



**THE INSTITUTE OF CHARTERED ACCOUNTANTS
OF NIGERIA**

PATHFINDER

NOVEMBER 2013 PROFESSIONAL EXAMINATION I

Question Papers

Suggested Solutions

Plus

Examiners' Reports

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FOREWORD

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

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

The answers provided in this publication do not exhaust all possible alternative approaches to solving the questions. Efforts have been made to use the methods which will save much of the scarce examination time. Also, in order to facilitate teaching, questions may be altered slightly so that some principles or application of them 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 EXAMINATION I - NOVEMBER 2013

FINANCIAL ACCOUNTING

Time Allowed: 3 hours

SECTION A: PART I MULTIPLE-CHOICE QUESTIONS (20 Marks)

ATTEMPT ALL QUESTIONS IN THIS SECTION

Write ONLY the alphabet (A, B, C, D or E) that corresponds to the correct option in each of the following questions/statements:

1. The following are enhanced qualitative characteristics of financial statements **EXCEPT**:
 - A. Understandability
 - B. Timeliness
 - C. Relevance
 - D. Verifiability
 - E. Comparability
2. Which of these is the main function of International Accounting Standard Board (IASB)?
 - A. Develop local GAAP to meet national and international standards
 - B. Receive comments from financial regulators
 - C. Control accountancy and other professions globally
 - D. Formulate International Financial Reporting Standards (IFRS)
 - E. Review the defects on companies' financial statements and make recommendations.

Use the following information to answer questions 3 and 4.

The extract from the Statement of Financial Position of Madam Limited is as follows:

₦'000

Assets:

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Property, Plant and Equipment	100,000
Goodwill	<u>20,000</u>
	120,000

Inventory	45,000
Trade Receivables	15,000
Bank Balances	<u>20,000</u>
Total Assets	<u>200,000</u>

Ordinary Shares of ₦1.25k each	80,000
10% Loan Notes	<u>80,000</u>
	160,000

Trade Payables	15,000
Other Short Term Payables	<u>25,000</u>
	<u>200,000</u>

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5. The following are parts of Equity and Reserves of a bank **EXCEPT**:

- A. Share Capital
- B. Small Scale Industry Reserve
- C. Fair Value Reserves
- D. Derivatives
- E. Retained Earnings

6. The creditors of Mongul Limited (in liquidation) since June 2012 consist of:

	₦
Trade Payables	64,000
PAYE deductions (2011- ₦ 20,000; 2012- ₦ 16,000)	36,000
Loan for payment of workers' salary	200,000
NSITF contributions (3 years)	45,000
Local rates (20 months)	50,000

The unsecured trade payables have agreed to accept a dividend of 85 kobo.

Calculate the amount for unsecured trade payables in the Statement of Affairs

- A. ~~₦~~54,400
 - B. ~~₦~~85,000
 - C. ~~₦~~110,500
 - D. ~~₦~~113,900
 - E. ~~₦~~224,400
7. Which of the following is a method of allocating annual finance charges in hire purchase transactions?
- A. Annuity method
 - B. Depletion unit method
 - C. Revaluation method
 - D. Production hour method
 - E. Sum-of-the-year digits method
8. In oil and gas operations, costs may be classified under the following broad categories **EXCEPT**:
- A. Mineral rights acquisition costs
 - B. Exploration and drilling costs
 - C. Improvement costs

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- D. Production costs
 - E. Development costs
9. An extract from Contract ABJ 402 B Account handled by Jumbo Construction Company Limited revealed the following:

	₦
Costs of job certified to date	1,800,000
Cash received to date	2,040,000
Contract price	3,000,000
Work-in-progress brought forward	980,000
Profit recognised in the year	250,000

There is a 15% retention policy on the contract. Determine the value of certificates issued to date:

- A. ₦2,050,000
 - B. ₦2,117,647
 - C. ₦2,400,000
 - D. ₦2,550,000
 - E. ₦2,780,000
10. Niger-Delta Insurance Company Limited was incorporated on 1 May 2013 to carry on re-insurance business. What is the minimum paid up capital requirement for the registration?
- A. ₦2 billion
 - B. ₦3 billion
 - C. ₦5 billion
 - D. ₦10 billion
 - E. ₦20 billion
11. Which of the following statements is **NOT** true of IAS 2 (Inventories)?
- A. The standard does not permit the use of LIFO
 - B. The standard requires the disclosure of the carrying amount of inventories at fair value less costs to sell
 - C. The standard permits the use of LIFO to measure the cost of inventories

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- D. The standard is not applicable to biological assets relating to agricultural activities and agricultural produce at the point of harvest
- E. Inventories are assets held in the process of production for sale

Use the following information to answer questions 12 and 13:

On 1 January 2011, Abacus purchased a debt instrument for its fair value of ₦1,000. It is due to mature on 31 December 2015. The instrument has a principal amount of ₦1,250 and carries a fixed interest rate of 4.72% paid annually. The effective interest rate is 10%.

12. Calculate the amortised cost at the end of 2011:
- A. ₦900
 - B. ₦1,000
 - C. ₦1,041
 - D. ₦1,059
 - E. ₦1,159
13. Calculate the amortised cost at the end of 2012:
- A. ₦982
 - B. ₦1,086
 - C. ₦1,100
 - D. ₦1,141
 - E. ₦1,145
14. How should a gain on the sale of an office building owned by an entity be presented in a Statement of Cash Flows?
- A. As an inflow in the “investing activities” section of the Statement because it pertains to a long-term asset
 - B. As an inflow in the “financing activities” section of the Statement of Cash Flows because the building was constructed with a long-term loan from a bank that would be paid from the sales proceeds
 - C. As an adjustment to the net income in the “operating activities” section of the Statement of Cash Flows prepared under the indirect method
 - D. Added to the sales proceeds and presented in the “investing activities” section of the Statement of Cash Flows

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- E. It should be ignored totally as the gain arose outside the normal business of the organisation
15. A acquired 30% of the Share Capital of B for ~~₦~~2million on 3 December 2010. The accumulated profit at that date was ~~₦~~4million. The abridged Statement of Financial Position of B on 31 December 2012 is as follows:

	₦m
Sundry net assets	12
Issued Share Capital @ ₦ 1 each	2
Share Premium	4
Retained Earnings	6

The recoverable amount of net assets of B is deemed to be ~~₦~~14million. The fair value of the net assets at the date of acquisition was ~~₦~~10million. Calculate the goodwill or gain on bargain purchase:

- A. ~~₦~~1million gain on bargain purchase
B. ~~₦~~1million goodwill
C. ~~₦~~2million gain on bargain purchase
D. ~~₦~~2million goodwill
E. ~~₦~~3million goodwill
16. Inter-group sales and purchases are eliminated from:
- A. Consolidated Statement of Cash Flows
B. Consolidated Statement of Profit or Loss
C. Consolidated Statement of Financial Position
D. Consolidated Statement of Other Comprehensive Income
E. Consolidated Statement of Changes in Equity
17. Which of the following items are found under Comprehensive Income Statement?
- (i) Income attributable to owners of the parent
(ii) Income attributable to debenture holders
(iii) Income attributable to preference shareholders
(iv) Income attributable to non-controlling interest

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- A. (i) only
 - B. (i) and (ii)
 - C. (ii) and (iii)
 - D. (i) and (iv)
 - E. (i), (ii) and (iv)
18. SOLAR Plc has an associate company in the group with ₦50,000,000 as cost of investment, ₦10,000,000 as share of post-acquisition retained earnings and ₦4,500,000 as impairment loss. Calculate the investment in the associate.
- A. ~~₦45,500,000~~
 - B. ~~₦50,000,000~~
 - C. ~~₦55,500,000~~
 - D. ~~₦60,000,000~~
 - E. ~~₦64,500,000~~
19. Which of the following is the oldest spreadsheet?
- A. Microsoft Excel
 - B. Microsoft Access
 - C. Lotus 1-2-3
 - D. Visicalc
 - E. QBooks
20. In Microsoft excel formula creation, which of the following is a valid formula structure?
- A. (=F1+F2+F3)
 - B. =(F1+F2+F3)
 - C. =(F1+F2+F3)
 - D. (F1+F2+F3)
 - E. F1+F2+F3=

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SECTION A: PART II

SHORT-ANSWER QUESTIONS

(20 Marks)

ATTEMPT ALL QUESTIONS IN THIS SECTION

Write the correct answer that best completes each of the following questions/statements:

1. State any **TWO** elements of financial statements that are reported in the Statement of Financial Position.
2. The framework for the preparation and presentation of financial statements identified two concepts of capital. State any **ONE**.
3. State the formula for computing dividend yield.
4. What is the minimum paid up capital requirement for the registration of a state Microfinance Bank?
5. Which is the first class of creditors to be settled from any available cash of a company in liquidation?
6. IAS 7 on Statement of Cash Flows encourages entities to report cash flows from operating activities using method.
7. In the financial statements of estate agents and property companies, under which item of Statement of Financial Position will “freehold land held for re-sale” be classified?
8. Which method is used in oil and gas accounting to recognise the value of proved oil and gas reserves as assets and changes in such reserve values as earnings in the financial statements?
9. State the accounting entry in “accounting for investment” when an amount is set aside as annual instalment.
10. State any **ONE** major role of the Securities and Exchange Commission (SEC) in Nigeria.
11. Taylor Plc bought a patent on 30 September 2010 for ₦70,000,000. The company expects to use the patent for 12 years after which the value remains at ₦10,000,000.

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What is the value of the patent as at 30 September 2013 in accordance with IAS 38 on Intangible asset?

12. An entity commenced construction of a 20 storey office building with a bank loan of ₦250,000,000 on 1 October 2012. The entity's accounting year-end is 30 September annually and the loan interest is 20% per annum. The office building was ready for use on 30 June 2013.
What is the cost of the office building to be recognised in the entity's Statement of Financial Position at the end of its 2013 financial year?
13. In accordance with IAS 38 (Intangible Assets), state any **TWO** types of classification of amortisation.
14. Biu Plc acquired 75% shares in Jos Limited on 1 January 2013, for ₦ 100,000 when the balance of the retained earnings was ₦45,000. On 10 January 2013, Biu Plc received dividend of ₦15,000 from Jos Limited out of the profit for the year ended 31 December 2012.
Calculate the effective cost of Biu Plc In Jos Ltd.
15. Clara Plc acquired 80% of Solo Ltd on 1 January 2012 for ₦390,000 when the retained earnings was ₦120,000. The fair value of non-controlling interest on acquisition was ₦75,000. Extracts from the Statements of Financial Position of the parent and subsidiary are:

	Clara Plc	Solo Ltd
	₦	₦
Issued Share Capital @ ₦1 each	500,000	140,000
Retained Earnings	<u>220,000</u>	<u>180,000</u>
	720,000	320,000

Calculate the value of non-controlling interest that will appear on the Consolidated Statement of Financial Position as at 31 December 2012.

16. How many sheets are there in a Microsoft Excel workbook by default?
17. When the value of a foreign currency falls, what is the effect on an entity holding assets in the foreign currency?
18. Which of the following errors may give rise to gain on bargain purchase?
 - (i) Value assigned to cost of combination was overstated
 - (ii) Total value of identifiable assets acquired was overstated
 - (iii) Contingent liabilities were omitted

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- SECTION B: ATTEMPT QUESTION 1 AND ANY OTHER THREE QUESTIONS (60 Marks)**

CASE STUDY

Upon investigation, it was discovered that Karatandi Plc is a leader in the brewing business in the country with a high level of liquidity, profitability, asset base and good track record.

The financial statements comprising Statement of Financial Position of Shitanda Plc and Karatandi Plc as at 31 December 2012 are as follows:

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Investment in Karatandi Plc.		<u>1,320</u>	
		2,520	
<u>Current Assets</u>			
Inventories	714		504
Trade receivables	1,050		252
Cash/bank	<u>316</u>	<u>2,080</u>	<u>60</u>
		<u>4,600</u>	<u>1,816</u>
Ordinary Shares at ₦1 each		3,000	1,200
Retained Earnings		<u>1,160</u>	460
Shareholders fund		4,160	1,660
<u>Current Liabilities</u>			
Trade payables		<u>440</u>	176
		<u>4,600</u>	<u>1,836</u>

Karatandi Plc owes Shitanda Plc ₦50million for goods purchased during the year. Inventory of Karatandi Plc includes goods bought from Shitanda Plc at the price that includes a profit to Shitanda Plc of ₦24million.

The management of Shitanda Plc wants the financial statements to be consolidated using the acquisition method and wishes to know whether there is goodwill acquisition of Karatandi Plc and the amount involved.

You are required to:

- | | | |
|-----|---|-------------------------|
| (a) | Prepare the Consolidated Statement of Financial Position as at 31 December 2012. | (10 Marks) |
| (b) | State the requirements of IFRS 3 (Business Combinations) in relation to acquisition method. | (3 Marks) |
| (c) | Explain TWO forms of business combinations. | (2 Marks) |
| | | (Total 15 Marks) |

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QUESTION 2

OLDSAD Operations Limited has been facing persistent business challenges and teetering on the brink of insolvency. This development prompted the loan notes holders to appoint a receiver on 31 March 2013 to take over the operation of the company's business and a liquidator was appointed on 30 June 2013. On the date of the receiver's appointment, the trial balance of the company is as follows:

	Dr. ₦ million	Cr. ₦ million
Machinery & equipment	720	
Accounts receivable	205	
Accounts payable		248
Inventories	187	
Profit and Loss	164	
7% Preference Shares of ₦1 each fully paid		40
400 million ordinary shares of ₦1 each fully paid		400
100 million ordinary shares of ₦1 each ₦0.60k paid		60
Capital reserve		32
10% Loan notes		300
Loan notes interest accrued to 31 March 2013		30
Bank overdraft		64
Mortgage loan		72
Taxation (due within the last 12 months)		30
	<u>1,276</u>	<u>1,276</u>

The following information is also relevant:

₦ million

i) Accounts payable include:

PAYE deductions (January - March 2013)	10
NSITF contributions (12 months to 31 March 2013)	5
Loan by directors to pay salaries for January - March 2013	20

(ii) The bank overdraft was secured by the personal guarantees of the directors of the company for ~~₦40~~million. The directors duly honoured their obligations to the bank.

(iii) The mortgage was secured on a fixed machinery with a carrying amount of ~~₦80~~million but they realised the security for ~~₦75~~million.

(iv) The receiver sold the remaining machinery and equipment for ~~₦620~~million. The receiver's remuneration and expenses amounted to ~~₦29~~million. He

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made all necessary payments and transferred the cash in hand to the liquidator on 30 June 2013.

- (v) The liquidator sold and realised ₦150million on the inventories. He was able to collect ₦170million from account receivables. His remuneration and expenses totalled ₦32million.

You are required to:

(a) Prepare:

- (i) Receivers' Receipts and Payments Account
 - (ii) Liquidator's Receipts and Payments Account
- (Show all workings)

(12 Marks)

- (b) State the circumstances that may lead to winding up of a company by court order.

(3 Marks)

(Total 15 Marks)

QUESTION 3

You are a freelance management accountant. Baale Plc is a public limited company. Your client, Mr. Souza, currently owns 20million shares in Baale Plc. He recently received the published financial statements of Baale Plc for the year ended 31 March 2013. Mr. Souza is not sure how the performance of the company during the year will affect the market value of the entity's shares but he is aware that the earnings per share statistics are often used by analysts in assessing the performance of listed companies.

Extracts from these published financial statements and other relevant information are given below.

Statement of Profit or Loss for the period ended 31 March 2013

	2013 ₦'m	2012 ₦'m
Revenue	18,000	15,300
Cost of Sales	<u>(11,340)</u>	<u>(9,180)</u>
Gross Profit	6,660	6,120
Operating Expenses	<u>(3,420)</u>	<u>(3,240)</u>
Operating Profit	3,240	2,880
Interest Payable	<u>(540)</u>	<u>(576)</u>
Profit before tax	2,700	2,304

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Taxation	(846)	(720)
Profit after tax	<u>1,854</u>	<u>1,584</u>

Statement of Financial Position as at 31 March 2013

	2013		2012	
	N'm	N'm	N'm	N'm
Intangible assets		5,400		-
Tangible assets		<u>7,200</u>		<u>6,660</u>
		12,600		6,660
<u>Current Assets</u>				
Inventory	2,340		1,800	
Receivables	2,700		2,160	
Cash in bank	<u>180</u>	<u>5,220</u>	<u>162</u>	<u>4,122</u>
		<u>17,820</u>		<u>10,782</u>
<u>Capital and Reserves</u>				
Share Capital		2,700		900
Share Premium		4,860		900
Retained Earnings		<u>1,620</u>		<u>1,206</u>
		9,180		3,006
<u>Current Liabilities</u>				
Trade Payables	3,060		2,160	
Taxation	900		756	
Bank Overdraft	<u>1,080</u>		<u>1,260</u>	
		<u>5,040</u>		<u>4,176</u>
		14,220		7,182
15% Loan Note		<u>3,600</u>		<u>3,600</u>
		<u>17,820</u>		<u>10,782</u>

The following information is also relevant:

- (i) The share capital of the company comprises ~~₦~~1 equity shares only.
- (ii) On 1 October 2012, the company made a rights issue to existing shareholders of two new shares for every one share held at a price of ₦5.94 per share and paid issue cost of ₦180,000.
- (iii) The market price of shares immediately before the rights issue was ₦6.30 per share.
- (iv) No other changes took place in the equity capital of Baale Plc in the year ended 31 March 2013.

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You are required to:

- (a) Compute EPS for the year and the comparative figures that will be included in the published financial statements of Baale Plc for the year ended 31 March 2013. (4 Marks)
 - (b) Using the extracts you have been provided with, write a report to Mr. Souza identifying the key factors which led to the change in the EPS of Baale Plc since the year ended 31 March 2013. (7 Marks)
 - (c) Comment on the relevance of the EPS statistics to shareholders. (4 Marks)
- (Total 15 Marks)**

QUESTION 4

- (a) Distinguish between a finance lease and an operating lease, showing their disclosure requirements in accordance with the provisions of IAS 17 (Leases) (9 Marks)
- (b) A property, plant and equipment company has entered into a lease agreement with another company. The terms of the contract stipulate that the property, plant and equipment company will pay an annual rent of ₦50million for 12 years on an asset valued at ₦350million. The cost of capital is 10%.

You are required to:

- (i) Calculate on yearly basis, the present value of the rental payments. (4 Marks)
 - (ii) Determine the type of lease involved, giving your reasons. (2 Marks)
- (Total 15 Marks)**

QUESTION 5

- (a) State and explain the **TWO** types of joint arrangement identified in IFRS 11 (7 Marks)
 - (b) A joint operator is expected to recognise and account for certain elements in relation to the joint operations. State **FIVE** elements to be recognised. (5 Marks)
 - (c) State **TWO** characteristics of a joint arrangement. (3 Marks)
- (Total 15 Marks)**

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QUESTION 6

- (a) Discuss the reasons for the development of a single set of financial reporting standards for use by business organisations globally. (6 Marks)
 - (b) Explain the arguments in support and against financial reporting standards. (4 Marks)
 - (c) Explain the classification of the elements of financial statements as stipulated in the conceptual framework . (5 Marks)
- (Total 15 Marks)**

SOLUTIONS TO SECTION A

PART 1 - MULTIPLE CHOICE QUESTIONS

- 1. C
- 2. D
- 3. E
- 4. E
- 5. D
- 6. A
- 7. E
- 8. C
- 9. C
- 10. D
- 11. C
- 12. C
- 13. B
- 14. C
- 15. A
- 16. B
- 17. D
- 18. C

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20. В

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$$4. \quad \frac{\text{Debt}}{\text{Equity}} \frac{100}{1} = \frac{120,000}{80,000} \times \frac{100}{1} = \underline{\underline{150\%}}$$

$$6. \quad 0.85 (64,000) = \underline{\underline{\text{N}54,400}}$$

9. $\frac{\text{N}2,040,000}{0.85} = \text{N}2,400,000$

		Cost @ beginning	Interest for the year	Cash in flow	Amortized Cost @ year end
		₦	₦		₦
12.	2011	1,000	100	(59)	<u>1,041</u>
13	2012	1,041	104	(59)	<u>1,086</u>
15.	Fair value of Net Asset				₦M
	Acquired (30% x N10m)				3
	Less: Cost				<u>2</u>
	Gain on bargain purchase				<u>1</u>
18.	Cost of investment				50
	Share of post acquisition retain earnings				10
	Impaired loss				<u>(4.5)</u>
					55.5

EXAMINERS' REPORT

The questions adequately cover all sections of the syllabus. Candidates' performance was fair. The commonest pitfall was the inability of the candidates to correctly answer computational questions that require accounting principles.

Candidates are advised to cover all sections of the syllabus for better performance in future examinations.

PART II SHORT ANSWER QUESTIONS

- ## 1. Assets, Liabilities & Equity

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- ## TUTORIALS

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11. $\text{N}70\text{M} - 3/12 (\text{N}70\text{M} - \text{N}10\text{M}) = \underline{\text{N}55\text{M}}$

12. $\text{N}250\text{M} + 9/12 (\text{N}250\text{M} \times 20\%) = \underline{\text{N}287.5\text{M}}$

13. $(\text{N}100,000 - \text{NIL}) = \underline{\text{N}100,000}$

The pre-acquisition dividend is not deductible

15. $\text{N}75,000 + 20\% (\text{N}180,000 - \text{N}120,000) = \underline{\text{N}87,000}$

N'000

19. Subsidiary profit for the period 282,000

Less: Pre-acquisition profit $(75\% \times 282 \times 2/12)$ (35,250)

Non controlling interest $(25\% \times 282)$ (70,500)

176,250

EXAMINERS' REPORT

The questions cover all areas of the syllabus.

Majority of the candidates attempted the questions and performance was fair. The commonest pitfall was the inability of the candidates to understand some accounting concepts.

Candidates are advised to read very wide so as to be well grounded in accounting concepts in order to improve their performance in future examinations.

SOLUTIONS TO SECTION B

SOLUTION 1 – CASE STUDY

Shitanda Plc

Consolidated Statement of Financial Position as at 31 December 2012

	N'Million	N'Million
Non Current Assets		
Goodwill (working 1)		120
Land & building $(630 + 556 + 140)$		1,326
Machinery & Equipment $(570 + 440)$		<u>1,010</u>
		2,456
Current Assets		
Inventory $(714 + 504 - 24)$	1,194	
Trade receivables $(1,050 + 252 - 50)$	1,252	
Cash/Bank $(316 + 60)$	<u>376</u>	<u>2,822</u>
		<u>5,278</u>

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Ordinary shares of ₦1 each	3,000
Retained earnings (Working 3)	1,323.2
Non-controlling Int. (Working 4)	<u>376.8</u>
	4,700
Current Liabilities	
Trade Payables (440 + 188 - 50)	<u>578</u>
	<u>5,278</u>

Workings:

1. Calculation of goodwill:

	N'Million	N'Million
Fair value of consideration		1,320
Plus fair value of NCI at acquisition		330
Less net acquisition – fair value of		
Assets acquired & liability:		
Share capital	1,200	
Retained Earning	190	
Fair value adj at acquisition	<u>140</u>	(1,530)
Goodwill		<u>120</u>
2. Group structure		
<u>960 million</u> x 100		<u>80%</u>
1,200 million		

3. Retained earnings:

	Shitanda ₦ million	Karatand ₦ million
As per question	1,160	424
Adjustment (unrealised profit)	(24)	
Pre-acquisition retained earnings		(190)
		<u>234</u>
Group share of post-acquisition retained earnings:		
(80% x 234)	<u>187.2</u>	
	<u>1,323.2</u>	

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4. Non-controlling interest:	₹ million
Fair value of NCI at acquisition	330
Plus NCI's share of post-acquisition retained earnings (20% x 234)	<u>46.8</u>
	<u>376.8</u>

Alternative Workings:

(W1) Fair value adjustment:
Dr: Consolidated land & building
Cr: Revaluation reserve

(W2) Consolidation Schedule

Karatandi Plc	Shitanda in Karatandi 80% (W3)	NCI 40%	Post – Acq
₦ 'M	₦ 'M	₦' M	₦ 'M
Ordinary share capital	1,200	960	240
Revaluation Res. (W1)	140	112	28
Retained earnings	424	<u>152</u>	84.8
Net assets acquired		1,224	
Cost of acquisition		(1,320)	
Goodwill (partial value)		(96)	
Goodwill attribute to NCI (W5)		<u>(24)</u>	24
Goodwill (fair value)		(<u>120</u>)	
Unrealised profit on inventory			<u>-</u>
NCI (fair value)			<u>376.8</u>
Retained earnings of Shitanda Plc			1,160
Consolidated retained earnings			1,323

(W3) Shitanda in Karatandi = $\frac{960\text{m shares}}{1,200\text{m shares}} \times 100 = 80\%$

(W4) Shitanda's share of Karatandi's pre-acquisition retained earnings = 80% x
= 80% x ~~₱190m~~ = ₱152m

(W5) Goodwill attribute to NCI	Nm
Fair value of NCI @ date of acquisition	330
Less: fair value of net assets attributable to NCI (20% x (1,200 + 140 + 190m))	306

PATHFINDER

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(1b) Requirements of IFRS 3 in relation to Acquisition Method

- (i) All business combinations must be accounted for using acquisition method.
- (ii) Identify the acquirer – one of the combining entities must be identified as the acquirer.
- (iii) Determine the acquisition date – this is generally the date on which the acquirer obtains control of the acquiree and this would usually be the closing date or sometimes a date earlier or later than the closing date.
- (iv) Recognise and measure the identifiable assets acquired and the liabilities assumed at fair value on the acquisition date.
- (v) NCI in an acquiree should be measured at fair value or at the NCI's proportionate share of the acquiree's identifiable net assets at acquisition.
- (vi) Recognise and measure goodwill or gain from a bargain purchase and test goodwill for impairment periodically.

(1c) There are two forms of business combinations:

- i) Combination based on purchase of controlling shares from existing shareholders of one company in another and combinations brought about by an acquisition of net assets of another and
- ii) Combinations brought about by an acquisition of net assets of another company.

EXAMINERS' REPORT

The question tests candidates' knowledge of how to prepare consolidated financial statement and the requirements of IFRS 3. The candidates are expected to prepare consolidated statement of financial position in part (a) while they are required to state the provisions of IFRS 3 in parts (b) & (c) in relation to acquisition method and forms of business combination.

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Being a compulsory question, majority of the candidates attempted the question. Most of the candidates understood the requirements of part (a) of the question, but only few candidates understood parts (b) and (c). The commonest pitfall was the inability of the candidates to compute goodwill and pre-acquisition retained earnings. Majority of the candidates could not state the requirements of IFRS 3 for business combinations.

Candidates are advised to cover adequately these areas of the syllabus for better performance in future.

SOLUTION 2

(ai) **Oldsad Operations Ltd**

Receiver's Receipt & payments account				
Receipts	N'M	Payments		N'M
Surplus from fully secured mortgage	3	Remuneration & Exp.		29
		Preferential (W1)		65
		Loan notes	300	
Machinery & Equipment	620	Loan interest (30 + 7.5)	<u>37.5</u>	337.5
		Liquidator (Balance)		<u>191.5</u>
	<u>623</u>			<u>623</u>

(ii)

Liquidator's Receipts & Payment Account			
	N'M		N'M
Payment from receiver	191.5	Remuneration & Exp	32
Inventories	150	Unsecured accounts	277
Accounts receivable	170	Payables (W1)	
		Returns to shareholders:	
		Preference shares	40
		400million ordinary shares	
		Fully paid at 40.5k	162
		100million ordinary shares	
		with 60k paid per share	0.5
		(Refund at 0.5k per share)	
	<u>511.5</u>		<u>511.5</u>

PATHFINDER

Workings

1. Schedule of account payables:

	Unsecured ₦ million	Preferential ₦ million
Accounts payables (248 – 35)	213	-
PAYE tax deduction	-	10
NSITF Contribution	-	5
Loan for 3 months salaries		20
Bank overdraft (64 – 40)	24	
Directors in respect of Bank overdraft	40	-
Taxation	<u>-</u>	<u>30</u>
	<u>277</u>	<u>65</u>

2. Return to ordinary shareholder:

i)	Amount invested	₦'M
	400 million ordinary shares of ₦1 each fully paid	400
	100 million ordinary shares of ₦1 each with 60k per share paid	<u>60</u>
		<u>460</u>
ii)	Cash to be returned to ordinary shareholders:	₦'M
	Total amount received by liquidator	511.5
	Less:	
	Disbursements (32 + 277 + 40)	(349)
	Cash left for ordinary share	<u>162.5</u>
iii)	Deficiency (₦460m – ₦162.5)	297.5
	Less per ordinary share = $\frac{\text{Total deficiency}}{\text{Normal value of shares}}$	
	= $\frac{297.5}{500}$ = 59.5k per ordinary share	
iv)	Return to ordinary shareholders:	
	a) 400million ordinary shares of ₦1 each fully paid to be paid (refund) 40.5k per share (i.e. ₦1 – 59.5k)	
	b) 100 million ordinary shares of N1 each with 60k paid per share to be paid (refund) 0.5k per share (i.e. 60k paid – 59.5k)	

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2(b) Conditions for winding up by court order

- i. A company is wound up due to its inability to pay its debt.
- ii. The company had by special resolution resolved that it be wound up.
- iii. Default is made in delivering the statutory report to the Corporate Affairs Commission or in holding the statutory meetings.
- iv. The company does not commence its business within a year from its incorporation or suspend its business for a whole year.
- v. The court is of the opinion that it is just and equitable that the company should be wound up.

EXAMINERS' REPORT

The question tests the candidates' knowledge of Liquidation of a company with emphasis on the preparation of Receiver and Liquidator receipts and payments accounts.

Majority of the candidates attempted the question but showed little understanding of the question. Performance was poor. In part (a) of the question, most candidates could not determine correctly the amount of the preferential and unsecured creditors while others failed to accrue for the loan notes interest up to the date of settlement.

Candidates are advised to acquaint themselves with the accounting principles required for the preparation of accounts of companies in Liquidation.

SOLUTION 3

(a) Earnings Per Share

$$= \frac{\text{Profit after tax}}{\text{No of shares issued}}$$
$$2013 = \frac{\text{N}1,854}{1,818} \times 100k$$
$$= 101 \text{ kobo}$$
$$2012 = \frac{1,584}{900} \times 100k \times \frac{6.06}{6.30}$$
$$= 169 \text{ kobo}$$

Workings

PATHFINDER

2. Weight average number of shares

1 share at ₦6.30 each	6.30
2 rights issue for every 1 at ₦5.94	<u>11.88</u>
3 shares for	<u>18.18</u>
Price per share $\frac{\text{₦18.18}}{3}$	= ₦6.06

2. Weight average number of shares

$$\begin{aligned} \text{1 April – 30 Sept. 2012} &= 900\text{m} \times \frac{6}{12} \times \frac{6.30}{6.06} = 467.8 \\ \text{1 Oct. – 31 March 2013} &= 2,700 \times \frac{6}{12} = \frac{1,350}{1.818} \end{aligned}$$

(b) **REPORT**

To: Mr. Souza
From: Management Accountant
Date: 15 April 2013

SUBJECT: EVALUTING THE CHANGES IN EPS OF BAALE PLC

The key factors which has led to changes in the EPS of BAALE Plc. are as follows:

Revenue and profitability. Revenue increased by ₦2,700 million (18%) last year, but the gross profit and net profit ratios have not increased proportionately.

The gross profit percentage fell from 40% to 37% in 2013, while the net profit percentage remained constant at 10%.

Factors responsible for the decline might be due to the inability of the entity to maintain good profit margin coupled with the failure to also maintain good control over operating expenses.

The more funds realised from the rights issue did not lead to any significant increase in return on capital employed which fell from 43% in 2012 to 25% in 2013 $\left\{ \begin{array}{cc} \underline{2,880} & \text{to } \underline{3,240} \\ \underline{6,606} & \underline{12,780} \end{array} \right\}$

PATHFINDER

It is hoped that this asset will start generating substantial returns in the near future.

Signed
Management Accountant

The ratios that are relevant to discussion and evaluation of changes in EPS of Baale Plc are those that relate to profitability and return on capital employed. The effect of the rights issue should also be considered in the discussion in relation to how the funds raised through the shares were employed.

(i)	Change in revenue	=	$\frac{18,000 - 15,300}{18,000} \times 100$	= 18% Increase
			<u>2013</u>	<u>2012</u>
(ii)	Costs of sales/revenue		$\frac{11,340}{18,000} = 63\%$	$\frac{6,120}{15,300} = 40\%$
(iii)	Gross profit %		$\frac{6,660}{18,000} = 37\%$	$\frac{6,120}{15,300} = 40\%$
(iv)	Net profit %		$\frac{1,854}{18,000} = 10\%$	= 10%
(v)	Operating expenses %		$\frac{3,420}{18,000} = 19\%$	$\frac{3,240}{15,300} = 21\%$
(vi)	Interest payable/sales		$\frac{540}{18,000} = 3\%$	$\frac{576}{15,300} = 4\%$
(vii)	Taxation/sales		$\frac{846}{18,000} = 5\%$	$\frac{720}{15,300} = 5\%$
(viii)	Capital employed		$\frac{3,240}{18,000} = 18\%$	$\frac{2,880}{15,300} = 19\%$

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$$3,006 + 3,600$$

(ix)	Assets/turnover	$\frac{18,000}{12.780} = 1.41$	$\frac{15,300}{6.606} = 2.32$
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Relevance of EPS to shareholders

- (i) The EPS is used to compute the Price Earning (P/E) ratio, a major market indicator to determine how successful a company has been operating.
- (ii) The Price Earning figure is a multiple of the EPS, where the multiple represents the number of years' earnings required to recoup the price paid for the share.
- (iii) Rising trend in EPS is a more accurate performance indicator than rising trend in profit after tax. The investor should consider the future economic conditions of an entity with some other ratios such as dividend cover and ROCE.
- (iv) EPS is a measure of performance from the existing and potential investors' perspective.
- (v) EPS show the amount available to each ordinary shareholder thereby indicating the potential returns on individual investment.
- (vi) EPS is used to compare the activities of two entities in the same industry.

EXAMINERS' REPORT

The question tests the candidates understanding of concept of Earning Per Share (EPS) with emphasis on Computation of EPS and factors that could lead to changes in Earnings Per Share (EPS) as well as the importance of EPS Statistic to Shareholders.

Few candidates attempted the question and performance was poor. The commonest pitfalls were:

- ✚ Inability of candidates to correctly calculate EPS ratio
- ✚ Poor report writing and lack of adequate knowledge of the relevance of EPS to shareholders.

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Candidates are advised to adequately cover all aspects of the syllabus including the International Financial Reporting Standards (IFRS) in order to improve their performance at this level of the Institute's examination.

SOLUTION 4

a) DIFFERENCES

	Finance lease		Operating lease
*	High probability that ownership of the asset would be transferred to the lessee at the end of the lease period.	*	Ownership of the asset will not be transferred to the lessee at the end of the lease term.
*	Lessee has the option to purchase the asset at a price which is expected to be sufficiently lower than the fair value at the date the option becomes exercisable such that it is reasonably certain at the inception of the lease that the option will be exercised	*	Even if the lessee has the option to purchase the asset, he is unlikely to exercise the option.
*	The lease period is for the major part of the economic life of the asset even if the title is transferred.	*	The lease term is relatively short in comparison with the economic life of the asset.
*	Present value of minimum lease payments at the inception of the lease amount to substantially the fair value of the asset.	*	The annual lease charge will be insignificant compared to the fair value of the asset.
*	Risks and rewards incidental to ownership resides with the lessee.	*	Risks and rewards incidental to ownership resides with the lessor.

(a) ii. DISCLOSURE REQUIREMENTS

	Finance lease		Operating lease
*	A reconciliation between the gross carrying amount of the investment in the lease and the present value of the future minimum lease	*	This is not required.

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	payment receivable.		
*	The gross investment in the lease and the future minimum lease payment for each of the following:	*	Future minimum lease payment under non-cancellable operating lease for each of the following:
	- Not later than one year		- Not later than one year
	- Later than one year but not later than five years		- Later than one year but not later than five years
	- Later than five years		- Later than five years
*	Unearned finance income	*	Not required
*	Unguaranteed residual value	*	Not required
*	Doubtful recoverable lease payment	*	Not required

(b1)

Calculation on yearly basis, the present value of the rent payment

S/N	DF% 10%	Annual Rent	PV
		₦ million	₦'M
1	0. 9091	50	45.46
2	0. 8264	50	41.32
3	0. 7513	50	37.56
4	0. 6830	50	34.15
5	0. 6209	50	31.05
6	0. 5645	50	28.23
7	0. 5132	50	25.66
8	0. 4665	50	23.23
9	0. 4241	50	21.21
10	0. 3855	50	19.28
11	0. 3505	50	17.53
12	0. <u>3186</u>	50	34.15
	6.8136		340.71

(bii)

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The lease involved is a finance lease for the following reasons:

- ✓ At the inception of the lease, the present value of the annual lease rentals, at ₦341m, is substantially the same as the fair value of the asset, ₦350m and
- ✓ The periodic lease finance charge is at a constant rate (10%) of the outstanding lease obligation.

EXAMINERS' REPORT

This is a question on Accounting for Lease that require candidates to distinguish between finance and operating lease as well as the disclosure requirements in accordance with IFRS 17 on leases. Candidates are also required to compute the present value of the lease rental payments.

The question was attempted by majority of the candidates and performance was fair. Most candidates could not correctly distinguish between finance and operating leases as stated in IFRS 17. Few of the candidates that attempted this question were able to calculate the present value of lease rental payments on yearly basis as required by the examiner.

Candidates are advised that most of the topics covered by the Professional Examination 1 syllabus can be linked to a particular IFRS, hence, attention should be paid to the principles and applications of these International Accounting Standards when preparing for examinations at this level.

SOLUTION 5

(a)

(i) **Joint Operations**

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have right to the assets and obligations for the liabilities relating to the arrangement. Those parties are called joint operators.

(ii) **Joint venture**

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have right to the net asset of the arrangement. These parties are referred to as joint venturers.

(b) **Elements to be recognised by a joint operator**

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- (i) Its assets and share of any assets held jointly
 - (ii) Its liabilities and share of any liabilities incurred jointly
 - (iii) Its revenue from the sale of its share of the output arising from the joint operation
 - (iv) Its share of the revenue from the sale of the output by the joint operations
 - (v) Its expenses and share of any expenses incurred jointly.
- (c) **Characteristics of joint arrangements**
- (i) The parties are bound by a contractual arrangement
 - (ii) The contractual arrangement gives two or more of those parties joint control of the arrangement.

EXAMINERS' REPORT

The question tests candidates understanding of the provisions of International Financial Reporting Standard IFRS II on Joint Venture Arrangement.

Most of the candidates did not attempt the question and performance was poor. Candidates displayed shallow knowledge of this standard and this was largely responsible for the poor performance.

They are therefore advised to pay more attention to the requirements of International Financial Reporting Standards for better performance in future.

SOLUTION 6

- (a) The common set of accounting and financial reporting standards are needed for the following reasons:
- (i) **Removal of subjectivity**
A common set of accounting and financial reporting standards are needed to define the way in which financial information are presented in financial statements so that their measurements and presentation are less subjective.
 - (ii) **Confidence**

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It ensures that users of financial statements have confidence in the statements.

(iii) **Definition of contractual entitlements**

Statements are needed because financial information are important when designing contractual entitlements e.g. the remunerations of directors and managers being based on salaries plus a bonus based on an agreed performance measure. Standards stipulate how such performances are measured.

(iv) **Comparison**

Without a common set of accounting and financial reporting standards, it would be difficult to compare financial information prepared by entities located in different parts of the world.

(v) **Consistency**

There is consistency in the presentation of financial information and a common understanding of terms used for the elements of financial statements. This aids efficiency and decision making since users do not need to learn new set of concepts for each reporting entities.

(vi) **Verification**

Auditors verify that financial statements have been prepared in accordance with applicable accounting standards. While an audit report is not a guarantee of a good investment, it lends credibility to the financial statements in a report.

(vii) **Comprehensiveness**

Reports prepared in accordance with standards are required to contain certain information. Potential lenders and companies are aware of those requirements and therefore, know that reports prepared under accounting standards will meet some of their needs.

In the absence of accounting standards, lenders would have to request for information on ad-hoc basis or speculate as to why certain information was missing.

(viii) **Transfer of accounting personnel across countries would be made easier.**

(b) **ARGUMENTS FOR AND AGAINST FINANCIAL REPORTING STANDARDS**

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ARGUMENTS FOR:

- (i) They guide preparers and users of financial statements
- (ii) Their use enhances objectivity and comparability of financial statement which would in turn engender reliability
- (iii) Their use helps to curtail or significantly narrow the divergence in the principles adopted by preparers of financial statements.
- (iv) Standards improve the uniformity of treatment of transactions in the financial statements among companies thereby increasing the credibility and comparability of financial statement.
- (v) Standards compel organisations to disclose information which they may not want to disclose had the standards not been in existence.
- (vi) Standards reduce the number of choices in the methods used to prepare financial statement thereby reducing the risk of creative accounting.
- (vii) Foreign companies which are targets for takeovers or mergers can be more easily evaluated.

ARGUMENTS AGAINST

- (i) The cost of setting up and maintaining a standard-setting apparatus is quite significant and not all countries can afford it.
 - (ii) The standards cannot address all issues or transactions. There are some which are unique and so rare/unusual that global standards are not and cannot be available for them.
 - (iii) Low level of details or explanations.
- (c) **Classification of elements of financial statements**

The elements of financial statements consist of the following:

- ❖ Assets
- ❖ Liabilities
- ❖ Equity

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- ❖ Revenue and
- ❖ Expenses

Assets

These are future economic benefits controlled by an entity as a result of past transactions or other past event. They are recognized in the Statement of Financial Position (SFP) when and only when:

- i. It is likely that the outflow of future economic benefits related thereto would arise and
- ii. The amount of the liability can be reliably measured

Liabilities

These are the present obligation to pay arising from past transactions (or other past events) and are expected to result in outflow of future economic benefits. They are recognized in the SFP when:

- i. It is likely that the outflow of future economic benefits related thereto would arise and
- ii. The amount of the liability can be reliably measured

Equity

This is the residual interest in the assets of the entity after deducting liabilities.

Revenue

Revenue is defined as the gross inflow of economic benefits (cash, receivables, other assets) during the report period arising from the ordinary operating activities of an entity when those inflows result in increases in equity other than increases relating to contributions from equity participants. Revenue is measured at the fair value of the consideration received or receivable.

Revenue is recognised in the income statement when:

- ❖ It is probable that any future economic benefits associated with the item of revenue will flow to the entity and
- ❖ The amount of revenue can be measured with reliability

Expenses

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These are losses or consumption of future economic benefits in the form of reductions in assets or increase in liabilities of the entity, other than those relating to distributions to owners that result in a decrease in equity. Expenses are recognized in the income statement when:

- (i) It is probable that the consumption or loss of future economic benefits has/or would occur and
- (ii) The consumption or loss of future economic benefits can be reliably measured.

EXAMINERS' REPORT

The question tests candidates' understanding of the benefits and challenges of financial reporting standards. The candidates are expected to state the reasons for the development of Financial Accounting Standards as well as merits and demerits of such standards. They are also required to state the classification of elements of the financial statements.

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

Candidates are advised to pay more attention to the provisions of the International Financial Reporting Standards (IFRS) which feature regularly at this level of the Institute's examination.

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THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

PROFESSIONAL EXAMINATION I – NOVEMBER 2013

INFORMATION TECHNOLOGY

Time Allowed: 3 hours

SECTION A: PART I MULTIPLE-CHOICE QUESTIONS (20 Marks)

ATTEMPT ALL QUESTIONS IN THIS SECTION

Write ONLY the alphabet (A, B, C, D or E) that corresponds to the correct option in each of the following questions/statements.

1. In which generation was microchip developed?
 - A. First
 - B. Second
 - C. Third
 - D. Fourth
 - E. Fifth
2. An input device that uses an exposed ball that the user manipulates with the fingers to move the cursor on the display screen is called:
 - A. Joystick
 - B. Mouse
 - C. Track ball
 - D. Optical scanning device
 - E. Touch screen
3. A byte consists of bits.
 - A. 9
 - B. 8
 - C. 7
 - D. 6
 - E. 5

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4. Which of the following are **NOT** examples of Network Interface Cards (NIC)?
- i. Switch
 - ii. Hub
 - iii. Ethernet card
 - iv. Local talk connector
 - v. Token card
- A. i, iii and iv
B. iv and v
C. i and ii
D. i, ii, iii and iv
E. i, ii, iii and v
5. The direct computer-to-computer exchange of electronic information is known as:
- A. Electronic Data Interchange
B. Electronic Data Exchange
C. Electronic Message Transfer
D. Electronic Data Change
E. Electronic Message Interchange
6. The process of visiting different websites and not looking for anything of particular importance is called:
- A. Web Visiting
B. Web Surfing
C. Web Searching
D. Web Going
E. Web Journeying
7. Which of the following is **NOT** an advantage of duplicating evidence in computer forensic investigation?
- A. Introducing additional step into the forensic process
B. Ensuring that the original document is not subjected to alteration
C. Ensuring that the original document is in the best possible state

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- D. Allowing examiners to apply various techniques in cases where the best approach is not clear
 - E. Permitting multiple forensic computer specialists to work on data at the same time
8. Benefits of GPRS exclude:
- A. Higher data speed due to higher bandwidth
 - B. Easy and rapid roll out
 - C. Re-use of infrastructure
 - D. Base for future technologies
 - E. No support for internet communication protocol
9. Which of the following items is **NOT** within the scope of a feasibility study?
- A. Finding out if an existing system can correct the situation with modifications or a new system is required.
 - B. Formation of a study group
 - C. Identifying IT products that offer solutions to the problem.
 - D. Agreeing on how well the proposed solution fits the business
 - E. Estimating the cost of developing the system
10. Which of the following is **NOT** a System Testing issue?
- A. Audit requirement
 - B. Down time period of the hardware
 - C. Recovery and restart capabilities
 - D. Durability of the hardware
 - E. Interfaces between programs
11. Which of the following is **NOT** a benefit of a Bespoke system?
- A. There is a greater probability of bugs in Bespoke system
 - B. Bespoke system might give a company a competitive advantage in the market place.
 - C. It is written to fit the organisation's precise information needs
 - D. The system can be integrated with other applications within an organisation
 - E. The system can be modified to fit changing needs of a user over time.

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12. In the traditional approach of Project Management technique, which of the following is **NOT** a stage?
- A. Monitoring and controlling Stage
 - B. Initiation stage
 - C. Planning or design stage
 - D. Maintenance stage
 - E. Execution or production stage
13. The following events cause a process to be created **EXCEPT**:
- A. Execution of process creation system call by blocked process
 - B. System initialization
 - C. A user request to create a new process
 - D. Execution of process creation system call by running a process
 - E. Initiation of a batch job
14. A common example of an Information System Security Assessment Software tool is:
- A. Information Security tool
 - B. Microsoft Security Assessment tool
 - C. Information System Security tool
 - D. Microsoft Information Security tool
 - E. Information Assessment tool
15. A network protocol used to exchange and manipulate files over a computer network is known as:
- A. SOAP
 - B. HTTP
 - C. FTP
 - D. IMAP
 - E. SMTP
16. A unique identifier for all the information in any database table is called
- A. Master key
 - B. Primary key
 - C. Foreign key

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- D. Secondary key
 - E. Table key
17. Strategies of IT Risk Tolerance does not include which **ONE** of the following?
- A. Mitigation
 - B. Transference
 - C. Avoidance
 - D. Eradication
 - E. Elimination
18. IT personnel in user departments are directly responsible to the manager.
- A. Software
 - B. Hardware
 - C. Operator
 - D. Operations
 - E. Sales
19. Availability and continuity of IT resources are dependent on both back-up and procedures.
- A. Logical
 - B. Physical
 - C. Recovery
 - D. Procurement
 - E. System
20. IT controls are often described in **TWO** categories namely, IT General Controls (ITGC) and IT..... Controls.
- A. Systems
 - B. Software
 - C. Hardware
 - D. Program
 - E. Application

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SECTION A: PART II

SHORT-ANSWER QUESTIONS

(20 Marks)

ATTEMPT ALL QUESTIONS IN THIS SECTION

Write the correct answer that best completes each of the following questions/statements:

1. A hardware resource that converts digital signals to analog signals and vice versa is called.....
2. The processing speed of a computer processor is measured in.....
3. A computer network where two or more geographically separated networks are linked by communication devices is called.....
4. Policies, procedures and technical measures used to prevent unauthorised access, alteration, theft and physical damage to Information Systems is referred to as.....
5. The technology that facilitates the transfer of electronic data or information from one place to the other or from one person to another is known as.....
6. In telecommunication, the acronym WAP stands for.....
7. A malicious program that spreads from computer to computer with the capability to travel without human action is.....
8. The mobile telephone network of the first generation (1G) carries signals.
9. A formal study to decide what type of system can be developed that meets the needs of an organisation and the user objectives is called.....
10. Terminals are the starting and..... points in any communication network environment.
11. A form of Decision Support System that allows users to benefit from expert knowledge and information is known as.....

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12. In a computer system, a record that provides documentary evidence, of the sequence of activities that have at any time affected a specific operation, procedure or event is called.....
13. A computer software which is the legal property of one party is known as.....
14. An operating system that is designed to be used on a stand-alone PC is called.....
15. What is the name given to a computer software used to identify and remove computer viruses and worms?
16. What is the name given to an Information System used in marketing which helps automate sales?
17. Authority structure in the IT environment is clearly defined as the department's hierarchy and.....
18. In Quantitative Risk Analysis Metrics, the acronym SLE stands for.....
19. In System Reliability, Auditability is a non-functional requirement and concerns the of a system with regards to external audits.
20. An IT personnel who is responsible for ensuring that Information Technology controls are utilised is the.....

SECTION B: ATTEMPT QUESTION ONE AND ANY OTHER THREE QUESTIONS

(60 Marks)

QUESTION 1

Swissdeal Nigeria Ltd is a departmental store dealing in a wide range of consumer goods, such as clothing, house wares, furniture and appliances.

As a result of high volume transactions, merchandise were not properly stacked, wares were not available to customers at the right time and long re-order times were recorded. Also long queues were experienced in the store at the point of payment.

Mr. Jolaosho, the Managing Director of Swissdeal Nigeria Ltd. has been contemplating on the kind of business system he could use to ameliorate these problems and an expert has suggested the use of a POS system to him.

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Mr. Jolaosho also discovered that the computer system which was bought some five years ago was frequently breaking down. The computer operator who had been operating the computer system has just been replaced on the ground of abuse of the computer system.

You are required to:

- (a) State a possible business system that will assist Swissdeal Nigeria Ltd. to solve the transactions' processing challenge. (4 Marks)
 - (b) State the full meaning of POS. (1 Mark)
 - (c) Apart from the device stated in the case study, list **TWO** other devices that can be used in capturing sales. (2 Marks)
 - (d) Suggest **THREE** likely causes of the frequent breakdowns of the computer system. (3 Marks)
 - (e) State **ONE** possible remedy for each of the causes in (d) above. (3 Marks)
 - (f) State **TWO** possible reasons for the allegation of abuse of the computer system levelled against the computer operator. (2 Marks)
- (Total 15 Marks)**

QUESTION 2

Over the years, the burden of man has been drastically reduced by increased utilisation of a broad range of computer systems.

You are required to:

- (a) Enumerate **FIVE** landmark features of digital computers manufactured within 1940 and 1960 (5 Marks)
- (b) Define the following terminologies:
 - (i) Software
 - (ii) Artificial intelligence
 - (iii) Time sharing system
 - (iv) Data processing(8 Marks)

PATHFINDER

- (c) Enumerate any **TWO** users' expectations of the fifth generation computers.
(2 Marks)
(Total 15 Marks)

QUESTION 3

The telecommunication industry has witnessed evolutionary trends in recent years.

You are required to:

- (a) Enumerate any **FIVE** key drivers for General Packet Radio Service (GPRS).
(5 Marks)
- (b) Explain the following services and applications offered in 3G.
- (i) Point-to-point packet delivery
 - (ii) Typical point-to-point applications
 - (iii) Point-to multi-point packet delivery (6 Marks)
- (c) List any **FOUR** benefits of GPRS. (4 Marks)
(Total 15 Marks)

QUESTION 4

In view of the recent growth in Loko Communications Limited's business activities, the company acquired a new accounting software. The company now wishes to employ the services of a Chartered Accountant.

You have been shortlisted to attend the employment interview. In the course of the interview:

You are required to:

- (a) Define Local Area Network (LAN) and list **TWO** areas where LAN is deployed.
(2 Marks)
- (b) State what is Corrective Maintenance? (1 Mark)
- (c) List **FOUR** features of Application Development Environment (ADE). (4 Marks)
- (d) Explain briefly any **THREE** activities performed during transaction processing. (6 Marks)

PATHFINDER

- (e) In Development Cost, Migration Cost is one of the costs incurred. State **FOUR** Migration Costs. (2 Marks)
(Total 15 Marks)

QUESTION 5

Application software is a software designed to solve specific data processing task.

You are required to:

- (a) Define an Electronic Spreadsheet? (2 Marks)
(b) List and explain any **FIVE** features of an Excel screen. (10 Marks)
(c) Explain **THREE** ways of saving a document in Microsoft Excel (3 Marks)
(Total 15 Marks)

QUESTION 6

IT systems embrace the use of rules and standards for service delivery and optimal use.

You are required to:

- (a) Enumerate and explain **FOUR** oversight IT functions relating to IT governance. (8 Marks)
Safeguarding of IT assets (such as data files) is a major objective for many organisations.
- (b) Enumerate **FOUR** areas in which IT assets safeguard should be provided on data privacy issue arising in response to information from a wide range of sources. (4 Marks)
- (c) What are Software-Related Threats? (3 Marks)
(Total 15 Marks)

PATHFINDER

SOLUTIONS TO SECTION A

PART I - MULTIPLE CHOICE QUESTIONS

1. D
2. C
3. B
4. C
5. A
6. B
7. A
8. E
9. B
10. B
11. A
12. D
13. A
14. B
15. C
16. B
17. D
18. D
19. C
20. E

EXAMINERS' REPORT

This section consists of twenty compulsory questions testing various aspects of the syllabus. The questions were clear and without any ambiguity.

The performance was good as over 60% of the candidates scored above 50% of the allocated marks.

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PART II – SHORT-ANSWER QUESTIONS

1. MODEM
2. Hertz
3. Distributed processing network
4. Security measures
5. Electronic mail (e-mail)
6. Wireless Application Protocol
7. Worm
8. Analog voice
9. Feasibility study
10. Ending /Stopping
11. Expert System/Artificial Intelligence
12. Audit trail /System log/log file
13. Propriety Software
14. Single User Operating System
15. Anti virus software
16. Sales Force Automation (SFA)
17. Authorities' hierarchy
18. Single Loss Expectancy
19. Transparency
20. Chief Information Officer/IT manager/IT Administrator/IT Auditor

EXAMINERS' REPORT

This section consists of twenty compulsory questions testing various aspects of the syllabus. The questions were clear and without any ambiguities.

The performance was fair, as over 50% of the candidates scored above 50% of the allocated marks.

PATHFINDER

SECTION B

QUESTION 1

- (a) The possible business system that will assist Swissdeal Nigeria Limited to solve the transaction processing challenge is the (Integrated) Transaction Processing system, TPS.

TPS is widely used in organisations with high volume of transactions resulting in benefits such as:

- Efficiency of operations
- Fast turnaround
- Answers to queries
- Improved inventory control
- Staff savings.

- (b) The full meaning of POS is Point-Of-Sale

- (c) Other processing devices that can be used for customers' transactions include:

- (i) Electronic Payment Terminal
- (ii) Mobile payment device
- (iii) Hand held billing device

- (d) The likely causes of the frequent breakdown of the computer system include:

- (i) Sabotaging of the system
- (ii) Inadequate maintenance of the computer system
- (iii) Incompetence of the operator
- (iv) Obsolete computer system
- (v) Software malfunctioning
- (vi) Hardware malfunctioning
- (vii) Power surge

PATHFINDER

- (viii) Virus/worm attack
- (e) The possible remedies for each of the above include:
 - (i) Appropriate security measures should be put in place against sabotage.
 - (ii) Regular maintenance of the system should be done
 - (iii) The Computer operator should be given necessary training on the job.
 - (iv) Upgrading or replacement of the computer system
 - (v) Software should be upgraded
 - (vi) Hardware should be upgraded or replaced
 - (vii) There should be provision of uninterrupted power supply (UPS)
 - (viii) Provision of a good antivirus software.
- (f) Possible reasons for the allegation of abuse of the computer system levelled against the computer operator include:
 - (i) The computer operator might not report malfunctioning of the computer system to the management early enough because of his/ her inefficiency.
 - (ii) The lack of control of the system and its resources by the operator
 - (iii) The operator might not know when to upgrade either the hardware or the software or both.
 - (iv) The computer operator may not have been paying much time to system maintenance.

EXAMINERS' REPORT

This is a compulsory question and it tests candidates' ability in answering a case study. The question tests candidates' knowledge and understanding of the machineries and techniques involved in transaction processing as well as the causes of frequent breakdown of computer systems.

The performance of candidates was good as almost 60% of them scored over 40% of the allocated marks.

PATHFINDER

The major pitfalls were the inability of most candidates to identify the required possible business system and other devices apart from POS which could be used to capture sales.

Candidates are advised to use recommended text books and the Institute's pathfinder when preparing for future examinations.

QUESTION 2

- (a) Digital Computers manufactured within 1940 and 1960 are referred to as the first and second generation computers.

The land mark features include:

- (i) Bulky size
 - (ii) Generate a lot of heat
 - (iii) Used complex and cumbersome machine programming language
 - (iv) The computer operations were very complex and cumbersome
 - (v) Used magnetic drum
 - (vi) Used vacuum tubes and diodes for circuitry
 - (vii) Input was based on punched cards and paper tapes
 - (viii) Low processing speed
 - (ix) More electricity energy consumption
 - (x) Operating System was introduced
 - (xi) Used transistors
- (b) (i) Software is a generic term used for all programs that drive the Computer hardware. A program is a set of step-by-step instructions written in a particular computer language to solve a particular problem.
- (ii) Artificial Intelligence is a field of Computer Science /Information Technology that attempts to develop computer systems that can mimic or simulate human thoughts, processes and actions

PATHFINDER

- (iii) Time-sharing System is a Computer System that allows several computer users to share resources in the host computer by allocating time slices to their processes.
 - (iv) Data processing is the collection and manipulation of items of data to produce information.
- (c) Expectation of the fifth generation computer include:
- (i) Knowledge-based management
 - (ii) Mechatronics
 - (iii) Voice synthesis
 - (iv) Intelligent interface with the user.

EXAMINERS' REPORT

This question tests candidates' understanding of the main features of certain generations of computers, properties of some data processing systems and the expectation of future generation of computers.

Almost all the candidates attempted this question and the performance was fair as over 40% of the candidates scored 45% of the allocated marks.

The major pitfall was the inability of the candidates to identify the landmark features. In addition, many candidates were not aware of the possible capabilities of the fifth generation computer.

The candidates are advised to be familiar with the features of all the generations of computers.

QUESTION 3

- (a) The key drivers for General Packet Radio Service, (GPRS) include:
- (i) Potential revenue increase
 - (ii) Gaining new subscribers who require mobile data services
 - (iii) Cost reduction due to speed and resulting in efficient use of network resources.

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- (iv) Ease of adapting applications
- (v) Higher data speeds
- (b)
 - (i) Point –to-point packet delivery
This is a packet transfer between two points or users.
 - (ii) Typical point-to-point applications services include:
 - Messaging (e.g. e-mail)
 - Remote access to corporate networks
 - Internet web-browsing
 - Credit card validation
 - Utility meter readings
 - Automated train control
 - (iii) Point-to- multipoint packet delivery: This renders the following tasks:
 - Point- to- multipoint (PTM) multicast
 - Message to any subscriber located within a geographical area
 - No knowledge about which subscribers will get the message
 - Anyone can be a subscriber of a certain group.
- (c) The benefits of GPRS include:
 - (i) New services of data and video are available
 - (ii) It combines telecoms and data
 - (iii) Packet switching rather than circuit switching, which translates into higher radio spectrum efficiency
 - (iv) Seamless, immediate and continuous connection to the internet
 - (v) Support for internet communication protocol
 - (vi) Higher data speed due to higher bandwidth
 - (vii) Easy and rapid roll-out
 - (viii) New text and visual data content and services

PATHFINDER

EXAMINERS' REPORT

This question tests candidates understanding of the General Packet Radio Service (GPRS).

Only few candidates attempted this question and the performance was very poor as 20% of the candidates scored 30% of the allocated marks.

The major pitfall was that many candidates who attempted the question did not show any understanding of the technology involved in GPRS.

Candidates are advised to study the technologies involved in the radio systems very well.

QUESTION 4

- (a) Local Area Network (LAN) is the interconnection of two or more independent computers and computer resources covering a small physical area to share resources like printer, scanner, disk and applications LAN is particularly useful in a house, office, or small group of buildings such as a school or an airport.
- (b) Corrective Maintenance usually consists of actions in response to a problem. The basic underlying cause of corrective maintenance is a system failure.
- (c) Application Development Environment (ADE) is a software application that provides comprehensive facilities to computer programmers for software development.

The features of ADE include

- (i) Editor (i.e. for writing programs)
 - (ii) Modifying programs
 - (iii) Compiling programs
 - (iv) Deploying software to uses
 - (v) Debugging programs in the course of development
 - (vi) Program testing /running.
- (d) Activities performed during Transaction Processing include:

PATHFINDER

(i) Data Entry /Capture:

This is the process of entering data into a computer system which can be either a manual process where data is entered through the keyboard, a scanner or may be automatic - where a system receives a transmission from another program or computer.

(ii) Data Manipulation: This involves activities such as

- Data transmission
- Arithmetic operations
- Logical operations such as comparison
- Master file update and
- Data storage

(iii) Information output. This is the result that emanated from the data manipulation.

(e) Migration Costs include:

- (i) Staff training
- (ii) File conversion
- (iii) Site conversion
- (iv) Changeover costs (such as parallel, direct, pilot and phase change over costs)
- (v) System testing

EXAMINERS' REPORT

This question tests candidates' understanding on Networks, Application Development Environment (ADE) and System Development.

Over 75% of the candidates attempted this question and the performance was good as over 60% of the candidates scored over 50% of the allocated marks.

The major pitfall was that many candidates did not show any understanding of ADE and the Migration Costs.

PATHFINDER

Candidates are advised to study system development very well using recommended textbooks and the Institute's pathfinder.

QUESTION 5

- (a) An electronic spreadsheet is an application software that simulates a paper worksheet. It displays multiple cells that together make up a grid consisting of rows and columns. Each cell can contain either alphanumeric or numeric values or formula.
- (b) Features of an Excel screen include:
- (i) Title bar
 - (ii) Menu bar
 - (iii) Tool bar
 - (iv) Cell
 - (v) Formular bar
 - (vi) Status bar
 - (vii) Worksheet tab
 - (viii) Row
 - (ix) Column
 - (x) Cell reference

Explanation

- (i) Title bar- displays the name of the workbook and operation being carried out on the worksheet.
- (ii) Menu bar- contains series of pull down menus which enclose some sets of commands used to perform tasks.
- (iii) Cell - Is the intersection of a row and a column
- (iv) Tool bar – contains buttons to help you quickly select common commands

PATHFINDER

- (v) Formular bar- displays the contents of the formula used in the active cell
 - (vii) Status bar- displays information about the task you are performing
 - (viii) Worksheet tab is a display for each worksheet in an excel workbook
 - (ix) Row- consists of horizontal line of boxes identified by a number
 - (x) Column- consists of a vertical line of boxes identified by an alphabet
 - (xi) Cell reference- consists of a column letter followed by a row number e.g A3, B1, C4
- (c) Various ways of saving a document in Microsoft Excel are:
- (i) Press Ctrl and S keys simultaneously on the keyboard e.g Ctrl + S
 - (ii) Click File on Menu bar; Select Save (or save AS)
 - (iv) Click on Save button on the Tool bar

EXAMINERS' REPORT

This question is practical in orientation and it tests candidates understanding on the use of the Electronic Spreadsheet, particularly Microsoft Excel.

The question demands for the definition and features of the Excel Software. Over 90% of the candidates attempted the question but the performance was poor as only 20% of the candidates scored above 40% of the allocated marks.

The major pitfall was the inability of the candidates to give the correct methods used in saving data in Excel.

Candidates are advised to use the computer system for Word Processing and simple mathematical operations to improve on their knowledge.

PATHFINDER

QUESTION 6

- (a) Oversight of IT functions relating to IT Governance include:
- (i) Evaluation of IT Governance effectiveness to ensure adequate control of the management over the decisions, directions, and IT performance.
 - (ii) Evaluation of human resources management and the operating organisation's structure in the IT environment to ensure that they support the organisation's strategies and objectives.
 - (iii) Evaluation of IT operational policies, standards and procedures for their development and implementation to ensure their support for the IT strategy and compliance with regulatory and legal standards.
 - (iv) Evaluation of the strategies and processes adopted for IT operations to ensure they align with the organisation's overall objectives.
 - (v) Evaluation of the practices of IT resource investment, use and allocation to ensure alignment with the organisation's overall strategies and standards.
 - (vi) Evaluation of the organisation's risk management practices to ensure proper implementation.
 - (vii) Evaluation of management practices to ensure they comply with the organisation's IT strategies.
- (b) Areas in which IT assets safeguard should be provided on data privacy issue include:
- Healthcare records;
 - Criminal justice investigations and proceedings;
 - Financial institutions and transactions;
 - Biological traits, such as genetic materials
 - Residence and geographical records;
 - Ethnicity.

PATHFINDER

- (c) Software Related Threats are threats that affect software in one way or the other. These include:
- (i) Improper processing logic;
 - (ii) Errors and omissions;
 - (iii) Data and program modification;
 - (iv) Interface with other systems

EXAMINERS' REPORT

This question tests candidates' understanding on IT functions relating to IT governance, IT safeguard on data privacy issues and Software Related Threats. Only 40% of the candidates attempted this question and the performance was very poor as only 10% of the candidates scored above 50% of the allocated marks.

The major pitfall was that the candidates did not display adequate understanding of the question despite the fact that the topic is an essential part of the syllabus.

Candidates are advised to acquire more understanding on control systems.

PATHFINDER

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

PROFESSIONAL EXAMINATION I – NOVEMBER 2013

ADVANCED AUDIT AND ASSURANCE

Time Allowed: 3 hours

SECTION A: PART I MULTIPLE-CHOICE QUESTIONS (20 Marks)

ATTEMPT ALL QUESTIONS IN THIS SECTION

Write ONLY the alphabet (A, B, C, D or E) that corresponds to the correct option in each of the following questions/statements.

1. Which of the following may **NOT** be taken into consideration when writing a report of an investigation?
 - A. The language of the report must take into consideration the technical knowledge of the users
 - B. The computation should be detailed in the body of the report
 - C. The subject-matter of the investigation must be clear from the heading of the report
 - D. Any reservation should be clearly stated in the body of the report
 - E. The users of the report must be clearly identifiable

2. In order to understand the internal control system of a computerised accounting system of a client, which of the following computer documentation will assist the auditor the most?
 - A. System narrative
 - B. Record layout
 - C. Programme listing
 - D. Record counts
 - E. System flow charts

PATHFINDER

3. Which of the following organisations has no representation on the Board of Financial Reporting Council of Nigeria?
 - A. Chartered Institute of Taxation of Nigeria
 - B. Chartered Institute of Stockbrokers
 - C. Nigerian Institute of Bankers
 - D. Nigerian Institute of Estate Surveyors and Valuers
 - E. National Insurance Commission
4. The primary purpose of audit working papers is to
 - A. Support the underlying concepts included in the preparations of the basic financial statements
 - B. Aid the auditors in adequately planning their work
 - C. Aid the auditors in adequately circularising the client's debtors
 - D. Provide a point of reference for future audit engagements
 - E. Identify area of weaknesses so as to conduct extended substantive and compliance tests
5. Which of the following is **NOT** a computer assisted audit technique used by auditors?
 - A. Integrated testing facility
 - B. Black box
 - C. System control and review facility
 - D. Parallel simulation
 - E. Snapshot
6. The following are examples of assurance engagement, **EXCEPT**
 - A. Reporting on environmental performance
 - B. Carrying out statutory audit
 - C. Reviewing of accounting and internal control system
 - D. Reporting on statements of accounting policies and goodwill
 - E. Reviewing of corporate governance within an entity
7. An auditor will be criminally liable if he engages in the following, **EXCEPT**
 - A. Aiding a client to devise or execute crime
 - B. Agreeing with a client to conceal or destroy vital evidence

PATHFINDER

- C. Advising a client to commit criminal offence
 - D. Advising a client on steps to minimise tax liability taking advantage of the law
 - E. Assisting the client to commit an offence relating to money laundering
8. The terms of reference to be agreed by the investigating accountant with the client before commencement of work do NOT include the
- A. Organisational and management structure of the entity to be investigated
 - B. Purpose of the investigation
 - C. Basis on which fees will be charged
 - D. General scope of work to be covered
 - E. Time within which the assignment will be carried out
9. Which of the following is **NOT** required as part of Financial Statements that are International Financial Reporting Standards (IFRS) compliant?
- A. Statement of financial position
 - B. Statement of cash flows
 - C. Account receivable
 - D. Chairman's statement
 - E. Non-current assets
10. Investigation under investment decision will **NOT** include
- A. Loan facility decision
 - B. Purchase of shares
 - C. Purchase of business
 - D. Reporting on profit forecast
 - E. Partnership participation
11. Which of the following is an analytical procedure generally used to produce audit evidence?
- A. Confirmations mailed directly to the auditor by the client's customers
 - B. Physical observation of inventories
 - C. Relationship among current financial balances and prior balances, forecasts and non financial data
 - D. Detailed examination of external and internal documents
 - E. Circularisation letters to debtors and creditors of the company

PATHFINDER

12. Which of the following is the primary purpose for obtaining an understanding of client's internal control?
- A. Provide a basis for making constructive suggestions in a management letter
 - B. Determine the nature, timing and extent of tests to be performed in the audit
 - C. Obtain sufficient and competent evidential matter to afford a reasonable basis for an opinion on the financial statements under examination
 - D. Provide information for communication of internal control related matters to management
 - E. Obtain sufficient evidence to afford a basis for an opinion on the financial statements
13. Social audit has to do with the extent to which a company gets involved and interacts with the society in which it operates. This means that social audit does not extend to **ONE** of the following
- A. Corporate code of conduct and business ethics
 - B. Pricing policy, product safety and quality control
 - C. Transaction audit
 - D. Employee health and safety
 - E. Environmental pollution
14. Factors that contribute to the weaknesses of local auditing standards include the following **EXCEPT**
- A. Standard setters being subject to political pressures
 - B. Having inadequate resources
 - C. Being insufficiently timed in response to market needs
 - D. Loss of investment by stakeholders
 - E. Having sources of fund which raise questions about their independence
15. The main reasons why auditors send letter of enquiry to the legal firm handling litigation or claims on behalf of their client is to provide
- A. Auditors with weak position in client litigation and claims
 - B. Auditors with written submission and statement of claims to the court
 - C. Information concerning the progress of outstanding cases to date
 - D. Auditors with corroborative audit evidence
 - E. Auditors with impact of legal opinion on financial statements

PATHFINDER

16. When a client has control over a subsidiary, what is the most appropriate audit procedure to obtain evidence to verify subsidiary accounts before consolidation?
- A. Arrange for independent valuation of the assets and liabilities of the subsidiary
 - B. Be involved in the appointment of the subsidiary auditors
 - C. Rely on additional work carried out by the internal auditors
 - D. Send template of your expectation to subsidiary auditors
 - E. Provide audit program for the subsidiary auditors
17. Yakubu Chukwu & Co was sued by one of its clients who alleged that the firm failed to satisfy the auditing standards in identifying substandard and obsolete inventory while attending end-of-year stock take. Which of the following is the firm's best defence?
- A. It is quite impossible to expect the firm to identify substandard and obsolete inventory due to the special nature of the inventory
 - B. Yakubu Chukwu & Co has to prove that its audit has been carried out with reasonable skill, care and diligence
 - C. Auditing standards are not legislated, therefore, the client has no right to sue the firm
 - D. The contributory negligence of the client
 - E. Identification of substandard and obsolete stock requires an expert opinion
18. The main users of financial report that auditors need to be primarily concerned about are
- A. Management and directors of the company
 - B. The general public
 - C. Banks and other financial institutions that provide working capital
 - D. Suppliers
 - E. Shareholders of the company
19. Which of the following assignments can be regarded as continuous audit function?
- A. Examining the effectiveness, efficiency and economy of a cement project
 - B. Evaluating the adequacy of the security and control measures of the information technology

PATHFINDER

- C. Ascertaining the fairness of the annual financial statements and notes to the accounts
 - D. Reviewing the internal control procedures before commencing the audit
 - E. Reviewing the company's compliance with relevant guidance and release of financial information periodically
20. Regarding the audit of a non-life insurance company, which of the following reserves may **NOT** be reviewed?
- A. Reserve for unexpired risks
 - B. Reserve for outstanding claims
 - C. Contingent reserve
 - D. External reserve
 - E. Statutory reserve

SECTION A: PART II SHORT-ANSWER QUESTIONS (20 Marks)

ATTEMPT ALL QUESTIONS IN THIS SECTION

Write the correct answer that best completes each of the following questions/statements.

- 1. An auditor's legal defence that the damages claimed by the client were not brought about by any act of his is
- 2. A reported difference in a confirmation of balances by a debtor to a client due to different reporting date but not due to misstatement or fraud is known as.....
- 3. A letter addressed to the debtor, requesting that the recipient indicate directly on the letter whether the stated account balance is correct, and if incorrect by what amount is.....confirmation.
- 4. A computer file for recording payroll transaction for each employee and maintaining total employee salaries paid and related data for the year to date is called.....
- 5. Quality control should not be in respect of each engagement only but must be a.....in the entire firm.

PATHFINDER

6. The balance sheet of parastatals is also referred to as a statement of.....and.....
7. Farmers usually operate as, in which case they keep incomplete records.
8. Forensic accounting encompasses both and investigative accounting.
9. A review by a partner or manager to ensure that the form and content of the financial statements are in accordance with accounting standards, CAMA CAPC20 LFN 2004 and Securities and Exchange Commission (SEC), where applicable is Review.
10. The maximum error in the population that the auditor can accept as being consistent with the conclusion that sample result confirms achievement of the audit objective is known as.....error.
11. In the evaluation of the system of internal control as applicable to a university, there are four factors to be considered by the auditors as follows: Methods of keeping records, and, segregation of duties, and custodial controls.
12. The tendency of an auditor not to believe management assertions unless they provide evidence to support the assertions is described as professional.....
13. In an Electronic Data Processing (EDP) environment the reprocessing of actual entity data using audit controlled software is called.....simulation.
14. A series of questions about accounting and control policies and procedures that the auditor considers necessary to prevent material misstatements in the presentation of financial statements is.....
15. Opinion expressed when the possible effect of a limitation on scope is an extreme case and the auditor has not been able to obtain sufficient appropriate audit evidence and accordingly is unable to express an opinion on the financial report is.....opinion.

PATHFINDER

16. A situation where the auditor issues an incorrect audit opinion as a result of an underlying failure to comply with the requirements of auditing standards is.....
17. An audit which is carried out on a company in respect of its relationship with shareholders, employees, customers and the community in which it operates and the public at large is known as.....
18. The report of the Auditor General for the Federation is reviewed by.....which has power to invite any person indicted for public hearing.
19. The codified rules and regulations which are mainly based on moral duties and obligations on how professionals should carry out their duties and how to behave in the society are known as.....
20. A situation which puts the auditor as opponent or rival of the client and which may impair his objectivity is termed.....

SECTION B: ATTEMPT QUESTION ONE AND ANY OTHER THREE QUESTIONS

(60 Marks)

QUESTION 1

Case Study

NAIJA SEVEN LIMITED

Your firm acts as the auditors and advisers to Naija Seven Limited, and to its four directors. The company is owned 50% by Praise Caro, 25% by his wife Madame and 10% by James Patrick. Braima is the Chief Executive and Julius the finance director. Julius' sister Mabel Mama recently resigned from the executive board following a disagreement with Praise. Mabel Mama formed her own company Nigeri Heaven, in competition with Naija Seven.

Currently, Mabel is negotiating with her former co-executives on the profit-related remuneration due to her and the sale of her 15% holding of shares in Naija Seven to one or all of them.

Mabel Mama has contacted you to find out Praise Caro's current remuneration package since he refused to disclose it to her.

PATHFINDER

She has also requested that your firm should continue to act as her personal adviser, financial adviser and auditor to Nigeri Heaven.

You are required to:

- (a) State and explain the matters to be considered in deciding whether or not your audit firm should comply with Mabel Mama's request. (10 Marks)
 - (b) Explain the importance of the role of confidentiality in auditor-client relationship. (5 Marks)
- (Total 15 Marks)**

QUESTION 2

Planning an audit involves establishing the overall audit strategy for the engagement and development of an audit plan.

You are required to:

- (a) Enumerate **SEVEN** reasons for audit planning. (7 Marks)
 - (b) Explain **EIGHT** audit procedures you would consider in planning the audit of an existing client. (8 Marks)
- (Total 15 Marks)**

QUESTION 3

XYL Limited has been granted a licence to operate in the extractive industry in the middle belt of the country, where there is abundant mineral resource called Topaz. This mineral is in great demand in the manufacturing industries of Western Europe. Due to the need for heavy equipment requiring intensive capital outlay, indigenous companies could not invest in the sector. Moreover, the technical expertise required in mining this product is not locally available.

The company was not only granted the licence but was also granted a pioneer status. The local community where operations take place supply the necessary labour-both skilled and unskilled. After a year, the workers' union found out that they were paid far less than what the company is paying in similar operations in nearby countries. As a result of labour union activities, many workers were retrenched and the company started making use of locals who had just completed secondary school education. Union activities were proscribed.

PATHFINDER

Being an extractive industry, the local people were affected as they could no longer carry out their economic activities as before.

Your firm has just been appointed as auditors of XYZ Limited after 3 years of operation.

You are required to:

Explain **SEVEN** areas of concern that would be of interest to you as auditor and provide reasons for their importance. **(15 Marks)**

QUESTION 4

The availability of computer-assisted audit techniques should be considered by the auditor when planning the nature, extent and timing of tests in an audit. The auditor must determine his testing strategies which will depend on his choice of either using a manual testing method or computer assisted method.

You are required to:

- (a) Explain **FIVE** factors that will determine the auditor's choice of method of testing in the planning of audit in a computer environment. **(10 Marks)**
 - (b) Identify **FIVE** solutions to loss of audit trail. **(5 Marks)**
- (Total 15 Marks)**

QUESTION 5

You have just concluded the audit of Roico Limited for the year ended 31 December, 2012. During the review of the working paper file, the partner in charge discovered that no information is available on activities after year end. The partner instructed the team leader to carry out a review of the company's activities after year end. The team leader was not comfortable with the instruction and wants to know why it is necessary to examine accounting information relating to the next accounting period.

You are required to:

- (a) Enumerate the audit procedures which would be carried out in order to identify any material subsequent events. **(10 Marks)**

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- (b) Discuss the purpose and importance of subsequent events review.

(5 Marks)

(Total 15 Marks)

QUESTION 6

Auditors' Liabilities may arise under common law and statute. Statutory liability may be civil or criminal. Professional accountants are increasingly guiding against incidence of litigation that may impact negatively on their work.

You are required to:

- (a) Outline **SIX** ways through which accountants may be charged for criminal offences. (6 Marks)
- (b) Explain **SIX** reasons why auditors are willing to settle legal matters with their clients out of court. (6 Marks)
- (c) State **THREE** disadvantages of an out-of-court settlement. (3 Marks)

(Total 15 Marks)

SOLUTIONS TO SECTION A

PART 1 MULTIPLE-CHOICE QUESTIONS

1. B
2. E
3. C
4. D
5. B
6. D
7. D
8. A
9. D
10. D
11. C
12. C

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- 13. C
- 14. D
- 15. D
- 16. D
- 17. B
- 18. E
- 19. E
- 20. D

EXAMINERS' REPORT

The questions test almost all aspects of the syllabus.

Most candidates understood the questions and performance was good.

PART II SHORT-ANSWER QUESTIONS

- 1. Absence of causal connection
- 2. Timing Difference
- 3. Positive
- 4. Payroll master file
- 5. Culture or standard or tradition
- 6. Assets and liabilities
- 7. Sole proprietor or individual entrepreneur or sole trader
- 8. Litigation support
- 9. Technical
- 10. Tolerable or allowable or acceptable
- 11. Authorisation and approval
- 12. Skepticism
- 13. Parallel

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14. Internal control questionnaire (ICQ)
15. Disclaimer
16. Audit failure
17. Social audit
18. Public account committee
19. Ethics or professional Code of Ethics
20. Advocacy threat

EXAMINERS' REPORT

The questions test most aspects of the syllabus.

Most candidates did not understand the questions and performance was average.

The commonest pitfall of the candidates was lack of indepth understanding of the requirements of the questions.

Candidates are advised to prepare adequately before registering for the examinations.

SOLUTIONS TO SECTION B

SOLUTION 1

CASE STUDY

NAIJA SEVEN LIMITED

- (a) Matters to be considered in respect of Mabel Mama's three requests are:
 - (i) Disclosure of a former co-executive's level of remuneration
 - (ii) Offer to continue to act as personal adviser
 - (iii) Accepting appointment by auditor of Naija Seven as auditor and adviser to Nigeri Heaven
- (i) Disclosure of a former co-executive's level of remuneration

PATHFINDER

- In an audit engagement, the auditor owes a duty of confidentiality to the client. There is no legal or professional right or duty to disclose client's information merely because it is available to the auditor.
- It would be a breach of the audit firm's duty of confidentiality to Naija Seven. By acting as its auditor and adviser to Praise Caro, it is inimical to disclose the information requested when there is clearly no process of law of "public interest" involved, and there is clearly no implied obligation to seek approval to disclose.
- The information can only be disclosed with Praise's consent, and this is unlikely since Praise has refused to tell Mabel. In this case, any attempt by the auditor to obtain permission from Praise is likely to result in breach of the duty of confidence that the audit firm owes.
- Generally, the audit firm's working papers are its own property and any request for them should be refused. This is because the audit firm's working papers contain the schedule of directors' remuneration.
- The latest audited financial statements may disclose Praise's remuneration for the previous year since the chairman is usually the highest paid executive. Mabel will have to wait for this information to be made publicly available.
- The Client is owed a duty of confidentiality as an implied term of contract of engagement by the auditor. In circumstances where demand for disclosure of confidential information is not perceived to be in good faith, the auditor may decide to decline and not bother to seek authorisation from the client to disclose.
- Approval to disclose may be sought if demand is considered objective. The auditor may disclose without seeking approval, if the law compels him to do so, or if it is in public interest to disclose, under implied obligation.

PATHFINDER

- Disclosure in such circumstance must be to persons authorised or entitled to such information in the ordinary course of business.
- Though the auditor owes a duty to disclose information to shareholders, he owes the obligation to shareholders as a group and not to an individual shareholder. (The Caparo case).
- Mabel Mama's brother is the Finance Director of Naija Seven. Audited accounts can disclose remuneration of Directors. These channels are available to Mabel.

(ii) Continuing as personal adviser

- A conflict of interest of Naija Seven and Mabel Mama is likely to arise over the valuation of Mabel's shareholding.
- It is unethical for one adviser to act for both parties in certain matters, such as negotiating a share price without appropriate safeguards.
- Valuing Mabel's shareholding and negotiating her profit-related remunerations may appear to threaten the objectivity of the audit of Naija Seven. Mabel may try to exert influence to overstate profit since her brother is the Finance Director.

(iii) Appointment as auditor

- A conflict between the interests of Mabel's new company, Nigeri Heaven and Naija Seven is likely to arise as the former has been set up in competition with the latter.
- Where there is appropriate safeguard, the auditor can have both companies as audit clients. The auditor must have different reporting partners and teams of staff for each audit engagement.
- Becoming an adviser to the two companies could threaten the objectivity of the audit engagement. In particular it would be unethical for the personal adviser to be the reporting partner or

PATHFINDER

be involved in the audit, as that could impugn the independence of the auditor.

- (b) Auditors should not disclose information on clients to third parties without proper and specific authority.

Confidential information acquired as a result of professional relationships should not be used for the personal advantage of members or third parties, or the firm itself.

Disclosure of information without the client's permission could lead to serious legal and professional consequences/damages.

However, the auditor may disclose such information in the following circumstances.

- (i) If a competent court of law demands the information
- (ii) If the auditor believes that the client has committed or he is about to commit a criminal offence.
- (iii) If authorised government official or any authorised person acting in official capacity demands the information from the auditor;
- (iv) If the information is needed by the auditor to defend himself in a case against him.

It is necessary to protect clients' confidential information since by law, clients are obliged to disclose information demanded by auditors. It will be unethical to harm clients by unauthorised use of information compelled to be disclosed by law under auditor-client relationship.

EXAMINERS' REPORT

Part (a) tests candidates' knowledge and understanding of ethical issues while part (b) tests the understanding of the importance of the role of confidentiality in auditor-client relationship.

About 92% of the candidates misunderstood the question and performed poorly. The commonest pitfall was that candidates answered the question in line with the threat faced by an auditor in the performance of his duties. Candidates are advised to cover the syllabus adequately subject in subsequent examinations.

PATHFINDER

SOLUTION 2

- (a) Reasons for audit planning
- (i) It establishes the intended means of achieving the audit objective;
 - (ii) It assists in efficient assignment of staff to the job to be carried out;
 - (iii) It is a means of effective liaison in a joint audit and coordination where more than one firm of Chartered Accountants is involved in the audit;
 - (iv) It facilitates authorised delegation between the audit partner, manager and team leader and effective control and supervision.
 - (v) It enhances performance and control over the execution of the programme.
 - (vi) It fosters effective control of audit costs by monitoring the budget based on an approved audit plan;
 - (vii) It helps in identifying and covering critical audit areas that require special attention;
 - (viii) It ensures that the audit is completed effectively, efficiently and on time.
 - (ix) It assists the audit staff to gain proper understanding and background knowledge of the key areas of the audit before the audit work commences.
- (b) Audit procedures to be adopted in planning the audit of existing or old client are explained as follows:
- (i) Review previous year's audit working papers and carried forward balances so as to identify previous problem areas.
 - (ii) Review any changes in the nature of business and the management structure and their impact on the audit.
 - (iii) Review any changes in legislation affecting the client and impact on corresponding comparative figures.

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- (iv) Review the extent to which the financial statements have been prepared by the client's management in compliance with standards.
- (v) Confirm the extent to which summary and schedules to major items in the financial statements have been prepared and treatment of cut-off procedures.
- (vi) Review the extent of work performed by the client's internal auditors and the reports prepared, and management attitude thereto.
- (vii) Review the quality of staff needed for the assignment taking into consideration their qualifications, competence, experience and possession of special skills.
- (viii) Assess the need for specialist audit staff, for example, information technology experts for computer based accounting systems networks and issues of cyber security.
- (ix) Brief the audit team of the required audit tests and procedures, the objectives and the qualities of audit working papers which are to be compiled and filed.
- (x) Brief the audit team of the audit objectives, the areas to be addressed by each member and the target to be achieved within the time allocated.

EXAMINERS' REPORT

Part (a) of the question tests candidates' understanding of audit planning, while part (b) tests the procedures that an auditor will consider in planning the audit of an existing client.

About 80% of the candidates attempted the question. Performance in part (a) was average while that of part (b) was poor.

The commonest pitfall was that candidates were confused about the issue of existing client.

Candidates are advised to read and understand questions properly before attempting them.

PATHFINDER

SOLUTION 3

Area of interest to the auditors and their significance are as follows:

- (i) Verification and confirmation of the pioneer status granted.
This is necessary to ascertain the reliefs that will be available and the time when the pioneer status will end.
- (ii) Stock (Inventory) taking
The use of specialist is needed in determining the value of stock. The qualification, experience and relationship of the specialist should be evaluated.
- (iii) Determination of mineral reserve requires the services of an expert.
This will be necessary to determine the going concern prospect of the company. If mineral reserve is nil, the company would cease operations.
- (iv) Use of amortisation
Depletion of mineral mine is determined by amortisation policy rather than general depreciation.
- (v) Impact of the business on the local environment needs to be assessed.
Any impending litigation against the company has to be brought into the financial statements to show a fair view of the financial statements.
- (vi) Employment generation and empowerment of local community
Employment generation and empowerment of local community is a social service owed to stakeholders. It is part of stakeholders' expectation and is in sync with governance best practices.
- (vii) Social services rendered to the environment.
Investment in infrastructure, hospitals, electricity, recreation facilities, schools, etc should be compared with the annual reports to ensure compliance.
- (viii) Recruitment policy
Evaluate the recruitment policies to ensure there is no discrimination against disabled people under the equal opportunity policy.

PATHFINDER

- (ix) **Evaluation of receivables**
Debtors are to be circularised to confirm balances due from them. Since products are exported, incidence of bad debts should be considered.
- (x) **Translation/conversion of foreign currencies**
This is to be examined at the year end to ensure appropriate policy on foreign currencies conversion and translation since statement of accounts are naira denominated.
- (xi) **Review of labour union activities**
To assess the impact of union activities on the mining operations.
- (xii) **Ownership structure**
Determination of ownership structure could help in determination of dividends repatriated and matters relating to immigration control issues.
- (xiii) **Filing of Returns**
Ensure returns are filed with appropriate agencies in respect of the company in regards to its pioneer status compliance requirement. These will ensure adequacy and completeness on the status of the company and its sustainability.
- (xiv) **Depreciation/Impairment**
Adequate provision for depreciation in respect of property, plant and equipment should be made.
This is necessary to have a true and fair view of fair value assessment of financial position and profit or loss.

EXAMINERS' REPORT

The question tests candidates' understanding on the matters that would be of concern to auditors of companies in the extractive industry and enjoying pioneer status.

About 80% of the candidates attempted the question and performance was poor due to lack of understanding of the requirements of the question.

The commonest pitfall was that candidates concentrated on the interest of the company and the public rather than those of the auditor.

PATHFINDER

Candidates are advised to adequately prepare for examinations and endeavour to answer questions as asked.

SOLUTION 4

- (a) The auditor's choice of method of testing during the planning of audit in a computer environment will be determined by the following factors:
- (i) Practicability of performing audit tests manually:
Many computer based accounting systems perform functions for which no visible evidence is available. In this regard, it will not be advisable for the auditor to use manual testing method.
 - (ii) Time availability:
Generally, since the auditor has to report within a short time scale, he may choose to use Computer Assisted Audit Techniques (CAAT's) as they are quicker to apply, even though manual methods may be more practical and cheaper.
 - (iii) Computer facilities availability
When using a computer assisted audit technique, the auditor will need to ensure that the required data, computer files and programs are available;
 - (iv) Expertise and experience
The auditor will require at least a basic understanding of the fundamentals of computer processes because he is using the computer to assist him in performing his audit tests before contemplating using a computer assisted audit technique.
 - (v) Reliance on internal audit functions
Where a computer assisted audit technique is used by a suitably trained internal auditor, it may be of significant assistance. The extent to which the external auditor is able to reduce the level of his tests by taking account of computer audit techniques performed by the internal auditor will depend on his assessment of the independence and effectiveness of the internal audit function.

PATHFINDER

- (vi) Volume of clients' business

It is not worthwhile to use computer assisted audit techniques where the volume of transactions is small.

- (b) Solutions to loss of audit trail include the following:

- (i) Use of computer assisted audit techniques to assess reliability.
- (ii) Testing on a total basis and ignoring individual items to access data output.
- (iii) Closer co-ordination between internal and external auditors to bridge gaps in compliance tests.
- (iv) Arranging for special print-outs of individual information for the auditors to attempt to re-create transaction trail.
- (v) Clerical re-creation of individual items of data for comparison with computer generated totals.
- (vi) Programmed interrogation facilities whereby records held on magnetic files are printed on a selective basis by means of direct request to those files.

EXAMINERS' REPORT

Part (a) of the question tests candidates' understanding of the method of testing during the planning of an audit in a computer environment, while part (b) tests solutions to loss of audit trail.

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

The main problem was that candidates lacked understanding of audit in a computer environment.

Candidates are enjoined to prepare well for future examinations.

SOLUTION 5

- (a) Subsequent events include:

- Events occurring between the period end and date of the auditor's report, and
- Facts discovered after the date of the auditor's report, but before signing of the report by the auditor.

PATHFINDER

The following steps should be taken to identify any material subsequent events:

- (i) Identify and evaluate procedure implemented by management to ensure that all events after the end of the reporting period have been identified, considered and properly evaluated as to their effect on the financial statements.
- (ii) Review relevant accounting records to identify subsequent cash received in relation to account receivables. Check items uncleared at the year end on the bank reconciliation statement and other accounts.
- (iii) Read minutes of Board and management meetings, correspondence and memoranda relating to items included in the minutes to identify any subsequent events.
- (iv) Consider relevant information which has come to the auditor's attention from sources outside the business, including public knowledge of competitors, suppliers and customers.
- (v) Review management accounts, budget and cashflow projections for the new period to assess the company's trading position
- (vi) Review known risk areas and contingencies, whether inherent in the nature of the business or revealed by previous audit experience.
- (vii) Review response to debtors, creditors and bank circularisation, including legal counsel's opinion.
- (viii) Obtain written representation concerning subsequent events from management.
- (ix) Review Inventory and Payables in line with cut-off procedures.

ISA 560 states that auditor shall perform audit procedures designed to obtain sufficient appropriate audit evidence that all events occurring between the date of the financial statements and the date of auditors' report that require adjustments of, or disclosure in the financial statements have been identified.

- (b) Purpose and importance of subsequent events

The auditors' responsibility extends to the date on which they sign their audit report. As this date is inevitably after the year-end, it follows that in order to discharge their responsibilities, the auditors must extend their audit work to cover the period after the year-end.

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The purpose of this review is to ascertain whether management has dealt correctly with any subsequent events, both favourable and unfavourable, which occurred after the end of the reporting period and need to be reflected in the financial statements, if those statements are to show a true and fair view.

The general rule is that, in the preparation of year-end financial statements, no account should be taken of subsequent events unless to do so is required by statute or to give effect to compliance retrospectively with legislation, or to take into account an event which provides information about a condition existing at the end of the reporting period e.g. obsolete stock.

Additionally, certain events may have such a material effect on the company's financial condition.

EXAMINERS' REPORT

Part (a) tests candidates understanding of the audit procedures to be applied in identifying any material subsequent events while part (b) tests their understanding of the purpose and importance of a subsequent events review.

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

The major shortcoming was their inability to identify events occurring after the year-end and the importance of the review of subsequent events.

Candidates are advised to prepare adequately for future examinations.

SOLUTION 6

- (a) The accountant may be charged with criminal offence where he:
 - (i) Aids a client in devising or executing a crime.
 - (ii) Knows the client has committed an offence and agrees to accept a consideration for withholding incriminating information.
 - (iii) Agrees with a client to conceal or destroy vital evidence or mislead the authorities with false statements or information.
 - (iv) Advises a client to commit a criminal offence.

PATHFINDER

- (v) Knows a client has committed an arrestable offence and acts in such a way as to prevent the client's arrest and possible prosecution.
 - (vi) Knows the client has committed treason or terrorist offences and fails to report the offence to the appropriate authority in line with the law.
 - (vii) Assists the client to commit an offence relating to money laundering.
- (b) Some auditors shall be willing to settle legal matters with their clients out of court for the following reasons:
- (i) The judicial system is very slow and this can be frustrating in terms of delays and adjournments;
 - (ii) Every litigation has a cost to both parties, so if there are means of settling out-of-court, it will be encouraged in order to save costs;
 - (iii) The attendant negative publicity usually associated with decided court cases will be avoided;
 - (iv) There is a general lack of confidence and uncertainty in the outcome of litigations, hence auditors will rather prefer out-of-court settlement;
 - (v) The out-of-court settlement serves as a closed door to other parties who may be willing to take the auditors to court based on the outcome or the decision of the court;
 - (vi) Both sides "save face" as neither is an outright winner.
- (c) Disadvantages of out-of-court settlement include:
- (i) The client may not be fully compensated;
 - (ii) The audit firm may not be appropriately penalised;
 - (iii) The final duty of responsibility is left unresolved;
 - (iv) Insurance premium will rise because of the settlement made;
 - (v) Settling out-of-court will further worsen the perceived credibility of the profession.

PATHFINDER

EXAMINERS' REPORT

Part (a) tests candidates understanding of the ways through which accountants may be charged for criminal offences, part (b) tests why auditors may want to settle legal matters out of court and part (c) tests disadvantages of out-of-court settlement.

About 80% of the candidates attempted the question and performance was good in part (a) while performance in part (b) and (c) was poor.

The major deficiency was that candidates did not comprehend the requirements of the question.

Candidates are advised to prepare well for future examinations.

PATHFINDER

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

PROFESSIONAL EXAMINATION I - NOVEMBER 2013

MANAGEMENT ACCOUNTING

Time Allowed: 3 hours

SECTION A: PART I MULTIPLE-CHOICE QUESTIONS (20 Marks)

ATTEMPT ALL QUESTIONS IN THIS SECTION

Write ONLY the alphabet (A, B, C, D or E) that corresponds to the correct option in each of the following questions/statements:

1. Which of the following statements is **NOT** correct about the Management Accountant?
 - A. He uses accounting and other appropriate techniques from statistics and operations research.
 - B. He takes cognisance of underlying economic logic.
 - C. It is not his responsibility to conduct special investigations to obtain required data.
 - D. He uses data from financial and cost accounting systems.
 - E. He must take into account human elements in all activities.

2. The price which a customer is willing to pay for a product and not necessarily a consequence of the product itself is
 - A. Intuitive price
 - B. Incremental cost price
 - C. Experimental price
 - D. Multi-product price
 - E. Demand-oriented price

PATHFINDER

3. A portfolio comprises securities X and Y with an expected return of ₦250,000 from X and ₦180,000 from Y. If security X constitutes 60% of the portfolio and security Y constitutes the remainder, what is the expected return from the portfolio?
- A. ₦72,000
 - B. ₦150,000
 - C. ₦222,000
 - D. ₦402,000
 - E. ₦652,000
4. The quantitative measure of the relationship between securities' fluctuations is referred to as
- A. Standard deviation
 - B. Co-variance
 - C. Co-efficient of determination
 - D. Coefficient of correlation
 - E. Variance
5. Which of the following equations correctly relates to a Cash Budget?
- A. Opening balance + receipts – payments=closing balance
 - B. Cash inflow – cash outflows=closing balance
 - C. Opening balance + cash outflow – cash inflows=closing balance
 - D. Opening balance – closing balance=cash inflow
 - E. Closing balance + receipts – payments=opening balance
6. Which of the following is **NOT** an objective of budgetary control?
- A. Centralises control
 - B. Coordinates all the activities of the business
 - C. Decentralises responsibility of each of the managers
 - D. Encourages departmental rivalries
 - E. Acts as a guide for management decisions

PATHFINDER

7. A method of budgeting based on activity framework which utilises cost driver's information in budget setting and variance feedback processes is known as
- A. Zero-Based Budgeting
 - B. Activity-Based Costing
 - C. Rolling-Budgeting
 - D. Activity-Based Budgeting
 - E. Priority-Based Budgeting
8. Which of the following budgets is expressed only in quantities?
- A. Sales budget
 - B. Material budget
 - C. Production budget
 - D. Flexible budget
 - E. Fixed budget
9. Which of the following best describes the importance of staff participation in standard and budget setting in an organisation?
- A. Always improves performance
 - B. Needs to be done selectively
 - C. Can only be done when zero-based budgeting is used
 - D. Encourages unhealthy rivalry among personnel
 - E. Actual performance is revealed
10. The two variances attributable to variable manufacturing overheads are
- A. Expenditure and efficiency variance
 - B. Expenditure and volume variance
 - C. Spending and capacity variance
 - D. Expenditure and capacity variance
 - E. Spending and budget variance

PATHFINDER

11. A company has the following budget for the coming year:

Finished product:

Sales	14,000 units
Production	14,400 units

Materials:

Usage per unit	4kg
Opening stock	800kg
Closing stock	1,000kg

What is the material purchases budget for the year?

- A. 55,800kg
 - B. 56,200kg
 - C. 56,800kg
 - D. 57,400kg
 - E. 57,800kg
12. The process of creating a formal plan and translating goals into a quantitative format is called
- A. Process costing
 - B. Budgeting
 - C. Job costing
 - D. Variance
 - E. Batch costing
13. The necessary cost of an activity that cannot be eliminated without affecting a product's value to the customer is called
- A. Sunk cost
 - B. Value added cost
 - C. Stepped cost
 - D. Standard cost
 - E. Value analysis cost.

PATHFINDER

14. In transfer pricing, where there is no external market for the item being transferred and no alternative use for the division's facilities, the transfer price is
- A. The standard cost of production
 - B. The actual cost of production
 - C. The standard variable cost of production
 - D. The standard period cost of production
 - E. The total arbitrary cost of production.
15. The provision of information to support strategic decisions in organisations is called
- A. Management by Objective
 - B. Management by Exception
 - C. Management Accounting Strategy
 - D. Strategic Management Accounting
 - E. Strategic Financial Management
16. The purpose of selecting the method that will preserve the independence of each division so that the failure of one will not affect the success of the other is called
- A. Autonomy
 - B. Divisionalisation
 - C. Decentralisation
 - D. Standardisation
 - E. Centralisation
17. The drivers used to count the frequency of an activity or number of times of an activity are called
- A. Intensity drivers
 - B. Transaction drivers
 - C. Duration drivers
 - D. Activity cost drivers
 - E. Production drivers

PATHFINDER

Use the following information to answer questions 18 and 19:

The details of Stock information of Kalokalo Limited are as follows:

Normal usage	50 units per week
Minimum usage	25 units per week
Maximum usage	75 units per week
Re-order quantity	300 units
Re-order period	4 to 6 weeks

18. What is the maximum stock level?
- A. 300 units
 - B. 450 units
 - C. 500 units
 - D. 650 units
 - E. 750 units
19. What is the average stock level?
- A. 325 units
 - B. 425 units
 - C. 525 units
 - D. 625 units
 - E. 725 units
20. The dual method of determining the shadow price of a constraint is also known as:
- A. Dualised method
 - B. Decreasing constraint capacity method
 - C. Lying down method
 - D. Composite method
 - E. Lying up method

PATHFINDER

SECTION A: PART II

SHORT-ANSWER QUESTIONS

(20 Marks)

ATTEMPT ALL QUESTIONS IN THIS SECTION

Write the correct answer that best completes each of the following questions/statements:

1. The cost of activities that can be eliminated without diminishing the quality of the product/service, performance or perceived value is called.....
2. Adamu is contemplating investing ~~₦~~120,000 on a project which will last for 4 years. Annual sales and related costs are as shown below:

	₦
Sales (250 units)	125,500
Variable costs	<u>83,000</u>
Contribution	42,500
Fixed Overhead (incremental)	<u>10,000</u>
Annual profit	<u>32,500</u>

If the company's cost of capital is 10%, determine the project's NPV.

3. A pictorial representation of the various alternatives and sequences involved in complex problems requiring inter-related decision making is referred to as.....
4. The measure of the time it will take to recoup the initial naira outlay in the form of cash inflows from operations is known as.....
5. A budget which is designed to recognise the existence of fixed, variable and semi-variable costs at varying levels of activity in a period is known as
6. The budget which consolidates all the functional budgets is known as
7. Oshina Flour Mills is preparing its production budget for next year. Market research projects sales requirement to be 200,000 bags of Oshina Flour. Opening stock is estimated to be 40,000 bags while closing stock is projected to be 20% of sales. How many bags of Oshina Flour will be produced to achieve the sales target?.....
8. The budgeted revenue for Adua Company Limited is ~~₦~~400,000 in 2013. Budgeted contribution margin ratio is 30%. What is the budgeted fixed cost when the company achieves a break even position?

PATHFINDER

9. A process designed to assess how well the control system operates and how current plans are carried out is known as
10. The rate used to absorb manufacturing overhead to work-in-progress inventory calculated as manufacturing overhead cost divided by the estimated amount of cost driver is called.....
11. The act of building budgetary slack into a budget by over estimating expenses and under estimating revenue is called.....
12. In January, 300,000 kgs of material X were purchased at a cost of ₦16 per kg. If there was an unfavourable direct material price variance of ₦600,000 for the period, what is the standard cost per kg?
13. The system where the authority for decision making is delegated to other levels of management is known as.....
14. A location, function, department or section in respect of which costs may be ascertained and related to cost units for control purpose is known as.....
15. The linked set of value adding activities, performed by suppliers through an organisation's customer service activities, is known as
16. The manufacturing philosophy which tends to reduce waste and non-value added activities is referred to as philosophy.
17. The sales of technically similar products at prices which are not proportional to their marginal costs are referred to as.....
18. A mathematical statement which is to be maximised or minimised in a Linear Programming problem is the
19. The consideration of each variable in order to know the effect of a slight change in such variable on the actual decision to be taken is known as
20. What is the ordering cost of 200 units of annual demand at a cost of ₦10 each, ordering cost of ₦10 and handling cost of 10% of the purchase cost?

PATHFINDER

SECTION B: ATTEMPT QUESTION 1 AND ANY OTHER THREE QUESTIONS (60 Marks)

QUESTION 1

CASE STUDY

Ace Ltd. was the first company to produce a specific 'off-the-shelf' accounting software package two years ago. The pricing strategy decided on by the Chief Executive Officer (CEO) for the packages was to add a 50% mark-up to the budgeted full cost of the packages. The company achieved and maintained a significant market share and high profits for the first two years.

The budgeted information for the current year (year 3) is given below:

Production and sales	15,000 packages
Full cost	₦4,000 per package

At a recent Board meeting, the Finance Director reported that although costs were in line with the budget for the current year, profits were declining. He explained that the full cost included ₦800 for fixed overheads. This figure had been calculated by using an overhead absorption rate based on labour hours and the budgeted level of production of 15,000 packages. He pointed out that this was much lower than the current capacity of 25,000 packages.

The Marketing Director stated that competitors were beginning to increase their market share. He also reported the results of a recent competitor analysis which showed that when Ace Ltd. announced its prices for the current year, the competitors responded by under-cutting them by 15% price reduction. Consequently, he commissioned a market research. He informed the Board that the market research showed that at a price of ₦7,500 there would be no demand for the packages. For every ₦100 reduction in price, the demand would increase by 1,000 packages.

The CEO appeared to be unconvinced about the loss of market share and argued that profits could be restored to their former level by increasing the mark-up.

- (a) You are required to
- (i) Discuss the CEO's pricing strategy. (7 Marks)
 - (ii) Suggest and explain **TWO** alternative strategies that could have been implemented at the launch of the packages. (4 Marks)
- (b) Based on the data supplied by the market research, derive a straight line demand equation for the packages. (4 Marks)

(Total 15 Marks)

QUESTION 2

	Production Levels	
	10,000 units	20,000 units
	₦	₦
Direct Material	200,000	400,000
Direct Labour	1,500,000	3,000,000
Warehouse Rental	800,000	1,300,000
Machine Maintenance	240,000	300,000
Factory Rent, Rates, etc	400,000	400,000
Factory Power	450,000	630,000

- i. Machine maintenance is under a contract with the machine suppliers. The period cost is based on the production level and is charged at ₦1,500 per 100 units with a minimum charge of ₦240,000 payable per period.
- ii. Warehouse rent is fixed per warehouse per period. One warehouse is sufficient to cope with the storage demands up to 12,500 units. Should production exceed this activity level, additional warehouse will be rented for the period at an additional cost of ₦500,000. This will be enough to cover the highest production level.
- iii. All variable costs and the variable part of mixed costs follow constant linear pattern.

Prepare a flexible budget for the period for the following activity levels: 10,000 units; 12,500 units; 15,000 units, 17,500 units and 20,000 units. (15 Marks)

Nagogo Nigeria Ltd. produces and sells FURA. The standard direct costs per unit are as follows:

10kg of material L at ~~£5~~ per kg
20kg of material M at ~~£4~~ per kg
2 Labour hours at ~~£120~~ per hour.

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The budgeted monthly production and sales are 100,000 units and the price is ₦500 per unit.

The following details relate to June 2013 when 130,000 units of FURA were produced and sold and 1,000 idle hours were recorded.

	₦
Sales	64,000,000
Materials used:	
Material L 1,260,000 kg	6,200,000
Material M 2,700,000 kg	16,200,000
Labour: 255,000 hours	31,800,000

- (a) You are required to
- (i) Compute the price and usage variance for each of the materials (6 Marks)
 - (ii) Determine the wage rate and efficiency variances (6 Marks)
- (b) What are the likely causes of these variances you have computed? (3 Marks)
- (Total 15 Marks)**

QUESTION 4

The Concept division of a retailing group has five years remaining on a lease for premises in which it sells self-assembled furniture. Management is considering an investment of ₦6,000,000 for immediate improvement to the interior of the premises in order to stimulate sales by creating a more effective selling environment.

The expected increase in sales revenue following the improvement is ₦5,000,000 per annum. The average contribution to sales ratio is expected to be 40 percent.

The cost of capital is 16 percent and the division has a target Return on Capital Employed of 20% using the net book value of the investment at the beginning of the year in its computation.

At the end of the five-year period the premises improvements will have a NIL residual value.

You are required to

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Prepare summary statements of the proposal for years 1 to 5 showing Residual Income and Return on Capital Employed for each year based on

- (a) Straight-line method of depreciation (5 Marks)
- (b) Annuity depreciation method at 16% cost of capital (10 Marks)
- (Total 15 Marks)**

QUESTION 5

Kone System Limited produces two products: FAT and SLIM, using the same machine and identical process. An extract of the production data for these products in one period is shown below:

	FAT	SLIM
Quantity produced (units)	2,500	3,500
Direct labour hours per unit	2	4
Machine hours per unit	6	2
Set-ups in the period	20	80
Orders handled in the period	30	120
Overhead costs relating to		£
Machine activity		440,000
Production run set-ups		40,000
Handling of orders		<u>90,000</u>
		570,000

You are required to

Calculate the production overheads to be absorbed by one unit of each of the products using the following costing methods:

- (a) A traditional costing approach using a direct labour hour rate to absorb overheads. (6 Marks)
- (b) An activity-based costing approach using suitable cost drivers to trace overheads to products. (9 Marks)
- (Total 15 Marks)**

QUESTION 6

The following information was extracted from the records of Cope Ltd. on the pattern of demand for BIRON, a product of Sansakool Nig. Plc.:

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DEMAND	PROBABILITY
20	0.06
30	0.15
40	0.10
50	0.34
60	0.20
70	0.15

You are given the following as the tag numbers generated by the computer for the determination of the appropriate demand made per day for which order was placed:

06, 79, 62, 22, 38, 89, 36, 70, 92, 14, 33, 46, 87, 98, 01, 92, 23

- (a) You are required to simulate the daily demand for 10 days, taking cognisance of the tag numbers. (4 Marks)
- (b) Given the order of 40 units per day, what will be the profit or loss for the 10 days assuming that any order in excess of the demand is regarded as scrap and any demand in excess of the daily order is termed "unsatisfied demand"?

The selling price is given as ₦30 per unit, cost of sales as ₦20 per unit while the stock out cost is ₦5 per unit. (6 Marks)

- (c) Assuming that the information in (b) above remains the same, except that any excess of order in any day will be used to satisfy any subsequent unsatisfied demand, what will be the profit or loss for the 10 days?

(5 Marks)

(Total 15 Marks)

SOLUTIONS TO SECTION A

PART I MULTIPLE- CHOICE QUESTIONS

1. C
2. E
3. C
4. B
5. A

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- | | |
|-----|---|
| 6. | D |
| 7. | D |
| 8. | C |
| 9. | A |
| 10. | A |
| 11. | E |
| 12. | B |
| 13. | B |
| 14. | C |
| 15. | D |
| 16. | A |
| 17. | D |
| 18. | D |
| 19. | B |
| 20. | C |

Tutorials

3. Portfolio returns (weighted average)
 $= 250,000 \times 0.6 + 180,000 \times 0.4 = \text{₦}222,000$
11. Materials required for production 57,600
 (4kg x 14,400 units)
 Add: closings stock 1,000
 58,600
 Less: Opening stock 800
 Material purchased 57,600
18. Maximum stock level = Re-order level – (min. usage x min re-order period)
 + Re-order quantity = $(75 \times 6) - (25 \times 4) + 300 = 650\text{units}$
19. Average stock level = $\frac{\text{maximum stock level} + \text{minimum stock level}}{2}$
 $= \frac{650 + 200}{2} = 425 \text{ units}$

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Note: Minimum stock level = Re-order level – (Normal usage x Normal Re-order period)
= (75 x 6) – (50 x 5) = 200 units

EXAMINERS' REPORT

The questions cover a reasonable area of the syllabus. Candidates' understanding was good as about 60% of them scored above the average mark.

Candidates are advised to pay attention to current developments in Management Accounting.

PART II SHORT ANSWER QUESTIONS

1. Non value-added costs
2. (N17,007.50)
3. Decision tree
4. Payback period method
5. Flexible budget
6. Master budget
7. 200,000 bags
8. N120,000
9. Double- loop feedback
10. Pre-determined overhead rate/Overhead absorption rate
11. Budget paddling
12. N14
13. Decentralization
14. Cost centre
15. Value chain concept
16. Just-in-time
17. Price discrimination/Differential pricing
18. Objective function
19. Sensitivity analysis
20. N31.62

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2.

Year	CF ₦	DCF@10%	PV ₦
0	(120,000)	1.00	(120,000)
1-4	32,500	3.169	<u>102,992.50</u>
			<u>17,007.50</u>

	Bags
7. Opening stock	40,000
Production	<u>200,000</u>
	240,000
Less: Closing stock (20%)	<u>40,000</u>
Sales (100%)	<u>200,000</u>

8. Contribution margin ratio = 30%

Sales = ~~₦~~400,000

CMR = 30% of ~~₦~~400,000

Contribution = ~~₦~~120,000

Sales @ BEP is the point where fixed cost is equal to contribution

∴ Fixed cost = ~~₦~~120,000

12. Calculation of standard cost is obtained as follows:

Standard Cost (SC) = (Standard price – Actual price) Actual Quantity

$$(x - 16) 300,000 = 600,000$$

$$300,000x - 4,800,000 = 600,000$$

$$300,000x = 4,800,000 + 600,000$$

$$X = \frac{4,200,000}{300,000} = \text{₦}14$$

20.
$$EOQ = \sqrt{\frac{2DC_o}{C_c}}$$

$$= \sqrt{\frac{2 \times 200 \times 10}{10 \times 0.1}} = \sqrt{4,000}$$

$$= 63.25 \text{ units}$$

∴ Ordering cost = $\frac{D}{Q} \times c_o$

$$= \frac{200}{63.25} \times 10$$

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= ₦31.62

EXAMINERS' REPORT

The questions cover virtually all sections of the syllabus. Candidates' understanding was average as about 50% of them scored above the average mark. Candidates are advised to ensure a comprehensive coverage of the syllabus.

SOLUTIONS TO SECTION B

QUESTION 1

- (a)(i) The company adopted a pricing strategy that requires addition of 50% mark-up on full cost of packages. This strategy is known as full cost plus pricing strategy. The full cost pricing strategy is used in situations where the full cost of production would be accumulated and to which, as in this case, a 50% mark-up is added to the total cost to give the required selling price of the package.

The implication of adopting this pricing strategy is that, though it focuses on internal costs and targets, it does not take into account the market conditions prevalent at the time, especially the challenges posed by competition.

The price structure reflected by its present operation is based on budgeted quantity of 15,000 packages which is depicted below:

Full cost	₦4,000
50% mark-up	<u>₦2,000</u>
Selling price	<u>₦6,000</u>

At a fixed overhead cost of ₦800 per package, a total fixed overhead absorbed for the period will be ₦800 x 15,000 packages (i.e. ₦12million). If the total fixed overhead is applied on the current capacity of 25,000 packages, then the fixed overhead absorption rate would have been ₦ 480, which would have generated a decrease of ₦320 per package. This implication could have accounted for the decrease in profit generated in the current period. Thus, the current basis of absorption which is seen as arbitrary, generates a lower profit and consequently the strategy would produce different total costs and different selling prices.

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Another issue observed in this pricing approach is the issue of under- and over-absorption of overhead. In this very case, the pricing strategy is influenced by the over-absorption rate of $\text{£ } 320$ per package (i.e. $\text{£ } 800 - \text{£ } 480 = \text{£ } 320$).

However, the full cost plus pricing strategy is known to be cheap, quick to apply and easy to apply. It ensures that all costs are taken into consideration before arriving at the profit and selling price.

(ii) The two alternative pricing strategies are

- Market penetration pricing strategy is a policy of low price adoption when a product is first launched in order to achieve high sales volume and hence gain significant market share. If ACE Ltd. had adopted this strategy, then it might have discouraged competitors from entering the market.
- Market skimming pricing strategy is a strategy which involves charging high prices when a product is first launched. Heavy spending will be made on advertising and promotion to obtain sales, so as to exploit any price insensitivity in the market. This approach would have been very good for ACE Ltd. because the demand for the packages was tentatively inelastic and customers would have paid high prices for the packages given its novelty appeal. As the product moves into later stages of its life cycle, prices can be reduced to remain competitive.

(b) The straight-line equation is denoted by the formula

$$P = a + bQ$$

where P = Dependent variable

a = Fixed selling price

b = Elasticity of Demand resulting from change in price and change in quantity

Q = Quantity demanded

when $a = 7,500$, and

$$b = \frac{7,500}{75,000} = \frac{-100}{1000} = 0.1$$

Therefore $P = 7,500 - 0.1Q$

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EXAMINERS' REPORT

The question tests candidates' understanding of the effect of pricing decisions using full cost plus mark-up strategy in a competitive environment. It also tests their knowledge of the implications of pricing strategy to be adopted in new product launch viz Penetration Pricing and Skimming Pricing. It also tests the determination of the demand function.

Candidates' understanding was poor as about 85% of them failed to address the fundamental requirements of the question. They did not recognize the company's current pricing strategy of Full Cost Plus mark-up. They also failed to recognize the pricing strategies to be adopted in situation of product launching.

The demand function was also muddled up by most candidates. Candidates are advised to ensure they keep abreast of current developments in Management Accounting. They should also learn to apply theory to practice.

QUESTION 2

MUKOROMAH AND CO. LTD. FLEXIBLE BUDGET					
PRODUCTION LEVEL					
	10,000units N	12,500units N	15,000units N	17,500units N	20,000units N
Variable cost:					
Direct materials	200,000	250,000	300,000	350,000	400,000
Direct labour	1,500,000	1,875,000	2,250,000	2,625,000	3,000,000
Variable factory power	180,000	225,000	270,000	315,000	360,000
Machine maintenance cost	-	-	-	22,500	60,000
Total variable cost	<u>1,880,000</u>	<u>2,350,000</u>	<u>2,820,000</u>	<u>3,312,500</u>	<u>3,820,000</u>
Fixed costs:					
Warehouse rental	800,000	800,000	1,300,000	1,300,000	1,300,000
Machine maintenance cost	240,000	240,000	240,000	240,000	240,000
Factory rent rates etc	400,000	400,000	400,000	400,000	400,000
Factory power	<u>270,000</u>	<u>270,000</u>	<u>270,000</u>	<u>270,000</u>	<u>270,000</u>
Total fixed costs	<u>1,710,000</u>	<u>1,710,000</u>	<u>2,210,000</u>	<u>2,210,000</u>	<u>2,210,000</u>
Total costs	<u>3,590,000</u>	<u>4,060,000</u>	<u>5,030,000</u>	<u>5,522,500</u>	<u>6,030,000</u>

Workings

- i. Direct material is strictly a variable cost estimated at ₦20 per unit
- ii. Direct labour is a variable cost at ₦150 per unit
- iii. Warehouse rental cost is a stepped fixed cost as follows:

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Level of activity (units)	Cost (A)
10,000	800,000
12,500	800,000
15,000	1,300,000 = 800,000 + 500,000
17,500	1,300,000
20,000	1,300,000

- iv. The machine maintenance cost is a semi-variable cost, with fixed element to a certain production level to cover the minimum charge and then will rise linearly at ₦1,500 per 100 units. That is ₦240,000 divided by ₦15 = 16,000 Units (machine maintenance cost at 16,000 units) i.e. ₦15 x 16,000 units = ₦240,000.

The cost will be estimated as follows in the flexible budget:

Level of activity (Units)	Actual cost (₹)	Minimum Acceptable cost (₹)
10,000	150,000	240,000
12,500	187,500	240,000
15,000	225,000	240,000
17,500	262,500	262,500
20,000	300,000	300,000

- v. Factory rent, rates etc are strictly fixed cost at any activity level. ~~Rs~~400,000 will be charged at any of the activity levels.
- vi. Factory power cost is a mixed cost made up of fixed and variable elements. Using the high-low method to estimate the fixed and variable element will show that:

$$\frac{\text{Variable cost}}{\text{Per unit}} = \frac{\text{N}630,000 - \text{N}450,000}{20,000 - 10,000}$$

$$\text{Variable cost per unit} = \frac{180,000}{10,000} = \text{₦18}$$

Fixed cost = ~~₦630,000~~ – (20,000 x 18)
= ~~₦630,000~~ – ~~₦360,000~~
= ~~₦270,000~~

EXAMINERS' REPORT

The question tests candidates' understanding of the principles underlying the preparation of Flexible Budgets.

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Candidates are expected to determine the budgets based on different levels of activity and appropriately separate relevant Fixed and Variable elements of the cost. Candidates are expected to determine applicable incremental costs and appropriately present the budget.

About 80% of the candidates attempted the question and candidates' understanding was above average.

Candidates' commonest pitfall was their inability to separate the fixed and variable elements of cost. Many candidates' presentation format was poor.

Candidates are advised to lay adequate emphasis on this section of the syllabus as it remains a core aspect of Management Accounting.

QUESTION 3

NAGOGO NIGERIA LIMITED

- (a) (i) Material Price Variance =
(Standard price – Actual price) Actual Quantity

	PRODUCT	
	L ₦	M ₦
Actual Qty x Std price (1,260,000 x ₦5)	6,300,000	-
(2,700,000 x ₦4)	-	10,800,000
Actual cost	<u>(6,200,000)</u>	<u>(16,200,000)</u>
Variance	<u>100,000 F</u>	<u>5,400,000</u> A
Total material price variance	₦5,300,000 A	

Material Usage Variance

	L	M
Standard Qty of output	1,300,000	2,600,000
Actual Qty of output	<u>1,260,000</u>	<u>2,700,000</u>

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	<u>40,000</u>	<u>100,000</u>
Standard price	₦5	₦4
Variance	₦200,000 F	₦400,000 A
Total usage variance	₦200,000 A	

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(ii)

Wage Rate Variance	
(Std Rate – Actual Rate) x Actual Hours	₦
Std rate x Actual hours (₦120 x 255,000.00)	30,600,000
Actual rate x Actual hours (₦124.70 x 255,000)	<u>31,798,000</u>
Variance	<u>1,198,000</u>
	<u>A</u>
Efficiency variance	
(Std hours of Actual output)	260,000
Actual hours less idle time	<u>254,000</u>
	<u>6,000</u>
Variance = 6,000 x ₦120	₦720,000 F

(b) The following are likely causes of these variances:

- Defective material purchased
- Ageing assets
- Inflation
- Under/Over estimation of standards

EXAMINERS' REPORT

The question tests candidates' knowledge of the determination of the material and labour variances and the likely causes of the variances computed.

Candidates are expected to use appropriate formulae/workings to analyse the variances. They are also required to give reasons for the variances.

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

A number of candidates, however, ignored the idle time in computing the Labour Efficiency Variance, thus losing valuable marks. Many were also unable to advance sound reasons likely to result in variances computed and some could not correctly apply the variances formulae. These were pointers to candidates' apparent deficiencies in Cost Accounting Principles and Practice.

Candidates are advised to sharpen their reading skills in the Principles and Practice of Cost Accounting in order to perform well at this stage of the Institute's examinations.

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QUESTION 4

(a)

CONCEPT DIVISION

CALCULATION OF RETURN ON CAPITAL EMPLOYED

(USING STRAIGHT-LINE DEPRECIATION METHOD ON INVESTMENT)

Year	1	2	3	4	5
	₦'00	₦'00	₦'00	₦'00	₦'00
	0	0	0	0	0
Investment at the beginning	6,000	4,800	3,600	2,400	1,200
Net cash flow (40% of sales)	2,000	2,000	2,000	2,000	2,000
Less Depreciation	<u>1,200</u>	<u>1,200</u>	<u>1,200</u>	<u>1,200</u>	<u>1,200</u>
Profit (Loss)	800	800	800	800	800
Less interest on capital	<u>960</u>	<u>768</u>	<u>576</u>	<u>384</u>	<u>192</u>
Residual Income	<u>(160)</u>	<u>32</u>	<u>224</u>	<u>416</u>	<u>608</u>
Return on Capital Employed	13.3%	16.7%	22.2%	33.3%	66.7%

- 16% of investment at the beginning of the year.
- Net profit expressed as a percentage of an investment at the beginning of the year, i.e. $\frac{800,000}{6,000,000} \times 100 = 13.3\%$ as a sample calculation for year 1.

(b)

CALCULATION OF ANNUITY

Year	Annual Repayment	16% interest on capital outstanding	Capital Repayment	Capital Outstanding
	₦'000	₦'000	₦'000	₦'000
0	-	-	-	6,000
1	1832.62	960.00	872.62	5127.60
2	1832.62	820.42	1012.20	4115.40
3	1832.62	658.46	1174.16	2941.24
4	1832.62	470.60	1362.02	1580.00
	1832.62	252.62	1580.00	-

Annual repayment = Investment ÷ Cumulative Discounting Factor (DF)
 = $\frac{6,000,000}{1832.62}$

Calculation of Return on Capital Employed using Annuity method of writing off Investment.

Year	1	2	3	4	5
	₦'000	₦'000	₦'000	₦'000	₦'000
Investment at start	6,000	5127.60	4115.40	2941.24	1580.00
Net cash flow	2000	2000	2000	2000	2000

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Depreciation	<u>872.62</u>	<u>1012.20</u>	<u>1174.16</u>	<u>1362.02</u>	<u>1580.00</u>
Profit/(loss)	1127.38	987.80	825.84	637.98	420
Imputed	<u>960.00</u>	<u>820.42</u>	<u>658.46</u>	<u>470.60</u>	<u>252.62</u>
Interest					
Residual	<u>167.38</u>	<u>167.38</u>	<u>167.38</u>	<u>167.38</u>	<u>167.38</u>
Income					
ROCE	18.80%	19.26%	20.07%	21.69%	26.58%
Year 1 as a sample calculation gives $\frac{1127.38}{6,000} \times \frac{100}{1} = 18.80\%$					

EXAMINERS' REPORT

The question tests candidates' understanding of the computation of Residual Income and Return on Capital Employed using Straight-line method of Depreciation and Annuity Depreciation method.

Candidates' were required to compute the Net Cash Flow, Depreciation and Interest on Capital for each of the years.

Over 60% of the candidates displayed shallow understanding of the requirements of the question. About 80% of those who attempted the question did not know the Annuity Depreciation method. Presentation format was deficient and performance was generally poor.

Candidates are advised to ensure they practise with relevant past question papers and utilize the Institute's Pathfinders in their preparations.

QUESTION 5

(a) Traditional Costing Approach

	Direct labour hours of producing	
FAT	5,000 (i.e. 2,500 x 2 hours)	
SLIM	<u>14,000</u> (i.e. 3,500 x 4 hours)	
	<u>19,000</u>	
∴ Overhead Absorption Rate (OAR) =		$\frac{\text{₹}570,000}{19,000}$
		= ₹30 per hour
Overhead absorbed would be as follows:		

$$\text{FAT } 2 \times \text{₹ } 30 = \text{₹ } 60 \text{ per unit}$$

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$$\text{SLIM } 4 \times \text{N} 30 =$$

$$\text{N} 120 \text{ per unit}$$

(b) Activity-Based Costing Approach

Machine hours requirement

FAT 15,000 (i.e. 2,500 x 6)

SLIM 7,000 (i.e. 3,500 x 2)

22,000

The cost drivers are used in absorbing the overhead costs.

Machine-hour driven costs $\text{N}440,000 \div 22,000$ = $\text{N} 20/\text{MH}$
m/hours

Set-up driven costs $\text{N}40,000 \div 100$ set ups = $\text{N} 400$ per set
up

Order driven costs $\text{N}90,000 \div 150$ orders = $\text{N} 600$ per
order

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∴ Overhead costs would be as follows:

	FAT N	SLIM N
Machine-driven costs (N20)	300,000 (15,000hrs x N20)	140,000 (7,000 hrs x N20)
Set-up costs	8,000 (20 x N400)	32,000 (80 x N 400)
Order handling costs	<u>18,000</u> (30 x N600)	<u>72,000</u> (120 x N 600)
	<u>326,000</u>	<u>244,000</u>
Units produced	2,500	3,500
Overhead cost per unit (<u>N326,000</u>)	N130.40 (i.e. <u>326,000</u> / 2,500)	N 69.71 (i.e. <u>N244,000</u> / 3,500)

In conclusion, Overhead Absorption should be based on the activities which drive the costs such as the machine hours, the number of production run set-ups and the number of orders handled for each product in order to avoid unrealistic amount of overhead being absorbed when a direct labour hour basis is adopted.

EXAMINERS' REPORT

The question tests candidates' understanding of the Traditional Overhead Absorption method and Contemporary Activity-Based Costing systems.

Candidates are expected to determine the Overhead Absorption rate applying it to the two products. They are also expected to identify the relevant cost drivers and the attributable overhead cost of each of the two products on per unit basis.

About 80% of the candidates attempted the question, while only about 50% of them obtained average of the marks allocated.

Candidates performed better on the Traditional Overhead Absorption part as compared with the Contemporary Activity-based concept.

Candidates are advised to acquaint themselves with the contemporary developments and emerging topics on Strategic Management Accounting.

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QUESTION 6

(a) Simulation for 10 days

Days	Tag Numbers	Demand
1	06	30
2	79	60
3	62	50
4	22	40
5	38	50
6	89	70
7	36	50
8	70	60
9	92	70
10	14	30

(b) Calculation of profit or loss for the 10 days on order of 40 units per day

Days	Demand	Scrap	Unsatisfied Demand
1	30	10	-
2	60	-	20
3	50	-	10
4	40	-	-
5	50	-	10
6	70	-	30
7	50	-	10
8	60	-	20
9	70	-	30
10	30	<u>10</u>	<u>-</u>
	Total	20	130

	N
Contribution ($(N30 - 20) \times (400 - 20)$)	3,800
Less Stock out cost ($N5 \times 130$)	<u>650</u>
Profit	3,150

(c) Calculation of profit or loss for the 10 days on order of 40 units per day

Days	Demand	Scrap	Unsatisfied Demand
1	30	10	-
2	60	-	10

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3	50	-	10
4	40	-	-
5	50	-	10
6	70	-	30
7	50	-	10
8	60	-	20
9	70	-	30
10	30	<u>10</u>	-
	Total	<u>20</u>	<u>120</u>

	N
Contribution (N 30-20) x (400 - 20)	3,800
Less Stock out cost (N 5 x 120)	<u>600</u>
Profit	3,200

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Note:

(1) Determination of tag numbers for demand

Demand	Probability	Cumulative Probability	Allocation Range
20	0.06	0.06	0-5
30	0.15	0.21	6-20
40	0.10	0.31	21-30
50	0.34	0.65	31-64
60	0.20	0.85	65-84
70	0.15	1.00	85-99

(2) Computation of Sales Figure

Sales	40 x 10 =	400
Less Scrap		<u>20</u>
		<u>380</u>

EXAMINERS' REPORT

The application of Simulation Technique for managerial decision making is the focus of this question.

Candidates are expected to apply the knowledge of probability theory, for the assessment of risk for decision making.

Although about 60% of the candidates attempted the question, performance was poor. Major pitfalls are as follows:

- Inability to compute the required stock-out cost and determination of scrap.
- Inadequate knowledge of the application of probability techniques for the assessment of risk.
- Poor knowledge of Inventory Control Technique was also evident.

Candidates are advised to update their knowledge of relevant courses such as Cost Accounting and Quantitative Techniques in order to perform well at this stage of the examinations. The use of the Institute's Pathfinders should not be neglected.