



**THE INSTITUTE OF CHARTERED ACCOUNTANTS
OF NIGERIA**

PATHFINDER

NOVEMBER 2012 INTERMEDIATE EXAMINATION

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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TABLE OF CONTENTS

SUBJECTS	PAGES
COSTING AND QUANTITATIVE TECHNIQUES	3 – 37
AUDIT AND ASSURANCE	38 – 62
TAXATION	63 – 90
BUSINESS COMMUNICATION AND RESEARCH METHODOLOGY	91 – 115

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THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA INTERMEDIATE - NOVEMBER 2012 COSTING AND QUANTITATIVE TECHNIQUES

Time allowed – 3 hours

SECTION A: Attempt All Questions

PART I: MULTIPLE-CHOICE QUESTIONS

(20 Marks)

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

1. Classification of costs can be made on the following bases **EXCEPT**
 - A. Business function
 - B. Assignment to a cost object
 - C. Behaviour pattern
 - D. Assets or expenses
 - E. Organisation.
2. Which of the following is **NOT** an element in a decision model?
 - A. Objective function
 - B. Alternative actions
 - C. Uncertainty
 - D. Set of probabilities
 - E. Payoffs.
3. Which of the following is **NOT** the cause of an unfavourable material efficiency variance?
 - A. Poor design of products
 - B. Inappropriate assignment of labour
 - C. Poor process
 - D. Poor cost reduction
 - E. Inadequate training of labour force.

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4. Benefits of Piece Rate System of remuneration include the following **EXCEPT**
- A. Remuneration based on the level of performance
 - B. Idle time created are paid
 - C. Inefficient worker is penalised by reduced wages
 - D. Employee can determine remuneration well in advance
 - E. Increase in production units reduces indirect fixed cost per unit.
5. From which of the following sources can overhead **NOT** be collected?
- A. Stores requisition note
 - B. Goods received note
 - C. Wages analysis sheet
 - D. Cash book
 - E. Invoices.
6. Which of the following is the correct accounting entry for factory overhead recovered?
- A. Debit work-in-progress control account, credit production overhead control
 - B. Debit costing profit and loss account, credit production overhead control
 - C. Debit production overhead control, credit costing profit and loss account.
 - D. Debit production overhead control account, credit stores ledger control account
 - E. Debit work-in-progress control account, credit cost ledger control account.
7. Which of the following is **NOT** a problem associated with site and contract work?
- A. Pilferage of materials, tools etc.
 - B. Unauthorised use of equipment, vehicles etc.
 - C. Incorrect labour bookings
 - D. On site cost clerks providing rapid information
 - E. High volumes of breakages.

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8. If the actual number of hours spent is 180 hours at a standard rate of ~~₦~~250 per hour and the labour rate variance is ~~₦~~4,500 adverse, what is the actual wages paid?
- A. ~~₦~~49,500
 - B. ~~₦~~45,000
 - C. ~~₦~~43,240
 - D. ~~₦~~40,000
 - E. ~~₦~~39,000.
9. The detailed quantitative plan of actions prepared for the co-ordination of the various activities of an organisation is referred to as
- A. Strategy
 - B. Goal
 - C. Mission
 - D. Budget
 - E. Budget manual.
10. In a process, every 8 litres of input is expected to yield 7 litres of output and the standard cost for the output is ~~₦~~49. What is the yield variance if output is 76,500 litres from a given input of 80,000 litres?
- A. ~~₦~~17,150 (A)
 - B. ~~₦~~24,500 (A)
 - C. ~~₦~~24,500 (F)
 - D. ~~₦~~45,500 (A)
 - E. ~~₦~~45,500 (F)
11. Which of the following activities is **NOT** included in store keeping?
- A. Issue of required materials, tools, etc.
 - B. Receipt of parts and materials
 - C. Protecting items in store from damage and deterioration
 - D. Securing and purchasing of materials, parts etc.
 - E. Securing the stores from pilferage and theft.

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15. If $A = \begin{pmatrix} -4 & 1 \\ 2 & -5 \end{pmatrix}$

The inverse of A is

A. $\begin{pmatrix} -5 & -1 \\ -2 & -4 \end{pmatrix}$

B. $\begin{pmatrix} -5/18 & -1/18 \\ -1/9 & -2/9 \end{pmatrix}$

C. $\begin{pmatrix} -0.25 & 1 \\ 0.5 & -0.2 \end{pmatrix}$

D. $\begin{pmatrix} 5/18 & 1/18 \\ 1/9 & 2/9 \end{pmatrix}$

E. $\begin{pmatrix} 5 & 1 \\ 2 & 4 \end{pmatrix}$

16. If $A = \{15, 18, 21, 23, 24, 29\}$ and
 $B = \{21, 23, 24, 26, 28\}$, the union of A and B is

- A. $\{15, 18, 21, 23, 24, 26, 28, 29\}$
B. $\{21, 23, 24\}$
C. $\{ \}$
D. $\{15, 18, 40, 44, 46, 26, 28, 29\}$
E. $\{15, 18, 21, 23, 24, 29, 21, 23, 24, 26, 28\}$

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17. Which of the following is always correct for partial derivatives of $f(x, y)$
- A. $\frac{\partial^2 f(x, y)}{\partial x \partial y} = \frac{\partial f(x, y)}{\partial y} = \frac{\partial f(x, y)}{\partial x}$
- B. $\frac{\partial^2 f(x, y)}{\partial x^2} = \frac{\partial^2 f(x, y)}{\partial y^2}$
- C. $\frac{\partial^2 f(x, y)}{\partial x \partial y} = \frac{\partial^2 f(x, y)}{\partial y \partial x}$
- D. $\frac{\partial^2 f(x, y)}{\partial x^2} = \frac{\partial^2 f(x, y)}{\partial x \partial y}$
- E. $\frac{\partial^2 f(x, y)}{\partial y^2} = \frac{\partial^2 f(x, y)}{\partial y \partial x}$
18. In the analysis to maximise an objective function $35S + 27K$, one of the extreme points of the feasible region is found to be (3.5, 2.75) with S taken as the independent variable. The value of the objective function is
- A. 46.50
- B. 149.50
- C. 190.75
- D. 196.75
- E. 387.00.
19. The main objective of replacement analysis is to
- A. Ensure that components do not deteriorate
- B. Replace bad components whenever they fail
- C. Determine minimum cost of production
- D. Determine the cost of replacement
- E. Determine the least cost of replacement.

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- PART II: SHORT-ANSWER QUESTIONS (20 Marks)**

1. The point of focus for the costs relating to a particular activity in an activity-based costing system is called.....
2. All variable costs are direct by nature but not all direct costs are.....
3. The time spent in providing a service to a specific customer or manufacturing a specific product is recorded on a source document called.....
4. A summary account where entries are made from totals of transactions for a period is called.....
5. In an attempt to neutralise the effect of abnormal gain for the normal loss that is not actually realised in the process costing is to debit.....and credit.....

If labour is the limiting factor, determine the optimum product mix.

- INTERMEDIATE EXAMINATION - NOVEMBER 2012**

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8. A practical way of showing the effect of uncertainty by varying the values of the key factors and showing the resulting effect on the project is called.....
9. Which form of costing will apply in a manufacturing company where a customer orders a quantity of identical items?
10. The cost of retaining an asset which includes the cost of financing and the cost of physical storage is called.....
11. From the data below, calculate the capacity ratio:

Budgeted labour hours	4, 200
Standard labour hours produced	4, 400
Efficiency ratio	110%
12. The arrangement of financial or expense items in logical groups having regard to their nature or purpose is called.....
13. Given that the value and price indices are 57.6% and 81.4% respectively, the quantity index is.....
14. The probability of throwing a total of nine with two dice is.....
15. The number of possible subsets in a set of English vowels is.....
16. Two matrices, A and B are said to be conformable for multiplication if.....
17. If the second derivative of a function is less than zero at a stationary point, then the point is.....
18. The values that are set to zero at each feasible solution when using simplex method are called.....
19. In transportation problem, slack variables stand for.....resources
20. The sum of the float values of all the activities on the critical path is.....

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SECTION B: ATTEMPT ANY FOUR QUESTIONS

(60 Marks)

QUESTION 1

- a. Nimilo Limited pays workers by a differential piecework. The scheme operates with a guaranteed minimum pay for 1,000 units. Analysed below are the pay rates.

< 1,000 units	₦20 per unit
1,001 - 1,200 units	₦ 5 per unit
1,201 - 1,400 units	₦7.5 per unit
1,401 - 1,600 units	₦10 per unit
> 1,600 units	₦12 per unit

The outputs of the company for a five-day week were 950 units, 1,320 units, 1,450 units, 1,280 units and 1,150 units.

You are required to calculate the daily pay for the week. (7½ Marks)

- b. The basic rate is ₦60 per hour and overtime rates are time and a half for night and double time for weekends. The following were made available on two different jobs.

	NMO 1	NMO 2
Normal time	72	72
Night	20	24
Weekend	10	16

Calculate the labour cost chargeable to each job. (3½ Marks)

- c. State **TWO** advantages and **TWO** disadvantages of an incentive scheme.

(4 Marks)

(Total 15 Marks)

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QUESTION 2

Payez Construction Limited executed two contracts during the year 2011. Details at the end of the year are given below:

Contract	X2	Y2
Commencement date	March	July
	₦'000	₦'000
Contract price	20,000	25,000
Expenditure:		
Materials	5,500	6,700
Wages	3,950	4,600
Sub-contract	3,000	4,750
Site expenses	1,870	2,550
Plant purchased	2,950	3,500
Material on site (year end)	1,250	2,200
Accrued wages	750	1,050
Value of work certified	14,000	15,500
Cash received on work certified	12,600	13,950
Work completed but not certified	2,100	4,750

Head office charges of ₦2,000,000 are charged to contract in proportion to the number of months covered during the year.

Plant at site is depreciated at 20% per annum. Depreciations are charged in full notwithstanding the time of purchase.

You are required to prepare the Contract Account in a columnar form for the year ended December 2011 and also show the relevant balance sheet extracts (15 Marks)

QUESTION 3

Le Offi Ogura Limited produces three different products for which the following operating statement has been produced:

	Product O	Product F	Product C	Total
	N	N	N	N
Sales	5,000,000	7,200,000	5,200,000	17,400,000
Total costs	<u>3,800,000</u>	<u>6,500,000</u>	<u>5,600,000</u>	<u>15,900,000</u>
Net profit/(Loss)	1,200,000	700,000	(400,000)	1,500,000

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Installed capacity	5,000	6,000	8,125
	units	units	units
Current production	90%	80%	80%

The following additional information was also made available

- i. Total costs comprise 60% variable and 40% fixed for products O and F while product C is 62.5% variable and 37.50% fixed.
- ii. No fixed cost is peculiar to any product and fixed cost will not change in the event of increasing production of any of the products to full installed capacity.
- iii. The Directors are considering dropping product C in the light of an additional order that will take the production to full installed capacity.

You are required to prepare a statement advising the Directors whether to

- a. Discontinue product C (10 Marks)
 - b. Take up the additional order (5 Marks)
- (Total 15 Marks)**

QUESTION 4

The following data were extracted from North-West Limited's records for July 2012 in respect of product OWL:

Standard Cost/unit

	N
Raw material (50kg @ N5 per kg)	250
Labour (2 hours @ N60 per hour)	120
	370

Budget

Production	2,000 Units
Fixed Overheads	N1,500,000
Variable Overheads	N1,800,000
Labour Hours	4,000
Standard hours of production	4,000

Actual

Production	2,400 Units
Direct Material Purchased	110,000kg @ N605,000

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Opening Stock Direct Material	1,000kg
Closing Stock Direct Material	4,000kg
Wages paid (4,900 hours)	₦318,500
Fixed Overhead	₦1,650,000
Variable Overhead	₦2,280,000

You are required to compute the following variances

- | | |
|---|------------|
| a. Material price variance | (2 Marks) |
| b. Material usage variance | (2 Marks) |
| c. Labour rate variance | (2 Marks) |
| d. Labour efficiency variance | (2 Marks) |
| e. Variable overhead expenditure variance | (2 Marks) |
| f. Variable overhead efficiency variance | (2½ Marks) |
| g. Fixed overhead efficiency variance. | (2½ Marks) |

(Total 15 Marks)

QUESTION 5

The table below shows the three time estimates, in weeks, for each of the eight activities of a civil project embarked upon by Lobibiya Nigeria Limited:

Activity	Most Likely	Optimistic	Pessimistic
1 - 2	6	4	8
1 - 3	5	5	6
1 - 4	8	5	17
2 - 5	8	7	12
3 - 5	5	4	6
3 - 6	4	4	4
4 - 6	12	6	20
5 - 6	6	4	10

You are required to

- | | |
|---|-----------|
| a. Calculate the expected time for each of the activities listed in the table above. | (3 Marks) |
| b. Draw activity-on-arrow network diagram for the project showing all expected activity duration. | (3 Marks) |

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- c. Identify and state all possible paths in (b) above and their durations. (3 Marks)
 - d. List the critical path and its duration. (3 Marks)
 - e. State the minimum duration to complete the project. (3 Marks)
- (Total 15 Marks)**

QUESTION 6

Each of the products S and T has to pass through two or three stages A, B and C before the product can be classified as a finished product. Each unit of S requires 10.6 hours of stage A, 8 hours of stage B and 6 hours of stage C while each unit of T requires 80 minutes of stage A and 5 hours of stage B. The maximum hours available for stages A, B and C are 80, 130 and 40 hours respectively and each unit of S sells for ₦55 while each unit of T sells for ₦45.

You are required to

- a. Formulate the linear programming problem for the information provided. (8 Marks)
 - b. Determine the optimal level of production using graphical method. (7 Marks)
- (Total 15 Marks)**

QUESTION 7

An interview was conducted among some ICAN staff working in examinations, accounts and administrative departments. The interview reveals that some staff have served in more than one of these departments, during the period investigated. In the interview, 42 said they have served in at least two departments, 49 said they served in examinations department, 63 said they served in accounts department while 10 claimed they have served only in administrative department. It was discovered that 35 have served in exactly two departments while 23 served in examination department only and 25 served in accounts department only.

You are required to

- a. Draw Euler-Venn diagram to illustrate the above information. (5 Marks)
- b. Determine the number of staff who have served in the departments of:
 - i. Examinations and administration
 - ii. Examinations and accounts

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- iii. Accounts and administration
 - iv. Administration
 - v. Examinations, accounts and administration (5 Marks)
- c. How many staff were involved in the interview? (5 Marks)
- (Total 15 Marks)**

SOLUTION TO SECTION A

PART 1 MULTIPLE-CHOICE QUESTION

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

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WORKINGS

8. Labour Rate Variance = (Actual hours x Standard rate) – Wages Paid

$$\begin{aligned} \text{ie } -\text{N}4,500 &= \text{N}45,000 - x \\ x &= \text{N}45,000 + \text{N}4,500 = \underline{\underline{\text{N}49,500}} \end{aligned}$$

10. (Actual yield – Standard yield from actual input material) x standard cost per Unit of output

$$(76,500 - 70,000) \times \text{N}7 = \underline{\text{N}45,000 (F)}$$

8 :7 standard

$\therefore 80,000$ will yield $70,000$ $\therefore 80,000$ per hour will yield $70,000$ Lts.

$$\cancel{49}/7 = \underline{\underline{\cancel{7}}}$$

$$14. \quad n(\text{men}) = 500 - 150 - \frac{90}{100} (500 - 150) \\ = 210$$

$$\therefore P(\text{men}) = \frac{210}{500} = \frac{21}{50} = 0.42$$

15. $|A| = 20 - 2 = 18$
Matrix of cofactor:

$$c_{11} = -5; c_{12} = -2; c_{21} = -1; c_{22} = -4$$

$$\therefore \text{Adjoint matrix} = C^T = \begin{pmatrix} -5 & -1 \\ -2 & 4 \end{pmatrix}$$

$$\therefore A^{-1} = \underline{\text{Adjoint matrix}}$$

$$= \begin{pmatrix} \frac{-5}{18} & \frac{-1}{18} \\ -\frac{1}{9} & -\frac{2}{9} \end{pmatrix}$$

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18. Value of objective function at point (3.5, 2.75)
= 35 (3.5) + 27 (2.75)
= 196.75

20. $t_e = \frac{1}{6} (4t_m + t_o + t_p)$
 $= \frac{1}{6} (4 \times 18 + 8 + 26) = \frac{106}{6} = 17.67$

EXAMINERS' REPORT

The questions cover a sizeable proportion of the syllabus.

All candidates attempted the questions.

Performance was good as about half of the candidates who attempted the questions scored 50% and above of the marks allocated.

Candidates performance will improve if they increase their coverage of the syllabus for subsequent examinations.

PART II SHORT-ANSWER QUESTIONS

1. Cost Drivers
2. Variable
3. Time sheets or Job cards
4. Control Account/Total Account
5. Debit Abnormal Gain Account
Credit Normal Loss Account
6. ACB
7. Target Costing
8. Sensitivity analysis
9. Batch Costing

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- ## Workings

15. Vowels $V = \{a, e, i, o, u\}$ $n(V) = 5$, no of sets $= 2^5 = 32$

All the candidates attempted the questions.

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Performance was poor as about 70% of the candidates did not score more than 40% of the marks allocated.

The major pitfalls exhibited by candidates include

- i) Insufficient familiarity with CQT terminologies
- ii) Misinterpretation of the requirements of the questions

Candidates will do well in future if they

- i) **Extend their coverage of the syllabus**
- ii) **Practice past questions**
- iii) **Read good quality materials**

SOLUTIONS TO SECTION B

QUESTION 1

- a. Nimilo Ltd**
Computation of Daily Pay for the Week

	Units	₱
Day 1:	1000 - { ₱ 20 x 1000}	20,000
Day 2:	1350 - { ₱ 20 x 1000} + { ₱ 5 x 200} + {7.5 x 120}	21,900
Day 3:	1,450 - { ₱ 20 x 1,000} + { ₱ 5 x 200} + {7.5 x 200} + { ₱ 10 x 50}	23,000
Day 4:	1,280 - { ₱ 20 x 1000} + { ₱ 5 x 200} + { ₱ 7.5 x 80}	21,600
Day 5:	1150 - { ₱ 20 x 1,000} + { ₱ 5 x 150}	20,750

- b. Computation of Labour Cost Chargeable to each Job**

	NMO 1			NMO 2		
	HRS	Rate	₦	HRS	Rate	₦
Normal Time	72	60	4,320	72	60	4,320
Night	20	90	1,800	24	90	2,160
Weekend	10	120	<u>1,200</u>	16	120	<u>1,920</u>
			7,320			8,400

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c. Advantages of an Incentive Scheme

- (i) Increases production thereby increasing wages but also reducing overhead per unit.
- (ii) May enable firm to remain competitive
- (iii) May improve morale by ensuring that extra efforts are rewarded.
- (iv) More efficient workers may be attracted by the opportunity to earn higher wages.

Disadvantages of an Incentive Scheme:

- (i) There may be problem in establishing performance levels and rates.
- (ii) Some incentive schemes are complex and expensive to administer.
- (iii) Some unskilled workers may earn high wages through incentive schemes than those engaged on skilled work.
- (iv) It may lead to unhealthy rivalry amongst workers.

EXAMINERS' REPORT

The question tests candidates' understanding of and ability to compute labour remuneration and the constituents of labour incentive.

The question appears popular among candidates as about 70% of them attempted it.

Performance was good as more than half of the candidates who attempted the question scored 50% and above.

The common pitfalls among candidates who did not do well in this question include

- (i) Inability to compute labour remuneration correctly
- (ii) Differential rates as an incentive scheme were misconstrued
- (iii) There was a significant mix-up in the merits and demerits of intensive schemes and these were juxtaposed for each other.

For improved performance in future, it is recommended that candidates should

- (i) Read the right quality materials
- (ii) Fully understand the requirements of the question before attempting it
- (iii) Use the Pathfinder as a guide
- (iv) Sufficiently cover the syllabus

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QUESTION 2

Contract Account

		X2		Y2		X2	Y2
	N'000	N'000	N'000	N'000		N'000	N'000
Material		5,500		6,700	Material c/f	1,250	2,200
Wages:	3,950		4,600		W.I.P c/f	2,100	4,750
Accrued	<u>750</u>	4,700	<u>1,050</u>	5,650	Cost of work cert	13,560	14,150
Sub-Contract		3,000		4,750			
Site Expenses		1,870		2,550			
*Head office Exps.		1,250		750			
Depreciation		<u>590</u>		<u>700</u>			
		<u>16,910</u>		<u>21,100</u>		<u>16,910</u>	<u>21,100</u>
Cost of work certified		13,560		14,150	Value of work Certified	14,000	15,500
Profit for the year		<u>440</u>		<u>1,350</u>			
		14,000		<u>15,500</u>		<u>14,000</u>	<u>15,500</u>

Balance Sheet Extract

	N'000	N'000
<u>Fixed Asset</u>	6,450	
Less Depreciation	<u>1,290</u>	<u>5,160</u>
Stock – W.I.P	6,850	
Material	<u>3,450</u>	<u>10,300</u>
<u>Debtors</u>		
Retention		<u>2,950</u>
<u>Liabilities</u> – Wages Accrued 750 + 1,050		<u>1,800</u>

*Head office expenses:

	X 2	Y2
Period Covered (Months)	10	6
Share of expenses $10/16 \times 2,000,000 =$	<u>1,250</u>	$6/16 \times 2,000,000 =$ <u>750</u>

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EXAMINERS' REPORT

The question tests candidates' understanding and preparation of Contract Accounts in columnar form and identification of balance sheet extracts when contract accounts are prepared.

Attempt was high as about 80% of the candidates attempted the question.

Performance was fairly good with about half of the candidates scoring 50% and above.

The common pitfalls identified are as follows:

- (i) Inability to present the two contracts information in columnar form
- (ii) Balance Sheet Extracts were presented as if the two contracts were done by two subsidiaries of a holding company
- (iii) Majority of candidates who attempted this question did not attempt the second part requiring display of Balance Sheet

QUESTION 3

a.

Products	Le Offi Ogura Ltd			Total
	O	F	C	
	₦'000	₦'000	₦'000	₦'000
Sales	5,000	7,200	5,200	17,400
Variable Costs				
60% for O and F				
62.5% for C	<u>2,280</u>	<u>3,900</u>	<u>3,500</u>	<u>9,680</u>
Contribution	2,720	3,300	1,700	7,720
Fixed Costs	1,520	2,600	2,100	<u>6,220</u>
Profit	1,200	700	{400}	<u>1,500</u>

Product C has positive contribution, so it should not be discontinued particularly where there is no limiting factor to limit the production of C

But if C is dropped, the profit figures would be

Products	O	F	Total
	₦'000	₦'000	₦'000
Sales	5,000	7,200	12,200
Variable Cost	2,280	3,900	<u>6,180</u>
	2,720	3,300	6,020

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Contribution	
Fixed Costs	<u>6,220</u>
Loss	<u>(200)</u>

There will be a loss of ₦200,000 if product C is dropped thus wiping off the contribution. The difference between the two scenarios is ₦1,700 which equals the contribution made by C.

- | | |
|-------------------------------|--------------|
| b. Taking up additional order | |
| Installed Capacity | 8,125 |
| Present operating units | <u>6,500</u> |
| | 1625 units |

$$\frac{\text{Cost per unit}}{\text{N1,700,000}} = \text{N261.54}$$

Additional Contribution	₦
1,625 @ ₦261.54	425,000
Fixed Cost	-
Additional profit	425,000

Directors are advised to take on the additional orders. This will mean an increase in profit to the tune of ~~£~~425,000

EXAMINERS' REPORT

The question tests candidates' knowledge and ability to use Marginal Costing techniques for business decision making.

About 30% of the candidates who wrote this paper attempted this question.

Performance was fairly good as about half of the candidates scored 50% and above. The common pitfalls include

- (i) **Candidates' inability to differentiate between Marginal Costing and Absorption Costing**
- (ii) **Many candidates did not attempt the second part of the question requiring advice to directors and owners**

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- (iii) Many candidates could not take good business decisions**

Candidates' performance could be better if they

- (i) Acquaint themselves of the contents of the Pathfinder
- (ii) Improve on their coverage of the syllabus
- (iii) Practise many past questions

QUESTION 4

- a. **Material Price Variance**

$$= (\text{Actual Purchase Quantity} \times \text{Actual Price}) - (\text{Actual Purchase Quantity} \times \text{Std Price})$$
$$= 605,000 - 110,000 \times 5$$
$$= 605,000 - 550,000$$
$$= \text{N}55,000 \text{ (Adverse)}$$

- b. Material Usage Variance**

$$\begin{aligned}
 &= (\text{Actual quantity used for Actual Production} \times \text{Std price}) - \left\{ \begin{array}{l} \text{Std Qty for Actual} \\ \text{Production} \times \text{Std price} \end{array} \right\} \\
 &= 107,000 \times \text{N}5 - 2400 \times 50 \times \text{N}5 \\
 &= 535,000 - 600,000 \\
 &= \text{N}65,000 \text{ (favourable)}
 \end{aligned}$$

- c. Labour rate Variance

$$\begin{aligned}
 &= (\text{Actual Labour hours} \times \text{Actual Rate}) - (\text{Actual Labour hours} \times \text{Standard Rate}) \\
 &= \text{N}318,500 - 4,900 \times \text{N}60 \\
 &= \text{N}318,500 - \text{N}294,000 \\
 &= \text{N}24,500 \text{ (A)}
 \end{aligned}$$

- d. Labour Efficiency Variance**

$$\begin{aligned}
 &= (\text{Actual Labour hours} \times \text{Std Rate}) - (\text{Std Labour Hours for Actual Production} \times \text{Std Rate}) \\
 &= 4900 \times \text{N}60 - 4800 \times \text{N}60 \\
 &= \text{N}294,000 - \text{N}288,000 \\
 &= \text{N}6,000 \text{ (favourable)}
 \end{aligned}$$

PATHFINDER

- ### Variable Overhead Absorption Rate (VOAR)

Fixed Overhead Absorption Rate (FOAR)

27

PATHFINDER

Common pitfalls include

- (i) Candidates did not show enough knowledge and familiarity with basic formulae for Variance Analysis
- (ii) Application of formulae by some candidates was very poor
- (iii) Favourable and Adverse Variances were confused with each other

It is recommended that for future examinations, candidates should

- (i) Intensify efforts in the mastery and application of basic and advanced formulae
- (ii) Use good quality materials
- (iii) Acquaint themselves with the Pathfinder

QUESTION 5

(a)

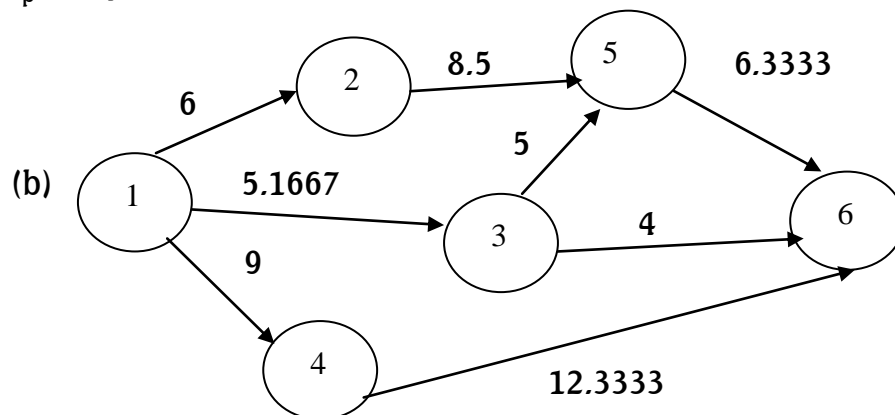
Activity

$$\text{Expected duration } t_e = \frac{4t_m + t_o + t_p}{6}$$

1 - 2	6
1 - 3	5.1667
1 - 4	9
2 - 5	8.5
3 - 5	5
3 - 6	4
4 - 6	12.3333
5 - 6	6.3333

t_m = most likely duration, t_o = optimistic duration

t_p = pessimistic duration.



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- (c) Possible paths together with their durations are
- | Paths. | Duration (weeks) |
|---------------|------------------------------|
| 1 - 2 - 5 - 6 | $6 + 8.5 + 6.3333 = 20.8333$ |
| 1 - 3 - 5 - 6 | $5.1667 + 5 + 6.3333 = 16.5$ |
| 1 - 3 - 6 | $5.1667 + 4 = 9.1667$ |
| 1 - 4 - 6 | $9 + 12.3333 = 21.3333$ |
- (d) The critical path is 1 - 4 - 6 and its duration = 21.3333 weeks
- (e) Minimum duration to complete project = 21.3333 weeks

EXAMINERS' REPORT

The question tests candidates' ability to draw, interpret and discuss Network Analysis

A very popular question which was attempted by about 90% of the candidates who wrote the paper.

Performance was very good. About 80% of the candidates who attempted the question scored 50% and above.

The common pitfalls include

- (i) Bad drawing of the Network
- (ii) Arrows were not properly shown and aligned
- (iii) Duration of activities was not denoted as stated in the question

For improvement in future examination, it is recommended that candidates should

- (i) Make use of good quality materials
- (ii) Practise with past questions
- (iii) Familiarise themselves with the Pathfinder

PATHFINDER

(a) For each product, times required in each stage are

T:

$$80 \text{ min} = \frac{80}{60} \text{ hrs in A}$$

5 hrs in B

" B = 130 hrs

“ C = 40 hrs

“ ” ” ” T = ~~₹~~45

Objective function is to maximize 5

$$8S + 5T \leq 130$$

$S, T \geq 0$ non-negativity constraint

$$10.6S + \frac{4}{3}T = 80$$
$$T = 60 \quad S = 7.55$$

for $8S + 5T = 130$

i.e $(S, T) = (0, 26)$ and $(16.25, 0)$

For the graphical method desired, point A = (0, 26)
 “ B = (4.6, 18.5)
 “ C = (6.7, 4.8)
 “ D = (6.7, 0)

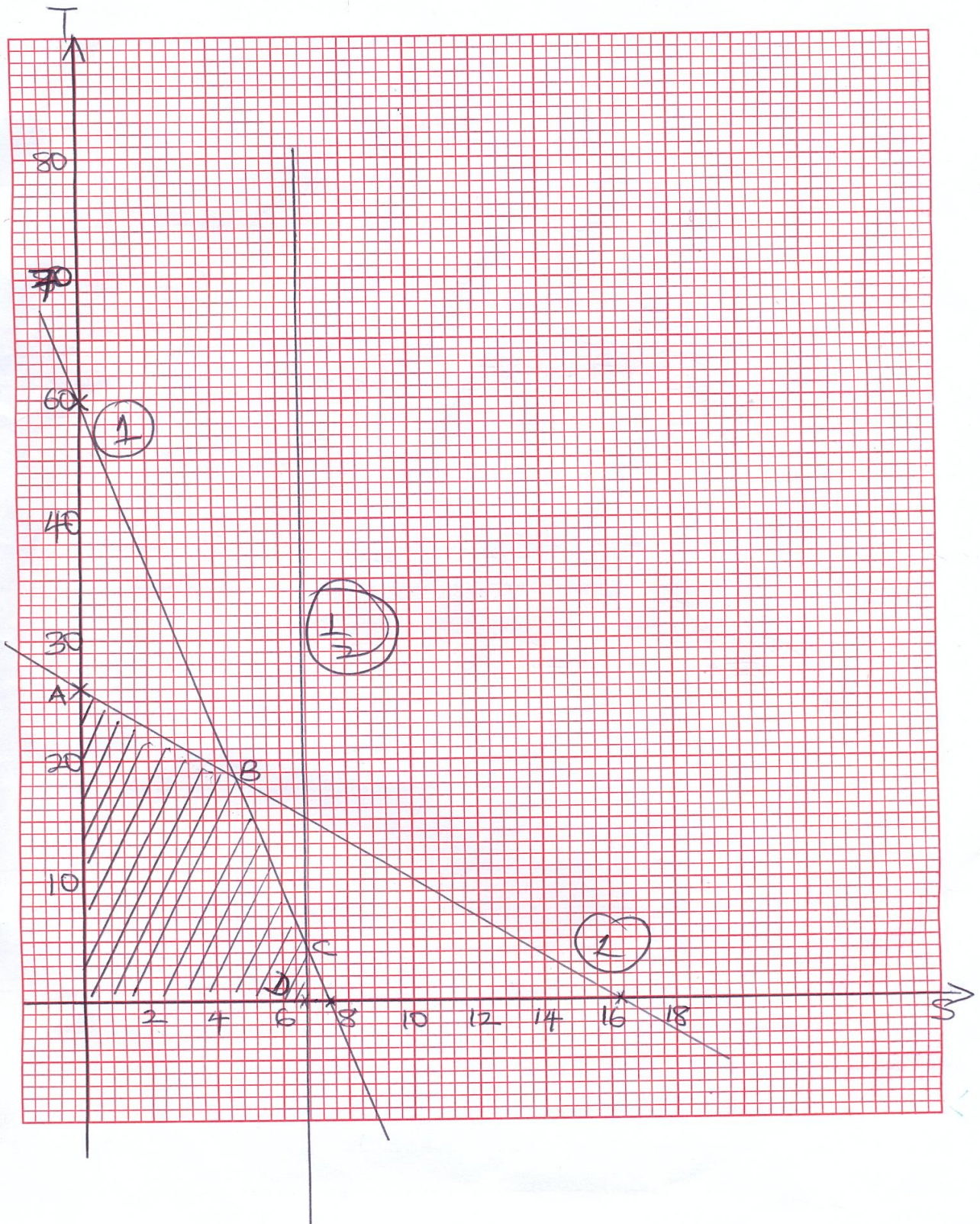
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(b) Points	Solution ($55S + 45T$)
A (0,26)	1170
B (4.6, 18.5)	1085.5
C(6.7, 4.8)	584.5
D(6.7, 0)	368.5

∴ For optimum level of production, 26 units of T only should be produced to yield maximum profit of ₦1,170

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EXAMINERS' REPORT

The question tests candidates' knowledge and understanding of Linear programming problems with respect to profit maximization and the relevance of graphical solution.

Attempt was about 55% of the entire candidates attempted the question.

Performance was very poor with only about 10% of the candidates scoring half of the marks and above.

General pitfalls include

- (i) Candidates' inability to display an understanding of the requirements of the question
- (ii) Bad attempt at drawing graphs and interpreting correctly

For improved performance in future examinations, candidates should

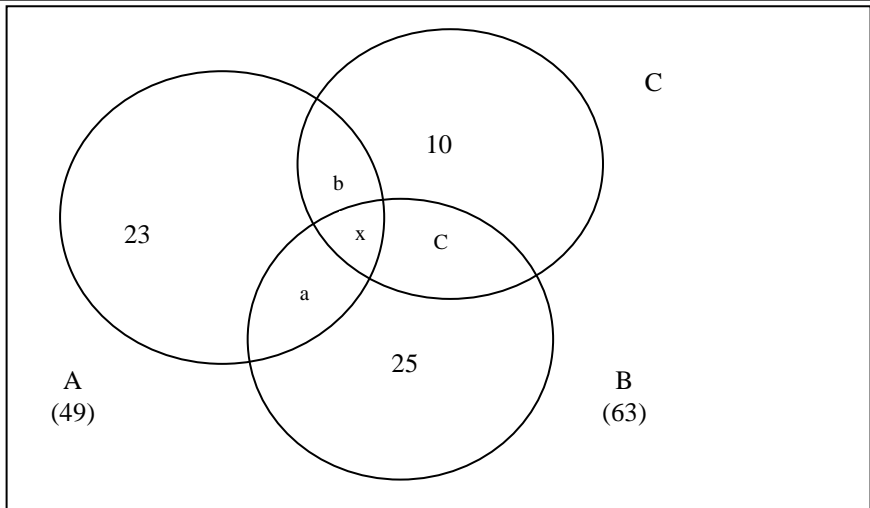
- (i) Master the requirements of linear Programming Techniques
- (ii) Expand the scope of materials currently used

QUESTION 7

- a.
- 42 have served in at least 2 depts.
 - 49 have served in exams dept
 - 10 have served in accounts
 - 35 have served in exactly 2 depts.
 - 23 served in exam dept only
 - 25 served in accounts dept only

Let A = exams dept
B = accounts dept
C = admin dept

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- (i) Those who have served in exams and administrative depts
 $= n(A \cap C) = B + x$

Those who have served in at least 2 depts i.e 2 & 2

$$\text{i.e } a + b + c + x = 42$$

Those who have served in exactly 2 depts

$$a + b + c = 35$$

From eqs (1) & (2)

$$35 + x = 42 \Rightarrow x = 42 - 35 = 7$$

49 have served in exams dept

$$\text{i.e } 49 = 23 + a = b + x$$

for accounts: $63 = 25 + a + c + x$

from eq (3); $a+b = 49 - 23 - 7 = 19$

eg (4) $a+c = 63 - 25 - 7 = 31$

but $a + b + c = 35$

$$\therefore c = 35 - (a+b) = 35 - 19 = 16$$

$$\therefore a = 31 - c = 31 - 16 = 15$$

$$b = 19 - a = 19 - 15 = 4$$

$$\therefore n(A \cap C) = b + x = 4 + 7 = 11$$

$$(ii) \quad n(A \cap B) = a + x = 15 + 7 = 22$$

$$(iii) \quad n(B \cap C) = C + x = 16 + 7 = 23$$

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$$(iv) \quad n(C) = b + c + x + 10 = 4 + 1.6 + 7 + 10 = 37$$

(v) $n(A \cap B \cap C) = x = 7$

(b) $n(\text{Universal}) = A \cup B \cup C = 23 + 25 + 10 + a+b+c+x$
 $= 58+15+4+16+7$
 $= 100$

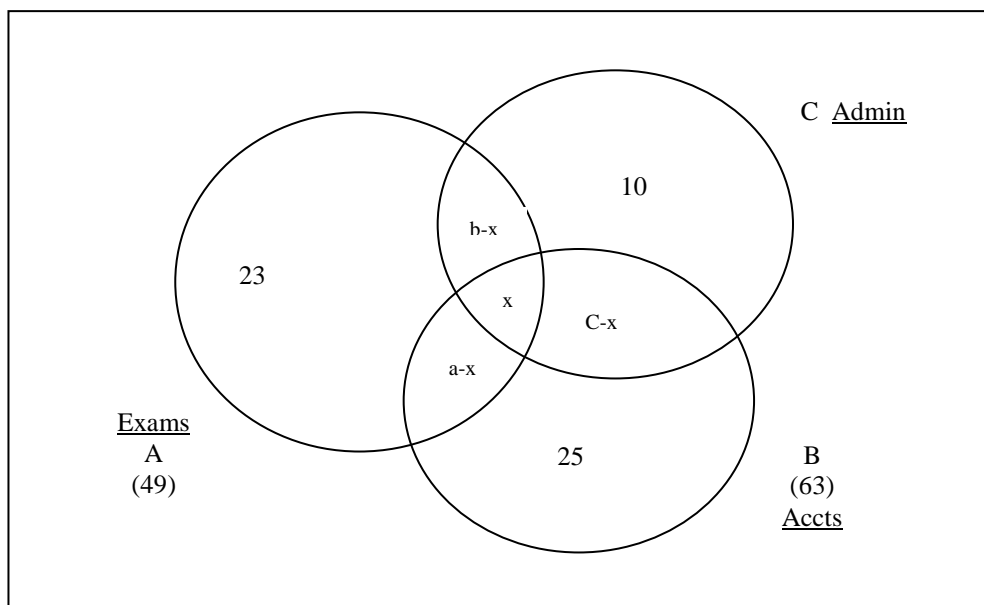
ALTERNATIVE METHOD TO QUESTION 7

42 have served in at least 2 depts
49 have served in exams dept
63 have served in accounts dept
10 have served in admin dept only
35 have served in exactly 2 depts
23 served in exam dept only
25 served in accounts dept only

```

Let  A  rep  exams  dept
     B  rep  accounts  dept
     C  rep  admin  dept

```



Let x rep $n(A \cap B \cap C)$

PATHFINDER

Let $b \in n(A \cap C)$

Let $c \text{ rep } n(B \cap C)$

$$\begin{aligned} a-x+x+c-x+25 &= 63 \\ a+c-x &= 38 \quad \text{(II)} \end{aligned}$$

$$\begin{aligned} a - x + b - x + c - x &= 35 \\ a + b + c - 3x &= 35 \quad \text{(IV)} \end{aligned}$$

$$\begin{aligned} \text{(V)} - \text{(VII)} &\Rightarrow c = 23 \\ \text{From (VI), } a &= 45 - c = 45 - 23 = 22 \\ \text{From (V), } b &= 33 - a = 33 - 22 = 11 \end{aligned}$$

INTERMEDIATE EXAMINATION - NOVEMBER 2012

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EXAMINERS' REPORT

The question tests candidates' familiarity with and understanding of the concept of the Set Theory.

About 75% of the entire candidates who wrote this paper attempted the question

Performance was poor with only about 30% of the candidates scoring 50% and above.

The major deficiencies among the candidates who performed poorly include

- (i) Mastery of the subject matter was poorly displayed
- (ii) The requirements of the question appeared not to be properly understood
- (iii) Poor labelling of the diagram

Recommendations for improvement in future examinations include

- i) Intensive practise of past questions
- ii) Candidates should show interest in learning applications
- iii) Candidates should familiarize themselves more with the Pathfinder.

PATHFINDER

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA
INTERMEDIATE EXAMINATION - NOVEMBER 2012
AUDIT AND ASSURANCE

Time allowed – 3 hours

SECTION A: Attempt All Questions

PART I: MULTIPLE-CHOICE QUESTIONS (20 Marks)

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

1. Which of the following is the principal function of forensic auditors?
 - A. Audit the accounts
 - B. Issue report to the shareholders
 - C. Give expert evidence at the eventual trial
 - D. Observe court proceeding
 - E. Give judgement relating to qualified report.
2. An audit principally seeks to provide which of the following objectives?
 - A. Audit explanations
 - B. Good Audit Working Papers
 - C. Fraud detection
 - D. Reasonable Assurance
 - E. Fraud deterrence
3. The following are letters concerning material weaknesses in internal control and terms of engagement **EXCEPT**
 - A. Letter of Internal Control Weaknesses
 - B. Management letter
 - C. Letter of representation
 - D. Domestic report
 - E. Internal control memorandum

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4. Which of the following poses no threat to auditor's independence?
- A. Self-Interest
 - B. Significant shareholding
 - C. Advocacy
 - D. Familiarity
 - E. Authority
5. Which of the following year(s) is a normal tenure for those appointed as Audit Committee members?
- A. One
 - B. Two
 - C. Three
 - D. Four
 - E. Five
6. What action should an auditor take if he discovers that his firm lacks the competence for an audit engagement?
- A. Rely on competence of the client personnel
 - B. Consult other professional colleagues who are competent in that line
 - C. Disclaim an opinion
 - D. Issue an Adverse Opinion
 - E. Carry out the audit engagement and issue a clean report
7. Which of the following is **NOT** a contribution by Institute of Chartered Accountants of Nigeria to the development of Auditing?
- A. Review of Accounting Standards
 - B. Review of the existing Auditing Standards
 - C. Ensuring that the tenure of its President is one year
 - D. Adherence to the Ethical Codes by members
 - E. Establishment of Disciplinary Committee to deal with complaints against Accountants and Auditors

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8. Which of the following is NOT a quality assurance safeguard created by the accounting/auditing profession?
- A. Education, training and experience.
 - B. Continuing education requirements
 - C. Professional standards, monitoring and disciplinary process
 - D. External review of a firm's quality control system
 - E. Competent staff employed by the assurance client to make managerial decisions
9. Which one of the following options is NOT a type of working paper?
- A. Audit plan and programmes
 - B. Working trial balance
 - C. Account analysis and listings
 - D. Auditing standards and guidelines
 - E. Audit memoranda.
10. Which of the following is NOT a type of general controls in an information technology environment?
- A. Organisational control
 - B. Systems development and evaluation controls
 - C. Master file control
 - D. General security
 - E. Operations and data controls
11. The following Audit Procedures are used as tests of control EXCEPT
- A. Inquiry of appropriate client's personnel
 - B. Observation of the application of the policies and procedures
 - C. Observation of the client's personnel
 - D. Inspection of documents, reports and electronic media indicating the performance of policies and procedures
 - E. Re-performance of the application of the policy or procedure by the auditor

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12. Which of the following is **NOT** a benefit of environmental audit to a company?
- A. Promotion of good environmental citizenship
 - B. Improvement of business efficiency
 - C. Improvement of reporting requirements to the members
 - D. Improvement of the company's image and community relationship
 - E. Revelation of cost savings opportunities
13. Which of the following is **NOT** a factor in determining sample size?
- A. The level of confidence
 - B. The population size
 - C. The tolerable error
 - D. Sampling unit
 - E. Materiality
14. In the process of instituting a system of internal control in an organization, which of the following is **NOT** an issue to be considered?
- A. The nature, size and volume of transactions.
 - B. The public perception of the controls
 - C. The cost of setting up the controls and the expected benefits
 - D. The nature of production process
 - E. The geographical distribution of branches
15. Computer Assisted Auditing Techniques (CAATs) **CAN** perform the following functions **EXCEPT**
- A. Stratification
 - B. Application development
 - C. Selection of samples
 - D. File manipulation
 - E. Advanced statistical analysis
16. The existence of a computer system will cause the auditor to consider the following special factors **EXCEPT**
- A. The cost of the computer
 - B. The need to use staff with specialized knowledge and skills

PATHFINDER

- C. The possible problem of loss of visible evidence and systematic errors
 - D. The form in which the accounting records are maintained
 - E. The timing of his audit
17. Which of the following audit procedures is most useful for the detection of fraudulent activities?
- A. Interim audit
 - B. Analytical review
 - C. Operational audit
 - D. Compliance audit
 - E. Forensic audit
18. Which of the following is a disadvantage of using audit programmes?
- A. Initiative may be stifled
 - B. They provide a clear set of instructions on the work to be carried out
 - C. Work can be reviewed by supervisor's manager
 - D. Work will not be duplicated
 - E. No important work will be overlooked
19. The Accounting firm appointed to act as auditors can also provide the following services **EXCEPT**
- A. Accounting
 - B. Systems advisory
 - C. Executive accounting functions
 - D. Taxation
 - E. Share valuations
20. Which of the following is **NOT** a right of statutory auditors?
- A. Access to books, accounts and vouchers
 - B. Membership of audit committee
 - C. Indemnity
 - D. Lien on books of accounts and other related documents
 - E. Receipt of remuneration

PATHFINDER

PART II: SHORT-ANSWER QUESTIONS

(20 Marks)

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

1. The transfer of management's day-to-day functions to service providers is called.....
2. A process to ensure that cost of goods sold is recorded in the period when the sales are made is known as.....
3. A way of concealing cash shortage caused by defalcation, such as misappropriating cash receipts and covering same with subsequent collections is called
4. A written scheme of the exact details of the work to be done by the auditor in connection with a particular audit is.....
5. A documentary evidence which supports a transaction appearing in the books of account is referred to as
6. In a computer-based system, a test designed to ensure that valid transaction codes and characters fit within a valid field size is
7. In a computerized accounting environment, controls designed to ensure that correct master files and current data files are used are called.....
8. An obligation relating to some past events or transactions, which may arise depending on the outcome of some future events is known as
9. The official that has the power to conduct periodic audit checks of all federal parastatals, including all persons and bodies established by an Act of the National Assembly is.....
10. The series of tasks and records of an entity by which transactions are processed as a means of maintaining financial records is known as.....

PATHFINDER

11. The overall attitude and actions of directors and management regarding internal controls and their importance in the entity is referred to as.....
12. Fee calculated on a predetermined basis depending on the outcome of a transaction is known as.....
13. The state of mind that permits the provision of an opinion without being affected by influences that compromise professional judgement, allowing an individual to act with integrity and exercise objectivity and professional scepticism is.....
14. The committee that receives and reviews the reports of the Auditor-General for the Federation and invites any indicted person in the report for public hearing is known as.....
15. A situation when an auditor becomes sympathetic to the client's interest, because he has a close relationship with an assurance client, its directors, officers and employees, occurs where there is a.....
16. What is the penalty for an officer of a company who makes misleading, false or deceptive statements in a material particular to a company's auditors as specified by Companies and Allied Matters Act CAP C20 LFN 2004?
17. A form of audit qualification where there is uncertainty regarding a specific item which is material but not fundamental in the financial statements is referred to as.....
18. The document sent to customers to obtain valuable third party evidence about the completeness and accuracy of the sales ledger is
19. A document which is designed to enable the auditors to review and assess the adequacy of the internal control system is.....
20. The audit file containing documents relating to matters of continuing importance to the auditor is

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SECTION B: ATTEMPT ANY FOUR QUESTIONS

(60 Marks)

QUESTION 1

In this era of Information Technology (IT) where all kinds of IT models and designs are deployed in a business process, traditional auditing has to change towards the direction of IT auditing.

Required:

- a. In setting up an Information System (IS) audit function, what factors must an organisation consider in relation to the following?
 - i. This IS audit manual (2 Marks)
 - ii. Organisation and Management issues (2 Marks)
 - iii. Staff skills level (2 Marks)
 - b. List **FIVE** activities that may occur to support the assessment of the key controls in an IT environment. (5 Marks)
 - c. State **FOUR** matters to be considered before deciding to use Computer Assisted Audit Techniques (CAATs). (4 Marks)
- (Total 15 Marks)**

QUESTION 2

The auditor develops the general audit strategy in an overall audit plan to set the direction for the audit and provide guidance for the development of the audit programme.

Required:

- a. Explain **THREE** objectives of audit planning which takes place before the detailed audit work begins. (6 Marks)

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- b. In developing the overall audit plan, list **FOUR** matters the auditor must take into consideration in respect of each of the following:
- i. Knowledge of the entity's business (3 Marks)
 - ii. Risk and materiality (3 Marks)
 - iii. Nature, Timing and Extent of procedures (3 Marks)
- (Total 15 Marks)**

QUESTION 3

The Constitution of the Federal Republic of Nigeria gives the Senate and the House of Representatives certain constitutional powers, which can be delegated to committees appointed by them. One of such committees is the Public Accounts Committee (PAC).

Required:

- a. Explain the functions of PAC. (5 Marks)
 - b. Enumerate **FIVE** of such powers that Parliament can delegate to the PAC. (5 Marks)
 - c. List **FIVE** of the problems likely to confront PAC in the course of carrying out its functions (5 Marks)
- (15 Marks)**

QUESTION 4

Samuelson Company Limited has resolved to outsource the internal audit functions to a reputable service organization.

Required:

- (a) State **SIX** advantages and **SIX** disadvantages of outsourcing the internal audit functions. (6 Marks)
- (b) List **TEN** issues that should be considered when outsourcing the internal audit functions. (5 Marks)

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- (c) In audit planning, what are the activity areas that can be undertaken by the service organization which could be of interest to the External Auditors?

(4 Marks)

(Total 15 Marks)

QUESTION 5

Learners Corporate Limited is a fast growing restaurant. The company owns eight outlets for which raw materials are procured and delivered centrally. All other operations including payroll system are controlled at the head office.

Required:

- a. List **FOUR** audit objectives of a payroll system. (4 Marks)
- b. Enumerate **FOUR** controls that can be found in the accounting system in relation to the payroll. (4 Marks)
- c. Explain **FIVE** procedures used in collecting audit evidence regarding the operations of payroll system. (5 Marks)
- d. Explain **TWO** qualities of audit evidence. (2 Marks)

(Total 15 Marks)

QUESTION 6

Globalisation brought about the necessity of one man being **entrusted** to some extent with the **property of another**, hence the need to check **the fidelity** of the former.

Required:

- a. Explain the reasons for the development of the audit activity for commercial transactions in the context of the above statement (10 Marks)
- b. Outline four objectives of the audit. of financial statements. (5Marks)

(Total 15 Marks)

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SOLUTIONS TO SECTION A

PART I MULTIPLE-CHOICE QUESTIONS

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

EXAMINERS' REPORT

The questions cover a wide area of the syllabus. The performance was average. Candidates are advised to work harder.

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PART II SHORT-ANSWER QUESTIONS

1. Outsourcing
2. Cut-off procedure
3. Teeming and Lading
Or
Carry over fraud
4. Audit programme
5. Voucher
6. Validity check
7. File control
Or
File maintenance control
8. Contingent liability
9. Auditor-General for the Federation
10. Accounting system
11. Control environment
12. Contingent fees
13. Independence of mind
14. Public Accounts Committee
15. Familiarity threat
16. A fine of ₦500.00 or imprisonment for one year or both
17. "Subject to"
18. Debtor's circularisation letter
19. Internal Control Evaluation Questionnaire (ICEQ)
20. Permanent Audit File.

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EXAMINERS' REPORT

The questions cover a substantial part of the syllabus. Performance was average. Candidates are enjoined to study wider for future examination.

SOLUTIONS TO SECTION B

QUESTION 1

(a)(i) The Information System (IS) Audit Manual

This is a key element in the development of the IS audit function. The manual should specify the following issues:

- Objectives
- Scope
- Reporting level of the IS audit function
- Contents of the internal audit manual

(ii) Organisation and Management Issues

This has to be addressed to offer structure to the IS audit function and the following issues are considered:

- Identifying the professional competence required and ways to obtain such expertise
- Establishing salary guidelines which conform to organisation's policies and provide competitive and fair compensation
- Identifying the activities required to support the external auditors
- Formulating the audit schedule for IS audit activities
- Developing standards and procedures to support the IS audit function.

(iii) Staff Skills Level

This will generally depend on the complexity of the computer systems and environment. The lowest level of skilled staff should be able to use IS audit tools, techniques and control concepts in computerised systems. They should also possess good interpersonal skills and solid understanding of management concepts. A Certified Information System Auditor (CISA) qualification will surely

PATHFINDER

be imperative and non-negotiable for a very complex IS environment. The organisation must procure the necessary IS audit resources such as computer hardware, a close ratio of one-to-one to each IS audit personnel is recommended, and Computer Assisted Audit Techniques (CAATS) software of choice; Necessary training and retraining of the IS audit personnel is also very essential.

- (b) Activities that may occur to support the assessment of the key controls in an IT environment
 - (i) Understanding the organisation's internal control program and its financial reporting processes
 - (ii) Identifying the IT systems involved in the initiation, authorisation, processing, summarisation and reporting financial data
 - (iii) Identifying the key controls that address specific financial risks
 - (iv) Designing and implementing controls designed to mitigate the identified risks and monitoring them for continued effectiveness
 - (v) Documenting and testing IT controls
 - (vi) Ensuring that IT controls are updated and changed as necessary to correspond with changes in internal control or financial reporting processes
 - (vii) Monitoring IT controls for effective operation over time
- (c) The matters to be considered before deciding to use Computer Assisted Audit Techniques (CAATS) include
 - (i) The requisite computer skill and knowledge of the proposed CAATS by the Auditor
 - (ii) The availability of the CAATS the auditor intends to use, that meet the audit requirements
 - (iii) The compatibility of the CAATS software with the organisation's system
 - (iv) The cost of CAATS in relation to potential benefits (cost-benefit factor)
 - (v) The reliability of CAATS as to achievement of appropriate audit and quality controls in the case of client developed CAATS.
 - (vi) The nature of the system to be interrogated and the most essential files to interrogate

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EXAMINERS' REPORT

The question tests candidates' knowledge of audit of computer-based accounting systems. About 50% of the candidates attempted the question and the performance was poor. Candidates are advised to ensure that all aspects of the syllabus are effectively covered.

QUESTION 2

- (a) The objectives of audit planning which takes place before the detailed audit work begins include ensuring that:
- (i) Appropriate audit process or work is done timely to meet reporting deadline as necessary.
 - (ii) The audit process or work is done at the lowest cost in order to prevent the audit being done at a loss.
 - (iii) The firm's audit quality control is maintained to avoid any consequences like litigation, damages and sanctions as appropriate.
 - (iv) Necessary arrangements are made in advance for the audit process to facilitate identification of potential problems and making necessary provisions for them.
- (b) Matters for auditors to consider in developing the overall audit plan.
- (i) Knowledge of the entity's business
The following are to be considered:
 - General economic factors and industry conditions affecting the entity's business
 - Important characteristics of the entity, its business, principal business strategies, its financial performance and its reporting requirements, including changes since the previous audit, as relevant
 - The operating style and control consciousness of directors and management

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- (ii) Risk and Materiality**

- The setting of materiality level for audit planning purposes
- The expected assessments of risks of error and the identification of significant audit areas
- Any identification, including expense of past years, that misstatement that could have a material effect on the financial statements might arise because of fraud or for any other reason
- The identification of complex accounting areas including those involving accounting estimates

- The following are to be considered:

- The relative emphasis expected to be placed on tests of control and substantive procedures
- The effect on the audit of the use of Information Technology by the entity on the auditors
- The work of any internal audit function and, as expected, effect on external audit procedures
- Procedures which need to be carried out on or before the year end
- The timing of significant phases of the preparation of the financial statements

PATHFINDER

EXAMINERS' REPORT

The question tests candidates' knowledge and understanding of audit planning.

About 80% of the candidates attempted the question. The performance was poor because majority of the candidates misinterpreted audit planning for audit programme.

Candidates should read and understand questions well before answering them.

QUESTION 3

(a) FUNCTIONS OF THE PUBLIC ACCOUNTS COMMITTEE (PAC)

- (i) To review whether public money was spent for the approved purposes.
- (ii) To ascertain whether the public money spent for approved purposes was spent with due regard to efficiency, economy and effectiveness
- (iii) To review audit findings reported by the Auditor-General and hold public sittings for the review, as necessary
- (iv) To enforce audit sanctions as required
- (v) To do such other things as are necessary and expedient for the full discharge of its functions under the 1999 Constitution

(b) POWERS THAT CAN BE DELEGATED TO PAC BY PARLIAMENT

The Public Accounts Committee is empowered to:

- (i) Examine such audited accounts of the federation and of all offices and courts of the Federation and the Auditor-General's report thereon as may be referred to it.
- (ii) Examine the accounts and report of Ministries and Departments of the Government of the Federation

PATHFINDER

- (iii) Examine the audited accounts of Statutory Corporations, Boards and such other government bodies
- (iv) Examine the causes which led to or might have led to any excess over approved appropriations
- (v) To procure all such evidence, oral or written and examine such persons as it may deem necessary or desirable and
- (vi) To require any person to produce any books, documents or records as it may deem necessary and desirable
- (vii) To do such other things as are necessary and expedient for the full discharge of its function.

(c) **PROBLEMS OF THE PUBLIC ACCOUNTS COMMITTEE**

These include:

- (i) Political instability (either through violent change as is in the military regimes or change of political party) leading to continuous changes in the composition of the committee
- (ii) Financial statements to be examined are often in arrears
- (iii) Members may not be knowledgeable in accounting and financial reporting
- (iv) Lack of co-operation and information from the expected facilitators,
- (v) Resolutions are not always implemented, amongst others
- (vi) Discrepancies between figures of various government organs (e.g Central Bank of Nigeria and the Ministry of Finance) make the function of PAC difficult on different occasions
- (vii) Delay between occurrence of an event and its subsequent investigation

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EXAMINERS' REPORT

The question tests candidates understanding of Public Accounts Committee's functions. Over 80% of the candidates attempted the question. Performance was very poor because the candidates did not exhibit adequate understanding of the functions of PAC. Candidates should read widely.

QUESTION 4

Samuelson Company Limited

(a)(i) Advantages of outsourcing include:

- The problems of employing personnel are passed on to others (e.g employment legislation, health and safety, etc)
- It can be cheaper, so that the cost savings can be used for more productive activities
- It creates a level of independence from the commissioning organization, which can be beneficial
- Technical expertise and experience not always available in-house can be accessed.
- Service organizations can keep up-to-date equipment and new developments more easily than the user enterprise in a fast-moving world.
- It reduces the time management spends on house-keeping functions
- It removes the burden for training internal staff from management.
- It provides a more reliable audit evidence for the external auditors

(ii) Disadvantages of outsourcing:

- The quality of service may fall short of expectation
- The service provider may hold its client to ransom.

PATHFINDER

- The service provider may disclose the company's secret
 - The service cost may be excessive
 - Cooperation from clients staff to service provider may not be readily available
- (b) The following items should be considered when outsourcing the internal audit function:
- (i) Independence of service providers
 - (ii) Allegiance of in-house versus external service providers
 - (iii) Professional standards followed by the service provider
 - (iv) Qualifications and experience of the service provider consultants
 - (v) Staffing, training, turnover, rotation of staff, management
 - (vi) Flexibility in staffing resources to meet engagement needs or special requests
 - (vii) Availability of resources
 - (viii) Retention of institutional knowledge for future assignments
 - (ix) Access to best practice or insight to alternative approaches
 - (x) Culture of the organization's receptiveness to service providers
 - (xi) Insight into the organization by the service provider
 - (xii) Coverage of remote locations, as necessary
 - (xiii) Coordination with external auditors
 - (xiv) Use of internal auditing as a training ground for relevant internal promotions
 - (xv) Retention, access to and ownership of working papers
 - (xvi) Acquisition and availability of special skills
 - (xvii) Cost considerations
 - (xviii) Good standing membership in an appropriate professional organization.
- (c) The external auditor, in planning the audit, should determine which activities are undertaken by service organizations and which could be of interest to the External Auditors.

The following areas are to be considered:

- (i) Maintenance of accounting records – The external auditor is interested in the proper maintenance of accounting records

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- (ii) Sundry finance functions such as payroll, credit control, debt recovery, tax, verification of fixed and current assets
- (iii) Undertaking or making arrangements for transactions as agent of the company
- (iv) Internal audit department
- (v) Arrangement for branch visits
- (vi) System of Internal Control

EXAMINERS' REPORT

The question tests candidates' understanding of outsourcing of the internal audit functions. About 90% of the candidates attempted the question and the performance was poor because their understanding of the subject matter was shallow. Candidates should cultivate the habit of preparing adequately for examinations.

QUESTION 5

- (a) Audit objectives of Payroll System include:
 - (i) Employees are only paid for work done
 - (ii) Gross pay has been authorized and calculated correctly
 - (iii) Net pay has been calculated correctly
 - (iv) Gross and net pay have been recorded accurately in the general ledger
 - (v) Only genuine employees are paid
 - (vi) Correct amounts of deductions are made and remitted to regulatory authorities to avoid sanctions (e.g P.A.Y.E, NHF, ITF, prevision etc.)
- (b) Controls with regard to payroll system include:
 - (i) A clear understanding as to who may approve, employ or disengage personnel
 - (ii) An adequate supervision to ensure the utilization of personnel hired for the benefit of the company

PATHFINDER

- (iii) A proper system of recording attendance hours worked or units of commodities produced which will form the basis of arriving at the payroll for the period under review
 - (iv) The payroll as far as possible is not processed by one person from the beginning to the end
 - (v) Checking and approving the payroll by a more responsible official before the payment is made
 - (vi) Adequate flow of communication between the personnel, operations and accounting departments.
- (c) Procedures used in collecting audit evidence regarding the operations of payroll system
- (i) Observation: This involves watching a procedure being performed by others. In this instance, watching workers using the time recording system (biometric or clocking)
 - (ii) Inquiry: This involves obtaining information from knowledgeable and competent persons.
 - (iii) Recalculation (Re-computation): This entails the auditor carrying out independent calculations to check the arithmetic accuracy of accounting records. In this case, the hours worked by the time-recording system or computation of net pay on the payroll
 - (iv) Analytical procedure - This involves the auditor reviewing figures and ratios on financial statements to check the fairness of items or the need for additional explanation for unusual features in the accounts. Comparison of monthly payroll figures is an example
 - (v) Inspection: This consists of examination of records (internal or external) to provide audit evidence of their existence like the personnel file for staff emoluments history

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(d) Qualities of Good Audit Evidence

The qualities of good audit evidence are determined in relation to its relevance, reliability, and sufficiency

- (i) **Relevance** - Good audit evidence must be relevant to the matter under consideration. Audit evidence is relevant when it assists the auditor in forming his opinion on the subject being considered
- (ii) **Reliability** - This refers to the extent to which the auditor can base his opinion on the evidence being considered. The following rules apply in relation to reliability:
 - External evidence is more reliable than internal evidence
 - Documentary evidence is more reliable than oral evidence
 - Auditor's own evidence is more reliable than those of others
 - Original evidence is more reliable than photocopies
 - Multiple evidence is better than single evidence
- (iii) **Sufficiency** - The auditor must determine the level of evidence that is adequate for the formation of his opinion. This judgement will depend on:
 - How persuasive the evidence is
 - The auditor's knowledge of the business
 - The level of reliability of the internal control system
 - The level of audit risk involved

EXAMINERS' REPORT

The question tests candidates' knowledge of the audit of payroll and qualities of good audit evidence. About 70% of the candidates attempted the question and the performance was poor because the candidates failed to relate their solutions to the payroll system. Candidates are advised to read and understand questions properly before answering them.

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QUESTION 6

- (a) As stated in the given statement, the necessity may arise for someone to be **entrusted** with the property of another person. It behoves the owner to institute a mechanism whereby he would ensure that his property is properly held in trust and not misused

In commercial parlance, managers of a business, who are agents are expected to manage productive resources on behalf of the proprietors who are the principals. The managers are expectedly required to give stewardship to the proprietors. It is appropriate therefore for this stewardship to be checked to assure **fidelity** in the handling of the principal's interest in the business. This was the origin of the audit activity.

The formal origination of bookkeeping (and accounts) in Italy, in the sixteenth century, established the basis of recording and **stewardship** accounting, the precursor of the "modern" financial statements. The beginning of the twentieth century marked the period when the financial statements became the basic mechanism by which the agent's (manager's) of financial activities were monitored. The enactment of Company Law in Great Britain, later, "legalized" the need for the preparation of financial statements and the need for an **auditor** to be appointed to undertake the statutory audit.

It is also very necessary for the audit activity in order to check that the stewardship reports of managers are free from errors; they do not contain misstatements or fraud, they are not misleading inadvertently or deliberately, they contain full and relevant information and they are presented to show a "true and fair" view of the financial situation. The audit activity should check if the financial statements **conform** to relevant guidelines and provisions of relevant regulatory and legislative bodies.

The need of the audit activity is more pronounced when the is divorced from **management** and the organization is of large size

The need for reliance to be placed on the stewardship information (financial statements) by other users, other than the proprietors, also inform the audit activity. The people interested in and who rely on the audited financial statements include, lenders, staff, customers, suppliers, advisers, governments, competitors and the general public (including investors),

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- (b) As regards financial statements, the primary objective of an audit (usually statutory and private) is to enable the auditor express an opinion whether the financial statements are prepared, in all material respects in accordance with relevant reporting standards, laws and regulations applicable to the entity to determine the form and content of its financial statements and whether the financial statements present a true and fair view of the financial position in relation to the relevant period and date. Therefore, the objectives of the audit of financial statements are:
- (i) to express an opinion on the true and fair view of the financial position of an entity
 - (ii) to detect errors and fraud
 - (iii) to prevent errors and fraud
 - (iv) to advise management of any weaknesses and defects
 - (v) to recommend by way of domestic report/management letter on the way to improve on those weaknesses

EXAMINERS' REPORT

The question tests candidates' knowledge of the evolution of audit activity and the objective of an audit. About 20% of the candidates attempted the question and their performance was very poor. Candidates failed to understand the requirements of the question as they were unable to trace the development of the history of auditing.

Candidates are advised to read extensively and prepare adequately for examinations.

PATHFINDER

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA INTERMEDIATE – NOVEMBER 2012 TAXATION

Time allowed – 3 hours

SECTION A: Attempt All Questions

PART I: MULTIPLE-CHOICE QUESTIONS

(20 Marks)

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

1. Which of the following is **NOT** tax deductible under the Personal Income Tax (Amendment) Act 2011?
 - A. National Pension Scheme
 - B. Children Allowance
 - C. Gratuities
 - D. National Housing Fund Contribution
 - E. Life Assurance Premium
2. What is the quorum at a meeting of the Federal Inland Revenue Service Board?
 - A. Seven
 - B. Six
 - C. Five
 - D. Three
 - E. Two
3. Which of the following levies is **NOT** collectible by a State Government?
 - A. Personal Income Tax
 - B. Naming of street registration fee in a State capital
 - C. Marriage, birth and death registration fees
 - D. Market taxes and levies where State finance is involved
 - E. Right of occupancy fee on land owned by a State Government

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Use the following information to answer questions 4 - 6

James North Limited is a Nigerian company engaged in the manufacture of synthetic materials for the year ended 31 December 2011. The company's accounts disclosed a net profit of ₦10million after charging the following:

	₦'000
Staff/Personnel Cost	2,000
Rent paid on Managing Director's residential accommodation	3,000
Depreciation	1,000
Penalties & Fines	200
	₦'000
Agreed capital allowance	1,250
Unrelieved losses brought forward	550
Tax rate 30%	

4. The Adjusted profit is

- A. ₦15,455,000
- B. ₦13,750,000
- C. ₦12,700,000
- D. ₦11,200,000
- E. ₦9,850,000

5. The Total profit is

- A. ₦12,000,000
- B. ₦11,700,000
- C. ₦10,900,000
- D. ₦10,558,750
- E. ₦9,400,000

6. The Companies income tax liability is

- A. ₦6,850,000
- B. ₦5,950,000
- C. ₦2,820,000

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- D. ₦1,925,000
E. ₦1,200,000
7. In Nigerian taxation, a small business is one whose turnover does **NOT** exceed
- A. ₦5,000,000
B. ₦1,750,000
C. ₦1,000,000
D. ₦850,000
E. ₦750,000
8. What is the estimated tax life of a qualifying capital expenditure of ₦2million incurred by Jupitery Limited on Industrial building, where the rates of initial and annual allowances are 15% and 10% respectively?
- A. 10
B. 8
C. 7
D. 5
E. 4
9. What is the penalty for non-notification of a change of registered address to the Board within one month of such change?
- A. ₦30,000
B. ₦20,000
C. ₦15,000
D. ₦10,000
E. ₦5,000
10. Which of the following is **NOT** among the goods exempt from VAT?
- A. Baby products
B. Commercial vehicles and their spare parts
C. Medical and pharmaceutical products
D. Medical services
E. All exports

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11. Stamp Duty is administered by the
- A. Minister of Commerce
 - B. Commissioner of Commerce
 - C. Minister of Finance
 - D. Commissioner of Stamp Duties
 - E. Minister of Stamp Duties
12. Taxpayers' right of election on commencement of business is for
- A. Only the 2nd year of assessment
 - B. Only the 3rd year of assessment
 - C. The first three years of assessment
 - D. 2nd and 3rd years of assessment
 - E. First year of assessment
13. Under the change of accounting date rule ---- assessment years are considered relevant
- A. Six
 - B. Five
 - C. Four
 - D. Three
 - E. Two
14. Acceptance Certificate only applies to capital expenditure which is over
- A. ₦700,000
 - B. ₦600,000
 - C. ₦500,000
 - D. ₦400,000
 - E. ₦300,000
15. Which of the following is **NOT** an example of direct tax?
- A. Personal Income tax
 - B. Petroleum profits tax
 - C. Value added tax
 - D. Capital gains tax
 - E. Companies income tax

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16. The applicable rate of tax for a small business is
- A. 30%
 - B. 25%
 - C. 20%
 - D. 18%
 - E. 15%
17. In rural areas, the approved annual fees are.....for registration and.....for renewal of business premises.
- A. ₦12,500 ₦6,250
 - B. ₦10,000 ₦5,000
 - C. ₦7,500 ₦3,750
 - D. ₦5,000 ₦2,500
 - E. ₦2,000 ₦1,000
18. Withholding tax deducted at source from dividend due to a non-resident individual is payable to
- A. Local Government Council
 - B. Joint Tax Board
 - C. Country of residence of the recipient
 - D. Federal Inland Revenue Service
 - E. State of residence of individual
19. Which of the following is **NOT** among the benefits of applying computer models in tax administration?
- A. Accuracy of tax computation
 - B. High cost of computer acquisition
 - C. Speed and improved efficiency
 - D. Reliability of data used
 - E. Improved productivity

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20. Which of the following is the time limit for filing a **Notice of Objection** to an assessment raised by the Federal Inland Revenue Service?
- A. 90 days from the date stated on notice of assessment
 - B. 60 days from the date stated on the notice of assessment
 - C. 40 days from the date stated on the notice of assessment
 - D. 30 days from date of service of assessment notice
 - E. 30 days from the date stated on notice of assessment

PART II: SHORT-ANSWER QUESTIONS

(20 Marks)

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

1. One of the purposes of is to raise funds to provide public goods.
2. The term that describes government's decision to take away less of people's income to enable them spend more is
3. A principle of an ideal tax system that accepts that the structure and rates of tax should be capable of being altered without much difficulty is known as
4. Withholding tax deducted from rent due to Brigadier Abiodun Garuba is payable to.....
5. The scheme in taxation that allows a taxpayer to compute his tax payable for the year of assessment, file the returns and pay the tax due is known as
6. A term that best describes when the tax authority refuses to accept a taxpayer's return but imposes its own assessment is known as
7. The formula for the determination of Depreciation Ratio for air and sea transport companies is
8. The **TWO** methods of claiming VAT refunds are and

PATHFINDER

9. When a business ceases operations, any unutilised capital allowances for relief against chargeable profits of preceding years is referred to as
10. Granting capital allowances to a company means a..... in taxable profit.
11. Abu and Gabu have been in partnership for many years and share profits and losses equally. The Computed Income of the partnership for the year ended 31 December 2011 was ₦20,000,000. Capital Allowance was agreed at ₦5,000,000. What will be the chargeable income of each partner?
12. Contribution to a pension fund must be approved by before it can be allowed as an expense for tax purposes.
13. Pensions Reform Act 2004 requires employers of labour with..... employees in the private sector to register their employees for pension.
14. Under Current Year Loss Relief, loss from any source of earned income can be relieved against
15. The relevant tax authority in charge of collection of Education Tax in Nigeria is
16. An appeal to the Federal High Court based on the decision of the Tax Tribunal can be made only on points of
17. Under the provisions of Stamp Duties Act Cap S8 LFN 2004, “write”, “written” and “writing” include every mode in which words or figures can be expressed upon
18. It is a general rule that Ad Valorem Duty is **NOT** paid more than
19. Benefits enjoyed from employment but not in monetary terms are called
20. A person appointed by a Will to administer the Estate of a deceased is called

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SECTION B: ATTEMPT ANY FOUR QUESTIONS

(60 Marks)

QUESTION 1

In Nigeria, the Constitution vests the legislation of income tax on Federal Government in order to promote uniformity. Tax laws are reviewed periodically in line with the changes in social-political and economic conditions of the country.

In the light of the above, you are required to:

- a. List **FIVE** notable tax legislations in Nigeria. (2½ Marks)
 - b. State **FOUR** objectives of taxation. (4 Marks)
 - c. List **FIVE** levies and dues collectible by Local Governments in Nigeria. (2½ Marks)
 - d. State **THREE** merits of Self-Assessment Scheme in Nigeria. (6 Marks)
- (Total 15 Marks)

QUESTION 2

Year of Assessment is the accounting year of government for tax purposes. It is the national fiscal year which is usually a period of one year, during which, all income earners must pay tax.

From the above-stated assertion, you are **required** to:

- a. Compute the Assessable Profits of Mr. Jaja Idimu for the relevant years of assessment based on the Adjusted Profits given below:

	₦
12 months to 30/6/2007	200,000
12 months to 30/6/2008	260,000
18 months to 31/12/2009	250,000
12 months to 31/12/2010	350,000
12 months to 31/12/2011	380,000

(12 Marks)

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- b. What are the conditions for granting right of election to a taxpayer under the provisions of the Personal Income Tax Act Cap P8 LFN 2004, as amended?

(3 Marks)

(Total 15 Marks)

QUESTION 3

- a. Richard Kay Limited commenced business on 01 May 2010 and makes up its accounts to 31 July every year. The Fixed Assets Register of the company provides the following information:

Qualifying Capital Expenditure	Date of Acquisition
Plant and Machinery	21 April 2010
Buildings	27 September 2010
Motor Vehicle	19 March 2011
Furniture and Fittings	28 June 2011

Required:

- (i) Determine the basis period relating to the capital allowance for each qualifying capital expenditure. (6 Marks)
- (ii) What is the capital allowance implication of an asset acquired before the date of commencement of business? (4 Marks)
- b. Riverbase Limited makes up its accounts up to 31 May every year. The company ceased business on 30 July 2009.

You are **required** to determine the tax year when initial allowance will be claimed on furniture acquired on 14 December 2008. (Ignore Option)

(2 Marks)

- c. State **THREE** events that may lead to cancellation of an Investment Allowance. (3 Marks)

(Total 15 Marks)

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QUESTION 4

The Net Profit of Mennah Dogoyaro Limited for the year ended 31 December 2010 was ₦1,400,000. Depreciation charged in the accounts was ₦400,600 while donations made to the under-listed bodies during the accounting year were:

	₦
The Nigerian Institute for Oil Palm Research	60,000
The Chairman Political Party	30,000
Miracle Centre of Worship	25,000
Almsgiving to sundry persons	25,000
The National Library	90,000

Total	<u>230,000</u>
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Capital Allowances:

Brought Forward	1,500,000
Current	240,000

Required:

- Ascertain the amount of donations allowable and compute the income and education tax payable by the company during the relevant assessment year. (12 Marks)
- In line with the provisions of Companies Income Tax Act Cap C21 LFN 2004 as amended, how are subscriptions and donations treated? (3 Marks)
(Total 15 Marks)

QUESTION 5

James and John have been in partnership as medical doctors for many years. Statement of Income of the partnership for the year ended 31 December 2011 is as follows:

	₦	₦
Income		7,500,000
Deduct: Direct expenses		<u>1,300,000</u>
Gross Profit		6,200,000

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Deduct:		
Staff salaries and wages	2,420,000	
Rent and rates	40,000	
Transport and travelling	32,500	
Insurances	18,000	
Professional fees	30,000	
Bank charges and commissions	48,500	
Audit fees	50,000	
Miscellaneous expenses	12,000	
Interest on capital - James	40,000	
- John	35,000	
General provision for bad and doubtful debts	45,000	
Depreciation	260,000	
Passages and leave allowance of partners:		
- James	35,000	
- John	30,000	
Partners' salaries - James	50,000	
- John	40,000	
Interest on loan paid to James	<u>5,500</u>	<u>(3,191,500)</u>
Net Profit		<u>3,008,500</u>

Additional Information:

- i. Capital allowances agreed with the Revenue - ~~£~~200,000;
- ii. John has a life assurance policy of ~~£~~750,000 on which he pays ~~£~~70,000 as annual premium;
- iii. Partners' profit sharing ratio between James and John is 6:4 respectively;
- iv. John maintains his aged father who is over 75 years;
- v. James is married with six children, who are undergraduates of Kingsize University;
- vi. James and John contribute ~~£~~30,000 and ~~£~~20,000 per annum respectively to an approved National Pension Scheme.

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Note: Computations should be based on the relevant provisions of the Personal Income Tax (Amendment) Act 2011.

You are required to:

- a. Calculate the Computed Income of the Partnership. (6 Marks)
 - b. Compute the income tax liability of each of the partners for the relevant assessment year. (9 Marks)
- (Total 15 Marks)**

QUESTION 6

Broodinglad Limited has been in operation for many years, making up its accounts to 31 December each year. Due to incessant power failure and rising cost of diesel, it decided to cease operations on 31 May 2011. The unutilized capital allowance which is within 5 years was ₦750,000. The company has made a claim for the capital allowance to be carried back.

Below are some of its adjusted profits:

Year ended	₦
31 December 2009	450,000
31 December 2010	350,000
31 May 2011	250,000

A debt which was previously considered bad amounting to ₦60,000 was recovered by the liquidator of the company from a debtor on 30 November 2011.

Required:

- a. Compute the Assessable Profits for all the relevant tax years. (4 Marks)
 - b. Show the agreed capital allowances rolled back. (5 Marks)
 - c. Show the total profits of the relevant years of assessment. (3 Marks)
 - d. What are the provisions of the law when a taxpayer ceases business? (3 Marks)
- (Total 15 Marks)**

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SOLUTIONS TO SECTION A

PART I - MULTIPLE- CHOICE QUESTIONS

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

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Tutorial

		₹	₹
	Net Profit as per account		10,000,000
	<u>Add</u>		
	Depreciation	1,000,000	
	Penalties and fines	<u>200,000</u>	<u>1,200,000</u>
Q4	Adjusted Profit		11,200,000
	Less		
	Capital Allowance	1,250,000	
	Unrelieved losses bff.	<u>550,000</u>	<u>1,800,000</u>
Q5	Total Profit		<u>9,400,000</u>
Q6	Tax payable		
	Total Profit	₹9,400,000 x 30%	₹2,820,000

EXAMINERS' REPORT

The questions test different areas of the syllabus

Candidates demonstrated an understanding of the subject area. The commonest pitfalls are in the area of reliefs available under PITAM and the time limit for filing notice of objection. Performance was good.

Candidates are advised to read wide in order to perform well in this section.

PART II – SHORT ANSWER QUESTIONS

1. Taxation
2. Tax cut
3. Flexibility
4. Federal Inland Revenue Service
5. Self Assessment Scheme
6. Best of Judgement
7. Depreciation allowance x 100
Worldwide income receivable
8. Credit method and Direct cash refund method

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9. Terminal Capital Allowances
10. Reduction
11. Chargeable income of each partner is ₦7,500,000

Workings

	₦
Adjusted Profit for tax purposes	20,000,000
Capital Allowance	<u>(5,000,000)</u>
Chargeable income	<u>15,000,000</u>
Share of Chargeable Income	
Abu (50%)	<u>7,500,000</u>
Gabu (50%)	<u>7,500,000</u>

12. Joint Tax Board
13. Five or More
14. Aggregate income from all sources
15. Federal Inland Revenue Service Board
16. Law
17. Materials
18. Once
19. Benefits – in - kind
20. Executor

EXAMINERS' REPORT

The questions test various aspects of the syllabus.

Candidates demonstrated an understanding of the questions. The commonest pitfalls are the use of “tax” instead of “taxation” in question 1 and also the wrong determination of residence in question 4.

PATHFINDER

Performance was good. Candidates are advised to read wide to perform well in this section.

SECTION B

SOLUTION TO QUESTION 1

- (a) Notable tax legislations in Nigeria include:
- (i) Personal Income Tax Act Cap P8 LFN 2004 (as amended);
 - (ii) Companies Income Tax Act Cap C21 LFN 2004 (as amended);
 - (iii) Petroleum Profits Tax Act Cap P13 LFN 2004 (as amended);
 - (iv) Capital Gains Tax Act Cap C1 LFN 2004;
 - (v) Value Added Tax Act Cap V1 LFN 2004 (as amended);
 - (vi) Education Tax Act Cap E4 LFN 2004; and
 - (vii) Stamp Duties Act Cap S8 LFN 2004.
- (b) Objectives of taxation include:
- (i) Revenue generation to meet needs of government;
 - (ii) Provision of fiscal tool for stimulating economic growth and development;
 - (iii) Redressing of the rural-urban population drift;
 - (iv) Curbing environmental pollutions for promoting a decent society
 - (v) To discourage the consumption of harmful goods
 - (vi) Redistribution of income/wealth in order to reduce inequality
 - (vii) To encourage the provision of goods and services required for the growth of the economic by decreasing the rate of tax
- (c) The Levies and dues collectible by Local Governments in Nigeria include:
- (i) Shops and kiosks rates;
 - (ii) On-off liquor licence fees;
 - (iii) Slaughter slab fees;
 - (iv) Tenement rates;
 - (v) Market taxes and levies excluding any market which involves state finance;
 - (vi) Customary burial ground permit fees;

PATHFINDER

- (vii) Bicycle, truck, canoe, wheel borrow and cart fees;
 - (viii) Marriage, birth and death registration;
 - (ix) Street naming registration fee except in state capital;
 - (x) Motor park fees;
 - (xi) Domestic animal licence fee;
 - (xii) Road closure levy;
 - (xiii) Radio and Television licence fees;
 - (xiv) Illegal parking fees;
 - (xv) Signboard and advertisement permit fees;
 - (xvi) Religious places establishment permit fees; and
 - (xvii) Public convenience sewage and refuse disposal fees.
- (d) Merits of Self Assessment Scheme include:
- (i) Enhancing the pace of tax collections;
 - (ii) The democratic nature as the taxpayer is allowed to participate in the assessment;
 - (iii) Giving the taxpayer a sense of belonging and responsibility; and
 - (iv) Reduction of the cost of collection by shifting same to the individual taxpayers.

EXAMINERS' REPORT

The question tests candidates' knowledge of the theoretical framework of taxation. Candidates demonstrated sufficient understanding of the question.

The commonest pitfall is in the area of self assessment scheme. Performance was good.

Candidates are advised to study the theoretical areas of the syllabus.

PATHFINDER

SOLUTION TO QUESTION 2

- (a) MR JAJA IDIMU
COMPUTATION OF ASSESSABLE PROFITS
FOR 2009, 2010 AND 2011 ASSESSMENT YEARS

<u>Year of Assessment</u>	<u>Basis period</u>	<u>Amount</u> ₦
<u>Using old date</u>		
2009	1/7/07 - 30/6/08	260,000
2010	1/7/08 - 30/6/09	
	$\left[\frac{12}{18} \times \text{₦}250,000 \right]$	166,667
2011	1/7/09 - 30/6/10	
	$\left(\frac{6}{18} \times \text{₦}250,000 \right) + \left(\frac{6}{12} \times \text{₦}350,000 \right)$	258,333
		<u>685,000</u>
<u>Using new accounting date</u>		
<u>Basis Period</u>		
2009	1/1/08 - 31/12/08	
	$\left(\frac{6}{12} \times \text{₦}260,000 \right) + \left(\frac{6}{18} \times \text{₦}250,000 \right)$	213,333
2010	1/1/09 - 31/12/09	166,667
	$\frac{12}{18} \times \text{₦}250,000$	
2011	1/1/10 - 31/12/10	<u>350,000</u>
		<u>730,000</u>

- (b) Conditions for granting right of election to a taxpayer under the Personal income Tax Act Cap P8 LFN 2004 as amended include:
- (i) It is applicable to a taxpayer on commencement of business
 - (ii) The taxpayer must elect to have 2nd and 3rd years of assessment based on actual;

PATHFINDER

- ## EXAMINERS' REPORT

Candidates demonstrated good understanding of the question. The commonest pitfall was the failure to use the correct basis periods.

SOLUTION 3

- | Year of Assessment | Basis period for Ass. Profit | Basis Period for Capital allowance | Qualifying Capital Expenditure |
|--------------------|------------------------------|------------------------------------|---------------------------------|
| 2010 | 1/5/10 – 31/12/10 | 1/5/10 – 31/12/10 | Plant & Machinery.
Buildings |
| 2011 | 1/5/10 – 30/4/11 | 1/1/11 – 30/4/11 | Motor Vehicle |
| 2012 | 1/8/10 – 31/7/11 | 1/5/11 – 31/7/11 | Furn. & fittings |

- INTERMEDIATE EXAMINATION - NOVEMBER 2012**

PATHFINDER

(b) Riverbase Limited

Determination of initial allowance on Qualifying Capital Expenditure

Tax Year	Basis period For Ass. Profit	Basis Period For Cap. Allowance	Qualifying Capital Expenditure
2008	1/1/08 – 31/12/08	1/1/08 – 31/12/08	Furniture
2008	1/6/06 – 31/5/07	1/6/06 – 31/5/07	
2009	1/1/09 – 30/7/09	1/1/09 – 30/7/09	

(c) Events that may lead to cancellation of an Investment Allowance are:

- (i) Any transfer of the qualifying capital expenditure to a person acquiring the asset for chargeable purposes or as scrap;
- (ii) Any appropriation of the asset where it is transferred for a purpose other than the chargeable purpose; and
- (iii) Any sale or transfer or other dealings with the asset by the taxpayer where the expenditure seems to be incurred in anticipation of being granted for investment allowance.

EXAMINERS' REPORT

The question tests candidates' understanding of the various aspects of the computation of capital allowances. Candidates demonstrated poor understanding of the subject area.

Candidates' commonest pitfalls were their inability to identify the basis periods for capital allowances and factors that might lead to the cancellation of investment allowance.

Performance in the question was poor.

Candidates are advised to pay attention to the computation of capital allowances as this is a very technical area.

PATHFINDER

SOLUTION 4

(a) MENNAH DOGOYARO LIMITED

Computation of income tax Liability for 2011 Assessment Year

	₦	₦
Net Profit per accounts		1,400,000
Add back:		
Depreciation	400,600	
Donations	<u>230,000</u>	<u>630,600</u>
Assessable Profit before the adjustment for Donations		2,030,600
Deduct: Capital Allowances:	₦	
Brought forward	1,500,000	
Current	<u>240,000</u>	
	1,740,000	
Granted (66.67% of ₦ 2,030,600)	<u>(1,353,733)</u>	(1,353,733)
Unrecouped Cap. Allowance carried forward	<u>386,267</u>	
Total Profit before charging donations		676,867
Donations allowed limited to:		
10% of ₦ 676,867		<u>(67,687)</u>
Total Profit after donations		<u>609,180</u>
Income Tax Payable at (30% of ₦ 609.180)		<u>182.754</u>

Donations made to approved bodies:

	₦
The Nig. Inst. for Oil Palm Research	60,000
The National Library	<u>90,000</u>
Total	<u>150,000</u>

Note: Out of ~~₦~~150,000, only ~~₦~~67,687 that is, 10% of total profit is tax

deductable

PATHFINDER

	N	N
Net Profit for accounts		1,400,000
Add:		
Depreciation	400,600	
Donations not allowed	162,313	
(N230,000 less N67,687)	-----	562,913
Assessable Profit		1,962,913

Education tax @ 2% of Assessable profit ₹39,258

- (b) Subscriptions and donations are usually charged in the profit and loss accounts under one account head, but while there are elaborate provisions in Companies Income Tax Act Cap C21 LFN 2004 (as amended) on the donations to be allowed for tax purposes, nothing specific is said about subscriptions. The bottom line, however, is that subscriptions that are incurred for the purposes of trade or business are allowed as deductible.

For donations to be allowable as an expense, it must:

- (i) Be made out of profits;
- (ii) Not be of capital nature;
- (iii) Not exceed 10% of the Total Profit before the deduction of donation; and
- (iv) Be made to any of the bodies specified in the 5th schedule of Companies Income Tax Act Cap C21 LFN 2004 as amended.

EXAMINERS' REPORT

The question tests candidates' understanding of the computation of income tax.

Candidates demonstrated poor knowledge of the question. Candidates' commonest pitfall was in arriving at the correct profit after the donation had been deducted.

Performance was poor in this area. Candidates are advised to pay attention to this area of the syllabus.

PATHFINDER

SOLUTION 5

(a)

JAMES AND JOHN (MEDICAL PRACTITIONERS) COMPUTATION OF THE COMPUTED INCOME OF THE PARTNERSHIP FOR 2012 YEAR OF ASSESSMENT

	₦	₦
Net Profit per accounts		3,008,500
Add:		
General provision for bad and Doubtful debts	45,000	
Depreciation	<u>260,000</u>	<u>305,000</u>
Assessable profit		3,313,500
Capital Allowances		<u>(200,000)</u>
Distributable Profit		<u><u>3,113,500</u></u>

b) Computation of Partners' Income Tax Liability

	James ₦	John ₦	Total ₦
Share of Profit (6:4)	1,868,100	1,245,400	3,113,500
Interest on Capital	40,000	35,000	75,000
Passages and Leave Allowance	35,000	30,000	65,000
Partner's Salaries	50,000	40,000	90,000
Interest on Loan	<u>5,500</u>	<u>0</u>	<u>5,500</u>
	1,998,600	1,350,400	3,349,000
Reliefs:			
Consolidated Relief Allowance	(599,720)	(470,000)	(1,069,720)
Life Assurance Premium	(0)	(70,000)	(70,000)
National Pension Scheme	<u>(30,000)</u>	<u>(20,000)</u>	<u>(50,000)</u>
Chargeable Income	<u><u>1,368,880</u></u>	<u><u>790,400</u></u>	<u><u>2,159,280</u></u>
First ₦ 300,000 at 7%	21,000	21,000	42,000
Next ₦ 300,000 at 11%	33,000	33,000	66,000
Next ₦ 190,400 at 15%		28,560	28,560
<u><u>₦790,400</u></u> (For John)			
Next ₦ 500,000 at 15%	75,000		75,000
Next ₦ 268,880 } at 19%	<u>51,087</u>		<u>51,087</u>
James			
	<u><u>180,087</u></u>	<u><u>82,560</u></u>	<u><u>262,647</u></u>

PATHFINDER

EXAMINERS' REPORT

The question tests candidates' understanding of the computation of partnership's profits and the aggregation of partners' incomes.

Candidates' demonstrated a good understanding of the computation of partnership' profits.

The commonest pitfall was the inability of the candidates to present the answer in an orderly manner. Performance was good.

Candidates are advised to study standard format for the presentation of partnership tax computation.

SOLUTION 6

BROODINGLAD LIMITED

(a) COMPUTATION OF ASSESSABLE PROFITS FOR ALL THE RELEVANT YEARS

		₦	₦
2011	1/1/11 - 31/05/11		<u>310,000</u>
2010	1/1/10 - 31/12/10 (Actual Year Basis)	350,000	
	OR		
	1/1/09 - 31/12/09 (Preceding Year Basis)	<u>450,000</u>	<u>450,000</u>
	The Revenue will choose the higher		
	for the penultimate year i.e.		450,000

Adjustment of Profit for 1/1/11 – 31/5/11

	R
Reported Adjusted Profit	250,000
Bad debt recovered	<u>60,000</u>
	<u>310,000</u>

(b) Capital Allowances Rolled Back

Unutilised Capital Allowances in the year of permanent cessation of business is available for relief against the remainder of its assessable profits on 5 years before the cessation.

PATHFINDER

(c) PROFITS OF THE RELEVANT YEARS OF ASSESSMENT

- (d) The rules to be applied in respect of the assessment year in which cessation occurs and the year before, which is referred to as the penultimate year are as follows:
 - (i) The assessment for the year of cessation is the actual result from 1st January to the date of cessation;
 - (ii) The penultimate year would have been previously assessed on the preceding year basis. The Revenue has the option to amend the assessment for this penultimate year to actual result of that year i.e 1 January to 31 December of that year; and
 - (iii) The unutilised Capital Allowances in the year of permanent cessation of business is available for relief against the remainder of its assessable profit for 5 years before the cessation i.e Capital Allowances Rolled Back.

PATHFINDER

EXAMINERS' REPORT

The question tests the treatment of bad debts recovered and the roll-back of unrecouped capital allowances on cessation of business

Candidates demonstrated good understanding of the question, especially the computation of basis periods on cessation.

Candidates' commonest pitfall was their inability to correctly roll back unrecouped capital allowances.

Candidates performed well in this question. Candidates are advised to pay attention to post cessation incomes and expenditure.

PATHFINDER

NIGERIAN TAX RATES

1. CAPITAL ALLOWANCES

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

2. INVESTMENT ALLOWANCE 10%

3. RATES OF PERSONAL INCOME TAX

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

	Taxable Income ₦	Rate of Tax %
First	300,000	7
Next	300,000	11
Next	500,000	15
Next	500,000	19
Next	1,600,000	21
Over	3,200,000	24

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

4. COMPANIES INCOME TAX RATE 30%

5. EDUCATION TAX (2% of Assessable Profit)

PATHFINDER

- | | | |
|----|-------------------|-----|
| 6. | CAPITAL GAINS TAX | 10% |
| 7. | VALUE ADDED TAX | 5% |

PATHFINDER

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA
INTERMEDIATE EXAMINATION – NOVEMBER 2012
BUSINESS COMMUNICATION AND RESEARCH METHODOLOGY

Time allowed – 3 hours

SECTION A: Attempt All Questions

PART I: MULTIPLE-CHOICE QUESTIONS

(20 Marks)

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

1. One of the most important aspects of research study is the appropriate choice of the research title. Which of the following is **NOT** considered as a good attribute of a research title?
 - A. The title should be based on availability of data
 - B. It should never be linked with existing theory
 - C. The research title must be clearly defined
 - D. It should be within the competence of the researcher
 - E. Availability of resources such as time and finance to complete the research
2. A good research proposal should include the following, **EXCEPT**
 - A. The research title
 - B. The background to the study
 - C. The policy implications
 - D. Methodology of the study
 - E. Research questions
3. Which of the following is a distinguishing characteristic of an experimental research?
 - A. Control over the extraneous variables
 - B. The measurement of the independent variable
 - C. Manipulation of the dependent variable

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- D. Establishing a relationship between given variables
 - E. Examining the antecedents of the variables
4. A research that focuses on investigation of a real world is called research.
- A. Basic
 - B. Ex-post factor
 - C. Applied
 - D. Correlational
 - a. Historical
5. A researcher distributed 150 copies of a questionnaire to respondents out of which 125 returned completed questionnaire. If 5 of the returned questionnaire were ineligible, the percentage of the valid total response is
- A. 82%
 - B. 83%
 - C. 86%
 - D. 80%
 - E. 4%
6. Which of the following is **NOT** necessary in the process of hypothesis testing?
- A. Determination of the test statistic value
 - B. Identification of the research objectives
 - C. Stating the test statistic
 - D. Stating the hypothesis to be tested
 - E. Decision-making
7. An Automated Timing Machine was designed to determine accurately the arrival and departure times of factory employees. If the machine is consistently available and functional, the machine is said to be
- A. Concurrently valid
 - B. Valid
 - C. Historical
 - D. Reliable
 - E. Correlated

PATHFINDER

8. Budgeting is a vital element in the planning process. Which of the following is **NOT** usually included in a research budget?
- Staff training expenses
 - Equipment expenses
 - Accommodation expenses
 - Consultancy expenses
 - Estimated profit margin
9. The variable that is manipulated by the researcher is referred to as the variable.
- Continuous
 - Control
 - Dependent
 - Independent
 - Discrete
10. An auto-manufacturing company produces three types of cars, each of which can be identified by its model. These characteristic models can be classified as data.
- Numeric
 - Categorical
 - Rank
 - Ordinal
 - Discrete
11. The following quarterly data was retrieved from the sales of the textile industry for the period indicated:

Quarter	1	2	3	4
Sales (N-Million)	109	101	153	194

The mean sales of the industry is

- ~~N~~ 55.70m
- ~~N~~391.25m
- ~~N~~139.25m
- ~~N~~139.52m
- ~~N~~139.92m

PATHFINDER

12. Which of the following charts can best be used to compare different groups of information?
- A. Component bar chart
 - B. Simple bar chart
 - C. Field bar chart
 - D. Multiple bar chart
 - E. Semi-component bar chart
13. Which of the following best describes the inequality in income distribution among employees of a given organisation?
- C. Frequency Polygon
 - D. F-Curve
 - E. Z-Curve
 - F. Lorenz Curve
 - G. Cumulative Frequency Curve
14. The major purpose of studying Communication is to be able to
- H. Understand idiomatic expression
 - I. Use high-sounding words
 - J. Express oneself in a meaningful way
 - K. Showcase knowledge
 - L. Write books
15. Which of the following is a consequence of effective communication in business?
- A. The profit reduces
 - B. Unrest is the order of the day among the work force
 - C. Ideas are locked in the minds of parties in communication
 - D. Good industrial relations prevail
 - E. No action can be taken on ideas and instructions

PATHFINDER

16. The receiver of a message does the following **EXCEPT**
- A. Decode
 - B. Encode
 - C. Interpret
 - D. Receive
 - E. Mediate
17. All of the following are parts of a report **EXCEPT**
- A. Method of investigation
 - B. Appendix
 - C. Channel
 - D. Findings
 - E. Terms of reference
18. The following are communication barriers brought about by limitations of the human body **EXCEPT**
- A. Perspective
 - B. Semantic
 - C. Physiological
 - D. Phonological
 - E. Technological
19. One feature that stands out a Special Report from the Routine Report is
- A. Recommendations
 - B. Conclusion
 - C. Investigation
 - D. Information
 - E. Addressing
20. Communication will **NOT** be effective if
- A. Noise is reduced substantially
 - B. The sender has adequate knowledge of the needs of the receiver
 - C. The receiver listens with rapt attention
 - D. All participants are motivated
 - E. The receiver is emotionally unstable

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PART II: SHORT-ANSWER QUESTIONS

(20 Marks)

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

1. A conjectural statement that “The performance of the Olowo economy is better than the performance of the Akushe economy” is an example of hypothesis.
2. An investigation conducted on a mini-sample of the study population to validate the instruments for the main study is
3. A research plan that shows the procedure which a researcher intends to use in his/her study is called
4. The aspect of research report that specifies what the study seeks to achieve is called
5. A type of survey design in which a single group of subjects is followed over a specified period of time, measured at regular intervals, is design.
6. When you “scramble” your electronic information or e-mail to make it more secure, the action is called
7. Deciding **NOT** to reject the null hypothesis when in actual fact, the null hypothesis is false is
8. A group of subjects in an experiment that does **NOT** receive the experimental treatment constitutes the group.
9. A researcher who attempts to create as closely as possible a real world situation is said to be engaged in
10. If the sum of observation of a given variable and the mean are given as 2958 and 73.95 respectively, the number of observation is

PATHFINDER

11. A straight line drawn on a scatter diagram of y on x-axes that minimises the variance of error term is known as
12. Given the equation $Y = c + bX$, the parameters c and b represent and respectively.
13. The average sales of Ogbodo Company Limited over a period of time is ₦50.25 million with a standard deviation of ₦9.75 million. What is the coefficient of skewness if the modal sales is ₦49.82 million?
14. The study of speech sounds and how they are produced is called
15. The basic skill of has suffered too much neglect for too long apart from writing, reading and speaking.
16. Another name for lateral communication is communication.
17. A group of words without a finite verb forming a part of a sentence is a(n)
18. Documents that are labelled and attached to the back of a report are called
19. The is the part of a report that distils the entire contents of the document into a much concise form.
20. The objectives, the structure, and the time frame for the completion of a report are presented in

SECTION B: ATTEMPT ANY FOUR QUESTIONS

(60 Marks)

QUESTION 1

- a. Choosing a research title is fundamental to the success of any research. The researcher has to do a rigorous search before he can derive a suitable title.

List any **FIVE** sources from which a researcher can derive research titles. (5 Marks)

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- b. Many management processes are in stages. For example, we have stages in organisational buying behaviour and the life cycle of a product among others.

List **SEVEN** stages of the research process and explain **THREE** of them. (10 Marks)
(Total 15 Marks)

QUESTION 2

In the process of investigating a problem scientifically, a researcher may formulate hypothesis for verification.

You are required to:

- a. Explain the various steps in the process of testing the hypothesis formulated. (10 Marks)
- b. Enumerate **FIVE** criteria for a good hypothesis. (5 Marks)
(Total 15 Marks)

QUESTION 3

An international examination body conducts her professional examination worldwide. The examination analyst was asked to find the performance of candidates who sat for the same examination in Europe and Africa.

In his analysis, the following scores were obtained:

	Score Analysis		
Centres	Mean	Variance	Standard Deviation
Europe	87.59	15.4	A
Africa	82.61	13.8	B

- a. i. Calculate the values of A and B. (2 Marks)

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- d. Give **ONE** reason why the telephone may be preferred to the word of mouth. (1 Mark)
- e. Explain what could make you prefer the word of mouth to the telephone. (2½ Marks)
- (Total 15 Marks)

QUESTION 6

- a. You came into the office during lunch break and met your colleagues arguing about types of speeches.

Required:

- i. Explain any **TWO** peculiar features that distinguish an impromptu speech from a written speech. (4 Marks)
- ii. In your opinion, which of the **TWO** is better? (1 Mark)
- b. Amehill & Sons Limited is a company which produces and markets a wide range of baby products. A company is launching Oma, a new baby food, and you have been invited as a guest of honour to formally present it to the public.

Required:

Write a suitable speech to be delivered at the occasion. (10 Marks)

(Total 15 Marks)

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SOLUTIONS TO SECTION A

PART I MULTIPLE-CHOICE QUESTIONS

1. B

2. C

3. A

4. C

5. C
$$\frac{\text{Total No of Response} - \text{Ineligible Response}}{\text{Total No of Sample}} \times 100 = \frac{120}{150} \times 100 = 80$$

6. B

7. D

8. E

9. D

10. B

11. C
$$\frac{\sum x_i}{n} = \frac{557}{4} = 139.25$$

12. A

13. D

14. C

15. D

16. E

17. C

18. E

19. C

20. E

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EXAMINERS' REPORT

The questions were drawn from all the three sections of the syllabus. The questions test candidates' understanding of basic terms, concepts and principles involved in Research Methodology, Statistics and Business Communication.

All candidates were expected to attempt these questions. The performance was 60%.

The major pitfall was candidates' inability to clearly understand concepts and apply such where necessary

Candidates should study more and understand concepts very well.

PART II SHORT-ANSWER QUESTIONS

1. Directional/Alternate
2. Pilot study/survey
3. Research Proposal
4. Objective of study
5. Longitudinal
6. Encryption
7. Type II error
8. Control
9. Simulation
10. $\sum f = \frac{\sum fx}{x} = \frac{2958}{73.95} = 40$ or $n = \sum x$
11. Line of best fit/least square line/regression line
12. c = intercept & b = slope/gradient
13. Coefficient of skewness = $3 \frac{(\text{mean} - \text{median})}{\text{S.D.}} = \frac{\text{mean} - \text{mode}}{\text{S.D.}} = \frac{50.25 - 49.82}{9.75}$

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= 0.43 = 0.044 (where SD = Standard Deviation)

9.75

14. Phonetics
15. Listening
16. Horizontal
17. Phrase
18. Appendices
19. Executive summary/abstract
20. Terms of reference

EXAMINERS' REPORT

The questions cover all aspects of the syllabus. The questions test candidates' understanding of basic terms, concepts and principles involved in the subject.

All candidates attempted the questions and average performance was 35% of the mark obtainable.

The major pitfall is that candidates were unable to interpret questions correctly.

Candidate should consult text-materials when studying so as to understand various terms used in the subject.

SOLUTIONS TO SECTION B

QUESTION 1

- (a) Sources from which a researcher can derive research topics are:
- i. Literature
 - ii. Personal experience
 - iii. Experts in related field (Consultation with the subject experts)
 - v. Prevailing economic, political and social conditions

PATHFINDER

- vi. Contemporary issues
 - vii. Foundations
 - viii. Research Institutes
 - ix. Wars, Disasters
 - x. Theoretical sources
 - xi. Library
- (b) Stages of a Research Process include:
- Stage 1: Problem identification: In this stage, the researcher identifies a research problem which he or she perfects to a research topic.
- Stage 2: Statement of research questions.
- Stage 3: Defining/Statement of objectives.
- Stage 4: Hypothesis formulation: An hypothesis is a statement of testable relationship between sets of variables. Hypotheses are the assumed answers to the identified problem. The researcher holds temporarily to these answers until he or she is able to test them empirically.
- Stage 5: Research design: This is a blue print that guides a researcher to conduct the research properly. There are different designs. The researcher must be able to identify the appropriate one that could solve the research problem at hand.
- Stage 6: Measurement: Measurement is the method by which researchers assign numerals, letters or other symbols to quality attributes based on defined rules. Measurement allows the researcher to compare, evaluate and draw causal relationships between various quality attributes. Therefore the researcher has to choose the appropriate measurement scale.

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Stage 7: Data collection. At this stage, the researcher, armed with the appropriate research instrument, such as questionnaire, interview, observation and experimentation, is ready to collect data or information. The information could be sourced from a primary or a secondary source.

Stage 8: Data Analysis: At this stage, the researcher picks the appropriate technique to analyse the data collected in stage 7. This involves the use of both descriptive and inferential statistics. At this stage the researcher comes up with research findings.

Stage 9: Recommendations: At this stage the researcher makes recommendations or proffers solution to the problem identified in Stage 1, based on his research findings.

EXAMINERS' REPORT

The question tests the sources, stages and processes of research. About 90% of the candidates attempted the question. The level of performance was about 60% of the mark obtainable.

Most candidates interchanged the sources of research for the stages of research process. Candidates should study the section of the syllabus and learn the stages sequentially.

QUESTION 2

(a) The various steps in the process of testing the hypothesis formulated are:

(i) Statement/formulation of the hypothesis:

The hypothesis to be tested has to be first of all stated formally as null and alternate hypothesis. These could be stated either in a research format or a statistical format. The alternate hypothesis is mostly stated in the opposite form of the null hypothesis; and the null is usually tested.

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- (ii) Selection of suitable test statistic: The suitable test statistic will depend on the population distribution characteristics and how the hypothesis is formulated. The decision to reject or accept a null hypothesis depends on the magnitude of the sample test statistic and sampling distribution.
 - (iii) Computation of the test statistic value: The suitable test statistic value will be calculated using the appropriate formula. The test statistic value is used to take decision on the null hypothesis when compared with the critical value found on the statistical table, with the appropriate degree of freedom.
 - (iv) Determination of the suitable level of significance: The level of significance shows the maximum chances of committing type I error. This decision is important because your result can be affected by the level of error.
 - (v) Determination of the critical value: This is also referred to as the tabulated value of the test statistic at the chosen level of significance.
 - (vi) This value is compared with the calculated value before a decision on the null hypothesis is taken.
 - (vii) Decision-taking: This involves taking a decision either to accept or to reject the null hypothesis. The decision must be based on the decision rule which states that if the test statistic value (calculated) is greater than the critical value (table), reject the null hypothesis and accept the alternate hypothesis; and vice versa.
- (b) Criteria for a good hypothesis include:
- (i) It should relate to two or more variables
 - (ii) The variables in the hypothesis are potentially measurable
 - (iii) It should imply the possibility of empirical testing
 - (iv) It should be derived from the problem being investigated
 - (v) It should be unambiguously stated
 - (vi) It should help to determine the method of analysis
 - (vii) It should have theoretical leaning

PATHFINDER

EXAMINERS' REPORT

The question tests the steps required in the process of testing hypothesis and the criteria for good hypothesis. About 90% of the candidates attempted the question out of which about 49% of the candidates scored an average of 60% of the mark obtainable.

Candidates were unable to differentiate between the steps of hypothesis testing and criteria of good hypothesis. Candidates should endeavour to attend lectures, read and properly understand the differences between these two concepts.

QUESTION 3

(a)(i) The value of standard deviations A and B are

$$\text{S.D.} = \sqrt{\text{variance}}$$

$$A = \sqrt{15.4} = 3.92$$

$$B = \sqrt{13.8} = 3.71$$

$$(ii) \text{ Coefficient of variation (CV)} = \frac{\text{S.D.}}{\bar{X}} \times \frac{100}{1} = \frac{\text{Standard deviation}}{\text{mean}} \times \frac{100}{1}$$

From the given data set:

$$\text{Europe C.V.} = \frac{3.92}{87.59} \times \frac{100}{1} = 4.48\%$$

$$\text{Africa C.V.} = \frac{3.71}{82.61} \times \frac{100}{1} = 4.49\%$$

where \bar{X} = Mean

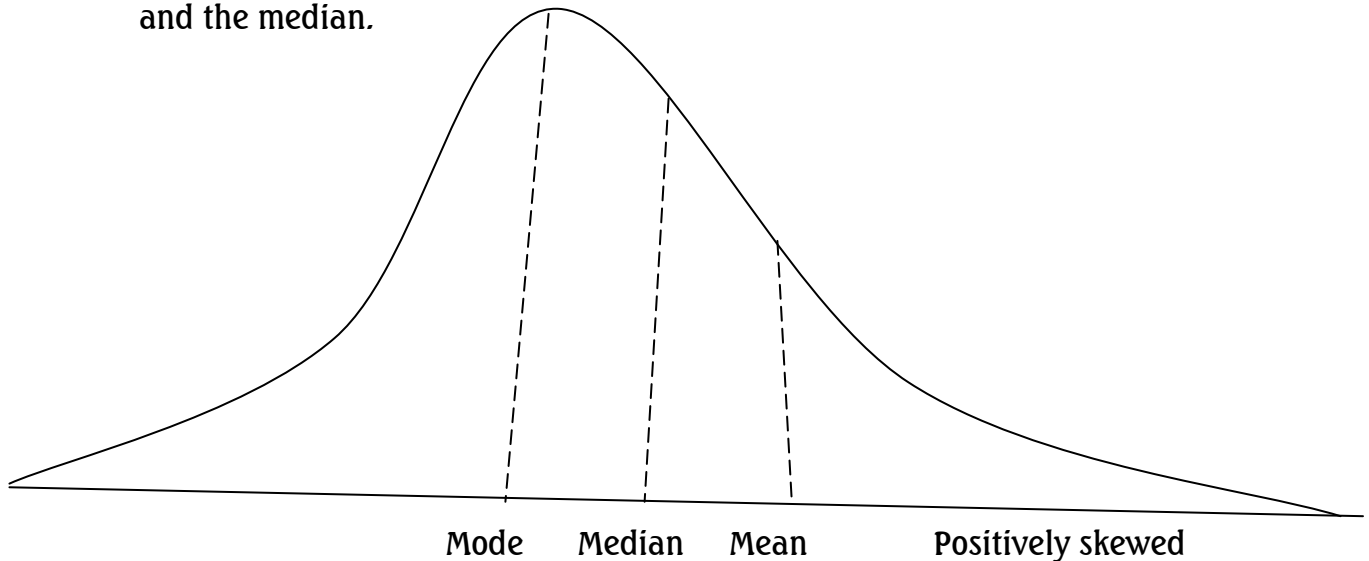
(iii) From the result above, it can be inferred that the performance of candidates who sat for the same examination in Europe are less dispersed than those in Africa, although marginally, since their coefficient of variation are 4.48% and 4.49% respectively.

(b) The characteristic of a data set whose distribution is not symmetric is said to be asymmetric, that is, the tail of the distribution lies to only one side of the normal distribution (i.e. skewed).

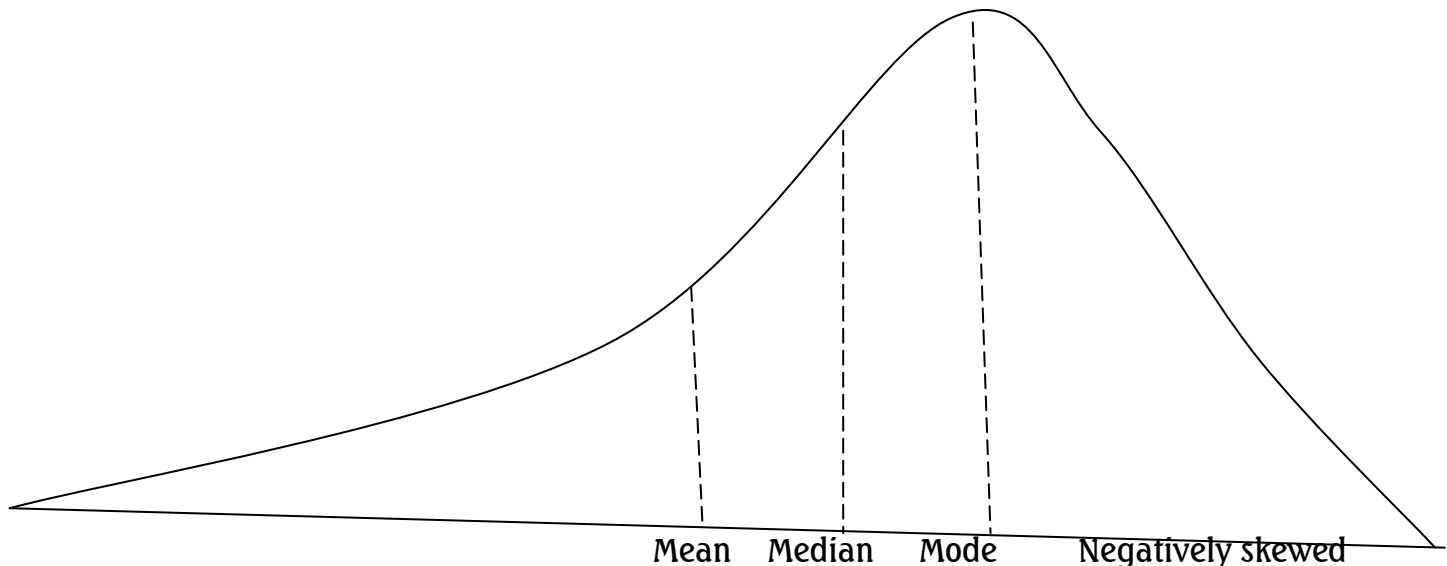
A skewed set of data will have the following characteristics:

PATHFINDER

- (i) When the tail of distribution is skewed to the right, it implies that the distribution is positively skewed. Thus, the mean will be greater than the mode and the median.



- (ii) When the tail of the distribution is skewed to the left, it implies that the distribution is negatively skewed. Thus, the mean is less than the median and the mode.



PATHFINDER

EXAMINERS' REPORT

The question tests the candidates' knowledge and understanding of the computation of coefficient of variation, its deduction and the characteristics of asymmetric data set in the statistical aspect of the course.

About 70% of the candidate attempted the question. The average performance was 52% of the mark obtainable. Candidates showed good understanding of coefficient of variation. However, the candidates mixed up the characteristics of asymmetric distribution of the data set.

It is suggested that candidates engage in group study habit so as to benefit from one another's practical experiences and skills.

QUESTION 4

A REPORT ON THE SEPTEMBER 21, 2012 CANCELLATION OF DANIELLA FLIGHTS AT THE ABUJA DOMESTIC AIRPORT

INTRODUCTION

On Friday the 21st of September 2012, our booking office at the Domestic Terminal of the Abuja Airport was thrown into confusion as all flights of Daniella Air from Abuja to other cities were cancelled, leaving hordes of intending travelers stranded.

INVESTIGATIONS

Preliminary investigations were conducted to ascertain the immediate and remote causes of the cancellation of our scheduled flights. I personally went to the airport to confirm the incident and evaluate the extent to which it had affected our routine business operations. With the assistance of some of our staff on ground at the airport terminal, I interviewed some of the stranded passengers and also made efforts to find out from the Airport Manager, what was the actual cause of the cancellations.

DISCOVERIES AND FINDINGS

From the information gathered, it was evident that Daniella flights were cancelled as a result of the protest of members of the Aviation Workers Union. The following were their grievances.

PATHFINDER

- a. That Daniella should settle all outstanding levies owed the management of the aviation authorities.
- b. That Daniella should as a matter of urgency, pay the severance benefits of the workers of the airline who were retrenched in June 2011.

Without any doubt, the current crises have had terrible consequences on the operations of Daniella Air. Besides, the negative publicity that it has generated against our relatively new airline is rather too damaging to shove aside. Tact needs to be employed to manage any other embarrassing action that the workers union or any detractors may want to stage to paint our organization in dark colours.

It is significant and worrisome to note that for the first time in the history of the aviation industry in Nigeria, the aviation workers union chose to picket only one airline, this time Daniella Air, for grievances that are not peculiar to our airline.

CONCLUSION

The strike action embarked upon by the Aviation Workers Union which singled out Daniella air for picketing gives room for suspicion. The fact that the strike was embarked upon without any prior declaration of a trade dispute with management is a proof that the actual causes of the action are more than meet the eye. I am certain that when a thorough investigation is conducted, more shocking revelations will come to the fore.

RECOMMENDATION

- (a) Daniella Air should seek legal redress against the Aviation Workers Union for the illegal approach it has adopted in registering its grievances.
- (b) Daniella should question and investigate the role that the aviation authorities, have played in the action of the workers union since it appeared that the union enjoyed a tacit approval for the embarrassing action it carried out.

PATHFINDER

- (c) In order to forestall a reoccurrence of the ugly incident, Daniella should as a matter of urgency:
 - (i) Settle all outstanding levies owed the aviation authorities.
 - (ii) Pay the severance benefits of all retrenched workers.
 - (iii) Tender an apology to all Daniella customers whose travelling plans were disrupted by the flights cancellation.
- (d) Finally, Daniella should embark on an aggressive media campaign to launder its image which has suffered massive blows from the recent strike action.

Press conferences should be organized immediately and sponsored advertorials should be published in some national newspapers and magazines.

Thank you.

SAMSON ONALO
Customers Service Manager
Daniella Airline Limited

EXAMINERS' REPORT

The question tests report writing-communication perspective. About 30% of the candidates attempted the questions out of which 50% scored an average of 50% of the mark obtainable.

Candidates failed to show skills and understanding in their knowledge of report writing.

Candidates should get involved in group-study so as to engage in discussions to share and improve knowledge.

PATHFINDER

QUESTION 5

- (a)(i) The internet is the most appropriate place to source for information that is not available elsewhere.
- (ii) The print media are the most appropriate source of secondary information to which reference can be made as and when needed.
- (iii) The electronic media are the most appropriate for their auditory and visual effect in the dissemination of information to large numbers of people. The electronic media include radio and television networks.
- (iv) The word of mouth is used when personal contact is considered most appropriate in sharing ideas, particularly when confidentiality and immediate feedback are of primary consideration. This is often commonly used at meetings and conferences.
- (v) The telephone is a communication device that is used for talking to somebody over a long distance. This is used when immediate feedback is derived, where face-to-face communication is not possible.
- (b) The internet may fail in Nigeria as a result of irregular power supply, lack of adequate technical know-how of computer operations and inadequate maintenance culture.
- (c) The print media are the channels of newspapers, magazines, journals among others. They are addressed to non-defined, disparate audience members. Their contents are usually in the form of news, announcements and advertisements. The printed documents of the media can be acquired and stored for reference without depending on electricity.

The electronic media are the channels of radio and television networks. The radio is an audio channel while the television is both audio and video. The electronic media are used to address far-flung, disparate audience members, their contents are in the form of news, announcements and advertisements.

- (d) The telephone can reach long distances, while word of mouth can only be used in a proximate environment.

PATHFINDER

- (e) Words of mouth could be preferred to the telephone because body language and facial expressions modify the meaning of word of mouth which is not applicable to telephone communication.

EXAMINERS' REPORT

The question tests various concepts adopted in communication-media channels. About 90% of the candidates attempted the question. Their performance was 45% of the mark obtainable. The common pitfall was that candidates interchanged the meaning of each term and subsequently the requirement to each.

Candidates should study harder and get involved in group-study.

QUESTION 6

- (a) Features that distinguish an impromptu speech from a written speech, include:
- (i) An impromptu speech is one which the speaker presents without any prior notice for him to prepare. The written speech on the other hand, as the name suggests, is written or scripted verbatim because the presenter had previously been notified ahead of the day of his presentation.
 - (ii) Whereas the language and the tone of presentation of an impromptu speech is much more adaptive to the mood of the occasion, the language of the written speech is stilled and it lacks the freshness that will excite an encouraging reception.
 - (iii) The impromptu speech accords the speaker the advantage of spontaneity in presentation which the written speech does not usually allow.
 - (iv) In presenting an impromptu speech, the speaker enjoys the benefit of maintaining eye contact and intimacy with the audience. This is lacking in the written speech because the presenter is usually more interested in keeping track with the written text, thereby suffering a disconnect with the audience.

A SPEECH DELIVERED BY CHIEF JOHNSON ICHABA ON THE OCCASION OF THE PRODUCT LAUNCH AND PUBLIC PRESENTATION OF OMA BABY FORMULAR ON FRIDAY THE 21ST SEPTEMBER, 2012 AT IMOLE HOTELS AND TOWERS, IKEJA, LAGOS

PATHFINDER

The Executive Governor of Lagos State,
His Excellency, Mr. Raji Fasola,
The Chairman of today's occasion,
The Managing Director and Board Members,
Ameh and Sons Limited,
Gentlemen of the Press,
Invited Guests,
Ladies and Gentlemen.

Good Morning,

It is a delight for me to grace this epoch-making occasion as a guest of honour as Ameh and Sons Ltd. is launching another high quality product into the Nigeria market.

In our present era of national economic depression, where productivity and sales of manufactured products have plummeted to the lowest ebb, and several companies in Nigeria are closing shop, it is encouraging that Ameh and Sons Limited is doing well in business and taking another bold stride at presenting a new baby food.

My joy is heightened by the fact that the product we are about to launch is not another repackaged baby formular imported from overseas. It is a made in Nigeria product that has gone through scrupulous quality control evaluations by relevant regulatory agencies, and the results are encouraging.

Oma Baby Formular is a product that guarantees healthy growth for the baby. It is rich in essential natural nutrients for both the physical and mental development of the child. It also increases the child's immunity against child killer diseases like measles and polio.

Considering the extensive research and innovative work that has gone into the production of Oma Baby Formular, I am tempted to conclude that this new product is coming rather too late into the market because my generation did not enjoy the benefits of a high quality baby formular during our infancy. I wish I were a baby again.

PATHFINDER

You may have hung your boots in the business of child-bearing just as I have done. Please join me for one last time to return to the trenches to make more who will enjoy and cherish this new product. Just for Oma's sake, go for one more baby, so we can enjoy the new formular of our time.

In closing, I want to challenge Ameh and Sons Ltd. to ensure that the high standard for which their other products have always been noted should not be compromised on our new Oma Baby Formular. Do not rest on your oars. I see a brighter future for your organization. I hereby present to the world Oma Baby formular for all infants. Congratulations.

Thank you.

CHIEF JOHN ICHABA

EXAMINERS' REPORT

The question tests the concept of speech writing and its features.

About 93% of the candidates attempted the question while about 87% scored average of 50% of the mark allocated. Candidates displayed inability to assign proper title to the speech and also omitted the protocol, which is part of the requirement. Candidates should study these processes and engage in group discussions.