance at a reasonable cost among other things. Many lenders will want to know how financial capital has been deployed in the past and future intentions, based on a holistic strategy and a well-rounded business plan;
- Incorporation of tangible assets as well as intangible assets in integrated reporting, along with quantifying (where possible) the value created from environmental, social and economic factors; and
- The volatility factor in valuation (undervaluation or overvaluation of an organisation) can be controlled by providing more information to investors and other stakeholders.

Examiner's report

The question tests candidates' knowledge of the critical analysis of the financial performance and position of a company as well as the limitations of financial reporting with the improvements that can be brought about by integrated reporting in an annual reports.

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

The commonest pitfalls of the candidates were their inability to interpret the computed ratios. They are unable to state the limitations of financial reporting and the usefulness of integrated reporting.

Candidates are advised to do an in-depth study to understand the basic principles of interpretation and analysis of financial statements for better performance in future examinations.

Marking guide

		Marks	Total
a.	Identification of relevant categories of ratios	1	
	Identification of each ratio, at least from each category	4	
	Computation of each ratio for two years	4	
	Discussion on each ratio category and conclusion	5	14
b. i.	Limitations of current financial reporting model under IFRS	3	
ii.	Improving usefulness of financial statements through IR	3	6
	Total		**20**

SOLUTION 4

(a) (i) **Why fair value is more relevant measure to use than historical cost in corporate reporting**

- Fair value can be said to be more relevant than historical cost because it is based on current market values rather than out dated costs.
- Fair value of an entity's asset will give closer approximation to the value of the entity as a whole and this will be more useful to decision makers or investors.
- With the introduction of IFRS 13 – on fair value measurement, the fair value figures are more relevant and reliable as a means of valuation in corporate reporting.
- Non-current assets values become unrealistic with passage of time under historical costs, particularly for properties due to inflation and other variables that affect the non-current assets.
- With fair value, valuations are more accurate because they are relatively very close to the market price, such that the valuations can follow when prices go up or down.

- Since fair value utilises information specific for the time and current market conditions especially when assets are volatile in nature and value, it attempts to provide the most relevant estimates possible.

- Adaptable to different types of assets.

- Fair value enhances the informative power of a financial statement as opposed to the historical cost.

- There is less scope of manipulation under historical costs.

Although historical cost will still also be used but fair value measures are more realistic for corporate reporting than historical cost.

(ii) In accordance with IFRS 13 on Fair value measurement, the following are the fair value techniques:

Market approach
This is when the fair value of an asset/liability is based on active market prices and other relevant information for identical or similar assets and liabilities or group of assets and liabilities. Fair value of an asset or liability must be based on the principal market which may not always be the one the entity transacts. Otherwise, the entity should use information from the most advantageous market.

The market participants must be independent of each other, knowledgeable, able, and willing to transact.

Income approach
This is where fair value of an asset is measured based on the present value of the estimated net future cash flows that the asset will generate. It is simply the value-in-use of an asset.

Cost approach
With this approach, the fair value of an asset is based on the amount or cost that will be incurred to replace the asset with similar or identical one.

bi **Three level hierarchy for fair value measurement**
IFRS 13:- Sets out a valuation approach which refers to techniques which can be used. These techniques are three-folds. The market, income and cost approach.

When measuring fair value, the entity is required to maximise the use of observable inputs and minimise the use of unobservable inputs. To this end, the standard introduces a fair value hierarchy, which prioritises the input into the fair value measurement process.

Level 1 Inputs are quoted prices (unadjusted) in active market for items identical to the assets or liabilities without adjustments when measuring the fair value. An example of this will be price quoted on the stock-exchange. The entity needs to be able to access the market at the measurement date.

Active markets are one where transactions take place with sufficient frequency and volume for pricing information to be provided. An alternative method may be used where it is expedient.

The determination of whether a fair value measurement is level 2 or level 3 inputs depends on whether the input are unobservable input and their significance.

Level 2 Inputs are input other than the quoted prices in level 1 that are directly or indirectly observable for that assets or liability. They are quoted assets or liability for similar items in active markets or supported by market data for example: Interest rate, credit spread, or yield curves, etc. Adjustments may be needed to level 2 inputs and if these adjustments are significant, then it may require the fair value to be classified as level 3.

Level 3 are unobservable inputs. The use of this input should be kept to the minimum. However, situation may occur where relevant inputs are not observable and therefore this input must be developed to reflect the assumptions that market participants would use when determining an appropriate price for the assets and liabilities. The entity should maximise the use of relevant observable inputs and minimise the use of unobservable inputs. The general principles of using an existing price remains and IFRS 13 does not preclude an entity using its own data e.g. cash flow forecast may be used to value an entity not listed.

b. ii.

	Market A	**Market B**	**Market C**
Volume of market (units)	12 million	6 million	3 million
	₦	₦	₦
Price per unit	19	16	22
Cost of entering market	(2)	(2)	(Nil)
Potential fair value	17	14	22
Transaction cost	(1)	(2)	(2)
Return (profit)	16	12	20

Since Bakatari Plc. already sells in market 'C' therefore, the cost of entering the market will be 'NIL' as this will no longer be incurred. The ₦3 per unit cost of entering the market is therefore ignored. The principal market will be market 'A' because it has the highest level of activity (i.e. the volume of units sold). The most advantageous market is market 'C' because it returns the best profit per unit. If the information about the market is reasonably available, then, Bakatari Plc. should base its fair value on the price in market 'A' due to the fact that market 'A' is the principal market. Therefore, the potential fair value will be ₦17 per unit, otherwise, the most advantageous market information from market 'c' will be used and the fair value will be ₦22.

c. Kantala Limited should measure the fair value of the land in its financial statement considering the relevant provision of IFRS 13 which is succinctly discussed below:

IFRS 13 requires the fair value of a non-financial asset to be measured based on its highest and best use from a market participant's perspective. In determining the highest and best use of an asset, the standard indicates that all uses that are physically possible, legally permissible and financially feasible should be considered. The highest and best use of the land will be determined by reference to its use and not its classification and this is determined from the perspective of market participants. It does not matter whether the entity intends to use the asset differently.

IFRS 13 allows management to presume that the current use of an asset is the highest and best use, unless market or other factors suggest otherwise. In this case, the land appears to have an alternative use as the company feels that the land will have more value if it were used for residential purposes.

If the land is used for residential purposes, the value should include all costs associated with changing the land to the intended use. In addition, demolition and other costs associated with preparing the land for residential purpose should be included in the valuation. These costs would include the uncertainty related to whether the approval needed for changing the usage would be obtained. However, in this case, the Ogun State Government has recently indicated that some agricultural land should be used for residential purpose.

Thus, the fair value of the land, if used for residential purposes, should include the fair value, any legal cost, viability analysis cost, cost of demolition (if required) discounted to the present value. In this situation, the current use is not the highest and best use of the land.

A use of an asset need not be legal at the measurement date but it must not be legally prohibited in the jurisdiction.

Examiner's report

The question tests candidates' knowledge of the principles that fair value is a more relevant measure than historical cost; the valuation techniques in fair value measurement in accordance with IFRS 13 on Fair Value Measurements; and the three-level hierarchy for fair value measurement of assets in the financial statements.

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

The commonest pitfalls of the candidates were their inability to present advantages of fair value over historical cost; clearly identify fair value techniques and inability to apply the provisions of IFRS 13 to practical situations.

Candidates are advised to pay more attention to requirements of all accounting standards relevant to corporate reporting and use ICAN study texts for better performance in future examinations.

Marking guide

			Marks	Marks
a.i	Relevance of fair value over historical cost in corporate reporting			4
ii.	Fair value techniques	Market approach	2	
		Income approach	1	
		Cost approach	1	4
bi.	Three levels hierarchy for fair value measurement			
		Level 1	2	
		Level 2	2	
		Level 3	2	6
ii.	Market A – Principal market because of the highest level of activity (units sold).		1½	
	Market C – Advantageous market because of the best return per unit		2½	4
c.	Advice to Kantala Limited on how to measure the land.			2
	Total			**20**

SOLUTION 5

(a) According to IAS 37 on provisions, contingent Liabilities and Contingent Assets; A provision is a liability of uncertain timing or amount. A provision should be recognised when:

i. A company has a present obligation (legal or constructive) as a result of a past event.

ii. It is probable that an outflow of economic benefits will be required to settle the obligation; and

iii. A reliable estimate can be made of the amount of the obligation.

Creative accounting on the other hand consists of accounting practices that may follow required regulations and standards, but deviate from the intention of these standards.

Creative accounting capitalises on loopholes in the accounting standards to falsely portray a better image of the company.

How provisions are employed to engage in creative accounting

- **Unincurred expenses:** Accrual concept states that expenses should be recognised when incurred and not when paid. In order to manage earnings, management may deliberately recognise expenses (provisions) even when it is not yet incurred or deliberately avoid to recognise expenses (provisions) even when it is incurred. This can also be achieved by deliberately recognising provisions even when there is no present obligation or deliberately not recognising provisions even when there is present obligation.
- **Off statement of financial position (off balance sheet) transactions:** Management can also manage earnings by engaging in off statement of financial position (off balance sheet) transactions.
- Capitalisation of expenses (provisions) that are meant to be expensed in order to reduce operating costs and improve profit and total assets., e.g capitalisation of provisions for environmental clean-up costs that are meant to be expensed in the profit or loss.
- Engaging in accounting measures that encourage profit smoothing. For instance, a larger provision may be created in a period of surplus profit and later released in another period of little or no profit.
- Non-provision for damaged and obsolete inventories and assets so as to improve both profit and total assets.

b. **Gama Plastics Limited**
Calculation or measurement of provisions
The amount recognised as a provision should be the best estimate of the expenditure required to settle the present obligation at the end of the reporting period. That is, the amounts that the entity would rationally pay to settle the obligation or transfer it to a third party at the reporting date.

The estimates will be determined by the judgment of the entity's management supported by the experience of similar transactions and experts advice.

Calculation or measurement of provisions of Gama Plastics Limited

Year	Cash flows	Discount factor@10%	Present value
	₦'000	**₦'000**	**₦'000**
Dec. 31, 2016	100,000	0.909	90,900
Dec. 31, 2017	80,000	0.826	66,080
Dec. 31, 2018	140,000	0.751	105,140
		NPV	**262,120**

Since the modification cost will enhance the economic benefits of the plants, it means that the calculated provision of ₦262,120,000 should be capitalised and included in the carrying amount of the plant.

Gama Plastics Limited
Statements of financial position extracts as at December31

		2015	2016
		₦'000	**₦'000**
Non-current liability			
Provisions	(66,080 + 105,140)	171,220	105,140
Current liability			
Provisions		90,900	66,080

Accounting entries

For year ended December 31, 2015	DR	CR
	₦'000	**₦'000**
Dr PPE	262,120	
Cr Provisions		262,120
Being provision for PPE modifications		
For the settlement of ₦100,000,000 on December 31, 2016		
Dr Provisions	₦100,000	
Cr Bank/cash		₦100,000
Being payment of amount due December 31, 2016		

c. **Shawarma Limited**

According to IAS 10 on Events After the Reporting Period, the settlement of a court case after the end of the reporting period is an adjusting event that confirms that the company had a present obligation as at the end of the reporting period. As a consequence of the case, there will be an update on the financial statements to allow for the new information.

Accounting treatment of the case:

Dr.	Profit or Loss	₦90,000,000	
Cr.	Provisions for judgment debt		₦90,000,000
	Being provision for judgment debt		

Disclosure Required:

Shawarma Limited
Statement of Financial position as at December 31, 2018 (Extract)

Current Liabilities
Provisions for Judgment debt ₦90,000,000

Statement of Profit or Loss and other comprehensive income for the year ended December 31, 2018 (Extract)

Expenses
Judgment Debt ₦90,000,000

Examiner's report

Parts 'a' and 'b' of the question test candidates' knowledge of the principles and applications of provisions in IAS 37 and how provisions can be employed by management that engaged in creative accounting using provisions. It also tests the computations of provisions with modifications to cash cost of assets as well as the accounting treatments and disclosure requirements of IAS 10 - Events after the reporting period.

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

The commonest pitfalls of the candidates were their inability to identify correctly how provisions are used to engage in creative accounting; they are unable to compute or measure correctly the present value of modification costs.

Candidates are advised to study all the accounting standards and familiarise themselves with their applications in order to have better performance in future examinations.

Marking guide

		Marks	
	Marks		
a	Definition of provisions	$^1/_2$	
	Recognition of principles of provisions	$1^1/_2$	
	Definition of creative accounting	1	
	Provisions employed to engage in creative accounting	4	7
b	Basis of measurement and recognition of provisions	1	
	Calculation of provisions of Gama	2	
	Statement of financial position	2	
	Journal entries	2	7

c	Present obligation inherent in events after the reporting period	2	
	Journal entries of obligation	2	
	Statement of financial position (extract)	1	
	Statement of profit or loss (extract)	1	6
	Total		**20**

SOLUTION 6

a. The standard gives guidance on when an investor is said to have gained significant influence. If an entity holds 20% to 50% of the equity interest in an investee, it will be presumed that the investor has significant influence unless it can be clearly proved that this is not the case. If the holding is less than 20%, the entity will be presumed not to have significant influence unless such influence can be clearly demonstrated.

The existence of significant influence by an entity is usually evidenced in one or more of the following ways:

- Acquisition of 20% to 50% of the share capital of an investee;
- Material transactions between the two entities;
- An inter-change of management personnel between the two entities;
- The provision of essential technical information by one entity to the other;
- Representation on the board of directors or equivalent governing body of the investee; and
- Participation in the policy-making process, including participation in decisions about dividends or other distributions.

Since Awa Publish has three (3) board members out of twelve (12) representing 25% and the majority shareholder has seven (7) members representing 58%, this qualifies Awa Publish to participate in the policy-making process thus gain significant influence.

Consequently, the investment in Tunbe should be accounted for in line with IAS 28 using the equity method as follows:

	₦
Cost of investment	X
Add/(minus) parent's share of profit/(loss)	X
Add/(minus) parent's share of OCI	X
Less impairment on investment in associate (or joint venture)	(x)
Less Dividend	(x)
Value of investment in associate	**(x)**

The directors of Awa Publish should be aware that percentage of interest is not the only basis of determining associate or subsidiary, other factors stated above should always be considered.

b. Deferred tax assets are Items on a company's statement of financial position that may be used to reduce taxable income in the future. They are created by deductible temporary difference (Deferred Tax Asset (DTA).

(DTA = Deductible temporary difference x tax rate).

The standard requires that DTA can only be recognised as a non-current asset if the following conditions are satisfied:

(i) If it is recalculated and reconfirmed;
(ii) If the entity can prove that there will be future profit where it intends to utilise it; and
(iii) If the amount can be reliably measured and are not to be discounted.

Suppose the above-mentioned conditions are met, then the directors of Awa Publish should account for the DTA as follows:

Dr Deferred tax asset (Non-current asset)
Cr Profit or loss

Based on constant loss in the past, current year profit may not demonstrate or serve as basis for future profits except if certain projections and conditions that will enhance future profits existed.

c. In line with the relevant standard, an asset is said to be impaired if the carrying amount (CA) of the asset or cash generating unit is higher than the recoverable amount (RA).

Recoverable amount is the higher of the fair value less cost to sell and value-in use.

Value in use is the present value of all the net future cash flows associated with the use of the assets including the residual value discounted at the cost of capital.

Impairment is the amount by which the carrying amount is higher than the recoverable amount.

This is applied in the determination of the recoverable amount of the asset as follows:

	₦'m
Cost	56.0
Acc. Depreciation	16.8
Carrying amount	39.2

Value in use (V.I.U)

Year	Cash flow	Annuity factor at 10%	Present value
1-5	₦7m	3.791	₦26.537m

Fair value less cost to sell (FVLCTS)		₦'m
Fair value		40.0
Cost to sell	8.5% x 40	(3.4)
FVLCTS		36.6

The recoverable amount (RA) is ₦36.6m (the higher of V.I.U of ₦26.537m and FVLCTS of ₦36.6m)

The impairment is computed as:	₦'m
Carrying amount	39.2
Recoverable amount	36.6
Impairment	2.6

Awa Publish should recognise the impairment by passing the accounting entry below:

Dr	Profit or loss	₦2.6 million	
Cr	Plant and equipment		₦2.6 million

Examiner's report

Part 'a' of the question tests candidates' knowledge of existence of significant influence by entity using different parameters. Part 'b' of the question tests candidates' knowledge of practical applications of deferred tax assets in IAS 12- Income Taxes, while the part 'c' of the question tests computation and explanations of carrying amount; recoverable amount, value-in-use, fair value less costs to sell and the impairment of non-current assets.

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

The commonest pitfalls of the candidates were their inability to apply the provisions of accounting standards to practical situations. They also mixed-up the applications of carrying amount; recoverable amount; value-in-use and impairment of non-current assets.

Candidates are advised to do an in-depth study of the accounting standards and familiarise themselves with the provisions of this standard for better performance in future examinations.

Marking guide

		Marks	Marks
a.	Standard guidance on significant influence	1	
	Conditions to show existence of significance influence	3	
	Applications of the conditions to Awa Publish	1	
	Accounting for investment in Tunbe	1	
	Advice to directors of Awa Publish	1	7
b.	Explanation of deferred tax asset (DTA)	2	
	Conditions to recognise DTA as a non-current asset	2	
	Journal entry to account for DTA	2	
	Advise to the directors of Awa Publish	1	7
c.	Explanation of carrying amount, recoverable amount, value-in-use and impairment	1	
	Computation of carrying amount	$\frac{3}{4}$	
	Computation of value-in-use	$\frac{3}{4}$	
	Computation of fair value cost of recoverable amount	$\frac{3}{4}$	
	Computation of impairment	$1\frac{1}{2}$	
	Journal entry on recognition of impairment	$1\frac{1}{4}$	6
	Total		**20**

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

PROFESSIONAL LEVEL EXAMINATION – MAY 2021

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

DIY Limited was incorporated on June 12, 2010, and commenced commercial activities on October 1, 2011.

The primary activities of the company are the manufacture, distribution and sale of solar panels for domestic use. DIY Limited has its main factory in Daura, Katsina State, Northern Nigeria and distributors in Kaduna, Abeokuta, Onitsha and Ilorin.

Extracts from the company's audited financial statements for 2016 to 2018 are as follows:

DIY Nigeria Limited

Years ended 31 December	**2018**	**2017**	**2016**
	₦'000	**₦'000**	**₦'000**
Revenue	520,000	403,650	310,500
Cost of production	(132,600)	(110,500)	(85,000)
Research and development cost	(85,800)	(71,500)	(55,000)
Product promotion expenses	(21,060)	(23,400)	(18,000)
Damaged products written off	(19,890)	(22,100)	(17,000)
Other overheads	(142,870)	(102,050)	(78,500)
Profit before tax	117,780	74,100	57,000
Tax	(17,500)	(41,000)	(17,500)
Retained earnings	100,280	33,100	39,500
Dividend distributed and paid	(80,000)	(40,000)	(30,000)

Note:

20% of "other overheads" represent depreciation and amortisation for each of the years reported, while capital allowances for the respective years represent 150% of depreciation and amortisation.

Chief Musa Jugula (MJ), the owner and founder of DIY Limited, owns 70% of the shares of the company while the remaining 30% shares are currently held by his three children and two wives.

Chief MJ has just returned from a business trip to Ghana to explore opportunities for expansion of the business. He is considering either setting up a branch or a full-fledged subsidiary. While at the airport lounge in Accra awaiting for his flight back to Nigeria, he overheard two of his fellow passengers discussing a recently signed agreement that will integrate all the 55 countries in Africa, promote trade in goods and services by eliminating tariffs and non-tariff barriers. From the little conversation he heard, it seems like a welcome development but he is unsure if this will affect his business in Nigeria positively and its likely impact on his planned expansion into Ghana.

The forecast financial performances for 2021 to 2023 are as follows:

Nigeria	**2023**	**2022**	**2021**
	₦'000	**₦'000**	**₦'000**
Revenue	1,040,000	645,840	589,950
Cost of production	(265,200)	(176,800)	(161,500)
Research and development cost	(171,600)	(114,400)	(104,500)
Product promotion expenses	(42,120)	(37,440)	(34,200)
Damaged products written off	(39,780)	(35,360)	(32,300)
Other overheads	(285,740)	(163,280)	(149,150)
Profit before tax	235,560	118,560	108,300
Tax	(35,000)	(65,600)	(33,250)
Retained earnings	200,560	52,960	75,050

Ghana	**2023**	**2022**	**2021**
	GH¢	**GH¢**	**GH¢**
Revenue	7,428.57	6,150.86	4,213.93
Cost of production	(1,894.29)	(1,683.82)	(1,153.57)
Research and development cost	(1,225.71)	(1,089.52)	(746.43)
Product promotion expenses	(300.86)	(356.57)	(244.29)
Damaged products written off	(284.14)	(336.76)	(230.71)
Other overheads	(2,041.00)	(1,555.05)	(1,065.36)
Profit before tax	1,682.57	1,129.14	773.57
Tax	(250.00)	(624.76)	(237.50)
Retained earnings	1,432.57	504.38	536.07

Note: The exchange rate of Ghana Cedi to Naira is ¢1 = ₦70.

Required:

a. Compute the companies income tax (CIT) and tertiary education tax (TET) payable by DIY Limited for 2017 to 2019 years of assessment and comment on any issues you consider as enablers or hindrances to investment promotion in Nigeria. Assume a tax written down value of qualifying capital expenditure (QCE) of ₦230 million, unutilised losses of ₦28 million and capital allowances brought forward of ₦50 million for 2017 year of assessment. (20 Marks)

b. As the Managing Partner of Poknos & Co, write a brief advice to Chief Musa Jugula about the African Continental Free Trade Area agreement and how the treaty compares to that of Economic Committee of West African States (ECOWAS) region from the perspective of trade in goods. Your advice should cover both opportunities and challenges that may arise from the implementation of the African Continental Free Trade Agreement. (10 Marks)

c. Advise with reasons:
   i. If DIY Limited is liable to prepare and submit Country-by-Country Reports (CbCR). (5 Marks)
   ii. The relevant tax authority where the Country- by- Country Reports (CbCR) should be submitted, assuming it is applicable to the company. (5 Marks)

(Total 40 Marks)

SECTION B: (60 MARKS)

INSTRUCTION: YOU ARE REQUIRED TO ANSWER ANY THREE OUT OF FIVE QUESTIONS IN THIS SECTION

QUESTION 2

The quest for economic development in every sector of the country has enabled the Federal Government to come up with various tax incentives, especially for pioneer companies.

Nature Agricultural Products Limited, a medium-sized company, was incorporated on January 10, 2015, as a manufacturer of animal feeds. The company thereafter applied for a pioneer status and was granted a pioneer certificate with a production day of March 1, 2015.

The following details were provided in respect of business operations of the company:

		₦	
(i)	Net profit for the year ended February 28, 2019	15,350,000	
	The above net profit was arrived at after charging the following:		
	Depreciation		1,725,000
	Legal charges for purchase of leasehold rights		1,500,000
	Loss on revaluation of plantation		2,104,000
	Fines for traffic offence		70,000
	Expenses on increase in share capital		1,201,000

(ii.) Capital expenditure incurred on or before February 28, 2018:

	₦
Motor vehicles	6,500,000
Industrial building	14,680,000
Ranching and plantation	3,000,000
Furniture and fittings	1,850,000

(iii) Accumulated profit as at February 28, 2018 ₦3,968,000

The management of the company did not apply for extension of the pioneer period.

Required:
As the company's Tax Manager, you are to:

a. Compute the adjusted profit for the relevant years. (3 Marks)

b. Compute the tax liabilities for the relevant assessment years. (17 Marks)

(Total 20 Marks)

QUESTION 3

The price of crude oil had fallen from over US$100 per barrel in the past few years to under US$40 per barrel recently in the international market. This has resulted in a squeezed margin despite efforts to cut costs.

Krude Explora Nigeria Limited, an indigenous oil servicing company, which has been operating in the oil and gas sector for 23 years, faces a going concern risk due to falling profitability and liquidity challenges. It is probable that the company will default on its loan facility of US$ 122.5 million from B2B Energy Bank Plc. If this happens, the company will likely be taken over by Asset Management Corporation of Nigeria (AMCON).

Coincidentally, Wakanda Oil Exploration Limited, a multinational oil servicing company, operating across Africa and the Middle East has just sent an offer to acquire Krude Explora Nigeria Limited. The proposed acquisition will solve the liquidity problems in the short term, while efficiency and scale from the acquisition will hopefully return the company to profitability.

As the lead tax advisor for the proposed transaction, **you are required to:**

a. Explain the term "acquisition" as compared to a "merger" and give one example each of a recent merger and acquisition in the Nigerian petroleum industry. (5 Marks)

b. Outline and explain briefly the areas that may have tax implications for:

   i. Krude Explora Nigeria Limited (4 Marks)

   ii. Wakanda Oil Exploration Limited (4 Marks)

c. Discuss the likely impact of the African Continental Free Trade Area agreement and the local economy on a proposed acquisition or merger. (7 Marks)

(Total 20 Marks)

QUESTION 4

"The concept of residence determines the extent to which the income of a taxpayer is liable to tax under a tax jurisdiction".

Gen Power Incorporated is an international power plant company based in New York, USA. It has subsidiary outlets in many parts of the world, especially in developing countries with major challenges in power generation and distribution. Kem Limited, Lagos, Nigeria is the only subsidiary company of Gen Power Incorporated in West Africa.

In 2018, the Nigerian government awarded a contract for the sum of US $3 million to the foreign company for the construction of a power plant in a Northern commercial city that will generate 5 megawatts.

The management of Gen Power Incorporated felt that, with little assistance from it, especially in the area of certain category of personnel, the Nigerian subsidiary company, Kem Limited, has the capacity to execute the contract. Thus, Kem Limited was given the mandate to perform the task.

In executing the job, the following expenses were incurred:

	₦'000
Materials and other direct inputs	320,800
Hire of special equipment	31,500
Foreign experts cost and emoluments	65,300
Personnel costs	110,400
Administrative expenses	52,000
Depreciation of assets	60,700
Repairs and maintenance	7,200
Fuel and oil	8,200
Miscellaneous expenses	27,100

Other relevant information:

(i) The exchange rate is ₦362 to US $1.

(ii) A similar special equipment could be hired from another company for ₦25 million.

(iii) Included in administrative expenses was ₦12 million transferred to revenue reserve.

(iv) Repairs and maintenance was made up of:

	₦'000
Maintenance of vehicles	2,000
Improvement to the office building	1,700
Repairs of equipment	2,100
Renewals of tools and implements	1,400
	7,200

(v) Miscellaneous expenses included ₦4 million, being loss on exchange for import payment of materials used for the project

(vi) Capital allowances agreed with the tax authorities was ₦57 million

Required:

a. Describe **FIVE** circumstances under which a non-resident company will be assessable to tax in Nigeria. (5 Marks)

b. Compute the tax liabilities of Gen Power Incorporated for the relevant year of assessment. (15 Marks)

(Total 20 Marks)

QUESTION 5

DD Nigeria Limited, a private limited liability company, was incorporated in March 2010. The company produces highly successful spring water. The Board of Directors of the company comprises a non-executive Chairman, his wife as the Managing Director and the Chairman's childhood friend. For the day-to-day running of the business, the Managing Director is being assisted by the Production Manager, Sales/Marketing Manager, Administrative Officer and Accounting Officer (a diploma graduate).

The company has a track record of steady growth in profitability and market share. In a bid to cut down its cost of raw materials, particularly polythene, the Board at its recent meeting decided to acquire a polythene company in the neighbourhood that is witnessing dwindling fortunes due to insufficient funds to finance its working capital. The Board has also lost confidence in the Accounting Officer as his poor knowledge in tax related matters was brought to the fore during recent visit to the company by officials of the Federal Inland Revenue Service.

The Managing Director has approached your firm of tax consultants to help provide professional advice on tax matters in respect of some transactions and activities that occurred in the last one year.

Records of the following transactions were made available to you:

(i) The company purchased plant and machinery at a cost of ₦5,000,000 on April 1, 2019. Plant was later disposed on September 15, 2019 for ₦3,500,000. The undisposed machinery was valued at ₦4,300,000. Incidental expenses incurred on disposal was ₦250,000.

(ii) The company sold an acre of land, which was acquired on May 22, 2018, at a cost of ₦6,750,000 for ₦12,500,000 on October 19, 2018. In the following month, the company bought another land, which was to be used for the purpose of the business, for ₦15,000,000 to replace the one sold. It was however, subsequently disposed for ₦18,000,000 in June 2019.

(iii) Part of the industrial building (where the production unit is located) was damaged in October 2020 during a protest by some youths in the area. The company, in November 2020, received ₦2,200,000 as compensation under policy of insurance. The company has intention of utilising the fund for acquisition of another building.

Required:

As the tax consultants to DD Nigeria Limited, draft a report to the Managing Director of the company explaining and providing computations (where necessary) on the:

a. Capital gains tax liability for the relevant tax year in respect to transaction (i) above. (5 Marks)

b. Relief available (if any) and tax liability due in respect to transaction (ii) above. (9 Marks)

c. Tax implications on the compensation under policy of insurance received on the damaged industrial building. (2 Marks)

d. Treatment of gains arising from business re-organisation in line with the provision of Section 49, Finance Act 2019, which amended Section 32, Capital Gains Tax Act Cap C1 LFN 2014. (4 Marks)

(Total 20 Marks)

QUESTION 6

Nigeria is generally described as a Federation with three levels of government with varying but sometimes overlapping tax powers.

Required:

a. Explain the term "Fiscal Federalism" and give examples of other countries that may be described as a Federation (6 Marks)

b. Discuss briefly the following:

   i. Roles of the three tiers of government. (3 Marks)
   ii. Structure and tax rights of different levels of government. (3 Marks)
   iii. Functions of the various tax administrative organs at the State government level. (3 Marks)

c. Articulate the causes and possible remedies of multiple taxation in Nigeria. (5 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 & 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 RATES FOR:

Small Companies	0%
Medium-sized Companies	20%
Large Companies	30%

5. TERTIARY EDUCATION TAX (2% of Assessable Profit)

6. CAPITAL GAINS TAX 10%

7. VALUE ADDED TAX 7.5%

SECTION A

SOLUTION 1

(a) **DIY Limited**

Computation of tax liabilities for 2017 – 2019 years of assessment (YOA)

2017 YOA		₦'000	₦'000
Adjusted profit	(Wk 1)		72,700
Unrelieved loss b/f		(28,000)	
Loss relieved		28,000	(28,000)
Assessable profit			44,700
Less: Capital allowances (CA)			
Unclaimed CA b/f		50,000	
Capital allowance for the year	(Wk 3)	23,550	
Capital allowance claimable		73,550	
Capital allowance claimed		(44,700)	44,700
Unclaimed CA c/f		28,850	
Total profit			NIL
Dividend distributed and paid			**30,000**

Since dividend distributed and paid (₦30,000,000) exceeded the total profit, the income tax for 2017 YOA shall be computed on dividend basis (S.19 CITA 2004).

	₦'000	**₦'000**
CIT (30% x N30,000)		9,000
TET (2% x N44,700)		894
Total tax liability		10,454

2018 YOA		**₦'000**	**₦'000**
Assessable profit	(Wk 1)		94,510
Less : Capital allowances			
Unclaimed CA b/f		28,850	
Capital allowances for the year	(Wk 3)	30,615	
Capital allowances claimable		59,465	
Capital allowances claimed		(59,465)	(59,465)
Total profit			35,045
Dividend distributed and paid			**40,000**

Dividend distributed and paid (₦40,000,000) exceeded the profit (₦35,045,000) therefore , income tax for 2018 YOA shall be computed on dividend basis (S19 CITA 2004).

		₦'000	₦'000
CIT (30% X ₦40,000)			12,000
TET (2% X ₦94,510)			1,890
Total tax liability			13,890

2019 YOA		₦'000	₦'000
Assessable profit	(Wk 1)		146,354
Less: Capital allowances			
Capital allowances for the year	(Wk 3)	42,861	
Capital allowances claimable		42,861	
Capital allowances claimed		(42,861)	42,861
Total Profit			103,493
CIT @ 30% X ₦103,493			31,048
TET (2% X ₦146,354)			2,927
Total tax liability			33, 975

Workings

1. Computation of adjusted profits for 2017 – 2019 YOA

	2017 YOA	2018 YOA	2019 YOA
	₦'000	₦'000	₦'000
Profit before tax b/f	57,000	74,100	117,780
Add: Depreciation and amortization	15,700	20,410	28,574
Adjusted profits	72,700	94,510	146,354

2. Depreciation and amortisation included in other overheads

	2017 YOA	2018 YOA	2019 YOA
	₦'000	₦'000	₦'000
Other overheads	78,500	102,050	142,870
Depreciation and amortisation (20% thereof)	15,700	20,410	28,574

3. Capital allowances:

(Wk 3) Capital allowances:	2017 YOA	2018 YOA	2019 YOA
	₦'000	₦'000	₦'000
Depreciation and amortisation (Wk 2)	15,700	20,410	28,574
Capital allowances (150% thereof)	23,550	30,615	42,861

Tax and non- tax factors may enable or hinder investment promotion in Nigeria.

Enablers

Tax factors which enhance investment promotion in Nigeria include:

(i) 100% foreign ownership in a new venture except those in banking, oil, insurance and mining as allowed by Nigerian Enterprises Promotion Act;

(ii) Free trade zone encourages investments in Nigeria as operators within the zone are granted tax holiday;

(iii) The Nigerian Enterprises Promotion Act guarantees foreign investors unconditional transferability of funds through an authorised dealer;

(iv) Small business incentive (0% tax rate for small businesses); and

(v) Pioneer legislation (tax holiday for a minimum of 3 years).

Non-Tax factors include:

(i) Economic and political stability;

(ii) Adequate physical, business, accounting and legal infrastructure;

(iii) Absence (or limited presence) of bureaucratic obstacles;

(iv) Effective banking system; and

(v) Adequate communication channels.

Hindrances

These include:

(i) Corruption;

(ii) Unstable fiscal/monetary policy;

(iii) Infrastructural deficit (especially epileptic power supply);

(iv) Insecurity of life, business and property;

(v) Unstable regulatory environment/ government policy; and

(vi) Multiple taxation.

b)

Poknos & Co
Suite 104 Mea Shopping Mall, Lagos

May 24, 2021

The Founder
DIY Limited
1 Lagos Road, Daura
Katsina

Dear Sir,

RE: AFRICAN CONTINENTAL FREE TRADE AREA (AfCFTA) AGREEMENT AND ECONOMIC COMMUNITY OF WEST AFRICAN STATES (ECOWAS) TREATY

We refer to your letter of May 8, 2021 requesting for a brief advice on the above subject and hereby make submission as follows:

AfCFTA and ECOWAS

Africa Continental Free Trade Area (AfCFTA) is an example of "free trade area", and one of the four main types of regional economic integration.

Free Trade Area is the most basic form of economic cooperation. Member countries remove all barriers to trade within themselves but are free to independently determine trade policies with non-member countries.

The similarities and dissimilarities between AfCFTA and ECOWAS are as follows:

(i) Both are examples of customs union;

(ii) CET is only applicable in ECOWAS;

(iii) Both AfCFTA and ECOWAS harmonise custom practises;

(iv) Both promote use of non-tariff barrier reporting mechanism;

(v) Both promote related institutional structures that are part of the ECOWAS free trade zone; and

(vi) Both are relevant in area of trade and customs integration.

Opportunities and challenges from implementation of AfCFTA Agreement

The opportunities derivable from implementing AfCFTA include the following:

(i) **Trade creation:** AfCFTA creates more opportunities for countries to trade with one another by removing the barriers to trade and investment;

(ii) **Employment opportunities:** By removing restriction on labour movement, economic integration can help to expand job opportunities;

(iii) **Consensus and cooperation:** Member nations may find it easier to agree with smaller number of countries. Regional understanding and similarities may also facilitate closer political cooperation;

(iv) **Impetus for private sector planning and investment:** AfCFTA 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; and

(v) **Other non-economic benefits:** AfCFTA may allow a member country to reap other non-economic benefits such as peace and security.

The possible challenges from implementing AfCFTA include:

(i) **Trade diversion:** Member countries may trade more with one another than non-member nations, which may mean increasing trade with a less efficient or more expensive producer simply because it is a member nation. Inefficient companies can be protected inadvertently by the agreement;

(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 a 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;

(iv) **Loss of national sovereignty:** Discussions and agreements within a regional bloc, may necessitate nations given up their political and economic rights; and

(v) It is a form of trade barriers with countries which are not members of the free trade area.

We hope the above will give you an insight into understanding of the agreement among member nations. While thanking you for the opportunity given us to advise on the above subject matter, please do not hesitate to contact us if you require further information on any aspect of this report.

Yours faithfully,

Baba Tee
Principal Partner

(c)i. DIY Limited **is not liable** to prepare and submit Country-by-Country Reports for 2017 – 2019 years of assessment and 2022 – 2024 years of assessment if the business expansion into Ghana is implemented.'

It is pertinent to state that the company is not a member of multinational enterprise (MNE) group because:

- It does not meet the definition of MNE group. For the purpose of Country-by- Country Reporting. MNE group means any group that includes two or more enterprises resident in different jurisdictions or includes an enterprise that is resident for tax purposes in one jurisdictions and is subject to tax with respect to the business carried out through a permanent establishment in another jurisdiction; and

- A group is also an excluded MNE if, in any accounting year of the group, is having total consolidated group revenue of less than €750 million or ₦160 billion during the accounting year immediately preceding the reporting accounting year as reflected in its consolidated financial statements for such preceding accounting year.

(c)ii. The relevant tax authority will be the tax authority of the reporting entity. In the case of DIY limited, the FIRS is the relevant tax authority. This is because DIY Limited, (the parent company) is the reporting entity and is resident in Nigeria.

In a situation where a surrogate parent entity (the subsidiary in Ghana in this case) is the reporting entity, the tax authority in Ghana will be the relevant tax authority.

Examiner's Report

The question tests the candidates' understanding of the basis of assessing companies to tax, using the dividend basis approach; African Continental Free Trade Area (AfCFTA) agreement and Country- by- Country Reports (CbCR).

Being a compulsory question, almost all the candidates attempted the question. Candidates demonstrated a fair understanding of the question, particularly in the computation of companies income tax and tertiary education tax; but performance was average.

The commonest pitfall was the inability of the candidates to differentiate between AfCFTA agreement and ECOWAS treaty from the perspective of trade in goods.

Candidates are advised to familiarise themselves with AfCFTA agreement and ECOWAS treaty by reading extensively the Institute's Study Text and other relevant textbooks.

Marking Guide

		Marks	Marks
(a)	**Computation of tax liabilities for 2017 YOA:**		
	Adjusted profit	½	
	Unrelieved loss b/f	½	
	Loss relieved	½	
	Assessable profit	½	
	Unclaimed capital allowances b/f	½	
	Capital allowances for the year	½	
	Capital allowances claimable	½	
	Capital allowances claimed	½	
	Total profit	½	
	Dividend distributed and paid	½	
	Companies income tax	½	
	Tertiary education tax	½	
	Computation of tax liability for 2018 YOA:		
	Assessable profit	½	
	Unclaimed capital allowances b/f	½	
	Capital allowance for the year	½	
	Capital allowance claimed	½	
	Total profit	½	
	Dividend distributed and paid	½	
	Note on dividend distributed and paid that exceeded the total profit	½	
	Companies income tax	½	
	Tertiary education tax	½	
	Computation of tax liability for 2019 YOA:		
	Assessable profit	½	
	Capital allowances for the year	½	
	Capital allowances claimed	½	
	Total profit	½	
	Companies income tax	½	
	Tertiary education tax	½	
	Workings		
	Adjusted profits (2017)	½	
	(2018)	½	
	(2019)	½	
	Depreciation and amortisation:		
	(2017)	½	
	(2018)	½	
	(2019)	½	
	Capital allowances:		

(2017)	½	
(2018)	½	
(2019)	½	
Factors that may enable investment promotions in Nigeria (Any 4 correct points @½mark each) OR Factors that may hinder investment promotions in Nigeria (Any 4 correct points @½ mark each)	2	20
(b) Heading of the report	1	
AFCFTA and ECOWAS (Any 3 correct points x 1mark each)	3	
Opportunities from implementation of the AfCFTA (Any 3 points @1mk each)	3	
Challenges from implementing AfCFTA (3 correct points @1 mark each)	3	10
(c) (i) DIY Ltd not liable to prepare and submit country by country reports	2	
3 correct reasons to substantiate why DIY Ltd is not liable @ 1mark each	3	5
(c)(ii) The relevant tax authority as the tax authority of the reporting entity	2	
2 correct discussions on the relevant tax authority @ 1½ marks each	3	5
		40

SOLUTION 2

(a) **Nature Agricultural Products Limited**
Computation of adjusted profit
For the year ended February 28, 2019

	₦	₦
Net profit for the year ended 28/2/2019		15,350,000
Add back: disallowable items		
Deprecation	1,725,000	
Legal charges for purchase of leasehold	1,500,000	
Loss on revaluation	2,104,000	
Fines for traffic offence	70,000	

Expenses on increase in share capital	1,201,000	6,600,000
Adjusted profit for the year		**21,950,000**

(b) **Nature Agricultural Products Limited**
Computation of income tax liabilities
For 2018, 2019 and 2020 assessment years

2018 assessment year (10 months)

	₦
Adjusted profit = 10/12 x ₦21,950,000	18,291,667
Deduct: Capital allowances (W1)	9,637,666
Total profit	**8,654,001**
Companies income tax @ 30%	2,596,200
Tertiary education tax (2% of ₦18,291,667)	365,832
Total tax liability	**2,962,032**

2019 assessment year (12 months)

Adjusted profit	21,950,000
Deduct: Capital allowances (W1)	3,387,800
Total profit	**18,562,200**
Companies income tax @ 30%	5,568,660
Tertiary education tax (2% of ₦21,950,000)	439,000
Total tax liability	**6,007,660**

2020 assessment year (12 months)

Adjusted profit	21,950,000
Deduct: Capital allowances (W1)	2,512,790
Total profit	**19,437,210**
Companies Income Tax @ **20%** (Medium-sized company)	3,887,442
Tertiary education tax (2% of ₦21,950,000)	439,000
Total tax liability	**4,326,442**

Appendix I: Capital allowances computation

	Motor vehicles IA 50% AA 25%	Industrial buildings IA 15% AA 10%	Ranching & plantation IA 30% AA 50%	Furniture & fittings IA 25% AA 20%	Capital allowances
	₦	₦	₦	₦	₦
2018 Y/A					
Cost	6,500,000	14,680,000	3,000,000	1,850,000	
IA	(3,250,000)	(2,202,000)	(900,000)	(462,500)	6,814,500

AA (W1)	(677,083)	(1,039,833)	(875,000)	(231,250)	2,823,166
					9,637,666
2019 Y/A					
TWDV	2,572,917	11,438,167	1,225,000	1,156,250	
AA (W2)	(812,500)	(1,247,800)	(1,050,000)	(277,500)	**3,387,800**
2020 Y/A					
TWDV	1,760,417	10,190,367	175,000	878,750	
AA	(812,500)	(1,247,800)	(174,990)	(277,500)	**2,512,790**
2021 Y/A					
TWDV	947,917	8,942,567	10	601,250	

Workings

(1) Annual allowances for 2018 Y/A

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

Motor vehicles

$$AA = \frac{₦6,500,000 - ₦3,250,000}{4} \times 10/12$$
$$= ₦\underline{677,083}$$

Industrial building

$$AA = \frac{₦14,680,000 - ₦2,202,000}{10} \times 10/12$$
$$= ₦\underline{1,039,833}$$

Ranching and plantation

$$AA = \frac{₦3,000,000 - ₦900,000}{2} \times 10/12$$
$$= ₦\underline{875,000}$$

Furniture & fittings

$$AA = \frac{₦1,850,000 - ₦462,500}{10} \times 10/12$$
$$= ₦\underline{231,250}$$

(2) Annual allowances for 2019 Y/A

Motor vehicles

$$AA = \frac{₦6,500,000 - ₦3,250,000}{4}$$
$$= \mathbf{₦812,500}$$

Industrial buildings

$$AA = \frac{₦14,680,000 - ₦2,202,000}{10}$$
$$= \textbf{₦1,247,800}$$

Ranching and plantation

$$AA = \frac{₦3,000,000 - ₦900,000}{2}$$
$$= \textbf{₦1,050,000}$$

Furniture & fittings

$$AA = \frac{₦1,850,000 - ₦462,500}{5}$$
$$= \textbf{₦277,500}$$

Examiner's report

The question tests the candidates' knowledge of assessment of a company to tax, after its pioneer period.

Overt 80% of the candidates attempted the question and they exhibited a clear understanding of the requirements of the question, therefore, performance was good.

The commonest pitfall was the inability of the candidates to correctly apply the commencement principles in the determination of total profits for the second (2019) and third (2020) years of assessment.

Candidates are advised to pay attention to the principles of basis period and determination of total profit by using the Institute's Study Text, other relevant textbooks and tax laws.

Marking guide

		Marks	Marks
(a)	Computation of adjusted profit:		
	Net profit as per accounts	¼	
	Depreciation	¼	
	Legal charges for purchase of leasehold	½	
	Loss on revaluation	½	
	Fines for traffic offence	½	

	Expenses on increase in share capital	½	
	Adjusted profit for the year	½	3
(b)	Tax liabilities:		
	2018 assessment year:		
	Adjusted profit	½	
	Capital allowances	½	
	Total profit	½	
	Companies income tax	1	
	Tertiary education tax	1	
	2019 assessment year:		
	Adjusted profit	½	
	Capital allowances	½	
	Total profit	½	
	Companies income tax	1	
	Tertiary education tax	1	
	2020 assessment year:		
	Adjusted profit	½	
	Capital allowances	½	
	Total profit	½	
	Companies income tax	1	
	Tertiary education tax	½	
	Appendix: Capital allowances computation		
	2018 Y/A		
	IA (4 ticks @ ¼ mark)	1	
	AA (4 ticks @ ¼ mark)	1	
	Capital allowances (3 ticks @ ¼ mark)	¾	
	2019 Y/A		
	TWDV (4 ticks @ ¼ mark)	1	
	AA (4 ticks @ ¼ mark)	1	
	Capital allowances (1 tick @ ¼ mark)	¼	
	2020 Y/A		
	TWDV (4 ticks @ ¼ mark)	1	
	AA (3 ticks @ ¼ mark)	¾	
	Capital allowances (1 tick @ ¼ mark)	¼	17
			20
	Total		

SOLUTION 3

ABC & Co. (Chartered Accountants)
3rd Floor, Glass House, Surulere, Lagos

May 12, 2021

The Managing Director
Wakanda Oil Exploration Limited
2, Ozumba Mbadiwe Road
Victoria Island
Lagos

Dear Sir,

RE: REPORT ON PROPOSED ACQUISITION OF KRUDE EXPLORA LIMITED

We refer to your letter dated May 8, 2021 requesting for explanation on the offer to acquire Krude Explora Limited. We wish to comment as follows:

a) **Acquisition and merger**

Acquisition is a form of business combination whereby one company purchases all or majority of the equity shares of another company, thereby gaining controlling interest over the acquired company.

Examples of recent acquisition in the Nigerian petroleum industry are the acquisition of a 50% ownership interest in Petrobras Oil and Gas B.V ("POGBV) by Africa Oil Corp. (AOI), in 2020; Globeleq Limited acquired 74% majority equity of CPGNL Limited in 2021; and Oando Energy Resources acquired 100% ownership of OML 131 that owned by Medal Oil Ltd in 2014.

Merger on the other hand, is a form of business combination where two or more companies come together to become one enlarged surviving company. In a merger arrangement, one of the companies may be the surviving entity while the other loses its identity. In another merger arrangement both companies lose their identities, while a new company entirely is formed to survive them. A merger may occur between companies in same line of business and in the same industry (horizontal merger) or between companies in different lines of business of same industry (Vertical merger).

b) **Tax implications of the acquisition arrangement**

Where one existing company takes over the business of another existing company either by acquisition or absorption, the following shall be the tax implications of the arrangement:

i. **Tax implications for Krude Explora Limited**

- The acquired or absorbed company shall cease operations and cessation provisions will be applied to the company.
- Capital gains tax (CGT) shall be paid by the shareholders of

Krude Explora Limited, the ceased company, unless the consideration is settled by shares in Wakanda Oil Exploration Limited.

ii. **Tax implications for Wakanda Oil Exploration Limited**

- No commencement rule will be applied to Wakanda Oil Exploration Limited unless its line of business is not the same with that of Krude Eplora Limited being acquired.
- No initial or investment allowance will be granted on assets taken over or transferred to Wakanda Oil Exploration Limited, while annual allowances claimable shall be based on the tax written down values of the asset taken over for the remaining tax lives of the assets.
- Unrelieved losses of Krude Explora Limited cannot be carried forward.
- Unclaimed capital allowances cannot be carried forward against the assessable profits of Wakanda Oil Exploration Limited.
- Increase in the share capital as a result of the merger will attract stamp duties.
- Professional service fee payable in connection to the merger will be subject to value added tax (VAT) and withholding tax.
- Wakanda Oil Exploration Limited will file annual returns as the surviving company.
- Any cost associated with the merger or acquisition arrangement shall not be allowable for tax purposes.

c) **The impact of AfCFTA agreement and the local (Nigeria) economy on the proposed acquisition or merger ;**

These include:

i. Further increase in the size of Nigerian market will enable investors, Wakanda Oil Exploration Limited, benefit not only from Nigerian market but also from other countries in Africa;

ii. Eliminating tariffs: The arrangement will enable the companies to benefit from reduced import duties and preferential tariffs to import from other countries;

iii. Potential growth for small and medium-sized companies. The new arrangement will enhance growth of emerged company;

iv. The companies will be exposed to competitive production, thereby increasing production capacity;

v. The arrangement will enable the emerged company to benefit from wider sources of finance;

vi. The arrangement will necessitate the emerged company to improve its production technology as AfCFTA does not allow dumping of poor products; and

vii. The success of the proposed transaction will encourage other companies to opt for either merger of acquisition as against complete liquidation of corporations, which will negatively affect the investors.

While hoping that the points noted above will facilitate the conclusion of the arrangement, please do not hesitate to contact us if any aspect of the report needs further clarification.

Yours faithfully,

Olabisi Jay.

Examiner's report

The question tests candidates' understanding of the tax implications and the impact of AfCFTA agreement and the local economy on the proposed acquisition or merger.

About 40% of the candidates attempted the question, but majority of them lacked a good understanding, hence performance was below average.

The major pitfall of the candidates was their inability to recognise the impact of AfCFTA agreement and the local economy on the transaction.

Candidates are advised to read the Institute's Study Text on economic regional integration, AfCFTA agreement, merger and acquisition.

Marking guide

		Marks	Total
A	Heading (address & introduction)	1	
	Any 4 points on explanations of "acquisition" and " merger" @ 1mark	4	5
b (i)	2 correct points on tax implications for Krude Explora Nigeria Ltd @ 2 marks	4	
(ii)	Any 4 correct discussions on tax implications for Wakanda Oil Exploration Ltd @ 1 mark	4	8
C	Any 7 correct discussions on impact of AfCFTA agreement and the local economy on the transactions on the @ 1 mark		7
			20

SOLUTION 4

(a) **The circumstances under which a non-resident company will be assessable to tax in Nigeria are:**

(i) Income derived through a fixed base or permanent establishment;

(ii) Income derived in Nigeria through a dependent agent;

(iii) Income derived from supervisory activity that lasts more than 3 months;

(iv) Income derived in Nigeria from a turnkey project;

(v) Income derived by non-resident company from professional consultancy, management and technical services rendered in Nigeria;

(vi) Income derived by a non-resident company from investment such as dividend, interest, rent and royalties. The withholding tax deducted from these incomes is taken as the final tax;

(vii) Income derived from a contract awarded to a Nigerian company, but sub-contracted to a non-resident company; and

(viii) Where the non-resident company has a significant economic presence in Nigeria.

(b) **Gen Power Incorporated**
Computation of tax liabilities
For 2019 year of assessment

	₦'000	₦'000
Turnover ($3 x ₦362)		1,086,000
Less: Expenses:		
Materials and other direct inputs	320,800	
Hire of special equipment	25,000	
Foreign experts cost and emolument	65,300	
Personnel costs	110,400	
Administrative expenses (₦52,000 – ₦12,000)	40,000	
Repairs and maintenance (₦7,200 – ₦1,700)	5,500	
Fuel and oil	8,200	
Miscellaneous expenses	27,100	
		602,300
Adjusted profit		483,700
Capital allowances	57,000	
Relieved	(57,000)	(57,000)
Unutilised capital allowances c/f	NIL	

Total profit	426,700
Companies income tax @ 30%	128,010
Tertiary education tax @ 2% of adjusted profit	9,674
Withholding tax on hire of special equipment (10% of ₦31,500)	3,150

Examiner's Report

The question tests candidates' understanding of taxation of non-resident company.

About 80% of the candidates attempted the question and they showed fair understanding and performance was above average.

The commonest pitfall was the candidates' inability to correctly identify the disallowable expenses in the determination of adjusted profit.

Candidates are encouraged to improve their understanding of allowable and disallowable expenses by reading the Institute's Study Text and other relevant textbooks before sitting for future examinations.

Marking guide

		Marks	Marks
(a)	5 correct points @ 1 mark per point		5
(b)	Heading	½	
	Turnover	1	
	Materials and other direct inputs	1	
	Hire of special equipment	1	
	Foreign experts cost and emolument	1	
	Personnel costs	1	
	Administrative expenses	1	
	Repairs and maintenance	1	
	Fuel and oil	1	
	Miscellaneous expenses	1	
	Adjusted profit	1	
	Capital allowances relieved	1	
	Total profit	1	
	Companies income tax	1	
	Tertiary education tax	1	
	Withholding tax on hire of special equipment	½	15
			20

SOLUTION 5

24 Abbey Plaza,
Ikeja Lagos

April 10, 2021

The Managing Director
DD Nigeria Limited
Colmas Road, Alabata
Abeokuta

Dear Sir,

RE: CAPITAL GAINS TAX ON DISPOSAL OF CHARGEABLE ASSETS

I refer to your mail of April 5, 2021, requesting for our advice on tax matters in respect of transactions relating to the above subject-matter. We wish to comment as follows:

(a) **Disposal of plant on September 15, 2019**

This is a partial disposal of plant from entire plant and machinery which was acquired for ₦5,000,000. The cost apportioned to the plant is ₦2,243,590, as per the attached appendix I.

There is chargeable gain of ₦1,006,410, being the difference between the consideration of ₦3,500,000 received and the cost of the plant. The chargeable gain will be liable to capital gains tax at 10% resulting to tax liability of ₦100,641, as per the attached appendix II.

(b) **Disposal of land in May 2018 and June 2019**

(i) **Roll-over Relief:** A relief is available in the capital gains tax (CGT), where the consideration received from disposal of class of asset is re-invested in the acquisition of another asset of same class. The relief is known as roll-over relief. Where roll-over relief is applicable, the capital gains tax on the chargeable gain arising on the disposal of the old asset will be deferred until the new asset is eventually disposed.

(ii) The disposal of the company's existing acre of land for ₦12,500,000 to acquire a new acre of land for ₦15,000,00 will result to the grant of a full roll-over relief of ₦5,750,000 (see appendix III) on the disposal of the existing land and the capital gains tax will only be payable when the new land is eventually disposed.

(iii) The cost of the new acre of land will be its carrying cost (₦9,250,000), which is the original cost of the new land (₦15,000,000) less chargeable gain rolled over on the old land (₦5,750,000).

(iv) There is no capital gains tax payable on disposal of the old land because of the full roll-over relief claimed on it.

(v) The CGT of ₦875,000 is due on the disposal of the new land in 2019 year of assessment as per the attached appendix IV.

(c) **Tax implication on the compensation under policy of insurance received on the damaged industrial building**

(i) Where an asset is lost or destroyed but compensation is received under a policy of insurance and the capital sum received by way of compensation is utilized to purchase another asset in replacement of those lost or destroyed within 3 years, roll-over relief shall be available.

(ii) The ₦2,200,000 compensation received under policy of insurance from part of the industrial building damaged constitutes disposal and the compensation shall be deemed to be consideration received from such disposal.

(iii) The intention of the company to utilize the compensation for acquisition of another building will qualify DD Nigeria Limited for roll-over relief on the old (damaged) building provided the new building is acquired within three years after the disposal of the old building.

(d) **Treatment of gains arising from business re-organization (S.49, Finance Act 2019)**

(i) Effective 2020 year of assessment, any gains on asset transferred in a related-party business reorganization shall be treated as assets specifically exempted from Capital Gains Tax subject to minimum holding test.

Minimum holding test requires that:

(ii) The acquired company that transferred its asset must be member of the group for at least 365 days prior to the date of the reorganization; and

(iii) The acquiring company to hold the underlying asset transferred for 365 days and above after the date of the transaction.

If the minimum holding conditions are not fulfilled, the exemption shall be withdrawn.

Attached appendix (I)-(IV) is for your information. Kindly get back to us in case you require further clarification.

Yours faithfully,

Sunny Kajooo
Principal Partner

APPENDIX I: Cost of acquisition for plant disposed

This is given by the formular:

$$\frac{A}{A + B} \times C$$

Where:

A = Consideration received from plant sold	₦3,500,000
B = Market value of machine unsold	₦4,300,000
C = Total cost of whole plant and machinery	₦5,000,000

$$\frac{₦3,500,000}{₦3,500,000 + ₦4,300,000} \times ₦5,000,000 = \underline{₦2,243,590}$$

APPENDIX II: Computation of CGT for 2019 year of assessment

	₦
Sale proceeds	3,500,000
Less: incidental selling expenses	250,000
Net Sales proceed	3,250,000
Less: Cost of Acquisition (appendix I)	2,243,590
Chargeable gains (CG)	**1,006,410**
CGT @ 10% x ₦1,006,410	**100,641**

APPENDIX III: Computation of CGT for 2018 year of assessment

Disposal of old land:

	₦	₦
Sale proceeds (old land)		12,500,000
Less: Cost of acquisition (old land)		6,750,000
Chargeable gains (CG) available for roll-over relief		5,750,000
Apply roll-over relief		
Amount re-invested	12,500,000	
Less: Cost of acquisition (old land)	6,750,000	
Roll-over relief		(5750,000)
Chargeable gains (CG) liable		NIL
Capital gains tax payable		NIL

APPENDIX IV: Computation of CGT for 2019 year of assessment

	₦	₦
Sales proceed (new land)		18,000,000
Less: Cost of acquisition (carrying cost):		
Original cost	15,000,000	
Less: CG rolled over on old land	5,750,000	
Carrying cost of new land		(9,250,000)
Chargeable gain (CG)		8,750,000
Capital gains tax payable @ 10% x ₦1,006,410		875,000

Examiner's report

The question tests candidates' knowledge on issues relating to capital gains tax, with emphases on partial disposal and roll-over relief.

About 70% of the candidates attempted the question. Majority of the candidates showed a good understanding and the performance in parts (a), (b) and (c) of the question was satisfactory, whilst that of part (d) was fair.

The major pitfall was the inability of the candidates to explain correctly the treatment of gains arising from business re-organisation in line with the provisions of Finance Act 2019.

Candidates are advised to read the Institute's Study Text, other relevant textbooks and Finance Act 2019, as this will go a long way in assisting them to pass future examinations.

Marking guide

	Marks	Total
(a) Disposal of plant on September 15, 2019		
Heading	½	
Body of the report- Disposal of plant on 15 Sept. 2019 (CGT of N100,641 as appendix I & II)	1	
Computation of CGT for 2019 Y/A (appendix I)		
Sale proceeds	½	
Incidental selling expenses	½	
Cost of acquisition	½	
Chargeable gains	½	
CGT @ 10%	½	
Cost of acquisition formula	½	
Result of cost acquisition (₦2,243,590)	½	5
(b) Disposal of land in May 2018 and June 2019		
Body of the report		
Any 2 correct discussions of relief available and tax liability @ 1 mark each	2	
Computation of CGT for 2018 year of assessment		

(appendix III)		
Sale proceeds (old land)	½	
Cost of acquisition (old land)	½	
Chargeable gain available for roll-over relief	½	
Amount re-invested	½	
Cost of acquisition (old land)	½	
Roll-over relief	½	
Chargeable gains liable	½	
CGT payable	½	
Computation of CGT for 2019 year of assessment		
Sale proceeds (new land)	½	
Cost of acquisition (carrying cost)		
Original cost	½	
Roll-over relief on old asset	½	
Carrying cost of new land	½	
Chargeable gains	½	
CGT @ 10%	½	9
(c) Tax implications on the compensation under policy of insurance: Any 2 correct tax implications on the compensation under policy of insurance received @ 1 mark		2
d) Treatment of gains arising from business re-organisation : Any 2 correct treatments of gains arising from business re-organization @ 2 marks		4
		20

SOLUTION 6

(a) **Fiscal federalism**

(i) Fiscal federalism is the system of revenue generation and redistribution within a federal system. It involves the financial, functions and responsibilities of units within a federal structure.

(ii) The Nigerian Constitution C.23 LFN 2004 (as amended) establishes the fundamental principles of federalism.

(iii) Section 2(1) of the Constitution of Nigeria provides that "Nigeria is one indivisible state to be known by the name of the Federal Republic of Nigeria", while section (2) further provides that "Nigeria shall be a federation consisting of states and a federal capital territory".

Other countries described as federation include:

(i) Australia;
(ii) Belgium;
(iii) Canada;
(iv) Ethiopia;
(v) Germany;
(vi) India;
(vii) Malaysia;
(viii) Mexico;
(ix) Pakistan;
(x) Switzerland;
(xi) United Arab Emirates;
(xii) United States of America;
(xiii) Venezuela;
(xiv) Republic of South Africa;
(xv) Ghana;
(xvi) Togo;
(xvii) Republic of Benin;
(xviii) Tanzania;
(xix) Malawi;
(xx) Tanzania;
(xxi) Cote D'Ivoire;
(xxii) Liberia;
(xxiii) Sierra Leone;
(xxiv) Uganda;
(xxv) Zambia;
(xxvi) Republic of Congo;
(xxvii) Cameroun, etc.

(b)i **Roles of the three tiers of government**

Federal government
The Federal government is responsible for the administration, assessment and collection of taxes due from all taxable corporate bodies, personnel of the Nigeria armed forces and those employed in the Nigeria's foreign missions through the Federal Inland Revenue Service (FIRS).

State government
Each state government is responsible for the administration, assessment and collection of the taxes due from all taxable persons resident in State with the exception of the employees of Nigerian Armed Forces and Nigeria foreign missions through the relevant authority in a State.

Local government
A Local government is responsible for collecting specified levies to generate revenue through the Local Government Revenue Committee in each local government of the federation.

(b) ii **Structure and taxing rights of different levels of government**

For tax purposes and according to the constitutional provision, Nigeria is divided into three tiers or levels. These include Federal, State and Local governments.

The taxing rights of each of the three levels of government are as contained in the Taxes and Levies (Approved List for Collection) Act Cap T2 LFN 2004 (as amended). The taxing rights of the different levels of government are as summarized below:

Taxing right of Federal government

The tax jurisdiction or taxes approved to be collected by Federal government through the Federal Inland Revenue Service (FIRS) are:

- Companies income tax;
- Withholding tax on companies and non-resident individuals;
- Petroleum profits tax;
- Value added tax;
- Tertiary education tax;
- Capital gains tax on companies, and non-resident individuals
- Stamp duties on corporate bodies; and
- Personal income tax of members of the Armed Forces of Nigeria, the Nigeria Police Force, staff of the Ministry of External (Foreign) Affairs and non-resident individuals.

Taxing right of State governments and Federal capital territory

The tax jurisdiction or taxes approved for collection by State Government through each State Board of Internal Revenue Services (SBIR) are:

- Pay As You Earn (PAYE);
- Withholding tax on individuals;
- Capital gains tax on individuals;
- Stamp duties on Investments executed by individuals;
- Pools betting, lotteries, gaming and casino Taxes;
- Road taxes;
- Business premises registration fees for:
  - Urban areas-as defined by each state- ₦10,000 (maximum) for registration and N5,000 for annual renewal of registration; and
  - Rural areas as defined by each state – ₦2,000 for registration and ₦1,000 for annual renewal of registration.
- Development levy for individuals only not more than ₦100.00 per annum on taxable individuals;
- Naming of street registration fees in State capital;
- Right of occupancy fees on lands owned by the State in urban cities of the state; and
- Market taxes and levies where State finance is involved.

With the enactment of FCT Internal Revenue Service Act, 2015, FCT-IRS now collects the following taxes and levies in the FCT:

- Personal income tax;
- Pay as You Earn (PAYE) in respect of all individuals resident in FCT under employment in both public and private sectors;
- Direct assessment in respect of self-employed individuals and enterprises;
- Federal capital territory property tax;
- Stamp duties in respect of individuals and enterprises resident in FCT
- Withholding tax in respect of individuals and enterprises resident in FCT; and
- Capital gains tax in respect of individuals and enterprises in FCT.

Taxing right of Local government

The tax jurisdiction or taxes approved for collection by Local governments are:

- Shops and kiosks rates;
- Tenement rates;
- Marriage, birth and death registration fees;
- Slaughter slab fees;
- On and off liquor license fees;
- Street naming registration fee except in State capital;
- Right of occupancy fees on lands in rural areas ((exclusive of those collectable by Federal and State governments);
- Market taxes and levies excluding any market where state finance is involved;
- Motor park fees;
- Domestic animal license fees;
- Bicycle, truck, canoe, wheel barrow and cart fees, other than a mechanically propelled truck;
- Cattle tax-payable by cattle farmers only;
- Road closure levy;
- Radio and television license fees (other than radio and television transmitter);
- Radio license fees (to be imposed by the Local government of the State in which the car is registered);
- Illegal parking fees;
- Public convenience sewage and refuse disposal fees;
- Customary burial ground permit fees
- Religious places establishment permit fees; and
- Signboard and advertisement permit fees.\

(b) iii. **Functions of various tax administration at the State government level**

The tax administrative organs at the State government level comprises of:

- The State Board of Internal Revenue (SBIR); and
- The Technical Committee of the SBIR.

Functions of the State Board of Internal Revenue (SBIR)

The State Board of Internal Revenue shall be responsible for:

- Ensuring the effectiveness and optimum collection of all taxes and penalties due to the government under the relevant laws;
- Doing all such things as may be deemed necessary and expedient, for the assessment and collection of the tax and shall account for all sums so collected, in a manner to be prescribed by the Commissioner;
- Making recommendations, where appropriate, to the Joint Tax Board (JTB) on tax policy, tax reform, tax legislation, tax t treaties and exemptions as may be required, from time to time;
- Generally controlling, the management of the State service on matters of policy, subject to the provisions of the law setting up the State Internal Revenue Service; and
- Appointing, promoting, transferring and imposing discipline on employees of the State Internal Revenue Service.

Functions of the Technical Committee of the SBIR

The Technical Committee shall:

- Have powers to co-opt additional staff from within the State service, in the discharge of its duties;
- Consider all matters that require professional and technical expertise and make recommendations to the State board;
- Advise the State board on all its powers and duties; and
- Attend to such other matters as may, from time to time, be referred to it, by the board.

(c) **Causes and possible remedies of multiple taxation in Nigeria**

The likely causes of multiple taxation include:

i. The alarming approved numbers of taxes for collection by a local government is a factor encouraging local government into the inordinate drive for revenue through those taxes/levies;

ii. The administrative problems of some SIRS, such as poor funding, lack of infrastructure, poor remuneration and lack of motivated skilled personnel;

iii. Deliberately denial by some States government of the revenue due to local governments;

iv. Failure of the three tiers of government to adequately fund their departments and agencies; and

v. Lack of information and data.

The possible remedies to the causes of multiple taxation include:

i. Reviewing the current statutory provisions in Nigeria to delimiting the scope of taxes and levies collectible by each level of government and imposing penalties for contravention of the laws;
ii. Making available to the local governments their portion of revenue from the federation account;
iii. Adequate funding the various agencies and departments of the State governments;
iv. Ensuring that the Ministry of Local Government and the House of Assembly play their oversight functions very well on the activities of the local government; and
v. Maintaining an up to date database of taxpayers in Nigeria.

Examiner's Report

The question tests candidates' knowledge of fiscal federalism and tax administration in Nigeria.

About 30% of the candidates attempted the question and they showed a good understanding of the question, hence performance was good.

The commonest pitfall was the inability of the candidates to correctly explain the term, fiscal federalism.

Candidates are advised to familiarise themselves with these aspects of the syllabus as this will enhance their performance in future examinations.

Marking guide

		Marks	Total
(a)	Any 2 correct explanations of fiscal federalism @ 2 marks	4	
	4 examples of other countries that practice federalism @ ½ mark	<u>2</u>	6
(b) i	Roles of the 3 tiers of govt. @ 1 mark	3	
ii	Structure and taxing rights of Federal govt. (4 points @ ¼ mark)	1	
	Structure and taxing rights of State govt. (4 points @ ¼ mark)	1	
	Structure and taxing rights of Local govt. (4 points @ ¼ mark)	1	

iii	Any 3 correct explanations of the functions of SBIR @½ mark	1½	
	Any 3 correct explanations of the functions of Technical Committee of the SBIR @½ mark	<u>1½</u>	9
(c)	Any 3 correct causes of multiple taxation @1 mark	3	
	Any 2 correct remedies to causes of multiple taxation @ 1 mark	<u>2</u>	<u>5</u>
			<u>20</u>

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

PROFESSIONAL LEVEL EXAMINATION – MAY 2021

STRATEGIC FINANCIAL MANAGEMENT

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

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

SECTION A: COMPULSORY QUESTION (40 MARKS)

QUESTION 1

Palemo Temidayo (PT) is a large engineering company listed on the stock market. The company is considering the purchase of Zinco, an unlisted company that produces a number of engineering components.

The board of directors is concerned about the appropriate price to pay for Zinco. As a starting point, it has been decided to provide a range of valuations based on different industry recognised techniques.

Summarised financial statements of Zinco Limited for the last two years are shown below:

Statements of profit or loss for the years ended 30 June

	2020	**2019**
	₦'000	**₦'000**
Sales revenue	112,400	101,090
Opening profit before exceptional items	6,510	4,100
Exceptional items	(10,025)	-
Interest paid (net)	(1,400)	(890)
Profit/(Loss) before tax	(4,915)	3,210
Taxation	(1,050)	(890)
Profit/(Loss) after tax	(5,965)	2,320
Note: Dividend	1,000	500

Statement of financial position as at 31 March (₦000)

	2020	**2019**
Non-current assets (net)		
Tangible assets	27,150	25,240
Goodwill	850	1,000
Current asset		
Inventory	17,000	13,900

Receivables	13,790	12,560
Cash and bank	240	240
Total assets	**59,030**	**52,940**
Equity and liabilities		
Call-up share capital (50 kobo par)	20,000	10,000
Retained profits	5,185	17,150
Other reserves	6,245	1,675
Total equity	31,430	28,825
Current liabilities – payable	27,600	24,115
	59,030	**52,940**

Additional information relating to Zinco:

(i) If the acquisition succeeds, there will be revenue synergy leading to increase in annual sales revenue of Zinco of 25% for three years, and of 10% per year thereafter.

(ii) Non-cash expenses, including depreciation, were ₦4,100,000 in 2020.

(iii) Income tax rate is 30% p.a.

(iv) Capital expenditure was ₦5 million in 2020, and is expected to grow at approximately the same rate as revenue.

(v) Working capital, interest payments and non-cash expenses are expected to increase at the same rate as revenue.

(vi) Zinco has a patent with current market value of ₦50million. This has not been included in the non-current assets.

(vii) Operating profit is expected to be approximately 8% of revenue in 2021, and to remain at the same percentage in future years.

(viii) Dividends are expected to grow at the same rate as revenue.

(ix) The realisable value of inventory is expected to be 70% of its book value.

(x) The estimated cost of equity is 12%.

(xi) The average P/E ratio of listed companies of similar size of Zinco is 30:1.

(xii) Average earnings growth in the industry is 6% per year.

Required:

a. Prepare a report that gives an estimate of Zinco using:

(i) Asset based valuation (8 Marks)

(ii) P/E ratios (6 Marks)

(iii) Dividend based valuation (6 Marks)

(iv) The present value of expected future cash flows (5 Marks)

(v) Discuss the potential accuracy of each of the methods used and recommend, with reasons, a value or range of values that PT might bid for Zinco. State clearly any assumptions that you make. (10 Marks)

b. The directors of PT are considering issuing some ₦100 nominal value ten year bonds to finance the purchase of Zinco. To make the bonds look attractive to potential investors, the bonds are to be issued at a discount of 10%. Based on PT's credit rating, investors are expected to require a return of 7% per year from such bonds.

You are required:

To estimate the coupon rate that PT will have to pay on these bonds in order to satisfy the investors. (5 Marks)

(Total 40 Marks)

SECTION B: OPEN-ENDED QUESTIONS (60 MARKS)

INSTRUCTION: YOU ARE REQUIRED TO ANSWER ANY THREE OUT OF FIVE QUESTIONS IN THIS SECTION

QUESTION 2

You should assume that the current date is 31 December 2019

You work for Eko Corporate Finance (ECF). One of the clients for whom you are responsible is Gap Plc (GP).

Gap Plc is a listed company and is seeking to raise ₦560 million to invest in new projects during 2020. Currently Gap Plc is financed by equity. However, at recent board meeting, the finance director stated that, since other companies in Gap's Plc industry have average gearing ratios (measured by debt/equity by market value) of 30% (with a maximum of 40%) and an average interest cover of 6 times (with a minimum of 5 times), perhaps the company should access the debt markets. The finance director presented to the board two alternative sources of finance to raise the ₦560 million.

Equity issue: The ₦560 million would be raised by a 1 for 2 rights issue, priced at a discount on the current market value of GP's shares.

Debt issue: The ₦560 million would be raised by an issue of 7% coupon bonds, redeemable on 31 December 2029. The yield to maturity (YTM) of the bonds would be equal to the YTM of the bonds of Eko Ventures (EV), another listed company in Gap's Plc market sector. Eko Ventures has a similar risk profile to Gap Plc and has recently issued its bonds. Eko Ventures' bonds have a coupon of 7%, will be redeemed in four years at par and their current market price is ₦110 per ₦100 nominal value.

There were concerns expressed by a number of board members regarding the debt issue since it has been the long-standing policy of the company not to borrow. Their concerns were how Gap's Plc shareholders and the stock market would react. The company's cost of capital would increase as a result of the borrowing, leading to a fall in the company's value.

An extract from Gap's Plc most recent management accounts is shown below:

	₦m
Operating profit	200
Taxations at 20%	(40)
Profit after tax	160

Additional information:

(i.) Gap Plc has an equity beta of 1.1
(ii.) The risk free rate is expected to be 3% p.a.
(iii.) The market return is expected to be 8% p.a.
(iv.) Gap's Plc current share price is ₦5 per share ex-div
(v.) Gap Plc has 320 million shares ordinary shares in issue.

Required:

a. Calculate, using the CAPM, Gap's Plc cost of capital on 31 December 2019 (1 Mark)

b. Assuming a 1 for 2 rights issue is made on 1 January 2020:
   i. Calculate the discount, the rights issue represents on Gap's Plc current share price (1 Mark)
   ii. Calculate the theoretical ex-rights price per share (1 Mark)
   iii. Discuss whether the actual share price is likely to be equal to the theoretical ex-rights price. (4 Marks)

c. **Alternatively, assuming debt is issued on 1 January 2020:**
   i. Calculate the issue price and total nominal value of the bonds that will have to be issued to give a YTM equal to that of Eko Ventures' bonds in the above calculation. (5 Marks)
   ii. Discuss the validity of the use of the YTM of Eko Ventures' bonds in the above calculations. (3 Marks)

d. Outline the advantages and disadvantages of the two alternative sources for raising the ₦560 million, discuss the concerns of the board regarding the bond issue (using the gearing and interest cover information provided by the finance director) and advise Gap's Plc board on which source of finance should be used. (5 Marks)

(Total 20 Marks)

QUESTION 3

You work with a large private company operating in several sectors of the Nigerian economy. The company is currently being prepared for listing on the stock market through introduction. You are part of the committee charged with the responsibility of providing corporate financial and non-financial information required for publicity. You are preparing an initial briefing to other members of the committee.

Required:

a. Discuss and provide examples of the types of non-financial, ethical and environmental issues that might influence the objectives of companies. Consider the impact of these non-financial, ethical and environmental issues on the achievement of primary financial objectives such as the maximisation of shareholder wealth. (12 Marks)

b. Discuss generally, the nature of the financial objectives that may be set in a not-for-profit organisation such as a charity or a hospital. (8 Marks)

(Total 20 Marks)

QUESTION 4

Kingston Plc. (KP) is a Nigerian company based in Aba. KP exports finished products to and imports raw materials from a company in Central Africa, with currency of Central Dollar (C$).

KP has the following expected transactions:

	C$
One month: Expected receipt	4,800,000
One month: Expected payment	2,800,000
Three month: Expected receipts	6,000,000

You have collected the following information:

	C$ per ₦ 1
Spot rate	1.7818 – 1.7822
One month forward rate	1.7826 – 1.7832
Three months forward rate	1.7842 – 1.7850

Money market rate for KP:

	Deposit	**Borrowing**
	%	**%**
Nigeria	9	12
Central Africa	13	15

Required:

a. Discuss the significance to a multinational company of economic exposure. (5 Marks)

b. Explain how inflation rates can be used to forecast exchange rates. (3 Marks)

c. Calculate the expected naira receipts in one month and in three months using the forward market. (3 Marks)

d. Calculate the expected naira receipts in three months using a money-market hedge and recommend whether a forward market hedge or a money-market hedge should be used. (5 Marks)

e. Discuss **FOUR** possible problems of using futures contracts to hedge exchange rate risks. (4 Marks)

(Total 20 Marks)

QUESTION 5

Ponk Plc is a market research company. It has seen significant growth in recent years and obtained a stock market listing 5 years ago. Due to current economic and political turmoil in the country, there has been a significant drop in revenue and profit.

Ponk Plc is planning a takeover bid for XY, a rival market research company specialising in the telecommunication industry – an industry that has been very resistant to the current economic turbulence in the country. XY has an advanced information technology and information system which was developed in-house and which Ponk Plc would acquire the rights to use. Ponk Plc plans to adopt XY's information technology and information system following the acquisition and this is expected to be a major contributor to the overall estimated synergistic benefits of the acquisition. These benefits are believed to worth ₦8million (in cash flow) at the end of the first year of acquisition and growing annually at 5%.

Ponk Plc has 30 million shares in issue and a current share price of ₦69 before any public announcement of the planned takeover.

XY has 5 million shares in issue and a current share price of ₦128.40.
It is believed that the WACC of the combined company will be 15% p.a.
The directors of Ponk are considering 2 alternative bid offers:
Bid offer 1 – Share based bid of 2 Ponk Plc shares for each of XY share.
Bid offer 2 – Cash offer of ₦135 per XY share.

Required:

a. Assuming synergistic benefits are realised, **evaluate** bid offer 1 and bid offer 2 from the viewpoint of:
   (i) Ponk's existing shareholders
   (ii) XY's shareholders. (10 Marks)

NOTE: (Up to 6 marks are available for calculations)

Advise the directors of Ponk Plc on:

b. (i) The potential impact on the shareholders of both Ponk and XY of not successfully realising the potential synergistic benefits after the takeover. (6 Marks)

NOTE: (Up to 4 marks are available for calculations)

(ii) The steps that could be taken to minimise the risk of failing to realise the potential synergistic benefits arising from the adoption of XY's information technology and information system (4 Marks)

(Total 20 Marks)

QUESTION 6

Tico Plc is comprised of only four major investment projects, details of which are as follows:

Project	% of company market value	Annual % return during the last 5 years	Risk % standard deviation	Correlation with the market
1	28	10	15	0.55
2	17	18	20	0.75
3	31	15	14	0.84
4	24	13	18	0.62

The risk free rate is expected to be 5% per year, the market return 14% per year, and the standard deviation of market returns 13%.

Required:

a. Assume that Tico Plc's shares are currently priced based upon the assumption that the last five years' experience of returns will continue for the foreseeable future. Evaluate whether or not the share price of Tico Plc. is undervalued or overvalued. (8 Marks)

b. Discuss why your results in (a) above might not correctly identify whether or not the share price of Tico Plc. is undervalued or overvalued. (6 Marks)

c. Briefly discuss the key limitations of portfolio theory in the analysis of physical investment decisions in practice. (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. $\frac{1 - (1 + r)^{-n}}{r}$

Where r = discount rate

n = number of periods

Discount rate (r)

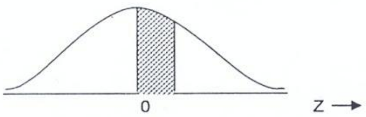
Periods

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

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

NORMAL DISTRIBUTION

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



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

SECTION A

SOLUTION 1

a) **Report**

The valuation of private companies involves considerable subjectivity. Many alternative solutions to one presented below are possible and equally valid.

As PT is considering the purchase of Zinco, this will involve gaining ownership through the purchase of Zinco's shares, hence an equity valuation is required.

Before undertaking any valuations it is advisable to recalculate the earnings for 2020 without the exceptional item. It is assumed that this is a one-off expense, which was not fully tax allowable.

The revised profit or loss is:

	2020
	₦'000
Sales revenue	112,400
Operating profit before exceptional items	6,510
Interest paid (net)	(1,400)
Profit before tax	5,110
Taxation (30%)	(1,533)
Profit after tax	3,577
Dividend	1,000
Change in equity	2,577

Estimated value = ₦3,577,000 x 30 = ₦107,310,000

i) **Asset-based valuation**

An asset valuation might be regarded as the absolute minimum value of the company. Asset-based valuations are most useful when the company is being liquidated and the assets disposed of. In an acquisition, where the company is a going concern, asset-based values do not fully value future cash flows, or items such as the value of human capital, market position, etc.

Asset values may be estimated using book values, which are of little use, replacement cost values, or disposal values. The information provided does not permit a full disposal value, although some adjustments to book value are possible. In this case, an asset valuation might be:

	₦000
Net assets	31,430
Patent	50,000
Inventory adjustment	(5,100)
	76,330

The value is not likely to be accurate as it assumes the economic value of non-current assets is the same as book value, which is very unlikely. The same argument may also be related to current assets and liabilities other than inventory.

ii) **P/E ratios**

P/E ratios of companies are sometimes used in order to value unlisted companies. This is problematic as the characteristics of all companies differ, and a P/E ratio valid for one company might not be relevant to another.

There is also a question of whether or not the P/E ratio should be adjusted downwards for an unlisted company, and how different expected growth rates should be allowed for.

Expected earnings growth for Zinco is much higher than the average for the industry, especially during the next three years. In view of this, it might be reasonable to apply a P/E ratio of at least the industry average when attempting to value Zinco.

The after-tax earnings of Zinco, based upon the revised statement of profit or loss, are ₦3,577,000.

Using P/E ratio of 30, this gives an estimated value of ₦3,577,000 × 30 = ₦107,310,000.

It could be argued that the value should be based upon the anticipated earnings rather than the past earnings months ago.

This is estimated to be:

	2021
	₦000
Sales revenue	140,500
Operating profit before exceptional items	11,240
Interest paid (net)	(1,750)
Profit before taxation	9,490
Taxation at 30%	(2,847)
Profit after tax	6,643
Estimated value = ₦6,643,000 × 30 =	199,290

This is a much higher value.
P/E – based valuation might also be criticised as it is based upon profits rather than cash flows.

iii) **Dividend-based valuation**

Dividend-based valuation assumes that the value of the company may be estimated as the present value of future dividends.

Using 2-Stage dividend model:

		₦000
Year 1 (2021)	$1,000(1.25) \times (1.12)^{-1} =$	1,116
Year 2 (2022)	$1,000(1.25)^2 \times (1.12)^{-2} =$	1,246
Year 3 (2023)	$1,000(1.25)^3 \times (1.12)^{-3} =$	1,390
Years 4 – infinity:		
	$\frac{1,000(1.25)^3 \times 1.1}{0.12 - 0.10} \times (1.12)^{-3} =$	76,461
Total value		**80,213**

This is a rather low estimated value and might be the result of Zinco having a relatively low dividend payout ratio, and no value being available for a final liquidating dividend.

iv) **The present value of expected future cash flows**

The present value of future cash flows will be estimated using the expected free cash flow to equity (FCFE). In theory, this is probably the best valuation method, but in reality, it is impossible for an acquiring company to make accurate estimates of these cash flows. The data below rely upon many assumptions about future growth rates and relationships between variables.

	2021	2022	2023
	₦000	₦000	₦000
Sales revenue	140,500	175,625	219,531
Operating profit	11,240	14,050	17,562
Interest paid (net)	(1,750)	(2,188)	(2,734)
Profit before tax	9,490	11,862	14,828
Tax at 30%	(2,847)	(3,559)	(4,448)
Profit after tax	6,643	8,303	10,380
Add back non-cash expenses	5,125	6,406	8,008
Less increase in working capital	(858)	(1,073)	(1,341)
Less capital expenditure	(6,250)	(7,813)	(9,766)
FCFE	4,660	5,823	7,281

The present value of FCFE is computed as follows:

			₦000
Year 1 (2021)	$4,660 \times (1.12)^{-1}$	=	4,161
2 (2022)	$5,823 \times (1.12)^{-2}$	=	4,642
3 (2023)	$7,281 \times (1.12)^{-3}$	=	5,182
4 – infinity:	$\frac{7281 \times 1.1}{0.12 - 0.10} \times (1.12)^{-3}$	=	285,036
	Total	=	**299,021**

Recommended valuation

It is impossible to produce an accurate valuation. The valuation using the dividend growth model is out of line with all others and will be ignored.

On the basis of this data, the minimum value should be the adjusted asset value, a little over ₦76,880,000, and the maximum approximately ₦299,021,000.

b) Let x = coupon rate

Annual coupon = 100X
Issue price = ₦90 (90% of ₦100)
The yield of 7% is the IRR of the cash flows associated with the bond. Therefore:

Year	CF	PVF at 7%	PV
0	(90)	1.000	(90.00)
1 – 10	100X	7.024	702.40X
10	100	0.508	50.80
NPV			702.40X – 39.20

By definition, this must equal to zero i.e

$702.40X - 39.20 = 0$

$X = \underline{5.58\%}$

Examiner's Report

The question tests candidates' knowledge of basic methods of valuation. Candidates were expected to value a company using the following methods:

- Asset basis
- P/E ratios
- Dividend basis
- Free cash flow to equity

They were also to comment on the accuracy of each of the methods:

Part (b) of the question tests basic knowledge of bond valuation.

Being a compulsory question, almost all the candidates attempted it. It is highly troubling that majority of the candidates could not provide any meaningful analysis.

Among the major challenges candidates faced in answering the question include:

- Inability to determine what constitutes cash flows in (a)(iv)
- Identifying the appropriate P/E to use in (a)(ii)
- Inability to identify the relevant present value formulae to use in (a)(iii) and (iv)

It is recommended that the students should practice examination-type questions and read extensively when preparing for the Institute's examination.

Marking guide

			Marks	Marks
(a)	(i)	Asset based valuation adjusting for inventory.	8	
	(ii)	P/E ratio based valuation adjusting for exceptional items thereby increasing the tax charge.	6	
	(iii)	Dividend based valuation using the expected present value of future dividends	6	
	(iv)	Present value of expected future cash flows based valuation using the adjusted figures and ignoring exceptional items	5	
	(v)	Discussing the potential accuracy of each of the valuation methods above (i-iv) and making recommendations giving reasons for a value or range of value that PT might bid for the purchase of Zinco	10	35
(b)		Calculation of coupon rate		5
				40

SOLUTION 2

a) Gaps Plc's cost of capital on December 2019 = 3 + (1.1 × (8 - 3)) = 8.5%

b) i) A 1 for 2 rights issue will require 320/2 = 160 million new shares to be issued.
The price per share = ₦560 million/160 million = ₦3.50
A discount on the current market price of (₦5 – 3.50)/5 = 30% (or ₦1.50).

ii) The theoretical ex-right price is:

	No of shares	Value per share	No per Value
		₦	₦
Existing shares	2	5.00	10.00
New shares	1	3.50	3.50
Total shares	3	Total value	13.50

Theoretical ex-rights price = ₦13.50/3 = ₦4.50

iii) The actual share price will depend on the market's reaction to the rights issue e.g. whether it is fully taken up, and whether the proceeds are invested in positive net present value projects.

If we were told the net present value of the projects, this could be incorporated in the theoretical ex-rights price of ₦4.50, giving a more realistic estimate of the actual share price post rights issue.

c) (i) The yield to maturity of the Eko Ventures bonds is calculated as follows:

Timing year	Cash Flow ₦	Factors at 3%	PV ₦	Factors at 10%	PV ₦
0	(110)	1	(110.00)	1	(110.00)
1 – 4	7	3.717	26.02	3.170	22.19
4	100	0.888	88.80	0.683	68.30
			4.82		(19.51)

IRR = 3 + (4.82/(4.82 + 19.51) × 7 = 4.39% say 4%

The issue price is:

Timing years	**Cash Flow ₦**	**Factors at 4.00%**	**PV ₦**
1 – 10	7	8.111	56.78
10	100	0.676	67.60
		Issue price	124.38

The total nominal value will be = 560/(124.38/100) = ₦450.23 million

ii) EV has similar risk to GP so it may be reasonable to assume that bond holders would require the same yield to maturity (YTM) in return for investing with either company. But how similar is similar? Eg, how comparable is EV to GP in terms of gearing?.

However the EV bonds have only four years until redemption, whilst the GP bonds mature in ten years. It is likely that bond holders would require a higher yield to redemption for investing in the GP bonds to compensate them for the risk of investing for a further six years.

d) The gearing and interest cover ratios of GP immediately after the bond issue will be as follows:

Interest cover: Interest ₦450.23 × 7% = ₦31.52m. Interest cover = (₦200/₦31.52) million = 6.35 times.

Gearing by market values assuming the current market price per share:

Market capitalisation 320 × 5 = ₦1,600 million. Gearing (D/E) 560/1,600 = 35% In time, both interest cover (more operating profits) and gearing (greater equity value) are likely to improve with the acceptance of positive NPV projects and any favourable market reaction to the issuance of debt and its tax shield.

An outline of general advantages and disadvantages of debt vs equity

- **Control:** if all the rights are not taken up by the existing shareholders, there will be dilution of control. Debt issue has neutral effect on control.
- **Cost:** debt should have lower cost of capital due to lower risk (both income and capital repayment) and the fact that interest on debt is allowed for corporate tax.
- **Security:** providers of debt finance will usually require some form of tangible security for any debt capital.
- **Cash flows:** while debt finance is cheaper than equity, it place on the company mandatory payment of interest. Payment of dividend depends on the availability of cash flow.

- **Issue cost:** generally, it is cheaper to issue equity (especially right-issue) than bonds.

  Note: Candidates might also comment on EPS and produce the following figures:

  Current EPS = ₦160m/320 = 50k

  EPS with rights issue = ₦160m/480 = 33k

  EPS with a bond issue: ((₦200m – 31.52) × 0.80)/320 = 42k

  Addressing the concerns of the board:

  The company will have a gearing ratio of 35% and an interest cover of 6.35 times. Gearing is between the industry maximum and average of 40% and 30% respectively. The interest cover is slightly above the industry average of 6. Since this is the first time that GP has borrowed, both shareholders and the stock market might be concerned and prefer these ratios to be around the averages or better.

  Borrowing should reduce the current 8.5% cost of capital of the company since debt is generally less expensive than equity because it is less risky than equity for the debt holders. Also the company receives tax relief on the interest that it pays. Because there is increased financial risk when a company borrows the shareholders may require a higher return but this is unlikely to offset the cheaper proportion of debt finance. The company value should increase as a result of the cost of capital reducing and new funds being invested in positive NPV projects.

  Advice: It would be prudent for the company to restrict its borrowing to the industry average gearing level especially since its interest cover is slightly above the industry average. I would advise the company not to borrow the full ₦560 million, perhaps this could be achieved by revising its plans for raising the finance. For example an issue of both debt and equity to ensure that gearing and interest cover ratios are more favourable. Or selling surplus assets.

Examiner's Report

The question tests candidates' knowledge of sundry issues on sources of long-term finance. Candidates were expected to compute ex-right price, issue price, YTM and to comment on the advantages and problems of equity issue vs bond issue.

More than 60% of the candidates attempted the question and again the level of performance was very poor.

Most of the candidates that attempted the question could not correctly calculate the issue price of the right issue; furthermore, they could also not calculate the issue price of the bond.

It is recommended that students should prepare adequately before presenting themselves for the Institute's examinations.

Marking guide

			Marks	**Marks**
(a)	Calculation of cost of capital – using CAPM			1
(b)	(i)	Calculation of the discount on the current market price	1	
	(ii)	Calculation of the theoretical ex-rights price	1	
	(iii)	Discussion on the actual share price viz-a-viz its likely equality with the theoretical ex-rights price	4	6
(c)	(i)	Calculations of the issue price and the total nominal Value of the shares of Eko Ventures bonds	5	
	(ii)	Discussion of the validity of the use of YTM of Eko Ventures bonds in the calculations	3	8
(d)	Calculation of the gearing and interest cover ratios of GP, immediately after the bond issue		2	
	Outlining the general advantages and disadvantages of debt Vs equity.		2	
	Addressing the concerns of the board		0.50	
	Advice		0.50	5
			Total	**20**

SOLUTION 3

a) Non-financial issues, ethical and environmental issues in many cases overlap, and have become of increasing significance to the achievement of primary financial objectives such as the maximisation of shareholder wealth. Most companies have a series of secondary objectives that encompass many of these issues.

   Traditional non-financial issues affecting companies include:

   i) **Measures that increase the welfare of employees** such as the provision of housing, good and safe working conditions, social and recreational facilities. These might also relate to managers and encompass generous perquisites.
   ii) **Welfare of the local community and society as a whole.** This has become of increasing significance, with companies accepting that they have some

responsibility beyond their normal stakeholders in that their actions may impact on the environment and the quality of life of third parties.

iii) **Provision of, or fulfilment of, a service.** Many organizations, both in the public sector and private sector provide a service, for example to remote communities, which would not be provided on purely economic grounds.

iv) **Growth of an organization,** which might bring more power, prestige, and a larger market share, but might adversely affect shareholder wealth.

v) **Quality,** many engineering companies have been accused of focusing upon quality rather than cost effective solutions.

vi) **Survival,** Although to some extent linked to financial objectives, managers might place corporate survival (and hence retaining their jobs) ahead of wealth maximisation. An obvious effect might be to avoid undertaking risky investments.

Ethical issues of companies were brought into sharp focus by the actions of Enron and others. There is a trade-off between applying a high standard of ethics and increasing cash flow or maximisation of shareholder wealth. A company might face ethical dilemmas with respect to the amount and accuracy of information it provides to its stakeholders. An ethical issue attracting much attention is the possible payment of excessive remuneration to senior directors, including very large bonuses and 'golden parachutes'.

Environmental issues might have very direct effects on companies. If natural resources become depleted the company may not be able to sustain its activities, weather and climate factors can influence the achievement of corporate objectives through their impact on crops, the availability of water etc. Extreme environmental disasters such as typhoons, floods, earthquakes, and volcanic eruptions will also impact on companies' cash flow, as will obvious environmental considerations such as the location of mountains, deserts, or communications facilities. Should companies develop new technologies that will improve the environment, such as cleaner petrol or alternative fuels? Such developments might not be the cheapest alternative.

Environmental legislations is a major influence in many countries. This includes limitations on where operations may be located and in what form, and regulations regarding waste products, noise and physical pollutants.

All of these issues have received considerable publicity and attention in recent years. Environmental pressure groups are prominent in many countries; companies are now producing social and environmental accounting reports, and/or corporate social responsibility reports. Companies increasingly have multiple objectives that address some or all of these three issues. In the short-term non-financial, ethical and environmental issues might result in a reduction in shareholder wealth; in the longer term, it is argued that only companies that address these issues will succeed.

b) In the case of a not-for-profit (NFP) organization, the limit on the services that can be provided is the amount of funds that are available in a given period. A key financial objective for an NFP organization such as a charity is therefore to raise as much funds as possible. The fund-raising efforts of a charity is therefore to raise as much funds as possible. The fund-raising efforts of a charity may be directed towards the public or to grant-making bodies. In addition, a charity may have income from investment made from surplus funds from previous periods. In any period, however, a charity is likely to know from previous experience the amount and timing of the funds available for use. The same is true for an NFP organization funded by the government, such as a hospital, since such an organization will operate under budget constraints or cash limits. Whether funded by the government or not, NFP organisation will therefore have the financial objective of keeping spending within budget, and budgets will play an important role in controlling spending and in specifying the level of services or programmes it is planned to provide.

Since the amount of funding available is limited, NFP organisations will seek to generate the maximum benefit from available funds. They will obtain resources for use by the organisation as economically as possible: they will employ these resources efficiently, minimising waste and cutting back on any activities that do not assist in achieving the organization's non-financial objectives; and they will ensure that their operations are directed as effectively as possible towards meeting their objectives. The goals of economy, efficiency and effectiveness are collectively referred to as value for money (VFM). Economy is concerned with minimising the input costs for a given level of output. Efficiency is concerned with maximising the outputs obtained from a given level of input resources, i.e with the process of transforming economic resources into desires services. Effectiveness is concerned with the extent to which non-financial organizational goals are achieved. Measuring the achievement of the financial objective of VFM is difficult because the non-financial goals of NFP organisations are not quantifiable and so not directly measurable. However, current performance can be compared to historic performance to ascertain the extent to which positive change has occurred. The availability of the healthcare provided by a hospital, for example, can be measured by the time that the patients have to wait for treatment or for an operation, and waiting times can be compared year on year to determine the extent to which improvements have been achieved or publicised targets have been met.

Lacking a profit motive, NFP organizations will have financial objectives that relate to the effective use of resources, such as achieving a target return on capital employed. In an organization funded by the government from finance raised through taxation or public sector borrowing, this financial objective will be centrally imposed.

Examiner's report

The question tests the candidates' knowledge of non-financial objectives and ethical issues in finance.

In part (a), candidates were expected to discuss the types of non-financial, ethical and environmental factors that shape company's financial objectives.

In part (b), they were expected to discuss the nature of financial objectives in a not-for-profit organisations.

Large number of the candidates attempted the question and surprisingly, the level of performance was below average.

In both parts of the question, candidates could not provide meaningful response to the requirements.

It is our view that the only insurance against poor performance is wide reading.

Marking guide

		Marks	**Marks**
(a)	Discussing and providing examples of non-financial issues and considering its impacts on the achievement of primary financial objectives – 1 mark per valid point max 5 points	5	
	Discussing and providing examples of ethical issues and considering the impact on the achievement of primary financial objectives. 1 mark per valid point Max 3 points	3	
	Discussing and providing examples of environmental issue and considerations of its impact on the achievement of company's corporate financial objectives – 1 mark per point, max 4 points	4	12
(b)	General discussion on the nature of the financial objectives that may be set in a not-for-profit organizations – 2 max per valid point, max 4 points		8
		Total	**20**

SOLUTION 4

a) **Economic exposure**

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

Implications of economic exposure

i) **Effect on international competitiveness**
This can affect companies through its purchases (where raw materials from abroad become more expensive because of a devaluation of the home currency) or its sales (where an appreciation in the home currency will mean that sales priced in foreign currencies will be worth less in home currency terms).

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

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

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

b) The law of one price suggests that identical goods selling in different countries should sell at the same price, and that exchange rates relate these identical values.
This leads on to purchasing power parity theory, which suggests that changes in exchange rates over time must reflect relative changes in inflation between two countries. If purchasing power parity holds true, the expected forward exchange rate (F) can be forecast from the current spot rate (S) using the following formula:

$$\frac{1 + i_F}{1 + i_D} = \frac{S}{F} \text{ (DC/FC) where:}$$

i_F = foreign inflation rate
i_D = domestic inflation rate

This relationship has been found to hold in the longer-term rather than the shorter-term and so tends to be used for forecasting exchange rates several years in the future, rather than for periods of less than one year. For shorter periods, forward rate can be calculated using interest rate parity, which suggests that changes in exchange rates reflect differences between interest rates between countries.

c) The exchange rate can be stated as follows:

	C$/₦		₦/C$
Spot	1.7818 – 1.7822	or	0.5611 – 0.5612
1 – month forward	1.7826 – 1.7832	or	0.5608 – 0.5610
3 – month forward	1.7842 – 1.7850	or	0.5602 – 0.5605

Forward Market

- Net receipt in 1 month = C$4,800,000 - C$2,800,000 = C$2,000,000
  Applicable exchange rate = ₦0.5608/C$
  Amount in ₦ = 2,000,000 × ₦0.5608 = ₦1,121,600

- Receipt in 3 months = C$6,000,000
  Applicable rate = ₦0.5602/C$
  Amount in ₦ = 6,000,000 × ₦0.5602 = ₦3,361,200

d) **Money market**
Expected receipt after 3 months = C$6,000,000
C$ 3 – month borrowing interest rate = 15/4 = 3.75%
C$ to borrow now to have C$ 6,000,000 liability after 3 months =
C$ 6,000,000/1.0375 = C$5,783,133 spot rate for selling = ₦0.5611/C$
Amount of naira to deposit now = 5,783,133 × 0.5611 = ₦3,244,916
Naira deposit rate over 3 months = 9/4 = 2.25%
Value of deposit in after 3 months = ₦3,244,916 × 1.0225 = ₦3,317,927

Based on the above calculations, the forward market rate provides higher net receipt.

e) The following problems are encountered in using futures contracts to hedge exchange rate risks:
- Futures contracts are only available in certain currencies. If you are due to receive a currency in the future for which futures contracts are not offered, then you will have to find a different way to hedge the risk.
- Futures contracts are only available for expiry in certain months. If you are due to receive a foreign currency in the future on a date which does not tie in with a contract expiry date, then a perfect hedge will not be possible.
- Futures contracts are available in whole numbers of contracts, for a fixed size. Usually the sum to be hedged will not equate to a whole number of contracts, leaving the fractional amount either unhedged or to be hedged using a different method (e.g. a forward FX contract).
- Margin must be paid on futures contracts, both an initial margin payable immediately that the contact is taken out and a daily variation margin as the value of the contract fluctuates. A company with poor liquidity may therefore prefer a different method of hedging, such as forward exchange contract on which no margin is payable.

- Futures contracts can be technically difficult to understand, so good training is required for employees if a company is going to start managing risk using futures. Such training is expensive but the risk of disaster if no one understands what is going on is very real, as has been proved over and over in recent history.
- Futures contracts expose the holder to basis risk, i.e. the risk that when a hedge is constructed, the size of the basis when the futures position is closed out is different from the expectation, when the hedge was created, of what the basis ought to be. It would be possible to hold all contracts to their expiry date, knowing that the basis must be zero by that date, but in practice nearly all futures contracts are closed out before expiry, so basis risk will be inevitable.

Examiner's report

The questions tests candidates' knowledge of management of foreign currency risk.

Part (a) tests the candidates' knowledge of economic exposure:

- The importance to multinational companies
- The remaining parts of the question deal with various FX risk hedging techniques

Less than 10% of the candidates attempted the question and performance was very poor.

In part (a), some of the candidates were discussing advantages of international trade!

In part (b), the candidates demonstrated absolute lack of knowledge of purchasing power parity theorem.

Furthermore, in answering parts (c) and (d), most of the candidates failed to recognise the need to net off the payment and against receipt in month one. In addition, candidates could not identify the appropriate exchange rates to use.

A complete coverage of the Institute's syllabus is a necessity when preparing for this examination.

Marking guide

		Marks	Marks
(a)	Discussing the significance and implications of economic exposure to a multinational company. 1 mark per valid point, max 5 points		
(b)	Explaining the role inflation rates play in forecasting expected exchange rates	1	
	Stating the formula normally used in forecasting expected forward exchange rate from current spot rate.	1	
	Discussing the relationship between exchange rate, interest rate, inflation rate and the law of one price	1	3
(c)	Computation of net-receipt in 1 month using the forward market rate	1.50	
	Computation of the receipt in 3 months using the forward market rate	1.50	3
(d)	Calculations of 3 months borrowing interest rate	0.5	
	Determining the spot rate for selling i.e. the selling rate	1.0	
	Computation of the amount of Naira to deposit now	1.0	
	Computation of the Naira deposit rate over 3 months	0.5	
	Calculation of the value of deposit after 3 months	1.0	
	Recommendation	1.0	5
(e)	Discussing problems usually encountered in using future contracts to hedge exchange rates risks. 1 mark per valid point, max 4 points		4
		Total	**20**

SOLUTION 5

a) The present value of the synergistic benefits is:
₦8million/(0.15 – 0.05) = ₦80 million

Current values

	₦million
PK 30 million × ₦69	= 2,070
XY 5 million × ₦128.40	= 642
	2,712

i) **Share offer**

Total market value after take over:

	₦million
Existing total value	2,712
Synergies	80
	2,792

Total number of shares:

Currently in PK	30	million

Issued to XY = 5 × 2	10 million		
	40 million		
Post-takeover VPS =	$^{2,792}/_{40}$	=	₦69.80 million

ii) **Cash offer**

	₦million
Post-takeover total value as above	₦2,792
Cash paid for XY (5 million × ₦135)	(675)
Value of existing shareholders in PK	2,117
VPS of PK = 2,117/30	= ₦70.57/share.

Comments

- The above calculations indicate that the bid offer is advantageous to both PK and XY shareholders assuming that the synergistic benefits are realised.
- PK shareholders can expect to make a higher financial gain under the cash offer than under the share offer. Under the cash offer, the share price is expected to increase from ₦69 to ₦70.57, a gain of ₦1.57 per share and ₦47.10 million in total. Under the share offer, a lower rise in the share price is expected, from ₦69 to ₦69.80 per share, a total gain of ₦24million.
- XY shareholders can expect to benefit from an immediate and certain gain of ₦33 million (₦675 – ₦642) under the cash offer. They need to weigh this up against a theoretical gain of ₦56 million ((69.80 × 10) – 642) from the share offer.

  However, the share offer carries greater risk for the shareholders of XY because they are exposed to the risk of a fall in the share price of PK if the market fails to respond to the merger favourably and/or the potential synergistic benefits are not realised.
- The cash offer has advantage of protecting the proportionate ownership of the current shareholders of PK. After the share offer there would be 40 million shares on issue, including 10 million held by the previous shareholders of XY.
- PK has to consider how to raise ₦675 million cash required under the cash offer. The impact of such a payment on gearing.
- The share offer also has cash flow implications in paying future dividends on a large number of shares. This could have an even greater call on over time but has a delayed impact on cash flow.

b) i) Assuming no synergistic benefits, the combined entity would be worth ₦80 million less at ₦2,712 million.

Share offer

The new VPS is = $^{2,712m}/_{40m}$ = ₦67.80

Revised total value of:

	₦'million
– PK 30m shares × ₦67.80	= 2,034
– XY 10m shares × ₦67.80	= 678
	2,712

Cash offer

		₦'million
Combined total value		2,712
Cash paid for XY		(675)
Value of current shareholders in PK		2,037
VPS = $^{2,037}/_{30}$	=	₦67.90

Comments

- If the synergistic benefits fail to be realised, the takeover would only be beneficial to XY's shareholders.

- PK's shareholders can expect to see a fall in share price under both the share offer and the cash offer (in the order of ₦36 million for the share offer and ₦33 million for the cash bid). The acquisition will therefore only be attractive to PK's shareholders if additional benefits can be realised such as the synergistic benefits arising from improved IT/IS systems to enhance future growth through the business.

- XY's shareholders would expect to benefit from an immediate and certain financial gain of ₦36 million (₦678m – ₦642m) under the share offer. However, the share offer carries greater risk for the shareholders of XY because they are exposed to the risk of a fall in the share price of PK if the market fails to respond to the merger favourably.

ii) The realisation of synergistic benefits will depend upon a smooth and efficient integration process, Key issues to discuss:

- Careful planning – detailed timetable, allocated responsibilities, interim targets.
- Retention of key personnel (programmers and operators) - possibly by offering enhanced packages and by keeping personnel fully informed.
- Building good relationships between staff transferring from XY to PK.
- Training of key personnel on how to operate the system.

- Parallel running of the system and possible test data before going live.
- Looking at post completion audit reports of any such projects that have happened before to see if any lessons can be learnt.
- Proper management control via regular meetings and involvement of key personnel throughout.

Examiner's report

The question tests candidates' knowledge of various aspects of merger and acquisition. Candidates were expected to quantify the possible financial gains of the merger to shareholders of both companies.

About 60% of the candidates attempted the question and once again, performance was below average. This is despite the fact that the question was in the examination in the year 2019!

Candidates could not logically analyse the financial impact of the merger on the shareholders. They also failed to apply the appropriate valuation models in their solutions. For example, in part (a), they could not recognise the need to apply perpetual growth model to value the synergy arising from the merger.

The fact that the question was tested in a recent examination underscores the need for candidates to revise with the Institute's pathfinder when preparing for the examination.

Marking guide

		Marks	Marks
(a)	Calculation of the present value of the synergistic benefit	0.5	
	Computation of the current values of PK and XY shares	1.0	
	Calculating the total market value after take over	1.0	
	Determining the total number of shares after the take over	1.0	
	Computing the post take over value per shares	1.0	
	Determining the value of existing shares in PK after the cash offer	1.0	
	Value of PK shares after the take over	0.5	
	Comments based on the calculations	4.0	10
(b)(i)	Calculation of the new value per share based on share offer	1.0	
	Determining the revised total value of PK and XY shares based on share offer	1.0	
	Calculation of the wealth of the current shareholders in PK based on cash offer	1.0	
	Determining the new value per share in PK based on cash offer	1.0	
	Comments based on the calculations	2.0	6
(ii)	Discussing the steps to take in minimizing the risk of failing to realize the potential synergistic benefits 1 mark per point, max 4 points		4
		Total	**20**

SOLUTION 6

a) The beta value of each of the four projects may be estimated using:
Correlation coefficient of the project (R_{im}) and the market multiplied by the standard deviation of the project's returns (σ_i), and all divided by the standard deviation of returns from the market (σ_m).

$$\text{beta} = \frac{R_{im}\sigma_i}{\sigma_m}$$

$$\text{Project 1} = \frac{0.55 \times 15}{13} = 0.635$$

$$\text{Project 2} = \frac{0.75 \times 20}{13} = 1.154$$

$$\text{Project 3} = \frac{0.84 \times 14}{13} = 0.905$$

$$\text{Project 4} = \frac{0.62 \times 18}{13} = 0.858$$

The overall company beta is the weighted average of the project betas, the weighting being by their proportion of total market value. The beta of TK is estimated to be:

$(0.28 \times 0.635) + (0.17 \times 1.154) + (0.31 \times 0.905) + (0.24 \times 0.858) = 0.860$

Using the capital asset pricing model, the return that might be expected from TK may be estimated to be:
5% + (14% - 5%) 0.860 = 12.74%

The return historically has been:
$(0.28 \times 10\%) + (0.17 \times 18\%) + (0.31 \times 15\%) + (0.24 \times 13\%) = 13.63\%$

Assuming these historic returns are expected to continue, the share price of TK is likely to be undervalued, as the company is yielding a higher return than expected for its systematic risk.

b) Reasons why the results may not correctly identify whether the share price is overvalued or undervalued include:
   i) The data relating to returns, risk and correlation with the market is historic and is unlikely to repeat itself in the future. Betas may change

over time, reflecting changes in the risk of the projects. Ideally CAPM should use forecasts of data, but these will also be subject to inaccuracy.

ii) The market may not be totally efficient and may not accurately reflect information available. Alternatively, the market may only be semi-strong form efficient and not have knowledge of the full information known internally within the company.

iii) The capital asset pricing model (CAPM) upon which the evaluation is based relies upon a series of restrictive assumptions, and there is evidence that it might overstate or understate the required returns on high beta and low beta securities, small companies, investments with low PE ratios, and in certain seasons or on certain days of the week. It is only a single period, single factor model, whereas multi-factor models such as the arbitrage pricing theory might be more accurate.

iv) The market risk premium may not be constant. The difference between the market return and the risk free rate can vary over time.

c) **Limitations of Portfolio Theory**

i. Projects may be of such size that they are not easy to divide in accordance with recommended diversification principles.

ii. The theory assumes that there are constant returns to scale, in other words that the percentage returns provided by a project are the same however much is invested in it. In practice, there may be economics of scale to be gained from making a larger investment in a single project.

iii. It will be difficult in practical cases to know what are shareholders preferences between risk and return and therefore to reflect these preferences in decision-making.

iv. Portfolio theory requires an assessment of probability distribution of the possible outcomes. An objective probability assessment is difficult in practice.

v. Portfolio theory is based on the notion of managers assessing the relevant probabilities and deciding the combination of activities which a business will be involved. Managers have the security of their jobs to consider, while the shareholders can easily buy and sell securities. Managers are considerably less mobile and less well diversified than shareholders who can buy & sell securities more or less at will. Most managers are therefore more risk-averse than shareholders resulting in the likelihood of sub-optimal investment decisions.

vi. The mathematics required to handle portfolio comprising of many assets is far beyond the comprehension of many managers.

Examiner's report

The question tests candidates' knowledge of securities' valuation using CAPM. Candidates were expected to:

- Calculate the historical beta factor of each of the company's projects;
- Calculate the average beta factor of the company;

- Calculate, using CAPM, the company's required return;
- Calculate the company's actual average historical return;
- Conclude whether or not the company's share price is undervalued or overvalued.

They were also required to assess the validity of CAPM conclusion. Almost all the candidates attempted the question and performance was very poor.

In part (a), most of the candidates were assessing the individual projects rather than the company as a whole! Besides, some of them made use of wrong formulae when calculating beta factor. In parts (b) and (c), most of the candidates could not produce any meaningful answer.

Candidates are advised to read widely and practise examination-type of questions when preparing for the examination.

Marking guide

		Marks	Marks
(a)	Calculating the 'beta' for each project. 1 mark for each calculation 4 projects	4.0	
	Calculating the overall beta of the projects using WACC	1.5	
	Calculating the expected return from TK using CAPM	0.5	
	Computing the historic return on TK shares	1.5	
	Comment on the result of the historical return	0.5	8
(b)(i)	Discussions on why the results of the calculation above may not correctly identify whether the share price is over-valued or undervalued. 2 marks per valid point discussed. Max 3 points		6
(ii)	Discussing the steps to take in minimizing the risk of failing to realize the potential synergistic benefits $1^1/_2$ mark per point, max 4 points		6
		Total	**20**

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

PROFESSIONAL LEVEL EXAMINATION – MAY 2021

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

a. Blackmart Plc is one of your listed audit clients which offers property management, property financing and mortgage services to its clients. During the audit of the company, the following matters came to your attention:

(i) Grace Sadiku, one of the audit team members has provisionally agreed to take out a mortgage facility with a duration of 10 years using the facility of Blackmart Plc to finance her first residential property. In the area where the property is located, the first residential property gets full tax waiver on the entire installments paid within the first 5 years which is usually a significant tax incentive. The mortgage facility would be secured by the property and it has been defined as the best offer available in the market;

(ii) Also, during the period, the Human Resources (HR) Manager of Blackmart Plc resigned, and the company had reached out to your firm to provide a staff on secondment till a substantive HR Manager is appointed;

(iii) The management of Blackmart has also informed your audit team that the company maintains only two bank accounts and there will be no need to circularise the banks as the auditors can rely on the balances as generated from the bank's portal as at the end of the year; and

(iv) The audit committee has asked your firm to work with the internal audit team to design internal controls over the part of the accounting system which deals with revenue, and also evaluate the operating effectiveness of the internal controls.

Required:
Prepare a memo to your Manager, commenting on the professional and ethical issues arising from the audit of Blackmart Plc and also suggest to him/her on how to manage the identified issues. (15 Marks)

b. During the audit year, on the review of the audit work done on Community Microfinance Bank (a new significant audit client), you noted the following issues:

- At the audit strategy stage, it was agreed that the audit of loans and advances would involve reliance on the effectiveness of internal controls. However, during the test of controls, it was noted that five loans were not approved by the appropriate approving officers. Further review indicated that the loans were genuinely issued to customers but were only approved by officers whose approval limit have been exceeded;

- During the period under review, the tax authority carried out a tax investigation and noted significant variance between the company's estimated tax liabilities and the tax authority's position. From further discussion, it was noted that the previous tax computation was done by a junior staff who does not have the requisite experience and the computations were not duly reviewed by experienced senior officers of the company;

- The company deployed a new loan disbursement software which is linked to the financial reporting software. From your review of the new software, the initiator of a transaction could approve the same transaction as long as he/she changes the designation to approving authorities after initiation. You have flagged this as a possible control risk; and

- During your review of the receivables account, a variation was noted between the amount in a customer's receivables balance in the ledger and the client confirmation. However, the variance was considered not material and not adjusted for. During discussion with the Receivables Manager, it came to your attention that the client in focus is a family member of the Managing Director.

The team is considering the impact of the above observations on the audit.

Required:

(i) Draft a report to management evaluating the implications of the above observations on the control environment and the audit strategy/procedures. (15 Marks)

(ii) Comment on whether the issues are to be reported to those charged with governance of the entity. (10 Marks)

(Total 40 Marks)

SECTION B: OPEN-ENDED QUESTIONS (60 MARKS)

INSTRUCTION: YOU ARE REQUIRED TO ANSWER ANY THREE OUT OF THE FIVE QUESTIONS IN THIS SECTION

QUESTION 2

You are a partner in an audit firm – Dogba & Associates. One of your prospective clients is Edith Enterprises Nigeria Limited, a manufacturer of steel rods. Edith Enterprises is a private company set up by Madam Edith Adagba in 1985. Madam Adagba has since retired and handed over the running of the company to her daughter, Hauwa. Hauwa is determined to expand the operations of the company and has decided to go to the capital market for financing.

Hauwa has contacted Dogba & Associates and requested that the firm should act as reporting accountants by reviewing and reporting on its prospective financial information which has been prepared as part of the offer.

The audit firm has asked that you handle the engagement. In preparing for the engagement, **you are required** to do the following:

a. Explain the matters, as required by ISQC 1 and ISAE 3400, which you would consider before accepting the engagement to review and report on the client's prospective financial information. (6 Marks)

b. Assuming you choose to accept the engagement, recommend the examination procedures to be performed in respect of the review of the prospective profit or loss information. (9 Marks)

c. Prepare an extract of an unmodified report that the auditor could issue on the prospective financial information. (5 Marks)

(Total 20 Marks)

QUESTION 3

You are the manager responsible for the audit of Seraphim Nigeria Limited, a manufacturing company which produces biscuits. The company's financial year ended on December 31, 2018 and you are reviewing the audit work which was completed on a number of material balances and transactions: assets held for sale, capital expenditure and payroll expenses. A summary of the audit procedures carried out by the audit team is given below:

(i) **Provision for restructuring:** The board approved changes in the management structure of the company. The directors determined that the company was 'top heavy' and decided that 80% of the middle management staff should be laid off. The Finance Director had estimated the cost of the restructuring to be ₦180 million and a manual journal has been posted to record a provision for restructuring costs. The Finance Director has overridden the segregation of duties control by posting this journal and approving it himself. He told the team that he had done it because he wanted to preserve the confidentiality of the transaction. The audit team discussed the planned restructuring with the Managing Director (MD). The audit team relied on the discussions with the MD and the board resolution approving the restructuring as audit evidence.

(ii) **Investments:** The company's investments trading portfolio is outsourced to a fund manager - Hala Funds Management Limited, which processed all trades done by the company. The investments balance and income on investments recorded in the financial statements have been traced and agreed to year end reports from the service organisation. The audit team relied on the reports from the fund manager which was given to them by the Chief Financial Officer (CFO) of the company. Based on discussions, the audit team determined that the CFO had not classified the investments in line with the requirements of IFRS 9 and the interest income on its bonds investment were computed using the contractual rate.

The company made some investments directly without passing them through the fund manager, this is not in line with the company's policy. The audit team traced and agreed those transactions to the bank statement. The amounts of investments made directly without involving the fund manager were not considered material.

Required:

For each of the two matters described above;

a. Comment on the sufficiency and appropriateness of the audit evidence obtained. (10 Marks)

b. Recommend further audit procedures to be performed by the audit team. (8 Marks)

c. Explain the matters which should be included in a report in accordance with ISA 265: Communicating Deficiencies in Internal Controls to Those Charged with Governance and Management. (2 Marks)

(Total 20 Marks)

QUESTION 4

As a Senior Manager in Inagbe and Co. (Chartered Accountants), you act as a mentor to some of the young auditors in practice. As a mentor, you discuss frequently with your young mentees on professional and personal matters. Zainab Nigeria Limited is a cosmetics company and has just recently appointed Inagbe and Co. as its auditor. One of your young mentees has been asked to be part of the engagement team. The mentee has come to you for some advice and you decided to use the opportunity to explain the process and procedures to be carried out when accepting a new engagement.

Required:

a. Explain the elements of an engagement letter. (7 Marks)

b. Discuss the circumstances under which an auditor may reject an audit engagement. (3 Marks)

c. Discuss the procedures that an audit firm needs to carry out before accepting to audit a new client. (4 Marks)

d. Explain the audit procedures that should be carried out on opening balances. (6 Marks)

(Total 20 Marks)

QUESTION 5

Judi Nigeria Limited is a company that manufactures bicycles. The company acquired M&M Tires Limited, a manufacturer of tyres, in 2018 financial year. Six months after the acquisition, M&M Tires declared for bankruptcy.

The management of Judi Nigeria alleged that there had been financial impropriety by the previous management of M&M and that the 2017 financial statements of the company did not show a true and fair view of its financial performance. The management of Judi Nigeria Limited also alleged that the auditors of M&M had been negligent in carrying out the audit.

The Managing Director has asked your audit firm to carry out a forensic audit to determine if the auditors were negligent in their duties.

Required:

a. Distinguish among forensic accounting, forensic investigation and forensic audit. (6 Marks)

b. Identify the various government agencies associated with forensic auditing. (4 Marks)

c. Apply the fundamental ethical principles to forensic auditor's engagement. (5 Marks)

d. Describe the procedures to be adopted by an auditor in a forensic audit. (5 Marks)

(Total 20 Marks)

QUESTION 6

Wazobia Nigeria Limited is a manufacturer of corrugated zinc roofs. Due to the economic recession, revenue continued to decline each year for the past three years. You are aware that the company had only ₦300,000 in cash at the year end.

Extracts from the draft financial statements and other relevant information are given below.

	December 2018 (Draft) ₦'000	**December 2017** (Actual) ₦'000
Revenue	48,921	60,956
Operating expenses	(150,680)	(158,677)
Finance charge	(7,500)	(5,000)
Loss before tax	(109,259)	(102,721)
Total assets	600,500	645,600
Long-term liabilities – bank loan	1,400,000	300,000
Short-term liabilities – trade payables	280,000	80,000
Disclosed in notes to financial statements:		
Undrawn borrowing facilities	3,100,000	200,000
Contingent liability	4 ,350,000	-

Additional information:

(i) The bank loan was obtained in 2016 when the company started recording losses. The collateral for the loan is a fixed and floating charge on the assets of the company to the tune of the loan balance. The first tranche of repayment of the loan is due in 2019 and the amount repayable is ₦300 million.

(ii) Wazobia renegotiated its credit line with a major supplier and extended payment terms from 60 days to 90 days in order to improve working capital.

(iii) The terms for accessing the undrawn facilities stipulate that the company must meet certain covenants, including that interest cover is maintained at 2:1 and the ratio of bank loan to total assets does not exceed 1:1.

(iv) The contingent liability relates to litigation against the company by one of its customers for an alleged breach of contract to supply roofing sheets based on agreed specifications.

Required:

a. Identify and explain the matters which may cast significant doubt on the company's ability to continue as a going concern in the foreseeable future. (10 Marks)

b. Recommend the appropriate audit procedures to be performed to adequately address the going concern matters identified. (10 Marks)

(Total 20 Marks)

SOLUTION 1

1. (a) From: The Audit Senior To:
The Audit Manager
Title: Memo on ethical and professional considerations relating to Blackmart Plc.

Evaluation of ethical and professional issues and the actions on them are a vital part of the assessment of an auditor's independence. An auditor is expected to be seen to be independent both in appearance and in action.

The issues identified and the circumstances thereof are as given hereunder:

Mortgage facility

In line with the IESBA Code of Ethics for Professional Accountants (the Code), a loan to a member of the audit team may create a threat to the auditor's independence especially if such facility is not granted under the normal market conditions.

The following are issues addressed:

- The risk of self-interest may exist and may threaten the independence of the audit team members as it may serve as a motivation to influence her decisions and opinion;

- The team is advised to establish that the loan was given under normal market conditions by comparing the terms and conditions to other mortgage facilities given by the entity;

- Securitization of the loan with the property does not pose any ethical Threat;

  The tax waiver does not constitute any threat as it is generally available to anybody;

- An acceptable safeguard such as the withdrawal of the team member, non-acceptance of the loan by the team member or seeking for the loan in another institution that offer same services may be put in place; and

- The Engagement Partner and other senior members of the team may also review the situation and apply applicable safeguards if the team member is a junior staff without the power of decision on the team.

Secondment of Staff

(i) A loan staff secondment situation may lead to a self-review threat to the auditor's independence. They may over-rely on the work done by the loan staff or will not apply an appropriate level of scepticism when assessing the work.

(ii) According to the IESBA Code, an audit firm cannot provide accounting and bookkeeping services to an audit client which is a public interest entity unless the services relate to matters which are collectively immaterial to the financial statements.

(iii) The team needs to establish whether the HR service role is significant to the financial statements. Where it is considered significant, the audit firm should not provide the staff. Where it is considered immaterial, the staff can be provided with appropriate safeguards put in place.

(iv) Assurance providers should not serve as an officer or director of the assurance client. However, providing routine administrative services such as those provided by a company secretary may be appropriate. It is important not to be involved in making management decision.

Balance confirmation

(i) Balance on bank portal might seem reliable. The auditor has a right to implement additional audit procedures to satisfy himself/herself.

(ii) The audit firm is exposed to the risk of not obtaining appropriate evidence and issuing an opinion without obtaining appropriate and sufficient evidence.

(iii) This can be seen as a familiarity threat.

(iv) The Partner is advised to communicate this to the Board or those charged with governance. Where there is no change, an opinion with a limitation/ subject to paragraph should be considered.

Internal audit

(i) A self review threat arises from the audit committee's request for the audit team to work with the internal audit team to design and evaluate internal controls relating to revenue. The code of corporate governance suggests that providing an audit client with an internal audit service might create a self-review threat to objectivity. This is because in subsequent audits, the audit team may use the management work done with the internal audit in the audit of revenue. They may over-rely on the internal controls designed and evaluated by the audit firm or will not apply an appropriate level of scepticism when assessing the work.

(ii) A threat of management responsibility arises, whereby the audit firm is making decisions and using judgment which is properly the responsibility of management. The Code states that taking responsibility for designing, implementing, monitoring and maintaining internal control is assuming management responsibility. According to the Code, an audit firm must not assume management responsibility for an audit client because the threat to independence created is so significant that no safeguards could reduce it to an acceptable level.

(iii) The audit firm should politely decline the request made by the audit committee and ensure that the committee is fully aware of the ethical issues raised by their requests.

(b) **Wazobia & Co,**
4, Allen Avenue, Ikeja Lagos

May 7, 2021

Board of Directors
Community Microfinance Bank
4, Sabo Road
Yaba
Lagos

Dear Sirs,

RE: REPORT ON THE IMPLICATIONS OF OBSERVATIONS DURING THE AUDIT OF COMMUNITY MICROFINANCE BANK

During the course of our audit, we came across certain weaknesses in your accounting and internal control systems which we consider should be brought to your attention. These are discussed below:

- **Loans and advances**
  The absence of appropriate approval and authorisation of the selected loans represent an exception to the effective operation of the controls, hence the auditor may not rely on such controls or perform additional procedures during the substantive phase.

  The genuineness of the loans after extensive reviews does not resolve the exception in the effective operation of the control, hence the control is still deemed ineffective as there exist the chances that other loans may have been disbursed without appropriate authorisation.

  The impact on the audit is that the team will need to perform additional procedures and may not rely on such controls. Prior to finalising the audit, the audit team needs to assess the extent and significance of the internal controls as this may be in the form of increase in sample size, extent the audit focus to other balances with similar controls. The team should also consider including the matter in the report to management as this is a significant deficiency in the operations of internal control.

- **Tax investigation**
  The non-review of the tax computations indicate a deficiency in the management controls around the computation of tax balances. It would lead to additional tax liability and penalty. Similar to the above, the control is deemed ineffective and as such, the audit team should design appropriate audit procedures to review the

management tax estimates. The control lapse should also be reported to those charged with governance.

- **Loan disbursement software**
  The initiation and subsequent authorisation of transactions is a significant deficiency in internal controls. These should be communicated to the management. The audit team is now expected to perform extensive procedures over the balances generated over the new software. The team may not place reliance on the software. A fraud risk may be attached to the balances generated from such software.

- **Receivables account**
  There was the non-disclosure of related party transaction, but there exists no risk in the balance since the difference is not material. The audit team may wish to perform additional procedures to establish if same pattern exists.

(c) **Issues are evaluated and are usually submitted to those charged with governance**

i. Non- adherence to approval limits for loans and advances
The risk exists that loans will be disbursed without the right level of risk assessment, thereby leading to higher credit losses for the bank.

This is significant risk and therefore should be reported to those charged with governance for appropriate remedial action.

ii. Non review of tax computation
There is a risk that the tax computations might be significantly misstated leading to a misstatement of the financial statements and possible penalties form the tax authorities;

This is a significant risk, therefore, it should be reported to those charged with governance for appropriate remedial action;

iii. Same initiation and authorization of loan disbursed
The risk exists that the lapse in the control of segregation of duties could lead to material misstatements due to fraud and/or error;

This is a significant risk therefore, should be reported to those charged with governance for appropriate remedial action;

iv. Variation in receivables account
Variation in receivables was considered not material and not adjusted for.

v. This level of deficiency is not significant, therefore, needs not be escalated to those charged with governance.

Examiner's report

The question tests candidates' knowledge of the professional and ethical issues in an auditors' relationship with a client. It also tests their knowledge on the evaluation of control environments, communication with management and those charged with governance.

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

The commonest pitfalls of the candidates were their lack of essential knowledge of the rules of professional conduct of accountants, the difficulty in identifying the indicators that pose specific threats from the scenario created and their display of poor knowledge on how to draft official reports.

Candidates are advised to familiarize themselves with the rules of professional conduct in ICAN Code of Conduct for members, improve on their formal communication and read the Institute's Study Text and Pathfinders.

Marking guide

		Marks	Total
(a)	Ethical considerations:		
	Memo on Ethical considerations:		
	From	½	
	To	½	
	Title of memo	1	
	Any four correct points on mortage facility @ 1 mark	4	
	Any three correct points on secondment of staff @ 1 mark	3	
	Any three correct points on balance confirmation @ 1 mark	3	
	Any three points on internal audit @ 1 mark	3	15
(b)i.	Report on the Micro Finance Bank:		
	Address	½	
	Addressee	½	
	Title	1	
	Introductory paragraph	1	
	Any twelve (12) correct implications and audit strategy @ 1 mark	12	15
ii.	Comments on the issues:		
	Identification of the four issues @ ½ mark	2	
	Two correct comments on each or the total points identified @ 1 mark	8	10
			40

SOLUTION 2

a. Matters to be considered before accepting an engagement

ISQC 1 requires an audit 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 (including the 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.

ISAE 3400 requires that before accepting the engagement to review and report on the client's prospective financial information, the following matters would be considered:

(i) The availability of resources and staff with the necessary expertise;
(ii) The timescale for the completion of the engagement; and
(iii) Agreeing a fee for the work with the client.

b. **Examination procedures to be performed 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) Evaluating the nature of the assumptions that have been made by management whether they are best estimate assumptions for a forecast, or hypothetical assumptions for the purpose of making a projection; and
(v) Determining the time period covered by this information.

When deciding the nature, timing and extent of the procedures required to complete a prospective financial informative (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 judgement. In other words, to what extent does the PFI depend on judgement about best estimates or hypotheses;
(v) The adequacy and reliability of the underlying data and assumptions that have been used as the basis for preparing the prospective financial information;

(vi) The general approach to the assurance engagement should be similar to the approach for audit engagement or other assurance engageents, but with some modifications to allow for the specific nature of the work.

c. An extract of the unmodified audit report that the auditor can issue is as shown below:

REPORT ON A FINANCIAL FORECAST OF EDITH ENTERPRISES NIGERIA LIMITED

To the Board of Directors

We have examined the financial forecast of Edith Enterprises Nigeria Limited for the period … set out on pages … to …. in accordance with the International Standard on Assurance Engagement 3400.

Management is responsible for the forecast including the assumptions set out in Note … on which it is based.

Based on our examination of the evidence supporting the assumptions, nothing has come to our attention which causes us to believe that these assumptions do not provide a reasonable basis for the forecast. Further, in our opinion, the forecast is properly prepared on the basis of the assumptions and is presented in accordance with the requirements of Securities and Exchange Commission.

Actual results are likely to be different from the forecast since anticipated events frequently do not occur as expected and the variation may be material.

Dogba & Associates
Plot 151x Lafia Road, Abuja
June 30, 2021

Examiner's report

The question tests the candidates' knowledge on the regulations relating to the preparation of prospective financial information and the engagement on prospective financial information according to ISQC 1 and ISAE 3400. It also tests their knowledge of reporting on the prospective financial information.

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

The commonest pitfall of the candidates was their lack of adequate knowledge of the standards relevant to prospective financial information.

Candidates are advised to review relevant regulations that are essential for the practice of the accounting profession and acquaint themselves with the Institute's Study Text and Pathfinder.

Marking guide

		Marks	Marks
(a)	Any six points to be considered on both ISQC1 and ISAE 3400 @ 1 mark		6
(b)	For examination procedures and the issues to be considered, any nine points @ 1 mark		9
(c)	Extract of the report:		
	Title of report	½	
	First paragraph	1	
	Management responsibility	1	
	Body of report	1	
	Disclaimer on forecast	1	
	Closing	½	5
			20

SOLUTION 3

(a) **Comments on the sufficiency and appropriateness of the audit evidence obtained**

(i) **Provision for restructuring cost**

A constructive obligation to restructure arises only when an entity:

- Has a detailed formal plan for the restructuring identifying at least the business or part of the business concerned, the principal locations affect ted, the location, function and approximate number of employees who will be compensated for terminating their services, the expenditures that will be undertaken and when the plan would be implemented; and

- Has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement that plan or announcing its main features to those affected by it.

An Evaluation of the evidences are as follows:

- The evidence obtained does not appear to be sufficient to conclude on the appropriateness of recording the provision for restructuring costs;

- The discussion with management regarding the plan is relevant, as the audit team will need to understand management's rationale. However, due consideration should have been given to check that the requirements of IAS 37 were met before recognizing the provision;

- Checking that it is arithmetically correct, while appropriate, is not sufficient evidence. Further evidence should be obtained in order to conclude that the basis of the calculation is accurate and all elements of the expenditure envisaged by management has been duly accounted for; and

- Review of the minutes of board meetings would have provided evidence as to the costs approved by the board. No audit evidence appears to have been obtained in respect of these issues.

(ii) **Investment**

An evaluation of the evidences on investment are as follows:

- The audit team relied on the report from the Fund Manager in auditing the investments and income on investments, this is not sufficient;
- If the audit team had tested the controls, they would have assessed the risk of material misstatement which would help determine the nature, timing and extent of substantive procedures to carry out;

- IFRS 9 stipulates that financial instruments be classified into one of the following categories:
  - At amortised cost;
  - At fair value through profit or loss; and
  - At fair value through other comprehensive income.

The classification of the financial instruments would determine the measurement basis. Irrespective of the classification, interest income on financial instruments should be computed using the original effective interest rate and not the contractual rate;

- The audit team should have considered the impact of the improper classification and measurement of the investments and interest income in order to propose an adjustment if the amount is material;
- There were investment transactions done directly by the company.

  The audit team traced and agreed them to the bank statements and this procedure provides evidence that there was an outflow of cash; however, it doesn't provide evidence as to whether the cash outflow was really done with regards to investments;

- The audit team should have also traced and agreed the transactions to investment contract notes duly executed by the company's representative and the counter party
- The amounts were considered to be immaterial so the audit team can rely on less persuasive audit evidence and does not need to perform detailed procedures over the transactions;
- There is a risk of completeness of such transactions, hence the audit team should perform substantive procedures like cut off testing or tests of controls over completeness;
- The direct investments made is an indication of non-compliance with company policy. The audit firm should explain the implications of the control deficiencies to management and recommend improvements.
- Management needs to strengthen controls to ensure full compliance with company policies; and
- Staff need to be trained on the importance of controls and management should set an appropriate tone at the top so that there is no tolerance of controls being ignored or deliberately circumvented.

(b) **Further audit procedures**

(i) **Provision for restructuring cost**

- Discuss with management to confirm if the planned restructuring had been communicated to those affected and obtained evidence to this effect;
- Review minutes of board meetings to ascertain the elements of The cost approved by the directors in respect of the restructuring.

(ii) **Investment**

- Review the service agreement between Seraphim Nigeria Limited and Hala Funds Managers to understand the terms of the engagement and how Seraphim uses Hala Funds as a service organisation.
- Identify, evaluate and test the controls at Seraphim which relate to services provided by Hala Funds Managers.
- If the auditor is unable to obtain sufficient audit evidence from the Client, then he should use one or more of the following procedures:
    - Contact the Hala Funds, via the client, to obtain specific information.
    - Visit the Hala Funds to obtain necessary information; and
    - Use another auditor to perform such procedures.

- Perform tests of detail by selecting a sample of the transactions and agreeing the amounts and dates to investment contract notes and the bank statements.
- Ask management to determine the classification of the investments and recompute the carrying amounts based on the measurement requirements for each class. Compute the difference and consider the need to propose audit adjustments.
- Perform analytical review on investment income, setting an expectation of the investment income and determining an acceptable difference; then, comparing the expectation to the amount recognised in the financial statements and discussing variances with management.
- The team needs to carry out procedures to ascertain the completeness, existence and accuracy of the transactions documented in the report. ISA 402 Audit Considerations Relating to an Entity Using a Service Organisation requires the auditor to obtain assurance over the operation of controls at the service organisation.

c. **Matters to be included in the report to those charged with governance**

(i) **Provision for restructuring costs**

ISA 265 Communicating Deficiencies in Internal Controls to Those Charged with Governance and Management requires the auditor to communicate significant deficiencies in internal control to those charged with governance and management.

In deciding whether a control deficiency is significant, one of the matters which should be considered is the importance of the control to the financial reporting process. Controls that ensure segregation of duties over journal entries are very important as they often deal with the risk of fraudulent financial reporting.

The Finance Director should not have overridden the control over segregation of duties on the approval and authorisation of journal entries. The report to those charged with governance should recommend that controls are embedded in the system such that one person cannot initiate, process and authorise a transaction.

(ii) **Investment**

The direct investments made indicate non-compliance with company policies. The audit firm should explain the implications of the control deficiencies to management and recommend improvements, for example, management needs to strengthen controls to ensure full compliance with company policies. Staffs need to be trained on the importance of controls and management should set an appropriate standard at the top so that there is no tolerance of controls being ignored or deliberately circumvented.

Examiner's report

The question tests candidates' knowledge on the procedures for identifying and obtaining relevant evidence in forming an opinion and evaluation of the adequacy of audit work.

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

The commonest pitfall of the candidates was their lack of understanding on sufficiency and appropriateness of the audit evidence obtained.

Candidates are advised to endeavour to read widely for improved performance in subsequent examinations.

Marking guide

		Marks	Marks
(a)	Comment on audit evidence obtained:		
i.	Provision for restructuring:		
	Any 5 correct points @ 1 mark	5	
ii.	Investment: Any 5 correct points @ 1 mark	5	10
(b)	Further audit procedures:		
i.	Provision for restructuring		
	Any 3 correct points @ 1 mark	3	
ii.	Investment		
	Any 5 correct points @ 1 mark	5	8
(c)	Report to those charged with governance:		
i.	Provision for restructuring		
	Any valid point	1	
ii.	Investment		
	Any valid point	1	2
			20

SOLUTION 4

(a) The engagement letter must include references to the following:

(i) The objective and scope of the audit;
(ii) The responsibilities of the auditor;
(iii) The responsibilities of management;
(iv) Identification of the underlying financial reporting framework;
(v) The expected form and content of any reports to be issued;
(vi) Applicable regulations, ISAs, and ethical pronouncements;
(vii) There is an unavoidable risk that some material misstatements may Not be detected even though the audit was properly planned and performed in accordance with ISAs; due to inherent limitations of an audit, and the inherent limitations of internal control;
(viii) Arrangements regarding the planning and performance of the audit, including the composition of the audit team;
(ix) The expectation that management will provide written representations;
(x) The basis on which fees are computed and any billing arrangements;
(xi) A request for management to acknowledge receipt of the engagement letter and to agree to its terms;
(xii) Arrangements concerning the involvement of other auditors, experts or internal auditors (or other staff of the entity);
(xiii) Any restriction of the auditor's liability when such possibility exists; and
(xiv) Best practice also recommends that the engagement letter should include an explanation of the auditor's responsibility with regard to anti-money laundering checks and procedure.

(b) The auditor may reject an engagement if any of the following circumstances occurs:

(i) A limitation on scope is imposed by management such that the auditor would be unable to express an opinion on the financial statements.
(ii) The financial reporting framework to be used in the preparation of the financial statements is unacceptable.
(iii) Management does not agree to the following responsibilities:
   - The preparation of the financial statements;
   - Provision of adequate internal controls to ensure that the financial statements are not materially misstated; and
   - Providing the auditor with all relevant and requested information and unrestricted access to all personnel.
(iv) Lack of requisite technical skill to perform the engagement.
(v) The proposed client is suspected to be involved in illegal activities, for example, money laundering.
(vi) There is reputation risk in dealing with the proposed client, for example, where there is perceived lack of integrity with the client.

(c) Procedures to be carried out before an audit firm accepts an audit engagement from a new client, include ensuring that:

(i) The auditor will be independent and there are no conflicts of interest;

(ii) There will be performance of anti-money laundering review procedures;

(iii) There should be an assessment of the evidence of 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;

(iv) 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;

(v) It takes 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

(vi) It should communicate with the incumbent (existing) auditors, if there are 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.

(d) The following audit procedures are required to be carried out over opening balances:

(i) Read the most recent financial statements and audit report, if any, for information relevant to opening balances;

(ii) Check that the prior period's closing balances have been correctly brought forward;

(iii) Check that opening balances reflect appropriate accounting policies;

(iv) Carry out either or both of the following procedures:

- Where the prior period's financial statements were audited, reviews the proceeding joints working papers to obtain evidence regarding this opening balances; and
- Consider whether audit procedures carried out in the current period provide evidence on some of the opening balances, for example, cash received from customers in the current audit period gives evidence of the existence of a receivable at the opening date;

(v) Carry out a review of the audit report on the financial statements for the previous period;

(vi) Consider if the evidence found in the opening balances could contain material misstatements affecting the current period's financial statements and perform appropriate additional procedures to assess the effect;

(vii) Evaluate if material misstatements do exist and communicate this to those charged with governance in accordance with ISA 450;

(viii) Check that the accounting policies reflected in the opening balances have been consistently applied in the current period or a change of accounting policy has been properly accounted for and disclosed

Examiner's report

The parts (a), (b) and (c) of the question test candidates' knowledge on new client engagement processes, while part (d) tests their knowledge on the procedures applied to ensure the completeness and the reliability of opening balances.

Almost 70% of the candidates attempted the question and the performance was good.

The commonest pitfall of the candidates was their lack of detailed knowledge of new client engagement procedures.

Candidates are advised to devote more time to their studies and read ICAN Study Texts and Pathfinders.

Marking guide

		Marks
(a)	Content of engagement letter:	
	Any seven valid points @ 1 mark	7
(b)	Refusal of engagement:	
	Any three valid points @ 1 mark	3
(c)	Procedure for new engagement:	
	Any four valid points @ 1 mark	4
(d)	Audit procedure required:	
	Any six valid points @ 1 mark	6
	Total	**20**

SOLUTION 5

(a) The differences among forensic accounting, forensic investigation and forensic audit are as analysed hereunder:

In general terms, 'forensic' means used in connection with courts of law. In accounting, the term 'forensic', therefore, refers to the use of accounting information for legal purposes, in the resolution of legal disputes or in disputes that are resolved by a court of law. It may be used in both criminal cases, for example, fraud cases and civil cases.

Forensic accounting

Forensic accounting involves preparing financial information for use as evidence by a court of law. Examples include the provision of financial information relating to:

(i) Loss of earnings;
(ii) Settlement of a legal dispute involving the valuation of a business;
(iii) Losses relating to an insurance claim; and
(iv) A divorce settlement.

There are two aspects to forensic accounting:
(i) Forensic investigations; and
(ii) Forensic audits.

Forensic investigations

A forensic investigation is a forensic audit carried out in response to a suspicion of wrong-doing, usually to prove or disprove certain assumptions, for example, 'X person is carrying out a fraud' or 'Y person was negligent in carrying out that piece of work'.

The objective of a forensic investigation is to obtain evidence that might be used in legal proceedings to resolve a dispute or prove innocence/guilt in a criminal case, such as providing evidence of money laundering.

Often, forensic investigations are usually reactive, meaning that they seek to prove or disprove suspicions of wrongdoing and provide evidence for legal proceedings. However, investigations can also be proactive or preventative.

Techniques of forensic auditing can be used to identify risks of wrongdoing and then steps can be taken to improve the situation.

Forensic audit

Forensic audit is an element in forensic investigations. It refers to the methods and procedures used to obtain audit evidence in a forensic investigation.

Forensic auditing may be defined as the process of:

(i) Gathering, analyzing and reporting on data, much of it being financial in nature, in the pre-defined context of legal dispute or investigation into suspected irregularities; and
(ii) In some cases, giving preventative advice in this area.

The terms 'forensic accounting', 'forensic investigations' and 'forensic audits' are closely connected.

However, forensic audit can be grouped into two broad approaches namely:

(i) Reactive forensic; and
(ii) Proactive forensic.

(b) The government agencies associated with forensic auditing include the following:

(i) The Economic and Financial Crimes Commission (EFCC) which is empowered by the EFCC Act 2004;
(ii) The Independent Corrupt Practices and Other Related Offences Commission (ICPC) which is empowered by the ICPC Act 2000;

(iii) The Nigeria Financial Intelligence Unit which is empowered by the Money Laundering (Prohibition) Act 2011, as amended;
(iv) The Federal Inland Revenue Service which is empowered by the FIRS Act to adopt measures to identify, trace, freeze, confiscate, or seize proceeds derived from tax fraud or evasion; and
(v) The Central Bank of Nigeria which is empowered by the Banks and Other Financial Institutions Act (BOFIA) 2020, to order a special investigation of the books and the affairs of any bank where it is in the interest of the public to do so.

Other government agencies associated with forensic auditing are:

(i) Nigerian Police Force (Criminal Investigation Department);
(ii) State Security Service (SSS);
(iii) National Drug Law Enforcement Agency (NDLEA);
(iv) Nigeria Deposit Insurance Corporation (NDIC);
(v) National Insurance Corporation (NAICON);
(vi) National Pension Commission (PENCOM);
(vii) Security and Exchange Commission (SEC);
(viii) Nigeria Stock Exchange (NSE); and
(ix) Federal and State Ministries of Justice.

c. The ethical principles apply to accountants carrying out forensic work as they apply to accountants in every situation.

The fundamental ethical principles to forensic auditor's engagement are as follows:

(i) Integrity: In legal disputes and criminal investigations, individuals may be dishonest. However, the forensic accountant must act with integrity and honesty at all times;
(ii) Objectivity: The forensic accountant is paid by a client to carry out an investigation, and the client will presumably be hoping for a particular outcome to the investigation, for example, in a fraud investigation, the criminal investigators who use a forensic accountant may be hoping for evidence of guilt. However, the forensic accountant must remain independent (in spite of the advocacy threat) and should seek to obtain evidence to reach a fair opinion;
(iii) Professional competence and due care: Forensic accounting is a specialised area of work, and individuals should be sufficiently competent to do the work.
(iv) Confidentiality: The normal ethical rule is that accountants should maintain client confidentiality, and should not disclose information without the client's consent. An exception is that the duty of confidentiality is overridden by the requirement to provide evidence when requested to a court of law. Legal requirements for disclosure override the rules of client confidentiality; and
(v) Professional behaviour: Forensic accountants often appear as

witnesses in court, and in the public eye, they should display professional behaviour and act in a way that is not detrimental to the image of the accounting profession.

d. The procedures that might be performed in a forensic audit are as follows:

(i) Establish the objectives of the audit which is to determine if the auditor is negligent in performing his duties;
(ii) Plan the audit with a view to achieving the objectives;
(iii) Audit evidence should be gathered. This can be done in different ways, like interviewing the members of the audit team, reviewing the audit working papers, re-performing some of the audit procedures done by the audit team;
(iv) The forensic auditor should use the evidence obtained to reach an opinion. If the evidence is insufficient, he/she should try to obtain additional evidence;
(v) At the end of the audit, a report is prepared for the client; and
(vi) The audit work should, therefore, be planned in a way that will provide sufficient and appropriate evidence to achieve the objectives of the audit.

Examiner's report

The question tests candidates' knowledge on forensic services, the agencies involved, the ethical principles relating to an auditor in forensic engagement and the forensic audit procedures.

Approximately 75% of the candidates attempted the question as it had an appeal amongst candidates because of its inclusive nature but the performance was just below average.

The commonest pitfall of the candidates was their inability to properly distinguish the features amongst the various forensic concepts.

Candidates are advised to ensure thorough preparation for subsequent examinations and to focus on the intrinsic features of forensic concepts in the study materials.

Marking guide

		Marks	Marks
(a)	Differences:		
	Explanation/basis of forensic accounting		
	Definition	1	
	Two aspects	1	
	Forensic investigation		
	Any two points on explanation/definition @ 1 mark	2	
	Forensic audit		

	Any valid explanation	1	
	Identification of the group	1	6
(b)	Agencies:		
	Any four agencies identified @ 1 mark	4	4
(c)	Ethical principles:		
	Identification and explanation of each principle @ 1 mark	5	5
(d)	Procedure for forensic audit		
	Any 5 points @ 1 mark	5	5
			20

QUESTION 6

(a) The matters which cast significant doubts on the ability of the company to continue as a going concern are:

(i) **Revenue and profitability**

Based on the extract financial statements, the company's revenue reduced by 19.7% and the company made losses for the two consecutive years, the loss was ₦102 million in 2017 and N109 million in 2018. Earnings before interest and taxes was negative for both 2017 and 2018. The loss-making position of the company does not in itself indicate that the company is not a going concern. However, a trend seems to have developed and the company needs to urgently return to profit in the 2019 financial year.

(ii) **Bank loan**

The bank loan increased by ₦1.1 billion between 2017 to 2018. The loan represents 46% of the total assets of the company in 2017 and 233% in 2018. Considering that the reason for obtaining the loan was to support the working capital of the bank, it might have been better to obtain an overdraft instead of a term loan so as to reduce the cost of financing. The collateral is a fixed and floating charge on the company's assets, so if the company is unable to pay the loan installment due, the bank has a right to seize and sell the company's assets to settle the loan. This poses a risk to the bank's ability to continue as a going concern.

(iii) **Trade payables**

The trade payables balance increased by ₦200 million or 250%, probably as a result of the extension of the credit days from 60 to 90 days. The request for extension indicates that the company is not generating enough cash from its sales to pay its suppliers. If the situation persists or worsens and the company finds itself unable to meet the payment terms agreed with its trade payables, they might stop supplying to the company or insist on cash and carry. If this happens, the company's operations would be hampered and its going concern assumption threatened.

(iv) **Borrowing facility**

The undrawn lines of credit provides Wazobia with a possible source of cash which could help ease its cash flow problems. However, to access it, Wazobia has to show that it has met the covenants of the loan contract. From the calculations below, it is clear that Wazobia is in breach of the loan covenants, so the bank could withdraw the line of credit leaving Wazobia with no additional source of cash to fall back on.

	2018	**2017**
Interest cover 2:1	(₦101,759)/₦7,500= (13.57)	(₦97,721)/₦5,000 = (19.54)
Borrowings to total assets 1:1	₦1,400,000/600,500 = 2.33:1	₦300,000/₦645,600= 0.46:1

(v) **Contingent liability**

The litigation exposes the company to a possible cash outflow of ₦200 million, the timing of which is uncertain. Considering the company's financial performance, if it loses the case, satisfying the judgement debt would lead to a significant reduction in available cash reserves and the company might be declared insolvent which might lead to bankruptcy.

(b) Audit procedures in relation to going concern matters identified include:

(i) Discuss with management: Management should be asked to explain the reasons why they consider the going concern assumption to be valid. They should also be asked about their future plans for the business. If the entity is expecting to make a loss the following year, the possible implications of this for the going concern assumption should be discussed extensively;

(ii) Obtain a cash flow forecast: A cash flow forecast should be obtained from the entity and this should also be discussed with management. The assumptions in the forecast should be checked and, if appropriate, challenged. If there is a forecast of a cash shortage, the auditor should discuss with management their plans for obtaining the additional financing that will be required especially proprietary capital;

(iii) Review the sales order book: If this indicates a continued decline in sales orders, the issue should be discussed with management.

(iv) Review ageing of receivables: Check a list of ageing receivables and assess the average time to pay. Compare the average time to pay by trade receivables to the credit period of 90 days obtained from the supplier, if customers are taking longer than 90 days to pay, this may have adverse implications for operational cash flow;

(v) Consider whether any planned capital expenditure by the entity may be insufficient to support the business as a going concern in the future;

(vi) If a key senior employee has left the business entity in the recent past, the possible implications (for example, the possibility of losing key customers with the loss of the key employee) should be discussed;

(vii) Litigation: If the company is involved in continuing litigation, and faces the possibility of having to pay a large amount of money to settle the dispute, the implications should be discussed;

(viii) Obtain information from the client's bank. Since the client is expecting to rely on continuing financial support from its bank, the bank should be asked to confirm that the financing arrangement will remain available;

(ix) After discussing the issues with management, the auditor should obtain a letter of representation from management confirming their opinion that the entity is a going concern;

(x) Read the minutes of the meetings of shareholders, those charged with governance and relevant committees for reference to trading and financing difficulties; and

(xi) Evaluate management's willingness to accept the preparation of the financial statements in a different basis (break up basis) and if management does not agree to change its view, consider making a qualified audit report

Examiner's report

The question tests candidates' knowledge on various issues relating to going concern status of a business organisation.

This was poorly attempted as only about 50% of the candidates attempted the question and the performance was below average.

The commonest pitfall of the candidates was their inability to evaluate the indicators of going concern concept and also the inability to determine the appropriate audit procedures to address the issues.

Candidates are advised to read ICAN Study Text and other relevant study materials to ensure improved performance in future.

Marking guide

		Marks
(a)	Going concern matters:	
	Identification of the 5 matters @ 1 mark	
	Explanation of each of the matters identified @ 1 mark	10
(b)	Audit procedures	
	Any 10 procedures discussed @ 1 mark	10
	TOTAL	**20**

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

PROFESSIONAL LEVEL EXAMINATION – MAY 2021

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 is also published on the Institute's website: **www.icanig.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 financial information 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 adequate 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 includes both the pre-seen and the unseen and the examination requirements. Candidates must use the answer booklet provided by ICAN in the Examination Hall. Any solution presented with other papers **WILL NOT** be assessed.

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, approximately 10% is allocated to 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 simply restating facts from the case scenario but are awarded for demonstrating professional skills and technical depth. Therefore, to succeed, candidates are required to:

- Show sufficient evidence of knowledge of the case scenario;
- Be able to carry out appropriate analysis of the issues involved and suggest feasible solutions to the problems identified;
- Demonstrate ability to make informed judgement on the basis of analysis carried out; and
- Generate reasoned conclusions upon which relevant recommendations are made.

A candidate that omits any one of these will have a slim chance of success in the examination.

May 2021 Case Study: OGA Specialist Hospital Limited

List of exhibits

1. About you (Joseph Chima) and your employer, OGA Specialist Hospital Limited.
2. Health care in Nigeria: Opportunities and challenges.
3. OGA Specialist Hospital Limited.
4. OGA Specialist Hospital Limited's information system.
5. OGA Specialist Hospital Limited: Management accounts 2017 – 2019 and 2020 budget.
6. Correspondence from Iwalola to Joseph Chima – FCT OGA Hospital.
7. Summarised capital budget.

Exhibit 1

About you (Joseph Chima) and your employer, OGA Specialist Hospital Limited.

You are employed as a Financial Analyst at the head office of OGA Specialist Hospital Limited which has three hospital units within the Lagos metropolis. You report to Deborah Iwalola, Finance and Administration Director. Your responsibilities include:

- Preparing detailed financial analyses and reports on the performance of the hospital;
- Analysing the hospital's financial statements to identify areas of weakness and proffering likely solutions to correct the anomalies;
- Assessing operational and strategic business proposals to see how each aligns with the hospital's objectives and its impact on its business and financial risks;
- Assessing the hospital's financial and business forecast together with the assumptions upon which they are based to form judgements and recommendations to the board; and
- Drafting reports for the finance and administration director to be submitted to the board on the result of the hospital's financial, operational and strategic business analyses you have carried out.

Your responsibilities demand that you keep yourself abreast with the healthcare industry, both nationally and internationally, so as to be able to carry out the above tasks effectively.

Exhibit 2

Healthcare in Nigeria: Opportunities and challenges

Health, according to World Health Organization (WHO) in 1948, is described as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." By implication, this involves a feeling of well-being that is enjoyed by an individual when the body systems are functioning effectively and efficiently together and in harmony with the environment in order to achieve the objectives of good living ((World Health Organisation (WHO)).

Healthcare in Nigeria

Of all the industries in Nigeria, healthcare is the most pluralistic, as it is split between the public and private sector. According to the World Bank, 3.6% of Nigeria's GDP is spent on healthcare, thereby putting the healthcare market (both public and private) at approximately $14.6 billion. Healthcare in Nigeria is mainly driven by the public sector. Currently, 66 percent of the country's 34,000 health facilities are owned and run by the government.

The private sector is comprised of clinics, hospitals, diagnostics centres, pharmacies, and multi-specialist hospitals that provide a more premium service (compared to the public sector facilities) to those who can afford it.

The private health sector accounts for 70 – 75% of the total health expenditure in the country, meanwhile, most of the larger health care facilities with over 100 beds are inadequately-funded public sector facilities (curled from Pharmaceuticals & Healthcare in Nigeria: General Overview and Opportunities by Nifemi Aluko (2018).

Structure of Nigeria public healthcare system

Nigeria's public healthcare system is overseen and managed at three distinct levels. The federal government is responsible for tertiary care, which is mainly provided by university teaching hospitals and federal medical centres. Nigeria's 36 states and the federal capital territory of Abuja are each responsible for their own secondary care facilities, mainly in the form of general hospitals, while the 774 local government areas focus on primary health care that is administered primarily through dispensaries. On the surface, the clear delineation of responsibilities by hierarchy should result in greater accountability and fit-for-purpose provision. However, critics of this three-tiered structure argue that it has resulted in budgetary leakages, overlap, inefficiencies and blame passing.

Generally, the healthcare system is characterised by a marked discrepancy in the availability and quality of services between private and public facilities and between urban and rural areas. Also, the tertiary and general hospitals tend to be overcrowded because the primary health care centres are functioning below average.

Nonetheless, significant progress has been made in the reduction of life-threatening infectious diseases and there has been an improvement in the performance of key health indices (curled from Opportunities for private companies in Nigeria's Health care sector, and efforts to improve provision by Nigeria, by Oxford Business Group: Nigeria Health Overview, viewed online from *oxfordbusinessgroup.com* and Healthcare Sector in Nigeria: a General Overview by Nigerian Finder, viewed online).

Challenges of public healthcare system in Nigeria

One of the major challenges with healthcare delivery in the country is budgetary allocation which has been hovering between 5 to 6% of the country's annual budget.

Although the allocation to health is one of the highest, based on value, it is believed that the amount is still far less than what is needed. Also, when compared to the 2001
Abuja declaration where Nigeria and 21 other African nations pledged to commit 15% of their federal budget towards health needs, this is a far cry.

The lack of quality facilities in the country has led to an increase in medical tourism with Nigerians spending as much as $2 billion per annum on outbound medical tourism. The number of Nigerians leaving the country to seek medical treatment abroad is increasing, and this is having a significant impact in terms of lost revenue on the Nigerian economy. The authorities have said that tens of thousands of Nigerians travel every year to the US, UK, India, and other parts of the world to seek treatment for medical issues ranging from kidney transplants, open heart or cardiac surgeries, neurosurgeries, cosmetic surgeries, orthopaedic surgeries, eye surgeries and other health conditions, and even delivering babies. Nigeria's Health Ministry says it is building several world-class health centres to address the issue.

Opportunities for private participation in healthcare delivery

There are both short-term and long-term opportunities in this market, as more consolidation occurs with the private healthcare facilities to establish bigger, well-equipped facilities to match the medical demands of Nigerians. Recently, there has been a rise in HMOs (health insurance service providers), as most patients continue to pay out-of-pocket for services; 72% of total health expenditure is currently out-of-pocket expenditure.

Some of the other short-term opportunities include the supply of properly designed medical devices and equipment to establishments that need these devices and are willing to take on these capital expenditures. Furthermore, foreign entities have the opportunity to capitalise on Nigerians' trust of foreign healthcare systems, as an interested client base already exists (curled from Pharmaceuticals & Health in Nigeria: General Overview & Opportunities by Nifemi Aluko (2018).

With rising levels of disposable income among some segments of society, there is greater demand for private coverage. According to Dr. Abiodun Fatade, "Public hospitals are overstretched and under-funded, which drives down quality and lowers standards. Private hospitals provide patients with a faster, more effective option," Dr
Abiodun Fatade, the CEO of Crestview Radiology, told OBG (curled from opportunities for private companies in Nigeria's health care sector, and efforts to improve provision by Nigeria, by Oxford Business Group: Nigeria Health Overview, viewed online from *oxfordbusinessgroup.com*).

The introduction of the national health insurance scheme which requires both public and private sectors organisations with 10 or more staff members to contribute 10% of their employees' base salaries to the scheme will provide more opportunities to the populace to seek quality medical treatment from private healthcare providers.

Exhibit 3

OGA Specialist Hospitals Limited

Company History

OGA Specialist Hospital Limited was founded in 1986 by three friends, Professor John Olayemi, Professor Shehu Garba and Professor Andrew Arochukwu. All are professors of medicine and had worked previously at Federal Teaching Hospital in Lagos. The vision of the three friends is to have a chain of hospitals that is the first choice for healthcare solutions of international standards in Nigeria. Therefore, OGA's message to Nigerians is, "we are committed to clinical excellence and patient care, which is our driving force in the improvement of human life. This forms a big part of our motivation, striving to deliver quality, cost-effective healthcare to the people we serve"

Nature of Business

OGA Specialist Hospital Limited (OGA Hospital) currently has three hospital units within the Lagos metropolis and planning to have a branch of the hospital in Abuja. The hospital, from inception is planned to cater for the high class of the society, most especially, corporate executives, expatriates and upcoming professionals who value healthcare delivery and could afford the cost of a specialist treatment. In Lagos, the hospital has a total of 450 general ward beds and 50 intensive care unit (ICU) beds. The general beds comprise 120 private wards and 330 wards each with at least 2 patients at a time. The wards are distributed among the three hospitals in Lagos as follows:

- Lekki – 50 general wards and 60 private wards;
- Ikoyi – 100 general wards and 40 private wards; and
- Ikeja – 180 general wards and 20 private wards.

The intensive care units are distributed as follows: 10 each in Lekki and Ikoyi; and 30 in Ikeja.

About 80% of OGA Hospital patients are registered under Health Management Organisations (HMOs) and their bills are settled by these HMOs, while the balance are individuals who settle their bills during each visit. The three hospital units in Lagos (Including the pharmacies and laboratories located in each) operate as divisions of the same company and are not incorporated as separate companies.
OGA hospitals offer the following specialties:

- Cardiology;
- Critical care;
- Dermatology;
- Endocrinology;
- Gastroenterology;
- General surgery;
- Internal medicine services;
- Neonatal care;

- Nephrology;
- Neurology;
- Obstetrics and Gynaecology;
- Ophthalmology clinic;
- Orthopaedic and trauma;
- Emergency services; and
- General out – patient department.

OGA Hospital has relationship with all the major health management organisations in Nigeria. HMOs have the power to influence where patient care occurs. Tariffs are negotiated annually with these HMOs with regard to charges for the forthcoming year for care to be provided to insured patients. The vast majority of patient bills are settled directly by the HMOs and hence relationship with the HMOs are critical to the on-going success of the hospital. OGA is fortunate that it has a well-established reputation with most HMOs for providing high-quality healthcare services while keeping medical costs under control.

OGA owns the properties from which its hospitals operate.

Revenue Model

OGA charges for patient care according to two different models:
Fixed fee flat rate – a flat rate for specified treatments where the expected course of treatment is highly predictable. The fixed fee for service includes the theatre cost, pharmaceuticals, surgical supplies, laboratory investigations, equipment usage and ward fees. In this revenue model, OGA bears the risk of deviations in the cost of surgical procedures (except for the price of pharmaceuticals and laboratory investigations).

Flexible rate – OGA charges the patient for all the costs of care, including ward fees, theatre charges, equipment usage, pharmaceuticals, laboratory investigations and surgical supplies used. OGA bears no risk relating to the length of stay of patients or the cost of surgical procedures.

Approximately 50% of OGA's revenue is derived from fixed rate arrangements and the balance from flexible for service arrangements.

Shareholders and Directors

The shareholders of OGA at 31 December 2020: Shareholders and % shareholding

Prof. John Olayemi	33.33%
Prof. Shehu Garba	33.33%
Prof. Andrew Arochukwu	33.34%
	100.0%

The directors of OGA are as follows:

Prof. John Olayemi	Chairman/Chief Executive Officer
Prof. Shehu Garba	Executive Director
Prof. Andrew Arochukwu	Executive Director
Dr Philip Andrea	Chief Medical Director
Mrs. Deborah Iwalola	Finance and Admin Director
Dr David Ezeoke	Chief Laboratory Technologist

Competitors

There are six major competing hospitals around Lagos with similar facilities like that of OGA hospitals. These are:

- St. Nicholas Hospital;
- Reddington Hospital;
- Eko Hospital;
- First Consultant Hospital;
- St. Ives; and
- Lagoon Hospital.

These hospitals are able to negotiate preferred network arrangements with the health management organisations and attract higher volumes of patient admissions.

However, OGA hospitals have been adjudged, both nationally and internationally, to be the best hospital in Nigeria. OGA is the only Nigerian hospital accredited by the Joint Commission International, and one of two in Sub – Saharan African to be so accredited.This is a guarantee of safe and quality healthcare that meets international standards.

Future Plan

At the June 2020 board meeting a proposal to establish a 100-bed facility in Abuja, the Federal Capital Territory (FCT), located on a property that will be acquired by OGA Hospital, was evaluated. It was noted that the hospital would require a licence from the Federal Ministry of Health and the FCT Municipal Council before it can commence operations.

The board of directors of OGA Hospital resolved that Deborah Iwalola be tasked with preparing a capital budget for the proposed hospital to evaluate the potential financial returns thereof. Prof. Olayemi has indicated that the new hospital could leverage on the existing head office infrastructure and the only additional costs of running the new hospital would be the direct administration and operating costs.

Exhibit 4

OGA's information system

Most of OGA's accounting and administration functions are performed at its head office in Victoria Island. However, each hospital is responsible for patient admissions and discharges, usage of consumables and theatre, laboratory and pharmacy operations. As many of these transactions are first recorded on paper-based source documents, such data have to be captured onto the computer system by employees at the hospitals. Thereafter all hospital-related transaction data are uploaded in batches to the head office information system every night. Once uploaded, the data are processed to the company's computerised accounting records and used, amongst others, for the billing of patients.

From the Minutes of the October, 2020 board meeting, it is apparent that the board of directors of OGA is becoming increasingly anxious about the efficiency and effectiveness of the current information system. The following points were specifically noted:

- The current system is labour intensive and involves the duplication of processes. A system which facilitates the following is therefore considered essential:

    - The centralisation of patient data (which will remove the need for patients to complete patient administration forms on repeat visits and also enhance the inpatient care provided); and
    - The real time and paperless capturing and processing of details relating to patient hospital stay, dispensing of pharmaceuticals, laboratory investigations, theatre activities and use of surgical supplies.

- Health management organisations are demanding more information from hospitals to enable them to manage their healthcare costs, but with the current information system, this cannot be provided as it is not readily available from the system.

The CEO of OGA, Prof. John Olayemi, has previously worked with an enterprise resource planning ('ERP') system in a hospital environment and noted the following key benefits of such systems:

- Centralisation of information for all the hospitals and departments of each hospitals;
- Centralisation of patient information database that can be assessed for the purpose of information sharing amongst doctors and consultants which will lead to improvement in patient care;
- Centralisation of human resources management throughout the hospital for staff mobility, training and management;

- Overall reduction in operational costs as a result of real time processing of different tasks, such as admissions, discharges, capturing of facility usage and billings; and
- Improved in-patients' reception management by having real-time information on bed availability, doctors' schedules and patient locations.

Prof. Olayemi plans to seek approval from the board of directors of OGA to task a group of suitable OGA employees to perform a feasibility study regarding the possible introduction of an ERP system. However, the implementation of the new system (if approved) is only likely to take place at some point during 2021 financial year.

Exhibit 5

OGA specialist Hospital Limited
Management accounts and budget

December year end	**Actual 2017 ₦'m**	**Actual 2018 ₦'m**	**Actual 2019 ₦'m**	**Budget 2020 ₦'m**
Income Statement				
Revenue				
Theatre	348	361	371	409
Accommodation	389	410	440	488
Pharmaceuticals and surgical supplies	295	301	333	359
Equipment income	110	115	119	131
Laboratory	55	63	71	85
	1,197	1,250	1,334	1,472
Other income	8	9	9	10
Pharmaceuticals and surgical supplies	(265)	(274)	(296)	(323)
Laboratory supplies	(14)	(16)	(18)	(22)
Direct operating costs:				
Employee costs	(403)	(414)	(446)	(485)
Catering	(29)	(32)	(35)	(39)
Laundry	(7)	(7)	(8)	(9)
Indirect operating costs:				
Premises maintenance	(74)	(80)	(86)	(93)
Cleaning	(26)	(28)	(30)	(32)
Electricity and water	(15)	(17)	(19)	(22)
Other indirect costs	(67)	(72)	(77)	(83)
Administration costs	(91)	(98)	(105)	(112)
EBITDA	**214**	**221**	**223**	**262**
Depreciation	(34)	(37)	(37)	(38)
EBIT	**180**	**184**	**186**	**224**
Interest income	1	1	1	-
Finance charges	(9)	(9)	(7)	(5)
Profit before tax	172	176	180	219

Tax	(55)	(56)	(58)	(70)
Profit for the year	**117**	**120**	**122**	**149**

OGA Specialist Hospital Limited
Management accounts and budget

December year end	Actual 2017 ₦'m	Actual 2018 ₦'m	Actual 2019 ₦'m	Budget 2020 ₦'m
Statement of financial position				
Non-current assets				
Leasehold building	38	37	33	30
Medical and other equipment	149	144	140	143
Motor vehicles	3	3	3	2
	190	184	176	175
Current assets				
Inventories	18	20	23	22
Trade receivables	119	117	138	133
Other receivables	42	43	44	43
Cash and cash equivalents	30	29	2	6
	209	**209**	**207**	**204**
Total assets	**399**	**393**	**383**	**379**
Share capital	25	25	25	25
Retained earnings	122	152	174	211
Total equity	**147**	**177**	**199**	**236**
Non-current liabilities				
Hire purchase liabilities	79	55	29	-
Bank loan	37	19	-	-
Deferred taxation	11	11	11	11
	127	**85**	**40**	**11**
Current liabilities				
Trade payables	47	50	59	62
Accruals and value added-tax	24	26	27	28
Provisions	9	9	9	9
Income tax liabilities	4	3	4	4
Short-term portion: Bank loan	19	19	19	-
Short-term portion: Hire purchase	22	24	26	29
	125	**131**	**144**	**132**
Total equity and liabilities	**399**	**393**	**383**	**379**

Notes on the income statements:

(1) Catering and laundry expenses are in respect of accommodation;

(2) Employees expenses are allocated as follows:

Theatre	45%
Catering	20%
Pharmacy	30%
Laboratory	5%

Notes to the budget

(1) Equipment income is in respect of charges for using specialised equipment during surgery and post operation care.

(2) Other income is in respect of rent collected from coffee and snacks vendors who leased space on the hospitals' premises.

(3) The budget is predicated on the continuing outsourcing of catering, laundry and cleaning services in the hospitals. While catering charges vary depending on the occupancy levels per day, laundry and cleaning services are paid fixed amount per month in respective of activity levels in the hospitals.

(4) Electricity and water cost is approximately 80% variable.

(5) Other indirect costs and administration costs are generally fixed in nature.

Exhibit 6

Correspondence from Iwalola to Joseph Chima

From: Deborah Iwalola
Sent: 1 March, 2021
To: Joseph Chima

Subject: FCT OGA Hospital

Dear Joseph

I know you are under work pressure but there is another issue on which I need your input. The board is seriously considering starting a branch in the Federal Capital Territory (FCT) next year. What I need from you is to review the attached Excel spreadsheet (exhibit 7) to ensure that I have prepared it in a technically correct manner and have not missed any issues.

I compiled the Excel spreadsheet (exhibit 7) based on the information provided by an independent hospital expert that we use from time to time. The board wants some preliminary feedback by next Wednesday, so you may have to do a bit of work this weekend.

We may have to calculate the breakeven revenue for the board on the new hospital. They will probably want to know when this venture will start making profits and how sensitive, profits are to revenue levels. Perhaps, give that some thought too.

Anyway, happy reading and I look forward to your inputs next week.
Regards.

Deborah

Exhibit

Summarised capital budget	**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Acquisition of property, including transfer duty	(70.0)	0	0	0	0	0	0
Licence application and consulting fees	(9.0)	0	0	0	0	0	0
Renovations to existing building	0	(50.0)	0	0	0	0	0
Borrowing costs: Land and buildings before opening	0	(16.2)	0	0	0	0	0
Medical and theatre equipment purchased	0	(100.0)	0	0	0	0	0
Revenue*	0	53.78	230.2	307.88	395.32	493.5	528.04
Pharmaceuticals and surgical supplies	0	(10.76)	(46.04)	(61.58)	(79.06)	(98.7)	(105.6)
Direct operating costs	0	(59.0)	(63.14)	(67.54)	(72.28)	(77.34)	(82.76)
Indirect operating costs	0	(52.5)	(56.18)	(60.1)	(64.32)	(68.82)	(73.64)
Administration costs	0	(48.0)	(51.36)	(54.96)	(58.78)	(62.92)	(67.32)
Head office costs	0	(15.0)	(32.10)	(34.34)	(36.76)	(39.32)	(42.08)
Depreciation	0	0	0	0	0	0	0
Finance charges	0	(10.8)	(9.0)	(7.02)	(4.88)	(2.54)	0
Net cash flow from operations	(79.0)	(308.48)	(27.6)	22.34	79.24	143.86	156.66
Annual revaluation of land and buildings	0	7.2	7.64	8.08	8.58	9.08	9.64
Sale of business (5 x EBITDA in year 6)	0	0	0	0	0	0	783.26
Net cash flow	**(79.0)**	**(301.28)**	**(19.98)**	**30.42**	**87.82**	**152.94**	**949.54**
*Assumes hospital will be in operation during the last half of year 1							
IRR	26.4%						
NPV @ 12% hurdle rate	₦240.95m						

ASSUMPTIONS	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number of surgeries		14,940	59,760	74,700	89,640	104,580	104,580
Maximum capacity for patients		149,400	149,400	149,400	149,400	149,400	149,400
Average fixed fee per patient		₦3,600	₦3,852	₦ 4,122	₦4,719	₦4,719	₦5,049

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May 2021 Case Study: OGA Specialist Hospital Limited

List of exhibits

The following exhibits are newly provided and did not form part of the material provided as pre-seen:

8 Correspondence from Deborah Iwalola to Joseph Chima
9 OGA Hospital – performance scorecard
10 Correspondence from Daniel Sopade to John Olayemi
11 Correspondence from John Olayemi to Deborah Iwalola
12 Correspondence from Iwalola to Joseph Chima
13 Extract from the draft minutes of board meeting

OGA Specialist Hospital Limited: Case Study requirement

You are Joseph Chima, a final-year trainee Chartered Accountant working as Financial Analyst at the head office of OGA Specialist Hospital Limited. You report to Deborah Iwalola, the Finance and Administration Director.

Requirement

You are required to prepare a draft report, as set out in the correspondence dated 15 March 2021 from Deborah Iwalola to you **(Exhibit 8)**. Your report should comprise the following:

- An executive summary
- Responses to the two detailed requirements set out in exhibit 8, including appropriate appendices.

State clearly any assumptions you have made. All workings should be attached to your answer.

The following time allocation is suggested:

- Reading and planning 1 hour
- Performing calculations and financial analysis 1 hour
- Drafting report 2 hours

Marks allocation

All of the marks in the Case Study are awarded for the demonstration of professional skills, allocated broadly as follows:

Applied to the four elements of your report (as described above)

• Assimilating and using information	20%
• Structuring problems and solutions	20%
• Applying judgement	20%
• Drawing conclusions and making recommendations	20%
	80%
Applied to your report as a whole	
• Demonstrating integrative and multidisciplinary skills	10%
• Presenting appropriate appendices	10%
	100%

Of the total marks available, approximately 10% will be awarded for the relevant discussion of ethical issues within your answer.

Ensure that you address these requirements in your report, failure to address it 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 8

Correspondence from Deborah Iwalola to Joseph Chima

From: Deborah Iwalola
Sent: 15 March 2021
To: Joseph Chima
Subject: Board meeting

As you are aware, the next board meeting, where the hospital's performance and strategic plans for the coming year will be considered, is in two weeks. In this meeting, the board would like to review our performance and take decision whether to go ahead with the decision to acquire ERP and the proposed FCT hospital unit.

Therefore, I will like you to carry out:

(i) A detailed review of our management accounts for the last three years and the budget for 2020, assuming that the actual performance for 2020 is in tandem with the budget. You are to use the performance scorecard, included as an attachment to this correspondence, for your analysis. You are also to show the breakeven occupancy rate for 2020 budget, as requested by John Olayemi **(exhibit 11);**

(ii) A discussion on the method OGA Hospital should follow in the implementation of the proposed acquisition of ERP, taking into consideration the opinion of John Olayemi **(exhibit 4)** and that of Daniel Sopade **(exhibit 10).** Also discuss whether the implementation of ERP will solve the type of problem identified by the board **(exhibit 13);** and

(iii) Amendments to the capital budget on the proposed FCT hospital unit as requested by Deborah Iwalola **(exhibit 12).**

I attach herewith exhibits 9 to 13 to assist you. You can find, in your file, the management accounts for the previous three years and the 2020 budget.

Please draft for my review, a report to be submitted to the board. Your report should comprise:

a. An evaluation of the hospital's performance as reflected in its management accounts for the year ended 31 December 2019 as well as the budget for 2020 as presented in exhibit 5. Your evaluation should be based on the performance scorecard, attached as exhibit 9. You are also required to determine the breakeven occupancy rate, based on 2020 budget, for the existing hospital in Lagos, as required by John Olayemi.

b. A discussion on the implementation path the hospital should follow for the proposed ERP acquisition. Also discuss whether this ERP will meet the expectation of the directors as reflected in the extracts of the minutes of the board meeting.

   You are to prepare an amended capital expenditure budget as I requested on my earlier correspondence, exhibit 6, to you.

I look forward to receiving your draft report.

Deborah

Exhibit 9

OGA specialist Hospital Limited

Performance Scorecard

December year end	**Actual 2017 ₦'m**	**Actual 2018 ₦'m**	**Actual 2019 ₦'m**	**Budget 2020 ₦'m**
a. Revenue				
Number of active wards				
General ward	450	450	450	450
ICU	50	50	50	50
Paid patient days				
Occupancy	70%	72%	71%	75%
Average length of stay (days)	3.3	3.4	3.3	3.3
Number of admissions				
Average ward fee per patient day				
Average revenue per paid patient day				
Other income/revenue				
b. Operating costs				
Direct operating costs				
Employee costs/revenue				
Catering/accommodation income				
Laundry/accommodation income				
c. Profitability				
Gross profit margin				
Net profit margin				
Gross profit margin – pharmaceutical and surgical				
Gross profit margin – accommodation				
Gross profit margin - laboratory				

Exhibit 10

Correspondence from Daniel Sopade - Finathec Consulting Services to John Olayemi

From: Daniel Sopade
Sent: 13 February 2021
To: John Olayemi
Subject: ERP systems

Dear John,

It was a pleasure meeting you at the Technology Fair last month and I thought it wise to recap our discussions at the fair.

As mentioned during our discussion, I am a partner at Finathec Consulting Services, a management and information technology consultancy firm focusing on assisting clients who are considering ERP systems and helping them with the implementation thereof. We are not aligned with any ERP providers but instead remain objective in providing advice. Finathec has assisted over 20 clients in Nigeria with ERP implementations over the past five years.

Our knowledge of ERP system and experience in its implementation have made us to understand that the best way to implement ERP system requires the following key issues:

- Set up an internal project team and allocate necessary resources to the team for effective management of the implementation process;
- Ensure that top management of your organisation are convinced and committed to the success of the new system and are willing to see it to a successful implementation.
- Go for an industry specific ERP system that has the features for effective management of the peculiarities of your industry;
- Never depend on the supplier of the ERP system to midwife the implementation. It is better to appoint an independent ERP consultant to help you in the implementation process as a result of their vast experience in such implementation;
- Allow enough time for the implementation of the system as it usually takes longer time to effectively implement the system than most people envisage; and
- Ensure that the ERP system you are considering has accessibility to mobile users with appropriate security for robustness as today's managers like to be able to connect via smart phones.

I would be delighted to meet you to discuss how Finathec Consulting can assist you in realising maximum benefit from the changeover to an ERP system. Let me know when you are available for a meeting.

Yours sincerely,

Daniel

Exhibit 11

Correspondence from John Olayemi to Deborah Iwalola

From: John Olayemi
Sent: 13 March 2021
To: Deborah Iwalola
Subject: Breakeven

Hi Deb,

Sorry about the early email but I have been struggling to sleep recently due to pressure of the preparatory work for the proposed FCT hospital complex project. I think expanding our hospital network to the Federal Capital Territory will definitely boost our revenue and set the hospital as a national hospital.

Presently, I am not bordered about breakeven revenue at the proposed FCT hospital or when it is set to make profits. The overhead costs and upfront investment there, are so low that, I believe, we will make profit before the end of 2021.

I overheard a conversation at an industry function last night where a medical director was saying that the breakeven occupancy at their hospital was 55%!!! That's frightening! I am now much more concerned about breakeven at our existing hospitals.

Could you please have a look at our budget for 2020 and let me know what you think our breakeven occupancy is for the year – obviously excluding the proposed hospital. Your calculations don't have to be perfect for now (we can refine these calculations at a later stage), but I need you to respond as a matter of urgency.

Thanks.

Regards.

John

Exhibit 12

Correspondence from Deborah Iwalola to Joseph Chima

From: Deborah Iwalola
Sent: 14 March 2021
To: Joseph Chima
Subject: FCT OGA Hospital

Hi Dear,

Thank you for your work so far on reviewing the FCT hospital draft capital budget. Our board, during their last meeting, has decided that OGA Hospital will no longer be purchasing the property. A property development company has been contacted and has agreed to purchase the property and let it out to OGA Hospital. The following are the terms for the rental agreement:

- Five-year rental agreement renewable for a further five years at our option in Year 6 (you can assume we will renew the lease if the hospital is profitable);
- OGA will incur ₦20 million towards the planned improvements of the property;
- Annual rental of ₦13.2 million, payable yearly in advance. Rent will escalate by 8% per annum from Year 3;
- OGA will pay the rates and taxes. This is estimated to be ₦720,000 per annum in Year 1 and will escalate by 7% per annum; and
- An advertising company has been given the right to erect a billboard on the property and we will share 25% of any advertising revenue from the billboard. (I expect that our share of advertising revenue will be ₦1,800,000 per annum for five years – no increase given the pressure on outdoor advertising margins).

Could you please make the necessary amendments to the capital budget and let me know what the resultant IRR and NPV are? You should assume that the medical equipment will now be purchased and paid for in Year 0.

I also think we should use a hurdle rate of 15% (long-term return on the NSE) instead of 12% – what do you think?

Have a good evening.

Regards,

Deborah

Exhibit 13

Extract from the draft minutes of the board meeting held on 17 October 2020

Request that Tax Pro & Co. renders certain taxation services:

It was noted that the services we are getting from our tax consultants, DAT Tax Consultants, has not been satisfactory. Therefore, it was discussed and the board resolved that we should drop the firm and appoint a new tax consultants, Tax Pros & Co, to take over. Professor John Olayemi was then mandated to write to Tax Pro & Co. to perform the following tax service for the hospital:

- Compute the income tax liability of OGA Hospital for purposes of preparing the 2020 financial statements;
- Complete and submit the company's income tax return for this period; and
- Complete and submit the income tax returns for each of the directors for the 2021 year of assessment once the audit has been completed, using information provided by the directors.

Compliance issues

Two incidents of non-compliance with applicable laws and regulations had been detected since the previous board meeting:

- It was discovered that a senior nurse at the Ikeja hospital decided to convert patients' drugs to her own use and thereby deprived the patients their medication; and
- The Ikeja hospital pharmacy department has been boosting their operational performance through connivance with some drug suppliers' sales representatives who have been transferring cash to the pharmacy without buying any drugs. The purpose of this, is to induce the pharmacist to increase order for their products. This was discovered by the hospital's internal audit section during one of their routine checks. The Ikeja hospital pharmacy staff has been collecting higher bonuses as a result of these transactions.

The board noted that the above incidents reinforced the need to move to an ERP system as soon as possible.

ICAN CASE STUDY MAY 2021

First Marking

DATE		**CANDIDATE NO.**	
TIME		**MARKER NUMBER**	

	Exc Summary	Req 1	Req 2	Overall	TOTAL
SA					
CA					
BC					
NC					
V					
Total	5	8	8	4	25

SUPERVISOR SIGNATURE			CHECKER SIGNATURE	

Changes made? ☐

Executive Summary: **OGA Specialist Hospital Limited**

1 General

- States the purpose of the report
- States the summary of the two requirements
- States the assumptions
- States reservations, e. g. scepticism

V C BC CA SA

2. Requirement 1: Conclusions

- Internal control in the pharmacy section needs a rejuvenation
- The nursing crew needs reorientation on the ethics of the nursing profession.
- The performance of the hospital is growing steadily except pharmaceutical and surgical.
- The hospital's occupancy rate is better than the others in the industry.

NC BC CA SA

3 Requirement 1: Recommendations

- The hospital should try to sustain its performance in future years.
- The hospital should evaluate the control system in the pharmaceutical section so as to plug any loophole.
- The ethics of the medical profession should be reemphasised among the nursing staff.
- The patient's charge out rate for the pharmaceutical and surgical sections should be reevaluated to ensure appropriate charge out rate that will be profitable to the hospital.

V C BC CA SA

4. Requirement 2: Conclusions

- On the assumption that the projections are realistic, the hospital should go ahead with the proposed FCT hospital.
- The proposed ERP system will improve the hospital's administrative efficiencies and patients' management.
- There is need to ensure recruitment of qualified and experienced IT staff to manage the proposed ERP system relations practice.
- The proposed FCT hospital needs adequate board supervision to ensure it delivers on target.

V NC BC CA SA

5. Requirement 2: Recommendations

- The directors of the hospital should go ahead with the proposed FCT hospital project.
- he proposed ERP system is the solution to the hospital
- administrative inefficies identified and better patients' management.
- The hospital should engage an experienced ERP consultants to effectively implement the new ERP system.
- The hospital should recruit qualified and experienced staff to run the new ERP system.

V NC BC CA SA

V NC BC CA SA

REQUIREMENT 1: PERFORMANCE SCORECARD

1 USES DATA AND INFORMATION APPROPRIATELY

- Uses information on exhibit 5 to prepare the performance scorecard
- Uses information on exhibit 9 performance scorecard
- Uses information on exhibit 5 notes on the income statement accounts to show trend in performance of each revenue stream.
- Uses information on exhibit 5 - notes to the budget.
- Uses information on exhibit 11 for break even calculations.
- Uses information on exhibit 13 for discussion on the internal control system and ethics of the nursing profession.

V	NC	BC	CA	SA

2 USES PROFESSIONAL TOOLS AND KNOWLEDGE

- Calculates paid patient days
- Calculates number of admissions
- Calculates net average ward fee per patient day.
- Calculates net average revenue per paid patient day.
- Calculates other income to revenue ratio.
- Calculates operating costs to revenue ratios.

-

3

V	NC	BC	CA	SA

USES ANALYTICAL SKILLS (material points) written report

- Determines trend in number of admissions.
- Determines trend in average ward fee per patient day
- Determines trend in average revenue per paid patient day.
- Determines trend in operating costs to revenue ratios..
- Determines trend in the profitability ratios.

Determines trend in other income to revenue raio.

V	NC	BC	CA	SA

4 IDENTIFIES ISSUES AND OPTIONS

- Identifies that gross margin from laboratory services is very high and has been growing steadily.
- Identifies that gross margin from accommodation services is very high and has been stable over the years.
- Identifies that gross margin from pharmaceutical and surgery is very low and has been dropping over the years.
- Identifies that average revenue per paid patient day has been increasing steadily.

5

V	NC	BC	CA	SA

APPLIES PROFESSIONAL SCEPTICISM AND ETHICS

- Recognises that there seems to be lack of effective supervision of the nursing staff.
- Recognises that there is a need to reorientate the nursing staff on the ethics of the profession.
- Recognises that the internal control system of the hospital seems to be weak.
- Recognises that the financial statement used have not been audited, therefore, the accuracy of the figures may in doubt.

6

V	NC	BC	CA	SA

EVALUATIVE SKILLS AND JUDGEMENT

- Recognises that revenue has been growing steadily from year to year.
- Recognises that the number of paid patients days has been increasing steadily
- Recognises that occupancy rate has been increasing.
- Recognises that number of admissions has been increasing.
- Recognises that average ward fee per patient day has been . increasing
- Recognises that average revenue per paid patient day has been increasing
- Recognises that gross margin has been relatively stable.
- Recognises that net profit margin has been relatively stable.

V	NC	BC	CA	SA

7 CONCLUSIONS

(Draws distinct conclusions under a heading)

- Concludes that the hospital's internal control system seems to be inadequate.
- Concludes that ethic of nursing profession seems unemphasised regularly.
- Concludes that the the hospital's performance is good and gradually improving.
- Concludes on the breakeven occupancy rate
- Conludes that the gross margin from pharmaceutical and surgical services have been dropping.

V	NC	BC	CA	SA

8 RECOMMENDATIONS (commercial / relevant)

- Recommends that the hospital should strenghten its internal control system, especially aroung purchasing and dispensing of drugs.
- Recommends that the hospital should continously reorientate its nursing crew on the ethics of the profession.
- Recommends that the hospital should examine how pharmaceutical and surgical services are charged to patients to arrest the continous dropping in gross margin.
- Recommends that the hospital should continue to strive to improve on its performance through introduction of other medical services.
- Recommends that the hospital should continue to strive to maintain its breakeven occupancy rate as it is better than those of others in the industry.

V	NC	BC	CA	SA

REQUIREMENT 2 -Appraisal of the proposed ERP acquisition and the amended capital expenditure budget

1 USES DATA AND INFORMATION APPROPRIATELY

- Uses information in exhibit 4 on discussion on the need for acquiring an ERP system.
- Uses information in exhibit 6 for discussions on the proposed FCT hospital units.
- Uses information in exhibit 7 to prepare the amended capital expenditure budget.
- Uses information in exhibit 10 for discussions on the proposed acquisition of an ERP system.to determine total sales value
- Uses information in exhibit 12 to prepare the amended capital expenditure budget.

V	NC	BC	CA	SA

2 USES PROFESSIONAL TOOLS AND KNOWLEDGE
(written into report)

- Determines the rent payable annually.
- Determines rates and taxes payable annually.
- Determines yearly net cashflow from operations.
- Determines the total yearly net cashflow
- Determines the NPV of the project.
- Determines the IRR of the project.

V	NC	BC	CA	SA

3 USES ANALYTICAL SKILLS (material points)

- Calculates the new net present value of the project.
- Calculates the new IRR of the project.
- Calculates the new net cashflows from operations.
- Calculates the new yearly total cashflow from the project.
- Discusses the best way of implementing an ERP system.

V	NC	BC	CA	SA

4 IDENTIFIES ISSUES AND OPTIONS

- Identifies whether the directors of OGA will be able to supervise the proposed FCT hospital as they are doing in Lagos.
- Identifies that the realisation of the various projections on the proposed FCT hospital is critical to it being viable.
- Identifies that OGA need to engage the services of experienced IT consultant to help the hospital on the implementation of the proposed ERP system.
- Identifies that OGA should go for an ERP that has been in the hospital industry and must not make an attempt to develop this in house.

V	NC	BC	CA	SA

5 APPLYING PROFESSIONAL SCEPTICISM AND ETHICS

- Discusses how realistic are the figures used in the projections.
- Discuses how the directors of OGA hospital plans to effectively supervise the new hospital, seen that all the directors are based in Lagos.
- Discusses the possibility of disposing off the hospital at the end of the sixth year.
- Discusses the possibility of the proposed hospital being able to commence operation at the second half of the first year.

V	NC	BC	CA	SA

6 EVALUATIVE SKILLS AND JUDGEMENT
(uses analytical headings)

- Evaluates the basis of charging the hurdle rate from 12% to 15%.
- Evaluates the projected number of yearly surgeries for the proposed hospital, how authentic?
- Evaluates the maximum capacity for patients, can these be realised?
- Evaluates the the projected average fixed fee per patient, how authentic?
- Evaluates the proposal to dispose off the hospital at the end of the sixth year, is this possible?

V	NC	BC	CA	SA

7 **CONCLUSIONS**

(Draws distinct conclusions under a heading)

- Concludes that the proposed hospital project is worthwhile.
- Concludes that the ERP system will help the. hospital solve the identified problems
- Cocludes that the hospital needs qualified staff to manage the new ERP system.
- Concludes that the directors of OGA need to plan how to supervise the proposed new hospital.
- Concludes that the hospital needs to ensure the reasonability of the various projections regarding the proposed hospital.

V	NC	BC	CA	SA

8 **RECOMMENDATIONS (commercial / relevant)**

- Recommends that the hospital should go ahead with the proposed FCT hospital as it gives a positive NPV at 15% hurdle rate.
- Recommends that the ERP system should be acquired since it will solve the identified problems and improve the adminstrative efficiency of the hospital.
- Recommends that the hospital should employed qualified IT professional to manage the proposed ERP system so that the hospital can get greater benefit from its use.
- Recommends that the hospital should engage an independent IT consultants to midwife the implementation of the proposed ERP system.

V	NC	BC	CA	SA

Appendices	Main Report
1 Appendices R1: Content and style • Shows paid patient days • Shows number of admissions • Shows average ward fee per patient day • Shows average revenue per patient days • Shows operating costs to revenue ratios • Shows the profitability ratios • Shows the breakeven occupancy rate based on 2020 budget V | NC BC CA SA	**3 Report: Structure** • Sufficient appropriate headings • Appropriate use of paragraphs / sentences • Legible/clear hand writing • Correctly numbered pages V | NC BC CA SA
2 Appendices R2: Content and style • Shows the amended capital expenditure budget • Shows net casflow for each of the years. • Calculates the NPV of the proposed hospital Calculate the IRR of the proposed hospital. V | NC BC CA SA	**4 Report: Style and language** • Relevant disclaimer (external report) • Suitable language for the board • Tactful / ethical comments • Acceptable spelling and punctuation V | NC BC CA SA

CC	
SC	
IC	
ID	
NA	
Total	

OGA Specialist Hospital Limited				
Performance scorecard 2017 - 2020				
December year end	**Actual 2017**	**Actual 2018**	**Actual 2019**	**Budget 2020**
a. Revenue (₦m)	1,197	1,250	1,334	1,472
Number of active wards:				
General ward	450	450	450	450
ICU	50	50	50	50
Paid patient days	127,750	131,400	129,575	136,875
Occupancy	70%	72%	71%	75%
Average length of stay (days)	3.3	3.4	3.3	3.3
Number of admissions	38,712	38,647	39,265	41,477
	₦	₦	₦	₦
Average ward fee per patient day	3,045.01	3,120.24	3,395.72	3,565.30
Average revenue per paid patient day	9,369.86	9,512.94	10,295.20	10,754.34
Other income/revenue	0.67	0.72	0.67	0.68
b. Operating costs				
Direct operating costs:	%	%	%	%
Employee costs/revenue	33.67	33.12	33.43	32.95
Catering/accommodation income	7.46	7.80	7.95	7.99
Laundry/accommodation income	1.80	1.71	1.82	1.84
c. Profitabity				
Gross profit margin	40.69 / 40.02	41.28 / 40.56	40.48 / 39.81	41.03 / 41.03
Net profit margin	14.37	14.08	13.49	14.88
Gross profit margin – pharmceutical and surgical	11.78	11.56	10.44	10.58
Gross profit margin – accommodation	70.03	70.29	69.95	70.29
Gross profit margin - laboratory	37.91	41.75	43.24	45.59
Calculation of breakeven occupancy using 2019 budget			₦	
Average revenue per paid patient day			10,754.34	
Total variable costs:	₦m	₦		
Pharmaceutical and surgical supplies	323.00			
Laboratory supplies	22.00			
Employee costs	485.00			
Catering	39.00			
Premises maintenance*	93.00			
Electricity and water (80%)	17.60	979,600,000.00		
Paid patient days		136,875		
Variable costs per paid patient day		979,600,000/136,875	7,156.89	
Contribution per paid patient day			3,597.45	
Total fixed cost:				
Laundry	9.00			
Cleaning	32.00			
Other direct costs	83.00			

OGA Specialist Hospital Limited				
Performance scorecard 2017 - 2020				
December year end	**Actual**	**Actual**	**Actual**	**Budget**
	2017	**2018**	**2019**	**2020**
a. Revenue (₦m)	1,197	1,250	1,334	1,472
Number of active wards:				
General ward	450	450	450	450
ICU	50	50	50	50
Paid patient days	127,750	131,400	129,575	136,875
Occupancy	70%	72%	71%	75%
Average length of stay (days)	3.3	3.4	3.3	3.3
Number of admissions	38,712	38,647	39,265	41,477
	₦	₦	₦	₦
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Average revenue per paid patient day			10,754.34	
Total variable costs:	₦m	₦		
Pharmaceutical and surgical supplies	323.00			
Laboratory supplies	22.00			
Employee costs	485.00			
Catering	39.00			
Premises maintenance*	93.00			
Electricity and water (80%)	17.60	979,600,000.00		
Paid patient days		136,875		
Variable costs per paid patient day		979,600,000/136,875	7,156.89	
Contribution per paid patient day			3,597.45	
Total fixed cost:				
Laundry	9.00			
Cleaning	32.00			
Other direct costs	83.00			

Administration costs	112.00			
Depreciation	38.00			
Electricity and water (20%)	4.40			
Finance charges	5.00			
	283.40			
Less other income	10.00	273,400,000.00		
Contribution per paid patient day (as above)		3,597.45		
Patient days required to breakeven (273,400,000/3,597.45)		75,998.28	75,998	
Total available patient days (450 + 50) x 365		182,500	182,500	
Breakeven occupancy rate (75998/182500%)			41.64%	
			42%	
Note				
* A candidate who adds premises maintenance to fixed costs instead of variable costs should not be penalised. It could				
be either since the question was silent on this. A candidate that did this will have the following results:				
Variable cost per patient day			6,477.44	
Contribution per patient day			4,276.90	
Total fixed costs less other income			₦366,400,000	
Patient days required to break even (366,400,000/4,276.9)			85,670	
Breakeven occupancy rate (85670/182,500%)			46.90%	
Or			47.00%	

OGA Specialist Hospital Limited							
Amended capital expenditure budget							
Summarised capital budget	**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
	₦'m	**₦'m**	**₦'m**	**₦'m**	**₦'m**	**₦'m**	**₦'m**
Rent on of property	-13.2	-13.2	-14.256	-15.396	-16.628	-17.958	-19.395
Licence application and consulting fees	-9						
Improvements on the property		-20					
Rates and taxes		-0.72	-0.77	-0.824	-0.882	-0.944	-1.01
Medical and theatre equipment purchased	-100						
Revenue*	0	53.78	230.2	307.88	395.32	493.5	528.04
Revenue from billboard	0	1.8	1.8	1.8	1.8	1.8	0
Pharmaceuticals and surgical supplies	0	-10.76	-46.04	-61.58	-79.06	-98.7	-105.6
Direct operating costs	0	-59	-63.14	-67.54	-72.28	-77.34	-82.76
Indirect operating costs	0	-52.2	-56.18	-60.1	-64.32	-68.82	-73.64
Administration costs	0	-48	-51.36	-54.96	-58.8	-62.92	-67.32
Head office costs	0	-15	-32.1	-34.34	-36.76	-39.32	-42.08
Depreciation	0	0	0	0	0	0	0
Finance charges	0	-10.8	-9	-7.02	-4.88	-2.54	0
Net cash flow from operations	-122.2	-174.1	-40.846	7.92	63.51	126.758	136.235
Sale of business (5 x EBITDA in year 6)							681.175
Net cash flow	-122.2	-174.1	-40.846	7.92	63.51	**126.758**	**817.41**
*Assumes hospital will be in operation during the last half of year 1							
IRR	25.15%						
NPV @15% hurdle rate	₦153.171	130.791					
	Year 1	**Year 2**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Number of surgeries		14,940	59,760	74,700	89,640	104,580	104,580
Maximum capacity for patients		149,400	149,400	149,400	149,400	149,400	149,400
Average fixed fee per patient		₦ 3,600	₦ 3,852	₦ 4,122	₦ 4,410	₦ 4,719	₦ 5,049
Calculation of NPV @15%	Year	Cashflow	Present factor	NPV			
	0	-122.2	1.0000	- 122.200			
	1	-174.1	0.8696	- 151.397			
	2	-40.846	0.7561	- 30.884			
	3	7.92	0.6575	5.207			
	4	63.51	0.5718	36.315			
	5	126.758	0.4972	63.024			
	6	817.41	0.4323	353.366			
	NPV			153.432			
Calculation of IRR							
Using hurdle rate of 30%	Year	Cashflow					
	0	-122.2	1.0000	(122.20)			
	1	-174.1	0.7692	(133.92)			
	2	-40.846	0.5917	(24.17)			
	3	7.92	0.4552	3.61			
	4	63.51	0.3501	22.23			
	5	126.758	0.2693	34.14			
	6	817.41	0.2072	169.37			
	NPV			(50.94)			
IRR	15+(153.432/153.432+50.94)* (30 - 15)						
		26.24%					