



**THE INSTITUTE OF CHARTERED ACCOUNTANTS  
OF NIGERIA**

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# **PATHFINDER**

**NOVEMBER 2013 INTERMEDIATE EXAMINATION**

**Question Papers**

**Suggested Solutions**

**Plus**

**Examiners' Reports**

# **PATHFINDER**

## **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.

# **PATHFINDER**

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# PATHFINDER

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

INTERMEDIATE – NOVEMBER 2013

COSTING AND QUANTITATIVE TECHNIQUES

Time Allowed: 3 hours

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

ATTEMPT ALL QUESTIONS IN THIS SECTION

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

1. In relation to cost accounting, which of the following is **CORRECT**?
  - A. Information is mainly produced for external use.
  - B. The purpose of information is to record financial performance.
  - C. Formats and contents of accounts should follow accounting standards.
  - D. Time period is historical and futuristic.
  - E. It is regulated by legal requirement.
  
2. The issue of materials from store is done using a Material Requisition Note. Which of the following is **NOT** contained in a Material Requisition Note?
  - A. Quantity
  - B. Authorisation
  - C. Stock balance
  - D. Description
  - E. Job or centre charged
  
3. Which of the following cost pool-cost driver relationship is **INCORRECT**?

A. Machine Costs	Machine hour
B. Engineering support	Requisition raised
C. Set-up	Number of set-ups
D. Inspection	Number of inspections
E. Materials handling	Materials movement

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4. Which of the following is **NOT** a benefit of a quantitative expression of a plan of action prepared in advance of the period to which it relates?
- A. Planning
  - B. Co-ordination
  - C. Communication
  - D. Management by Exception
  - E. Demoralisation
5. Information is required for setting standard cost. Which of the following is **NOT** a source of information required?
- A. Material prices
  - B. Labour rate
  - C. Material input quantity
  - D. Pre-determined overhead rate
  - E. Labour efficiency
6. The following pieces of information were extracted from the records of XYZ Limited:

Average stock usage	50,000 units/day
Minimum usage	20,000 units/day
Maximum usage	150,000 units/day
Economic Order Quantity	200,000 units/day
Re-order period	4-7days

What is the maximum stock level?

- A. 420,000 units
- B. 900,000 units
- C. 1,110,000 units
- D. 1,170,000 units
- E. 1,200,000 units

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7. A machine costing ₦25 million is expected to produce 12.5 billion units of product Y over its working life of 10 years after which it will be disposed of for ₦500,000. Using the production units method, what will be the depreciation charge for year 3 with a production of 900 million units of product Y?
- A. ₦2,500,000
  - B. ₦2,000,000
  - C. ₦1,900,000
  - D. ₦1,800,000
  - E. ₦1,764,000
8. Where separate sets of books are maintained for cost and financial accounting, the profit disclosed differs due to appropriation of profits. Which of the following is **NOT** an appropriation of profit?
- A. Dividends
  - B. Income tax
  - C. Transfer to a reserve account
  - D. Loss on sale of investment
  - E. Amortization of fictitious assets
9. Planning Programming Budgeting System (PPBS) technique is basically related to government budgeting. Which of the following is **NOT** one of its objectives?
- A. Budgeting on a multi-year basis
  - B. Identification of real and actual objectives of expenditures
  - C. Segregation of projects into core and non-core
  - D. Elimination of inefficiencies and wastes
  - E. Budgeting on a yearly basis
10. Which of the following is **NOT** a cost associated with Labour Turnover?
- A. Cost of lower initial production
  - B. Cost of training
  - C. Cost of replacement of personnel
  - D. Cost of industrial actions
  - E. Cost of learning on the job

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11. In decision making, the only relevant costs are those which will change as a result of the decision. Which of the following is a relevant cost:
- A. Sunk Cost
  - B. Cost of fully utilised resource
  - C. Committed costs
  - D. Book values of assets
  - E. Stockout cost
12. The following data were extracted from the records of ABCD Limited.

Period	Quantity (Units)	Cost of inspections (₦)
1	9,000	327,000
2	15,000	375,000
3	600	259,800
4	18,000	399,000

Using the high-low method, what is the estimated cost of carrying out inspection in period 5 on 12,000 units?

- A. ₦351,000
  - B. ₦345,000
  - C. ₦255,000
  - D. ₦240,000
  - E. ₦96,000
13. The quantities of water needed for a particular construction are 30 tankers and  $q_0$  tankers. If the quantity relative is 60%, then the value of  $q_0$  is
- A. 20
  - B. 30
  - C. 40
  - D. 50
  - E. 60

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14. In a certain conference on economic reforms, there are 520 delegates, out of which 175 are Economists, 255 are Chartered Accountants and 110 are neither Economists nor Chartered Accountants. How many delegates are both Economists and Chartered Accountants?
- A. 20  
B. 30  
C. 40  
D. 50  
E. 60
15. If the Earliest Start Time(EST), Latest Finish Time (LFT) and Duration(D) of an activity P are 8 weeks, 15 weeks and 2 weeks respectively, then its float is
- A. 5 weeks  
B. 4 weeks  
C. 3 weeks  
D. 2 weeks  
E. 1 week
16. If a fair coin and an unbiased die are tossed together, the probability of obtaining no head and no number greater than 3 is
- A.  $\frac{1}{4}$   
B.  $\frac{1}{3}$   
C.  $\frac{1}{2}$   
D.  $\frac{2}{3}$   
E.  $\frac{3}{4}$



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17. If a matrix  $M$  is given by  $M = \begin{pmatrix} 1 & 2 \\ 3 & 4 \end{pmatrix}$ , the matrix of cofactors of  $M$  is
- A.  $\begin{pmatrix} 4 & -3 \\ -2 & 1 \end{pmatrix}$
- B.  $\begin{pmatrix} 1 & -2 \\ -3 & 4 \end{pmatrix}$
- C.  $\begin{pmatrix} 1 & -3 \\ -2 & 4 \end{pmatrix}$
- D.  $\begin{pmatrix} -1 & 3 \\ 2 & -4 \end{pmatrix}$
- E.  $\begin{pmatrix} -1 & 2 \\ 3 & -4 \end{pmatrix}$
18. Which of the following methods is regarded as the most efficient with respect to the initialisation of a transportation problem?
- A. North-west corner method
- B. Stepping stone method
- C. Least cost method
- D. Vogel's approximation method
- E. Simplex method
19. The demand function of a business is given as  $d(x) = 3x^2 + 20x$ . Calculate the marginal revenue when  $x = 10$
- A. 80
- B. 500
- C. 1,200
- D. 1,300
- E. 5,000

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20. The capacitors in an electronic counting machine used in a particular bank have a limited life span and the table below shows the proportion of failures of the capacitors:

	Week after replacement		
	1	2	3
Cumulative % of failures	35	70	100

The average life span of the capacitors is

- A. 1.65
- B. 1.95
- C. 2.05
- D. 3.95
- E. 4.75

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

#### ATTEMPT ALL QUESTIONS IN THIS SECTION

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

- The document which provides the details necessary to ascertain values and physical stock of materials is known as .....
- A system which distinguishes stock items by distinctive alphabets and/or numbers is referred to as.....
- The summation of indirect materials, indirect labour and indirect expenses is.....
- The deduction of net realisable value from the total joint cost is the accounting treatment given to.....
- An inventory valuation method that assumes that the materials are used up in the same sequence as they are purchased is.....
- Most times, the actual performance differs from the standard set. The difference is.....

## PATHFINDER

7. An assessment which is carried out during the design stage of a product to achieve the desired objectives at minimum cost is known as.....
8. If revenue is the most crucial part of a company's operations, then the foundation of all budgets is the.....
9. A location, person or an item of equipment in relation to which cost may be ascertained and used for the purpose of cost control is called.....
10. From the records of KKK Limited, the following data were extracted:

Budgeted labour hours	6,000 hours
Standard hours produced	5,400 hours
Actual labour hours	5,760 hours

Calculate the capacity ratio.

11. A manufacturing system where the target is zero defect is called-----
12. Budgeted sales of XYZ company for three months are as follows:

	₹
Month 1	2,000,000
Month 2	2,400,000
Month 3	1,800,000

If debtors pay according to the following pattern: 60% in the month of sale, 25% in the month after and 15% from the third month. What is the cash receipt in month 3?

13. A sample space contains all the possible .....in a .....experiment.
14. Differentiation is a mathematical concept dealing with .....of .....of a variable.
15. Simplex method of solving a Linear Programming problem requires at least .....decision variables.

## PATHFINDER

16. Consider the following table:

Year	2010	2011	2012
Price(₹)	30	X	120

If the price index for year 2010 is 80.2% with 2011 as the base year, then the value of X to the nearest whole number is .....

17. If every member of set P is a member of set Q and every member of set Q is a member of set P, then the two sets P and Q are said to be .....
18. The second phase of solving a typical transportation problem is the .....test
19. A symmetric matrix is a ..... matrix whose ..... is the same as the original matrix.
20. In Network Analysis, all ..... must begin and end with .....

**SECTION B: ATTEMPT ANY FOUR QUESTIONS IN THIS SECTION (60 Marks)**

**SUB-SECTION I: COSTING - ATTEMPT TWO QUESTIONS FROM THIS SUB-SECTION**

### QUESTION 1

- (a) Explain **FIVE** qualities of a good cost accounting information. (5 Marks)
- (b) Outline, in a logical sequence, the steps in Activity-Based Costing (ABC) System. (5 Marks)
- (c) List **FIVE** effects which the increase in automation will have on manufacturing from a cost accounting viewpoint. (5 Marks)
- (Total 15 marks)**

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## QUESTION 2

The following data were extracted from the records of JAKUJAKU LIMITED for the period of one accounting year:

	<b>MACHINING</b>	<b>FINISHING</b>	<b>STORES</b>	<b>MAINTENANCE</b>
No of employees	22	58	7	13
Labour hours	76,032	200,448	24,192	44,928
Asset value(₦ )	5,200,000	1,240,000	650,000	910,000
KWH('000)	400	250	70	180
Area occupied (sqm)	2,500	1,450	1,650	600
Materials requisition	1,220	980	-	750
Machine hours	34,560	13,824	-	-
Indirect materials(₦)	2,600,000	2,100,000	255,000	950,000
Direct labour(₦)	720,000	1,200,000	360,000	180,000

The following additional information was given:

	₦
Generator - Fuel and oil	1,953,000
Canteen expenses	2,640,000
Rent	5,580,000

Maintenance is apportioned using asset value for the secondary apportionment excluding the stores.

**You are required to**

Prepare, in a columnar form, the allocation and apportionment of overheads. Figures are to be rounded up to the nearest Naira. **(15 Marks)**

### QUESTION 3

XEEWEE LIMITED makes and sells one product XW of which the materials XEE and WEE were added in equal quantity to make 5 kg/unit. The price of XEE is ₦50/kg while that of WEE is ₦65/kg.

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Estimated sales volumes for the 4 quarters of the year are as follows:

Quarter 1	40,000 units
Quarter 2	60,000 units
Quarter 3	55,000 units
Quarter 4	45,000 units

Opening stock of the first quarter is 5,000 units. It is the company's policy to keep 15% of the next quarter's sales volume as the closing stock in a period.

**You are required to prepare**

- (a) Production quantity budget in a columnar form for the first 3 quarters (6 Marks)
- (b) Quantity and value of materials to be purchased for the first 3 quarters (9 Marks)
- (Total 15 Marks)**

### QUESTION 4

XYZ Limited is in the garment industry and recently accepted an order for the production of a special order called batch XYZ001 for 2,000 units.

The following costs were incurred:

Department M: 840 labour hours @ ₦ 700/hr  
 Department F: 600 Labour hours @ ₦ 1,200/ hr  
 Direct Materials     ₦1,245,000

It is the company's policy to adopt the cost plus system for setting selling prices and a gross profit of 25% of sales is expected.

Factory overheads are absorbed at ₦350/hr for department M and ₦480/hour for Department F. Administration and marketing overheads are absorbed at 10% of selling price.

- (a) You are required to calculate the
- (i) Selling price per unit (8 Marks)

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- (ii) Net profit (3 Marks)
- (b) List **FOUR** requirements necessary for an effective and workable job costing system. (4 Marks)
- (Total 15 Marks)**

**SUB-SECTION II: QUANTITATIVE TECHNIQUES – ATTEMPT TWO QUESTIONS FROM THIS SUB-SECTION**

### QUESTION 5

Five different components P, Q, R, S and T of a manufacturing plant were purchased by AJELOGO NIGERIA LIMITED in September of the years 2010 and 2013 is tabulated below:

Plant component	Year 2010		Year 2013	
	Price (₹m)	Quantity	Price(₹m)	Quantity
P	10	22	8	20
Q	16	18	10	18
R	20	17	18	14
S	22	15	20	10
T	25	8	28	6

**You are required to**

Use 2010 as the base year to construct an Aggregate Price Index number using

- |     |                   |                         |
|-----|-------------------|-------------------------|
| (a) | Laspeyre's method | (12 Marks)              |
| (b) | Paasche's method  | (3 Marks)               |
|     |                   | <b>(Total 15 Marks)</b> |

### QUESTION 6

- (a) Given that the demand function of a business is  $P(x) = 3x^2 - 4x + 13$ , calculate the price elasticity of demand when  $x = 5$  and interpret your result. (4 Marks)

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- ## QUESTION 7

Types of chair	Cutting time (hr)	Assembling time (hr)	Spraying time (hr)
ABIOK	3	5	2
TETRA	2	4	2.5
Monthly total time available	450	800	500

**You are required to**

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## SOLUTION TO SECTION A

### PART 1 MULTIPLE-CHOICE QUESTION

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

## PATHFINDER

## Tutorials

$$\begin{aligned}
 & 6. \quad \text{Re-order level} + \text{Re-order Quantity} - (\text{Minimum Usage} \times \\
 & \qquad \qquad \qquad \text{Minimum Re-order Period}) \\
 & = (\text{Minimum Usage} \times \text{Maximum Re-order Period}) + \text{EOQ} - \\
 & \qquad \qquad \qquad (\text{Minimum Usage} \times \text{Minimum Period}) \\
 & \qquad \qquad \qquad 150,000 \times 7 \quad + 200,000 - 20,000 \times 4 \\
 & \qquad \qquad \qquad 1,050,000 + 200,000 - 80,000 \\
 & \qquad \qquad \qquad = 1,170,000 \text{ units}
 \end{aligned}$$

$$7. \quad \text{Depreciation/Unit} = \frac{\text{N}25 \text{ million}}{2.5 \text{ billion}} = 0.002$$
$$\text{Change for year 3} = \text{N}900,000,000 \times 0.002$$
$$= \text{N}1,800,000.00$$

**OR**

$$\text{Yearly production} = \frac{12.5 \text{ billion}}{10 \text{ years}} = 1.25 \text{ billion/year}$$

$$\frac{900 \text{ million}}{1.25 \text{ billion}} \times \frac{\text{N}25 \text{ million}}{10 \text{ years}}$$

**N1,800,000**

12.  $18,000 - 600 = 17,400$  units  
 $\text{N}399,000 - \text{N}259,800 = 139,200$   
Variable cost/unit =  $\frac{139,200}{17,400} = \text{N}8$

**Fixed cost = ₦259,800 – (600 x ₦8.00) = ₦255,000**

Cost of 12,000 units

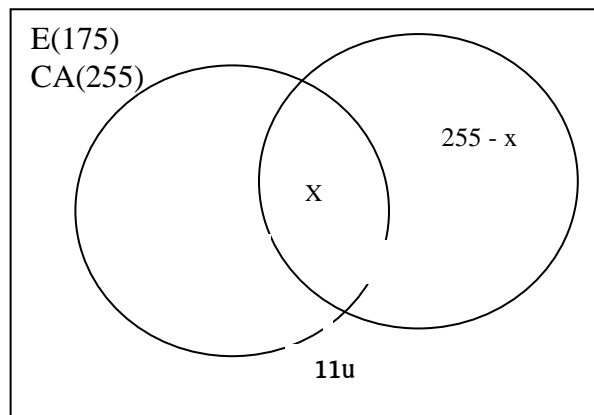
= 12,000 x 8 + ₦255,000

= ₦351,000

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14.  $n(U) = 520$   
 $n(E) = 175, n(CA) = 255, n(E \cup CA)^1 = 110$   
 $n(U) = n(P \cap VA) + n(P \cup CA)^1$   
 $n(P \cup CA) = 520 - 110 = 410$   
 $n(P \cap CA) = n(P) + n(CA) - n(P \cup CA)$   
 $= 175 + 225 - 410$   
 $= 20$

Aliter



From the venn-diagram, we have

$$\begin{aligned} 175 + 255 - x + 11_0 &= 520 \\ x &= 540 - 520 \\ &= 20 \end{aligned}$$

15. Float = LFT – EST – D  
= 15 – 8 – 2  
= 5

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16.

	1	2	3	4	5	6
H	H1	H2	H3	H4	H5	H6
T	<u>T1</u>	<u>T2</u>	<u>T3</u>	T4	T6	T6

Probability of obtaining no head and no number greater than 3 is obtained using the underlined sample points.

i.e. required probability =  $\frac{3}{12} = \frac{1}{4}$

17. Let the matrix of the cofactors of  $M$  be defined as

$$\mathbf{C} = \begin{pmatrix} c_{11} & c_{12} \\ c_{12} & c_{22} \end{pmatrix}$$

$$\begin{aligned} \text{where } C_{11} &= (-1)^{1+1} M_{11} = M_{11} = 4 \\ C_{12} &= (-1)^{1+2} M_{12} = -M_{12} = -3 \\ C_{21} &= (-1)^{2+1} M_{21} = -M_{21} = -2 \\ C_{22} &= (-1)^{2+2} M_{22} = M_{22} = 1 \\ \therefore C &= \begin{pmatrix} 4 & -3 \\ -2 & 1 \end{pmatrix} \end{aligned}$$

19.  $d(x) = 3x^3 + 20x$   
 $R(x) = xd(x) = 3x^3 + 20x^2$   
 $\frac{dR(x)}{dx} = 9x^2 + 40x$

$$\therefore \text{ when } x = 10 \quad \frac{dR(x)}{dx} = 900 + 400 = 1300$$

20. Average life span of the capacitors is  
 $(1 \times 35\%) + [2 \times (70 - 35)\%] + [3 \times (100 - 70)\%]$   
 $= 0.35 + 0.70 + 0.90 = 1.95$

# PATHFINDER

## EXAMINERS' REPORT

The questions test various aspects of the syllabus.

Virtually all the candidates attempted the questions and performance was fairly good as about 40% of the candidates scored 50% or above of the marks allocated.

It is recommended that candidates should read wide for future examinations in order to improve performance.

## PART II SHORT-ANSWER QUESTIONS

1. Stores Ledger Card
2. Coding
3. Overheads
4. By-products
5. First-In-First-Out (FIFO)
6. Variance
7. Value Analysis
8. Sales Budget or Sales
9. Cost Centres
10. 96%
11. Just-In-Time (JIT)
12. ₦1,980,000
13. Outcomes, random (in that order)
14. Rate, change (in that order)

## PATHFINDER

- ## Tutorials

16. Price Index =  $\frac{P_n}{P_o} \times 100$   
 $80.2 = \frac{30}{x} \times 100$   
 $\therefore x = \frac{30 \times 100}{80.2} = 37.4 \quad \underline{\underline{37}}$

The questions cover a sizeable proportion of the syllabus. Performance was good as about half of the candidates scored 50% or above of the allocated marks.

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## SECTION B

### QUESTION 1

- (a) The required quantities of good cost accounting information are
- i. **Relevance:** The information should be relevant to the user(s) and the purpose for which it is needed.
  - ii. **Timeliness:** The information is to be supplied early for the purpose for which it is required.
  - iii. **Reliability:** The information produced should be dependable.
  - iv. **Accuracy:** The information should be exact and devoid of error and mistakes.
  - v. **Understandability:** The information should not be too complex or ambiguous or too difficult to understand.
  - vi. **Completeness:** The information should show full disclosure of what is required.
  - vii. **Objectivity:** The information should not be subjective or personal to the originator.
  - viii. **Comparability:** The information should give room for comparative analysis with information provided in the previous period(s).
  - ix. **Conciseness:** The cost accounting information must be free from irrelevances.
  - x. **Verifiability:** Users of the cost accounting information must be able to verify its correctness.
  - xi. **Compliance:** The information must comply with professional and management guidelines.

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- x. More realistic absorption of production overhead costs.
- xi. Maximise efficient use of machines and other assets.
- xii. Ensures better Enterprise Resource Planning System (ERPS)

### **EXAMINERS' REPORT**

This question is in three parts and are meant to test candidates' understanding of the qualities of good Cost Accounting Information, steps required in Activity-Based System and effects of automation in manufacturing.

The question was popular among the candidates as about 95% attempted it. Performance was fairly good as about half of the candidates scored 50% or above of the marks allocated.

The common shortcomings among the candidates who performed poorly include

- i. Poor communication resulting in inability to express themselves effectively.
- ii. Many candidates misconstrued good qualities with the attendant benefits.
- iii. Some candidates confused office automation with Manufacturing Automation.
- iv. Part (c) of the question was ignored by many candidates and the few who attempted it misunderstood the requirements of the question.

It is recommended that candidates should improve on the presentation of answers and work harder by covering the syllabus.

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## QUESTION 2

		MACH.	FINISH.	MAINT.	STORES	TOTAL
	BASIS	₦	₦	₦	₦	₦
Indirect Materials		2,600,000	2,100,000	950,000	255,000	5,905,000
Direct Labour		720,000	1,200,000	180,000	360,000	2,460,000
Fuel & Oil – Generator	Kwh	868,000	542,500	390,600	151,900	1,953,000
Canteen Expenses	No of Employees	580,800	1,531,200	343,200	184,800	2,640,000
Rent	Floor Area	2,250,000	1,305,000	540,000	1,485,000	5,580,000
TOTALS		7,018,800	6,678,700	2,403,800	2,436,700	
Secondary Apportionment	Material Required	1,007,720	809,480	619,500	(2,436,700)	
Maintenance	Asset Value	2,441,174	582,126	(3,023,300)	-	
Total Production Dept. Overhead		10,467,694	8,070,306			

## EXAMINER'S REPORT

The question tests candidates' knowledge of overhead absorption and apportionment.

About 55% of the candidates attempted this question.

Performance was above average as about 60% of candidates who attempted the question scored half of the marks or more.

Common pitfalls among the candidates who didn't perform well include the following:

- The rationale for choosing a basis of apportionment for an overhead cost was not well understood.
- Formats used were unknown to cost accounting.
- Wrong calculations.

## PATHFINDER

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

- i. Have better grasp of the contents of the syllabus.
- ii. Improve in their Layouts.
- iii. Attempt to work on past question papers.

### QUESTION 3

#### XEEWEE LIMITED

##### (a) Production Quantity Budget

	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>
	Units	Units	Units
Closing Stock	9,000	8,250	6,750
Sales	<u>40,000</u>	<u>60,000</u>	<u>55,000</u>
	49,000	68,250	61,750
Opening Stock	<u>5,000</u>	<u>9,000</u>	<u>8,250</u>
Production Quantity	<u>44,000</u>	<u>59,250</u>	<u>53,500</u>

##### (b) Quantity and Value of Materials

	<u>Q1</u>		<u>Q2</u>		<u>Q3</u>
	Kg		Kg		Kg
Production Quantity	44,000		59,250		53,500
Quantity per unit x	x 5		x 5		x 5
Total Material Required	<u>220,000</u>		<u>296,250</u>		<u>267,500</u>

	<u>XEE</u>	<u>WEE</u>		<u>XEE</u>	<u>WEE</u>		<u>XEE</u>	<u>WEE</u>
Quantity	110,000	110,000		148,125	148,125		133,750	133,750
Price/ Kg	<u>x 50</u>	<u>x 65</u>		<u>x 50</u>	<u>x 65</u>		<u>x 50</u>	<u>x 65</u>
Value	₦5,500,000			₦7,406,250			₦6,687,500	
		₦7,150,000			₦9,628,125			₦8,693,750

## PATHFINDER

### PRODUCTION QUANTITY BUDGET - ALITER

	QUARTER 1	QUARTER 2	QUARTER 3
	(UNITS)	(UNITS)	(UNITS)
Sales Budget	40,000	60,000	55,000
Add Closing Stock	<u>9,000</u>	<u>8,250</u>	<u>6,750</u>
	49,000	<u>68,250</u>	61,750
Less Opening Stock	<u>5,000</u>	<u>9,000</u>	<u>8,250</u>
	<u>44,000</u>	<u>59,250</u>	<u>53,500</u>

### (b) MATERIAL PURCHASE BUDGET - ALITER

	QUARTER 1		QUARTER 2		QUARTER 3	
	XEE	WEE	XEE	WEE	XEE	WEE
Production Budget (Units)	44,000	44,000	59,250	59,250	53,500	53,500
Material Usage per unit (kg)	2.5	2.5	2.5	2.5	2.5	2.5
Material Usage Budget (Kg)	110,000	110,000	148,125	148,125	133,750	133,750
Add closing stock	-	-	-	-	-	-
Less Opening Stock	110,000	110,000	148,125	148,125	133,750	133,750
	-	-	-	-	-	-
Material Purchase Budget (Quantity)	110,000	110,000	148,125	148,125	133,750	133,750
Material Price Per Kg	₦50	₦65	₦50	₦65	₦50	₦65
	₦5,500,000	₦ 7,150,000	₦ 7,406,250	₦ 9,628,125	₦ 6,687,500	₦ 8,693,750

### EXAMINERS' REPORT

The question tests candidates' knowledge of

- Production budget in quantity.
- Material purchase budget in quantity and value.

About 25% of the candidates attempted the question.

Performance was average as about half of the candidates who attempted the question scored 50% or above.

## PATHFINDER

**Pitfalls identified were as follows:**

- i. **Presentation was disjointed and format was poor.**
- ii. **Candidates' inability to derive the value of stock at the end of each of the three quarters.**

**It is recommended, for improved performance, that candidates should**

- i. **Cover the syllabus more effectively.**
- ii. **Create quality study time.**
- iii. **Seek improved quality of tuition.**

### QUESTION 4

**XYZ LIMITED**

**BATCH XY2001**

**a(i) Calculation of selling price per unit**

	N
<b>Material</b>	<b>1,245,000</b>
<b>Labour - Dept M (840 x 700)</b>	<b>588,000</b>
<b>Dept F (600 x 1200)</b>	<b><u>720,000</u></b>
<b>Prime Cost</b>	<b>2,553,000</b>
<b>Overhead Absorbed</b>	
<b>Dept. M. (840 x 350)</b>	<b>294,000</b>
<b>Dept. F. (600 x 480)</b>	<b><u>288,000</u></b>
<b>Factory Cost (75%)</b>	<b><u><u>3,135,000</u></u></b>
<b>∴ Sales Value</b>	<b>= <math>\frac{3,135,000}{75} \times 100</math></b>
	<b>= <u>4,180,000</u></b>
<b>Selling price per unit</b>	<b>= <u><u>4,180,000</u></u></b>
	<b><u>2000</u></b>
	<b>= <u>N2,090</u></b>

## PATHFINDER

a(ii) Calculation of Net Profit

	N
Sales Value	4,180,000
Less: Factory Cost	<u>3,135,000</u>
Gross Profit	1,045,000
Less: Admin & Marketing	<u>418,000</u>
Net Profit	<u>627,000</u>

(b) The following are the requirements for an effective and workable job costing system.

- i. A sound system of production control
- ii. Comprehensive works documentation
- iii. An appropriate time booking system using either time sheets or piecework tickets.
- iv. A well organised costing system with clearly defined cost centres.
- v. Good labour analysis and appropriate overhead absorption rate.

### EXAMINERS' REPORT

The question is in two parts. It is designed to test candidates' ability to

- a. Carry out a job costing and price fixing exercise.
- b. List the requirements for an effective job costing system.

About 55% of the candidates attempted the question.

Performance was fairly good. About half of the candidates who attempted the question scored 50% or above particularly in part (a). In general, candidates did not show good understanding of part (b).

Common pitfalls among the candidates include the following:

- i. Poor presentation
- ii. Poor calculations

## PATHFINDER

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

- i. **Study more effectively**
- ii. **Use ICAN Pathfinders to assist in solving similar questions**
- iii. **Acquaint themselves with good presentation formats**
- iv. **Spend time to understand the requirements of questions before attempting to solve them.**

### QUESTION 5

## Index Numbers

Amount Component	Year 2010		Year 2013		$P_1 Q_0$	$P_0 Q_0$	$P_1 Q_1$	$P_0 Q_1$
	Price ( $P_0$ )	Qty ( $Q_0$ )	Price ( $P_1$ )	Qty ( $Q_0$ )				
P	10	22	8	20	176	220	160	200
Q	16	18	10	18	180	288	180	288
R	20	17	18	14	306	340	252	280
S	22	15	20	10	300	330	200	220
T	25	8	28	6	224	200	168	150
TOTAL					1,186	1,378	960	1,138

With 2010 as the base year,

- (a) Laspeyre's method

$$\begin{aligned}\text{Price Index number} &= \frac{\sum p_1 q_0}{\sum p_0 q_0} \times 100 \\ &= \frac{1186}{1378} \times 100 \\ &= 86.07\%\end{aligned}$$

- (b) Paasche's method

$$\begin{aligned}\text{Index number} &= \frac{\sum p_1 q_1}{\sum p_0 q_0} \times 100 \\ &= \frac{960}{1138 \times 100} \\ &= 84.35\%\end{aligned}$$

## PATHFINDER

### EXAMINERS' REPORT

The question tests candidates' knowledge of Index Numbers with respect to Laspeyre and Paache methods.

The question was popular among the candidates with about 98% of them attempting it.

Performance was very good as about 75% of them scored above average mark.

There were no noticeable common pitfalls.

It is recommended that this tempo and performance should be sustained for future examinations.

### QUESTION 6

(a)  $P = 3x^2 - 4x + 13$

$$\frac{dp}{dx} = 6x - 4$$

$$\text{Elasticity of demand } (\ell_d) = \frac{p}{x} \div \frac{dp}{dx}$$

$$\begin{aligned} &= \frac{(3x^2 - 4x + 13)}{x} \left( \frac{1}{6x - 4} \right) \\ \text{at } x = 5, \ell_d &= \left( \frac{75 - 20 + 13}{5} \right) \left( \frac{1}{30 - 4} \right) \\ &= \frac{68}{5} \cdot \frac{1}{26} \\ &= 0.523 \end{aligned}$$

i.e. the demand is inelastic

(b)  $TC(x) = 5q^4 - 195q^3 - 1800q^2$

$$\text{Average Cost} = \frac{TC(x)}{q} = 5q^3 - 1800q$$





## PATHFINDER

$$\frac{d^2 \Pi}{dx^2} = -10$$

Since this is less than zero

∴  $x = 2$  gives the maximum profit

### EXAMINERS' REPORT

The question tests candidates' understanding of differentiation with respect to

- i. Price elasticity of demand
- ii. Cost minimisation
- iii. Profit maximization

About 70% of the candidates attempted the question.

Performance was poor as about 60% of the candidates scored 50% or below.

The major pitfall was lack of understanding of the requirements of the question.

There will be improved performance in future if candidates

- i. Improve on the quality of texts they use for preparation.
- ii. Create quality time for their studies.
- iii. Familiarise themselves with past questions and solutions.

### QUESTION 7

- i. Let  $x$  be the decision variable representing the number of ABIOK chairs produced.

Let  $y$  be the decision variable representing the number of units of TETRA chairs produced.

Objective function,  $Z = 6500x + 5,800y$

Subject to:

$$\begin{aligned} 3x + 2y &\leq 450 \text{ (cutting constraint time)} \\ 5x + 4y &\leq 800 \text{ (Assembling constraint time)} \\ 2x + 25y &\leq 500 \text{ (Spraying constraint time)} \\ x, y &\geq 0 \quad \text{(Non-negative constraint)} \end{aligned}$$

## PATHFINDER

For cutting time constraint line:

$$3x + 2y = 450$$

$$\text{When } x = 0, y = 225$$

$$\text{When } y = 0, x = 150$$

For assembling time constraint line:

$$5x + 4y = 800$$

$$\text{When } x = 0, y = 200$$

$$\text{When } y = 0, x = 160$$

For spraying time constraint line

$$2x + 2.5y = 500$$

$$\text{When } x = 0, y = 200$$

$$\text{When } y = 0, x = 250$$

ii. From the graphs,

The corner points from the feasible region are

A (0,0), B(0,200), C(100,75), D(150,0)

$$Z = 6500x + 5,800y$$

$$\text{For A(0,0), } Z = 6500(0) + 5800(0) = 0$$

$$\text{For B(0,200), } Z = 6500(0) + 5800(200) = \text{N}1,160,000$$

$$\text{For C (100,75), } Z = 6500(100) + 5800(75) = \text{N}1,085,000$$

$$\text{For D(150,0), } Z = 6500(150) + 5800(0) = \text{N}975,000$$

The optimal solution is to produce no unit of AB10K and 200 units of TETRA.

### EXAMINERS' REPORT

The question tests candidates' knowledge of Linear Programming (Graphical Method) to determine optimum production level.

## **PATHFINDER**

The question was attempted by about 70% of the candidates and performance was good as about 60% of them scored 50% or above.

Common pitfalls identified are:

- i. Graph sheets were not used.
- ii. Scaling was poor.
- iii. Solutions depicted on the graph sheets were wrongly interpreted

For improved performance, it is recommended that candidates should

- i. Master the use of graph papers.
- ii. Appreciation of the need to use the right scales on graph sheets.
- iii. Work on their interpretational skills.

# **PATHFINDER**

**THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA**

**INTERMEDIATE – NOVEMBER 2013**

**AUDIT AND ASSURANCE**

**Time Allowed: 3 hours**

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

**ATTEMPT ALL QUESTIONS IN THIS SECTION**

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

1. Which of the following is **NOT** the responsibility of an auditor?
  - A. Vouch payment vouchers
  - B. Prevent non-compliance with law or regulations
  - C. Ensure compliance with accounting standards
  - D. Ensure compliance with auditing standards
  - E. Issue audit report
  
2. A positive external confirmation request expects respondents to
  - A. Reply only if the debtor disputes the amount shown on the form
  - B. Reply directly to the management
  - C. Advise the auditor on what to do
  - D. Reply directly to the auditor whether in agreement or disagreement with the amount shown on the form
  - E. Disregard the request because the information is contained in the financial statements

## PATHFINDER

3. Which of the following is **NOT** an element of a letter of representation?
- A. Addressed to the auditor
  - B. Addressed to management
  - C. Contains specific financial information
  - D. Dated
  - E. Signed
4. The objectives of stocktaking do **NOT** include:
- A. Discovery of fraud in the stock figures
  - B. Determination of the accuracy of cut-off
  - C. Ascertainment of the effectiveness of internal control system over stock
  - D. Determination of the accuracy of stock valuation
  - E. Provision of the basis for checking the correctness of stock records
5. Prior to the acceptance of an engagement, the auditor should obtain a preliminary knowledge of the client. Which of the following is **NOT** what an auditor should know?
- A. General economic factors and industry conditions affecting the entity's business
  - B. Number of prospective employees
  - C. The regulatory framework
  - D. The effect of new legislation, accounting or auditing pronouncements
  - E. The accounting policies adopted by the entity and changes in those policies
6. What should an auditor do when he discovers a material misstatement? He should
- A. Disregard the material misstatement
  - B. Correct the error before he writes the final audit report
  - C. Refer the error to the audit team for proper investigation
  - D. Issue an unqualified report

## PATHFINDER

- E. Communicate the misstatement to the appropriate level of management on timely basis and consider the need to report it to those charged with governance

7. The procedures outlined in an audit programme are mainly designed to
- A. Detect errors or irregularities
  - B. Ensure early completion of the audit
  - C. Protect the auditor against litigation
  - D. Highlight movement in the accounts on a year-to-year basis
  - E. Obtain audit evidence
8. Which of the following is **NOT** a relevant consideration for the auditor in determining whether or not a client is of high risk?
- A. The general abilities of the client's management
  - B. Evidence of management intentionally failing to record a material transaction
  - C. Evidence of client's involvement in fraudulent or illegal activities
  - D. The state of the economic sector in which the client operates
  - E. Diversification of the client's business into new areas
9. The management of corporate organizations sets up internal controls in the system to ensure all of the following **EXCEPT**
- A. That transactions are executed in accordance with proper authorization
  - B. To ensure that all debtors that failed to pay are prosecuted
  - C. All transactions are promptly recorded at the correct values in the appropriate accounts
  - D. Access to assets is permitted in accordance with authorised procedures
  - E. Recorded assets are compared physically with existing assets at reasonable intervals and differences reconciled
10. Which of the following is **NOT** a method used by auditors to ascertain the system of internal control?
- A. Examining previous audit work
  - B. Documenting the client's system
  - C. Interviewing client's staff

## PATHFINDER

- D. Tracing transactions
  - E. Obtaining the list of transactions for both purchases and creditors
11. Which of the following services is **NOT** carried out by a Computer Bureau?
- A. Parallel simulation
  - B. Sales of software packages
  - C. Time sharing
  - D. Data preparation
  - E. Designing of application packages
12. The objectives of public audit include the following **EXCEPT**
- A. Ascertainment of the use of public resources
  - B. Prevention of fraud and defalcations
  - C. Reporting on the internal control weaknesses
  - D. Promoting of government policies
  - E. Alerting the executive and legislature of departures from procedures
13. Audit evidence could be generated within and outside the organization. Which of the following sources of evidence is **NOT** internal?
- A. Accounting systems
  - B. Documents
  - C. Suppliers
  - D. Management and staff
  - E. Accounting records
14. Information Technology General Control (ITGC) represents the foundation of IT
- A. General controls
  - B. Control structure
  - C. System
  - D. Governing control
  - E. Communication



## PATHFINDER

15. The primary function of the forensic auditor at a trial is to
- A. Present the report of his investigation
  - B. Represent the management in court
  - C. Give expert evidence at the trial
  - D. Remain silent
  - E. Counter the other party in the suit
16. The following steps are adopted by a forensic auditor in performing an audit **EXCEPT** to
- A. Verify compliance with regulatory, legal and evidential matters
  - B. Review documents related to legal and general business functions
  - C. Test the organization's motivational and ethical climate
  - D. Perform substantive and analytical review
  - E. Identify questionable and exceptional transactions
17. The codes of best practice on corporate governance is treated under 3 sub-headings. Which of the following options best represents the subheading?
- A. Board of Directors, Manufacturers Association and Creditors
  - B. Audit Committee, Shareholders and Debtors
  - C. Shareholders, Board of Directors and Debtors
  - D. Board of Directors, Shareholders and Audit Committee
  - E. Audit Committee, Stakeholders and Debtors
18. Due process in the public sector involves all but **ONE** of the following:
- A. Transparency in accounting for contracts
  - B. Making use of administrative committees in approving contracts
  - C. Ensuring that arrangements are in place for dealing with all audit queries
  - D. Awarding contracts by the Executive after the legislature has given approval
  - E. Allowing interested parties to provide input into the decision-making process

## PATHFINDER

19. The operations of accounts in Federal Government Ministries, Departments and Agencies are regulated by well defined internal control instruments. Which of the following instruments is used by all the agencies?
- A. Financial order
  - B. Financial circulars
  - C. CBN financial instructions
  - D. Financial regulations
  - E. General financial instructions
20. Which of the following is **NOT** an element of internal control as defined in auditing standards and guidelines?
- A. Carrying out the business of the company in an orderly and efficient manner
  - B. Ensuring adherence to management policies
  - C. Ensuring adherence to continuous audit
  - D. Safeguarding the assets
  - E. Securing the completeness and accuracy of the records.

### SECTION A: PART II

### SHORT-ANSWER QUESTIONS

(20 Marks)

#### ATTEMPT ALL QUESTIONS IN THIS SECTION

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

1. The term used in auditing as a measure of the quality of audit evidence is.....
2. The process adopted by an auditor in obtaining representation or information of an existing condition directly from a third party is .....
3. Who signs the management representation letter?
4. State the cost at which an intangible asset should be carried in the balance sheet according to IAS 38.

## PATHFINDER

5. The procedure designed by the auditor to determine whether appropriate control systems exist to prevent specific errors or omissions is.....
6. The body that examines the audited accounts of the Federation is.....
7. The partner who assumes responsibility for the conduct of the audit and for issuing an auditor's report on the financial statement on behalf of the firm is known as.....
8. The audit risk components that the auditor does not have control over are..... and .....
9. The term used to describe transactions which primary purpose is to misrepresent the financial statements is.....
10. Another name given to value for money audit is.....
11. The Committee of Sponsoring Organization (COSO) identifies.....components of internal control
12. The type of opinion that an auditor will express when there is a serious departure from Generally Accepted Accounting Principles (GAAP) is.....
13. What is the name given to a report that either contains an emphasis of matter paragraph or qualified opinion?
14. A sampling method that adopts selection from different groups is .....
15. Another name given to financial audit is .....
16. The two main internal control areas in a computer-based system are.....and.....
17. Integrated Test Facilities (ITF) and Systems Control And Review File (SCARF) are two examples of.....

## PATHFINDER

18. In the exercise of his functions under the 1999 Constitution, the Auditor General is subject to the direction and control of .....
19. The controls implemented by management over a computer systems application is known as.....
20. State two types of audit in the public sector.

**SECTION B:                                      ATTEMPT ANY FOUR QUESTIONS                                      (60 Marks)**

### QUESTION 1

A young accounting trainee picked up a text book on auditing and came across the concept “True and fair view” and has approached you for its meaning in practice.

**You are required to:**

- (a) Explain the concept “True and fair view” as it relates to financial reporting. (4 Marks)
  - (b) State any **THREE** Nigerian Standards on Auditing (NSAs). (6 Marks)
  - (c) Outline any **FIVE** factors affecting materiality in auditing. (5 Marks)
- (Total 15 Marks)**

### QUESTION 2

Your audit firm has been appointed as auditors to ZOBO Nigeria Limited, a quoted company engaged in food processing. You are expected to take over from the existing auditor who has been relieved of his appointment.

**You are required to:**

- (a) Outline the rules of professional conduct which must be observed in practice when there is a change of auditors. (6 Marks)

## PATHFINDER

- (9 Marks)  
(Total 15 Marks)

### QUESTION 3

The audit of the accounts of a partnership is not statutorily required, but it is clear that various benefits would accrue to the firm if its accounts are voluntarily audited.

**You are required to:**

- (Total 15 Marks)**

### QUESTION 4

Your firm has been appointed as Auditors to ABC Limited, a private company limited by shares. A preliminary review has shown that the system of internal control is not reliable and will require the application of substantive tests in audit work.

**You are required to:**

- (3 Marks)**

## PATHFINDER

- (c) List **FOUR** differences between substantive tests and compliance tests.

(4 Marks)

(Total 15 Marks)

### QUESTION 5

Computer-Assisted Audit Techniques (CAATs) refer to the use of computer software to perform audit assignments.

**You are required to:**

- (a) Explain (CAATs) (2 Marks)
- (b) State **TWO** sources of CAATs (2 Marks)
- (c) List **FOUR** functions of CAATs (4 Marks)
- (d) Itemise **THREE** matters to be considered when deciding to use CAATs (3 Marks)
- (e) Outline **FOUR** benefits of using CAATs (4 Marks)

(Total 15 Marks)

### QUESTION 6

One of the responsibilities of those charged with governance of a company is to determine if the application of the going concern concept in the preparation of financial statements is appropriate.

**You are required to:**

- (a) Explain **TWO** audit activities that auditors perform at the planning stage that should provide auditors with information in assessing a company's going concern status. (6 Marks)
- (b) Enumerate **SIX** types of accounting information that a company may provide which are concerned with the future that may help the auditors in assessing the going concern status of the company. (3 Marks)

-

## PATHFINDER

- (c) Describe **THREE** steps which an auditor must take if he identifies events which cast doubt on the appropriateness of the going concern status of an entity.

(6 Marks)

(Total 15 Marks)

### SOLUTIONS TO SECTION A

#### PART I MULTIPLE-CHOICE QUESTIONS

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

# **PATHFINDER**

## **EXAMINERS' REPORT**

The questions cover a large spectrum of the syllabus. All the candidates attempted the questions. Performance was generally above average.

## **PART II SHORT-ANSWER QUESTIONS**

1. Appropriateness
2. External Confirmation/Third party confirmation
3. Managing Director/CEO and Financial Director
4. Cost less any accumulated amortization and any accumulated impairment losses
5. Internal Control Evaluation Questionnaire
6. Public Accounts Committee of the National Assembly
7. Audit engagement partner
8. (i) Inherent Risk and (ii) Control risk
9. Window dressing
10. Economy and efficiency audit
11. Five
12. Adverse opinion
13. Modified or Qualified Auditors report/Qualified opinion
14. Stratified sampling
15. Transaction audit
16. General Controls, Application controls
17. Computer Assisted Audit Technique/Embedded Audit Facilities
18. No authority or person
19. Application controls



## PATHFINDER

20. - Compliance/regulatory audit  
- Financial audit  
- Value for money audit

## EXAMINERS' REPORT

The questions test candidates' knowledge in various areas of the syllabus. The questions were attempted by all the candidates and performance was generally average. Candidates should study well for improved performance.

## SOLUTIONS TO SECTION B

## QUESTION 1

(a) **Concept of “True and fair view”**

(i) **Meaning of “True”**

- There is no statutory or judicial definition of the word “true”.
- For accountants, truth is not absolute while in the sciences, truth means a fact that is fixed and will never change.
- For accountants, the word “true” means truth in accordance with the facts available at the time of signing a financial statement or auditor’s report.
- For accountants, truth means an objective verification that the information contained in the financial statements is factual and without error.

(ii) **Meaning of “fair”**

- Fairness implies that relevant values have been applied impartially and objectively, considering the interest of all stakeholders.
- Fairness means that the financial statements presented create the right impression and not intended to mislead the users.

## PATHFINDER

### (iii) Meaning of “True and fair”

“True and fair view” requires compliance with the legislation and all the applicable accounting standards and regulations. Therefore, when a practitioner says that a set of accounts shows a true and fair view, it implies that:

- The auditor has requested for and obtained all information and explanations considered necessary for his audit.
- Proper books of accounts have been kept and the financial statements are in agreement with the books.
- Adequate returns have been received from branches not visited where applicable.
- The financial statements comply with statutory provisions and other relevant regulations and pronouncements.
- The assets are fairly stated, that is, they exist, are owned by the business and are properly valued.
- All the liabilities have been fully disclosed.
- There are no material errors or misstatements in the financial statements.
- Fundamental accounting concepts have been followed in the preparation of the accounts.
- The accounting policies adopted have been fully disclosed as required by International Financial Reporting Standards (IFRS).
- The financial statements have been properly presented.

### (b) The current Nigerian Standards on Auditing are

S/N	NSA Code	Name of Standards (ISA/NSA)
1.	NSA 1	Overall objectives of the Independent Auditor and the conduct of an audit in accordance with International Standards on Auditing
2.	NSA 2	Agreeing the Terms of Audit Engagements
3.	NSA 3	Quality Control for an Audit of Financial Statements
4.	NSA 4	Audit Documentation
5.	NSA 5	The Auditor’s Responsibilities Relating to Fraud in an Audit of Financial Statements

## PATHFINDER

- |     |        |   |
|-----|--------|---|
| 6.  | NSA 6  | Consideration of Laws and Regulation in an Audit of Financial Statements  |
| 7.  | NSA 7  | Communication with those charged with Governance  |
| 8.  | NSA 8  | Communication Deficiencies in Internal Control to those charged with Governance and Management                    |
| 9.  | NSA 9  | Planning an Audit of Financial Statements   |
| 10. | NSA 10 | Identifying and Assessing the risks of material misstatement through understanding the entity and its environment |
| 11. | NSA 11 | Materiality in planning and performing an audit   |
| 12. | NSA 12 | The auditor's responses to assessed risks   |
| 13. | NSA 13 | Audit considerations relating to an entity using a service organization   |
| 14. | NSA 14 | Audit evidence  |
| 15. | NSA 15 | Audit evidence – specific considerations for selected items   |
| 16. | NSA 16 | External confirmations  |
| 17. | NSA 17 | Initial audit engagements – Opening balances  |
| 18. | NSA 18 | Analytical procedures   |
| 19. | NSA 19 | Audit sampling  |
| 20. | NSA 20 | Audit accounting estimates, including fair value accounting estimates and related disclosures                     |
| 21. | NSA 21 | Related parties   |
| 22. | NSA 22 | Subsequent events   |
| 23. | NSA 23 | Going concern   |
| 24. | NSA 24 | Written representations   |
| 25. | NSA 25 | Special considerations – Audits of group financial statements (including the work of component auditors)          |
| 26. | NSA 26 | Using the work of internal auditors   |
| 27. | NSA 27 | Using the work of an auditor's expert   |
| 28. | NSA 28 | Forming an opinion and reporting on financial statements  |
| 29. | NSA 29 | Modifications to the opinion in the independent auditor's report  |
| 30. | NSA 30 | Emphasis of matter paragraphs and other matter paragraphs in the independent auditor's report                     |
| 31. | NSA 31 | Comparative information – corresponding figures and comparative financial statements                              |
| 32. | NSA 32 | The auditor's responsibilities relating to other information in documents concerning audited financial statements |

## PATHFINDER

- 33. NSA 33 Special considerations – audits of financial statements prepared in accordance with special purpose frameworks
  - 34. NSA 34 Evaluation of misstatements identified during the audit
  - 35. NSA 35 Special considerations – audits of single financial statements and specific elements, accounts or items of a financial statement
  - 36. NSA 36 Engagements to report on summary financial statements
- (c) The factors affecting the materiality of financial information include:
- (i) The magnitude of the item compared with the overall view presented by the financial statements.
  - (ii) The magnitude of the item compared with the magnitude of the item in previous year's financial statements.
  - (iii) Some items are always material if they are subject to statutory disclosure.
  - (iv) Departures from generally acceptable accounting standards may necessitate an item being termed material.
  - (v) The frequency of occurrence of non-recurrent items are often considered more material than recurring items of equal values.
  - (vi) The impact which an item has on the financial results of the enterprise, for instance, if the item can change a small profit-making enterprise to a loss-making one.

### EXAMINERS' REPORT

The question tests candidates' knowledge on (a) True and Fair View (b) the Nigerian Standards on Auditing, and (c) matters affecting materiality. More than 75% of the candidates attempted the question. Even though the question is straightforward, the understanding of the candidates was poor. Candidates undoing was the exhibition of shallow knowledge and poor interpretation of the requirements of the question.

Candidates should study hard and be current.

## PATHFINDER

### QUESTION 2

(a) The auditors are expected to take the following steps:

- (i) The incoming auditors should obtain authority from the client to contact the existing auditors.

The auditors should then write to the former auditors seeking information which could influence their decision as to whether or not to accept the appointment.

- (iii) If the client fails or refuses to grant the new auditors permission to contact the former auditors, then they should not accept the appointment.
- (iii) If permission is granted, the former auditors should communicate in writing to the new auditors stating that no matters exist why they should not accept the assignment.
- (iv) Where such matters exist, the former auditors should inform the new auditors of those facts within their knowledge, which in their opinion, the new auditors should be aware of. They should feel free to discuss such matters with the new auditors.
- (v) Where the former auditors do not respond within a reasonable time, the new auditors should endeavour to contact them by telephone, facsimile or e-mail. If no reply is received, they should send a final letter by registered delivery service stating that unless they receive a reply within a specified time, they will assume that no matters exist to prevent them from accepting the appointment.

## PATHFINDER

- (vi) If the former auditors state some matters of conflict in their reply, the new auditors should discuss with the client on such matters and thereafter decide whether to accept or reject the appointment.
- (b) Factors to be considered:
- (i) **Legal**
- The auditors must be duly appointed, for example, by members of the company at a general meeting.
  - The auditors must not be an officer or servant of the company or a body corporate.
  - The auditors must not be a partner or an employee of an officer of the company.
  - The auditors must be a member of a recognised professional body of accountants.
- (ii) **Ethical**
- When the acceptance of the audit will give rise to conflict of interest between the client and the auditor.
  - When the audit fees constitute a significant proportion of the total fee income.
  - Where the audit fees are payable subject to conditions placed by the management.
  - Where the outgoing auditors have not given professional clearance.
  - Where the new auditors are prevented from contacting the former auditors.
  - Where the auditors take loan or advance from the client and not under normal lending conditions.
  - Where the auditors have personal relationship (blood or marriage) with the Directors or Officers of the client's company.
  - Where the auditors have financial interest in the enterprise or other business relationship with the Directors of the client's company.
  - Where there is an offer of undue hospitality from the client.

## PATHFINDER

(iii) **Practical**

- Where the auditors lack the skills and experience necessary to carry out the audit.
- Where the client is not willing to pay the fee charged by the auditors.
- Where the time available to carry out the audit work is not enough.
- Where the auditors are in doubt about the integrity of the officers of the client's company.

### EXAMINERS' REPORT

The question tests the candidates' knowledge on professional ethics and the ICAN Code of Conduct. More than 50% of the candidates attempted the question, but general performance was poor, especially in part (b). Their commonest pitfall was misunderstanding of the requirements of the question. Candidates should prepare well for the examinations and exercise due care before answering questions.

### QUESTION 3

(a) **Reasons for the Audit of Partnership**

**Audited Accounts:**

- (i) provide a convenient and reliable means of settling accounts among the partners.
- (ii) reduce the possibility of dispute among partners.
- (iii) constitute a reliable evidence for computing the amount due from the firm to a retiring or deceased partner.
- (iv) admission of a new partner is facilitated if a set of past audited accounts is available for examination.
- (v) are relied upon by banks for advancing facilities (loan & over-draft).
- (vi) are generally accepted by the tax authority for computing the assessable income of each partner.

## PATHFINDER

- (vii) facilitate negotiation for sale or conversion of the firm to a company.
  - (viii) serve as moral deterrent and checks on the partners against fraudulent practices.
- (b) **The issues the auditor would look into while auditing the books of a partnership include:**
- (i) **Confirmation of scope of audit**  
The scope of the audit must be confirmed.
  - (ii) **Examination of partnership deed/articles of partnership**  
Partnership deed must be examined to ascertain capital contribution, profit sharing ratios, powers and responsibilities of each partner of the firm.
  - (iii) **Examination of minutes book**  
Examine the minutes book to check for the policy decisions taken by the partners.
  - (iv) **Ascertaining the business of the partnership**  
Verify that the business in which the firm is engaged is duly authorized and legally allowed by the articles of partnership.
  - (v) **Compliance with the provisions of Partnership Act**  
Ascertain that relevant provisions of the Partnership Act, as applicable, are complied with.
  - (vi) Ascertain that profits are shared in the agreed ratio.
  - (vii) Confirm if professional indemnity insurance policy is in place.
- (c) **Audit programme for receipts in a school owned by a Partnership**
- (i) Check the fees received on account of admission and compare them with admission forms.
  - (ii) Check the names entered in the students' attendance register to ascertain the total number of students enrolled. This should then be compared with students' fee register to verify the amount of fees charged and received.
  - ii. Ascertain the system of recovery of fines and penalty imposed on account of late payment (if applicable).



## PATHFINDER

- iii. Confirm that all hostel dues have been paid by students.
- iv. Vouch the rental income or interest/dividend income from investments held by the school.
- v. Check grants received from government or donations received from donors (if any).
- vi. Check for other incomes received by the school.
- vii. Verify that the school operates a system of internal check which ensures that fees are properly raised.
- viii. Check fees received by comparing it with the counterfoil of receipts and pay-in-slips through to the bank statements.
- ix. Ensure that the person receiving cash is not responsible for entries in the cash book and other records.
- x. Where payments are made directly into the bank, check the bank reconciliation statements prepared to ensure completeness in accounting for receipts.
- xi. Review the control systems on enrolment and recordings of tuition income.
- xii. Confirm if fidelity insurance policy is in place.

### EXAMINERS' REPORT

The question tests candidates' understanding of the needs and requirements for the audit of a partnership firm.

More than 50% of the candidates attempted the question and performance was generally poor.

Most candidates performed poorly because they are not familiar with the audit programme of schools. It is recommended that candidates should expand their knowledge of various audit programmes.

## PATHFINDER

### QUESTION 4

- (a) Substantive tests are procedures where a transaction is traced from the inception to the end of the transaction i.e. from cradle to grave. Substantive tests are audit procedures designed to detect material misstatements. Substantive test approach is usually adopted for the audit of small entities where the internal control systems are weak and there is a limited number of staff. Where there are no good controls within the system, the auditor has little or no choice but to test a large number of transactions. Substantive procedures are detailed tests of balances which are designed to obtain audit evidence to detect material misstatements in the financial statements.
- (b) **The substantive tests to be carried out on trade receivables will include:**
- (i) Obtain the debtors' age analysis and agree the total with control ledger balance.
  - (ii) Test samples of the balances on the ledger and agree same with the debtors' schedule.
  - (iii) Cast the debtors' schedule to ensure correctness of the total balance.
  - (iv) Examine the make-up of the schedule and determine the specific transactions that make-up each debtor's balance.
  - (v) Ensure that each account balance is settled in line with the credit days approved.
  - (vi) Ensure compliance with credit limit approved.
  - (vii) Enquire into reason(s) for any transfer between two accounts.
  - (viii) Ensure strict observance of cut-off procedure.
  - (ix) Consider the recoverability of the receivables.
  - (x) Review the reconciliation statements prepared for the customers' accounts.
  - (xi) Confirm directly balances with customers' to ensure correctness of the balances stated in the schedule.

## PATHFINDER

(xii) Test post sales invoices and credit/debit notes to sales ledger accounts.

(c) **Differences between substantive tests and compliance tests**

	<b>Substantive tests</b>		<b>Compliance tests</b>
i.	Carried out in an environment where there are no reliable internal controls.	i.	Carried out where there are strong internal controls.
ii.	Involve detailed testing of transactions and balances individually.	ii.	Are to obtain audit evidence about the effectiveness of the controls in force.
iii.	Do not involve preparation of system notes and flow charts.	iii.	Involve preparation of systems notes and flow charts.
iv.	Do not involve extrapolation of the results obtained.	iv.	Results obtained from the samples tested are extrapolated to the population as a whole
v.	Materiality considerations are not important.	iv.	Materiality consideration play a critical role in the extent of substantive tests carried out.
vi.	The sample size or sample units used is lower.	vi.	The sample size or sample units used is higher.

### EXAMINERS' REPORT

The question tests candidates' understanding of substantive and compliance tests. More than 50% of the candidates attempted the question, but performance was below average.

The major pitfall was that candidates displayed poor understanding of substantive and compliance tests. Candidates should cover the entire syllabus and cultivate better ways to study for the examination in order to harness and present their points.

## PATHFINDER

### QUESTION 5

(a) **Meaning of CAATs**

Computer Aided Audit Techniques (CAATs) are audit techniques, involving computer software used to extract and analyse data and review transactions and account balances.

CAATs may be used to increase the efficiency of certain audit procedures and may provide auditors with opportunities to apply certain procedures to an entire population of accounts or transactions.

(b) **Sources of CAATs**

The auditor can obtain his CAATs software from one of the following three major sources:

- i. The client's ICT Department
- ii. The auditors' ICT Department
- iii. The generalized CAATs software from software vendors

(c) **Types of CAATs include:**

- i. snapshots
- ii. tracing
- iii. mapping
- iv. flowcharting
- v. systems program data analysis
- vi. parallel simulation and normative auditing
- vii. program analysis
- viii. integrated test facilities
- ix. systems control and file review

(d) **Matters to consider when deciding to use CAATs include:**

- i. The practicability of conventional audit tests instead of using CAATs.
- ii. Whether the auditor has the requisite computer skills and knowledge of the proposed CAATs.

## PATHFINDER

- iii. The availability of the CAATs which the auditor plans to use.
- iv. The availability of the auditor's time
- v. The availability of the CAATs software within the client's system.
- vi. The cost of CAATs in relation to potential benefits.

(e) **Benefits of CAATs**

- i. **Creation of information structure**  
CAATs create information structure that cannot be accessed by manual audit procedures.
- ii. **Reconstruction of audit trail**  
CAATs have the ability to read and analyse files speedily and accurately to generate exceptional reports.
- iii. **Increased audit efficiency**  
CAATs increase efficiency of auditing by enabling the auditor to review large volumes of items within a short period of time thereby saving audit time.
- iv. **Enhancement of audit effectiveness**  
CAATs enhance the effectiveness of the audit by enabling the auditor to perform consistent audit tests on large volume of items without random errors.
- v. **Reduction of costs**  
The initial cost of setting up CAATs is very high, but once it is set up, it can be used from one audit period to the other. The running cost will reduce in later years.
- vi. **Improvement of data interpretation**  
CAATs allow the auditor time to think through and interpret data generated as a result of the audit exercise and selection of files or items for review. Stratification and analysis is possible with CAATs.

## **PATHFINDER**

### **EXAMINERS' REPORT**

The question tests candidates' understanding of functions, uses and benefits of CAATs. Less than 50% of the candidates attempted the question and performance was poor.

The major pitfall was that candidates displayed poor understanding of the use of CAATs in auditing. It is recommended that candidates should familiarise themselves with the use of CAATs in auditing.

### **QUESTION 6**

- (a) Two audit activities at the planning stage that should provide the auditors with information in ascertaining that a company is a going concern are:
- i. Assessment of the business/inherent risk and; to a lesser extent control risk.  
Assessment of the business/inherent risk requires auditors to be knowledgeable about the company, its products, main suppliers, competitors and the environment in which it operates.  
All these characteristics are necessary pieces of information which auditors evaluate when assessing going concern status of a company.  
The assessment of control risk is important because it can give the auditors some guidance on the confidence with which they can rely on both historical and budgeted financial information.
  - ii. Analytical review: this provides information about the present profitability and financial strength of the company which the auditors can use when assessing going concern status.
- (b) Accounting information that a company may provide which is concerned with the future that may help auditors in assessing the going concern status of the company include:
- i. Cashflow budget or forecast
  - ii. Forecast comprehensive income statement
  - iii. Forecast statement of financial position.
  - iv. Terms of debenture and loan agreement for future development and expansion.
  - v. Minutes of shareholders' meetings and those charged with governance regarding financial matters.
  - vi. Capital commitments

## PATHFINDER

- Approved but not incurred
  - Approved and incurred
  - vii. Contingent liabilities
  - viii. Bank's offer letters for loans
  - ix. Shareholders' approval to raise additional equity or loan
  - x. Copy of business plans for future expansion
- (c) If events are identified which cast doubt on the appropriateness of the going concern status, the auditors must:
- i. Review the plans and consider their adequacy. If the auditors consider the plans inadequate, then the auditors' must consider an adverse opinion in their report; if the directors will not amend the financial statements to reflect the loss of the going concern assumption.
  - ii. Consider if a material uncertainty exists which might need to be brought to the attention of the members in an emphasis of matter paragraph in the auditors' report.
  - iii. Seek written representation from management as to its plans and the expected outcome. This must come from the top level of the company or entity's management and be approved by the Board of Directors.
  - iv. If auditors are dealing with actual or potentially insolvent subsidiary company, they should confirm from the holding company for guarantees of continuing financial support – particularly where there is considerable intercompany indebtedness.

### EXAMINERS' REPORT

The question tests candidates' understanding of going concern status of companies. More than 70% of the candidates attempted the question and performance was below average.

The major pitfall is that candidates showed lack of proper understanding of the requirements of the question. Candidates' should endeavour to read widely for future examinations.

# **PATHFINDER**

**THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA**

**INTERMEDIATE – NOVEMBER 2013**

## **TAXATION**

**Time Allowed: 3 hours**

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

**ATTEMPT ALL QUESTIONS IN THIS SECTION**

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

1. The following are regarded as core objectives of a modern tax system **EXCEPT**:
  - A. Payment of salaries
  - B. Revenue generation
  - C. Economic regulation
  - D. Harmonisation of single market for ECOWAS
  - E. Redistribution of income and wealth
  
2. Tertiary Education Tax is payable by all companies at the rate of 2% of ..... profit.
  - A. Net
  - B. Assessable
  - C. Chargeable
  - D. Total
  - E. Attributable
  
3. The Revenue option to revise the assessment to actual year basis on cessation of business relates to the:
  - A. Penultimate year
  - B. Pre-penultimate year
  - C. Pre-penultimate and penultimate year
  - D. Cessation year
  - E. Accounting year



## PATHFINDER

4. Which of the following is **NOT** among the functions of the Technical Committee of the State Board of Internal Revenue?
  - A. Co-opting additional staff from within the State Service
  - B. Provision of general policy guidelines relating to the functions of the State Service
  - C. Advising the State Board on all its powers and duties
  - D. Attending to such other matters as may from time to time be referred to it by the Board
  - E. Consideration of all matters that may require professional and technical expertise and make recommendations to the State Board of Internal Revenue
5. Taxes and levies collectible by State governments exclude
  - A. Stamp duties on instruments executed by individuals
  - B. Pools betting and lotteries, gaming and casino taxes
  - C. Slaughter slab fees
  - D. Road taxes
  - E. Withholding tax (individuals only)
6. Which of the following is a non-investment income from which Withholding Tax is deductible?
  - A. Dividend
  - B. Rent
  - C. Royalty
  - D. Interest
  - E. Consulting services
7. The minimum number of members of the Tax Appeal Tribunal that must be present in a sitting to hear an appeal is
  - A. Six
  - B. Ten
  - C. Seven
  - D. Three
  - E. Five

## PATHFINDER

8. A Company's Tax Clearance Certificate shall show the following **EXCEPT**:
- A. Tax paid
  - B. Total profit
  - C. Turnover
  - D. Expiry date
  - E. Adjusted profit
9. The following incomes are subjected to Withholding Tax in Nigeria **EXCEPT**
- A. Commission
  - B. Professional fees
  - C. Rent
  - D. Salary
  - E. Management fees
10. Current year loss relief is applicable to ..... only.
- A. Insurance companies
  - B. Telecommunication companies
  - C. Individuals
  - D. Limited liability companies
  - E. Petroleum companies
11. Under the Companies Income Tax Act Cap C21 LFN 2004 (as amended), which of the following donations is **NOT** allowable for tax purposes?
- A. Donations to political parties
  - B. Donation to National Youth Council of Nigeria
  - C. Donations made out of profit
  - D. Donations not of a capital nature
  - E. Donations below ten percent of the company's total profit

## PATHFINDER

12. Investment Allowance is granted on Qualifying Capital Expenditure incurred on
- A. Industrial building
  - B. Housing estate expenditure
  - C. Mining expenditure
  - D. Research and development expenditure
  - E. Plant, machinery and equipment
13. Which of the following is **NOT** an example of an Indirect Tax?
- A. Value Added Tax
  - B. Import Duties
  - C. Capital Gains Tax
  - D. Excise Duties
  - E. Sales Tax
14. The Personal Income Tax (amendment) Act 2011 listed the following as “tax exempt” **EXCEPT**
- A. National Housing Fund contribution
  - B. Overtime
  - C. National Health Insurance Scheme contribution
  - D. Life assurance premium
  - E. Gratuities
15. An example of indirect tax on spending expected to be borne by the final consumer of goods and services is known as:
- A. Companies Income Tax
  - B. Commission Tax
  - C. Value Added Tax
  - D. Capital Gains Tax
  - E. Petroleum Profits Tax

## PATHFINDER

16. The power to assess, collect and administer taxes on limited liability companies under the Companies Income Tax Act Cap C21 LFN 2004 is vested in the
- A. Joint Tax Board
  - B. Federal Inland Revenue Service
  - C. State Board of Internal Revenue
  - D. Stamp Duties office
  - E. Education Tax Fund
17. Under the Value Added Tax Act Cap V1 LFN 2004 (as amended), the goods and services which are categorised as zero rated will **NOT** be subjected to:
- A. Input Tax
  - B. Education Tax
  - C. Capital Gains Tax
  - D. Pioneer Tax
  - E. Output Tax
18. In pursuance of the relevant section of the Stamp Duties Act Cap S8 LFN 2004 (as amended), which of the following duties is **NOT** among the four main technical duties of the Commissioner for Stamp Duties?
- A. Control of archives where copies of stamped documents are kept
  - B. Assessment of instruments
  - C. Stamping of assessed instruments
  - D. Adjudication
  - E. Custody of dies
19. The following are the steps involved in creating a named range **EXCEPT**:
- A. Select the range of cells you want to name including the row or column label
  - B. Select defined option from the name from sub-menu on the insert menu
  - C. Use of IF function
  - D. Click on the add button to add the row
  - E. The range of cells to which the name refers, is displayed in the “refers to” field

## PATHFINDER

20. A formula in Excel spreadsheet begins with one of the following options:

- F. +
- G. =
- H. ?
- I. &
- J. “

### SECTION A: PART II

### SHORT-ANSWER QUESTIONS

(20 Marks)

#### ATTEMPT ALL QUESTIONS IN THIS SECTION

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

1. The sum total of an employee's basic salary and other entitlements without other deductions is referred to as .....
2. What is the time limit of the notice required of an individual taxpayer to revoke an earlier option of election on commencement of business?
3. An employment, the duties of which are wholly performed outside Nigeria, save during any temporary visit of the employee to Nigeria is .....
4. Alhaji Mombo, an employee of Eniso Stores, is on an annual salary of ₦30,000. How much will he pay as tax for the year?
5. The relevant tax authority responsible for the collection of taxes of members of the Nigerian Army residing in Lagos State of Nigeria is .....
6. In relation to deduction of tax from employees' emoluments, what is the period stipulated for the remittance of such tax deducted to the relevant tax authority?
7. When a partnership is converted into a limited liability company ..... rules will apply to the partners up to the date of conversion.
8. An example of taxes collectible under customary laws is .....

## PATHFINDER

9. A tax structure where a taxpayer with assessable income of ₦1,000,000, pays tax of ₦100,000, while a tax payer with income of ₦5,000,000 pays tax of ₦500,000, is a form of ..... tax.
10. What is the time limit within which a newly incorporated company is expected to register with the Federal Inland Revenue Service?
11. Assume Portair Hotel Limited paid a dividend of ₦50 million for the year ended 31 December 2011, while its total profit for 2012 assessment year (based on the accounts to 31 December 2011) was ₦30 million. In accordance with Section 19 of the Companies Income Tax Act CAP C21 LFN 2004 (as amended), determine the income tax payable in 2012 year of assessment.
12. Assets which collectively constitute a pension fund are called .....
13. The aggregate of the properties possessed by a person, including his goods, money or other types of property is known as .....
14. Calculate the Income Tax payable and the Tertiary Education Tax payable for 2013 year by a company with an adjusted profit of ₦360,000 and capital allowances claim of ₦60,000.
15. State the formula for calculating the Adjusted Profit ratio percentage of a company engaged in shipping or air transport business.
16. What are the accounting entries required to record tax payable by a limited liability company for any year of assessment?
17. Who is the Chairman of Value Added Tax Technical Committee?
18. Which of the three variants of VAT is widely used by many countries including Nigeria?
19. An expression that can be evaluated to either "TRUE OR FALSE in Advanced Excel functions is known as .....
20. A Computer simulation mechanism that simulates a paper worksheet is known as .....

## PATHFINDER

**(60 Marks)**

James Nigeria Limited was incorporated on 7 October 2006 and commenced business in January 2008. The adjusted profits for the relevant years of assessment are as follows:

			<del>N</del>
Year ended	31/12/2008		340,000
“	“	31/12/2009	540,000
“	“	31/12/2010	620,000
“	“	31/12/2011	610,000
“	“	31/12/2012	750,000

The company received an income tax assessment of ₦175,000 on 1 June 2012, based on the audited financial statements for the year ended 31 December, 2011. Payments were made by the company as follows:

	<del>N</del>
30 June 2012	25,000
1 October 2012	50,000
30 November 2012	100,000

The Chief Accountant of the company wrote a letter to the Area Tax Controller requesting for payment of the assessment by instalment but unfortunately, he reneged on his promise.

You are given the CBN Monetary Policy Rate (MPR) plus spread at 18% per annum for the relevant period.

## PATHFINDER

**You are required to:**

Compute the interest and penalty on late payment of assessment in accordance with Section 32 (1) (B) and (C) of Federal Inland Revenue Service (Establishment) Act 2007.  
(15 Marks)

### QUESTION 2

- (a) Nigerian taxation in its present form can be traced to the establishment of the British Colony of Lagos on 6 August 1861, and subsequent amalgamation of Southern and Northern Protectorates of Nigeria in 1914.  
You have been appointed Consultant to a foreign-based investor.

**You are required to:**

State any **FIVE** sources of Nigerian tax laws and practices. (5 Marks)

- (b) As a result of increase in government expenditure due to increase in population, inflation and development of the country, financing these expenditure through proceeds from crude oil and non oil export is becoming inadequate. Successive governments in Nigeria are now widening the net of their Internally Generated Revenue (IGR).

**You are required to:**

State **SIX** notable legislations enacted by the Federal Government of Nigeria to address the challenges of tax collection. (6 Marks)

- (c) Tade John Limited is a company incorporated in Nigeria with two directors, Layoka Sule and John Tade. It is mandatory that the parties involved must register with relevant tax authorities.

**You are required to:**

- (i) Identify the relevant tax payers.  
(ii) State the relevant tax authorities responsible for the registration of the various tax payers. (4 Marks)  
(Total 15 Marks)



## PATHFINDER

### QUESTION 3

Sweet Boom Nigeria Limited is a company incorporated in Nigeria with its head office located in Victoria Island, Lagos. The company specialises in the importation of Green Stone and Hardwood for manufacturing its products. The company makes up its financial statements to 30 September annually. The financial results from its operations are as follows:

	₦
Year ended 30 September 2007	1,000,000 Profit
" " 30 September 2008	1,500,000 Profit
" " 31 December 2009 (15 months)	2,750,000 Profit
" " 31 December 2010	3,250,000 Profit
" " 31 December 2011	3,500,000 Profit

You are the newly employed Senior Inspector of Taxes and the file of the company has been forwarded to your office with the above details.

**You are required to:**

- (a) Compute the assessable profits and the tax payable for the relevant tax years.  
(12 Marks)
- (b) State the options available to a tax payer on commencement of business if he decides to exercise his right of election.  
(3 Marks)  
(Total 15 Marks)

### QUESTION 4

Mr. Dan Onyechi retired as a Director in the Federal Ministry of Oil Mining and Resources on 31 December 2011. On retirement, he was paid a gratuity of ₦3,000,000.

On 1 January 2012, he secured an employment with OOU Limited, a manufacturer of New Dexi products for hearing-impaired individuals, on a salary of ₦7,200,000 per annum. Mr. Dan Onyechi is married with two wives and five children.

## PATHFINDER

The following information was also provided at the end of his first year in his new employment:

- (i) The eldest son, Buchi, is gainfully employed with Tom-Tom Bank Limited.
- (ii) The company provides Mr. Dan Onyechi with an official car – Toyota Corolla – with a market value of ₦3,500,000.
- (iii) The company pays ₦720,000 per annum on his official accommodation.
- (iv) Mr. Onyechi has a life assurance policy with Tinko Assurance Plc. The sum assured is ₦500,000, while premium paid is ₦5,000 per month.
- (v) He contributed ₦15,000 monthly to an approved Pension Scheme.
- (vi) He spent ₦15,000 during the year for the upkeep of his two aged parents who have no source of income.

**You are required to:**

Compute Mr. Dan Onyechi's monthly and annual tax liabilities for the relevant year of assessment. **(Total 15 Marks)**

### QUESTION 5

- (a) Chief Jodab is worried about the poor financial results of his trading business in recent years. One of his friends, who is a lawyer, had discussed with him about the provisions of Personal Income Tax Act 2004 (as amended), relating to loss reliefs.

**You are required to:**

State any **TWO** ways in which Chief Jobab can claim loss relief. **(3 Marks)**

- (b) Barryjay Limited has been in business for many years preparing its accounts to 31 December each year. An extract from its financial records for year ended December 2010, is as follows:

	<b>₦'000</b>
Net profit as per accounts	37,500
After charging:	

## PATHFINDER

Donation to staff club	1,500
Office stationery	800
Provision for bad debts (General)	1,200
Depreciation of fixed assets	4,500
Loss on sale of fixed assets	2,250
Interest on loan	9,000
Franked investment income	1,300

The following additional information is given:

- (i) Unrelieved losses brought forward is ~~₦~~3, 150,000
- (ii) Capital allowances granted to the company amounted to ~~₦~~32, 250,000

**You are required to:**

Compute the taxes payable for the relevant year of assessment. (12 Marks)  
(Total 15 Marks)

### QUESTION 6

- (a) The Federal Government of Nigeria is the only competent authority to impose, charge and collect duties on instruments executed by corporate entities as specified in the schedule to Stamp Duties Act Cap S8, LFN 2004.

**You are required to:**

List any **TEN** instruments that are required by law to be stamped. (5 Marks)

- (b) Understanding Excel function is becoming a pre-requisite for using electronic spreadsheet in tax computations.

**You are required to:**

State any **FOUR** basic principles and concepts of Excel function. (4 Marks)

## PATHFINDER

- (c) When payment is made to the bank or the Withholding Tax section of the Revenue office, each Withholding Tax cheque must be accompanied with a payment schedule.

**You are required to:**

State any **SIX** information contained in a payment schedule.

(6 Marks)

**(Total 15 Marks)**

### SOLUTION TO SECTION A

#### PART 1 MULTIPLE-CHOICE QUESTION

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

## PATHFINDER

19. C
20. B

## EXAMINERS' REPORT

**The questions test candidates' understanding of the various areas of the syllabus.**

**Performance was above average. Candidates demonstrated a good understanding of the questions.**

**It is recommended that candidates should always cover the entire syllabus for better performance.**

## PART II SHORT-ANSWER QUESTIONS

1. Gross emoluments
2. Twelve months after the end of third year of assessment
3. Foreign employment
4. ~~₦~~300 (1% of ~~₦~~30,000)
5. Federal Inland Revenue Service
6. Within 10 days after the end of the month under consideration
7. Cessation
8. Isakole, Osusu Nkwu, Zakkat or Jangali
9. Proportional
10. 6 months after end of 1<sup>st</sup> Accounting period or eighteen months after incorporation, whichever is earlier
11. ~~₦~~15 million (30% of ~~₦~~50 million)
12. Pension Fund Assets
13. Estate
14. Companies income tax payable - ~~₦~~90,000; Tertiary Education Tax - ~~₦~~7,200

## PATHFINDER

15. Adjusted Profit Ratio (%) =  $\frac{\text{Profit or Loss before Depreciation}}{\text{World Wide Income}} \times 100$
16. Debit Profit and Loss Account, Credit Companies Income Tax Account
17. The Chairman of Federal Inland Revenue Service
18. The Consumption Variant
19. Logical Text
20. Spreadsheet

### Tutorial

14. - Companies Income Tax ( $\text{N}360,000 - \text{N}60,000$ )  $\times$  30%  
=  $\text{N}90,000$   
- Tertiary Education Tax 2% of  $\text{N}360,000 = \text{N}7,200$   
- In practice adjusted profit is taken to mean assessable profit

### EXAMINERS' REPORT

The questions test candidates' understanding of the various areas of the syllabus. Performance was good. Candidates demonstrated a good understanding of the questions.

Candidates are advised to cover the entire syllabus.

# PATHFINDER

## SECTION B

### SOLUTION 1

#### JAMES NIGERIA LIMITED

#### COMPUTATION OF INTEREST AND PENALTY ON LATE PAYMENT OF ASSESSMENT IN ACCORDANCE WITH SECTION 32(1)(B) AND (C) OF FIRS ACT 2007

	N	Total N	Penalty N	Interest N
Additional Income Tax Assessment	175,000			
Amount paid within stipulated period	<u>(25,000)</u>			
Amount subject to penalty	150,000			
Penalty due @ 10%		15,000	15,000	-

#### 2nd Payment - 1/10/12

50,000

Period of default (1/8/12 - 30/9/12) - 2 months

Interest payable (~~N~~150,000 x 18% x  $\frac{2}{12}$ ) 4,500 - 4,500

Balance payable (~~N~~150,000 - ~~N~~50,000) 100,000

#### 3rd Payment - 30/11/2012

100,000

Period of default (1/8/12 - 30/11/2012) - 4 months

Interest payable (~~N~~100,000 x 18% x  $\frac{4}{12}$ ) 6,000 - 6,000

25,500 15,000 10,500

#### Notes

- Section 85(1)(b) of Companies Income Tax Act Cap C 21 LFN 2004, states, inter alia, that "the tax due shall carry interest at bank lending rate from the date when the tax becomes payable until it is paid .....".

## PATHFINDER

2. The question is, when will an assessment become payable?  
Section 77(2) states that “tax charged by any assessment which is not or has not been the subject of an objection or appeal by the company shall be payable (after the deduction of any amount to set-off for the purposes of collection under any provision of this Act) at the place stated in the notice of assessment within two months after service of such notice upon the company”.
3. Arising from the above, calculation of interest payable should be from when the tax becomes payable, that is, two months after service of notice of assessment.
4. Candidates are advised to note that the date of notice of assessment could be different from the date of service of same.

### EXAMINERS' REPORT

The question tests candidates' understanding of instalmental payment by a tax payer. Very few candidates attempted this question and performance was very poor. The commonest pitfall was the inability of candidates to compute penalty and interest on late payment of assessment. It is recommended that candidates should pay attention to the rules governing payment of tax by instalment including calculation of penalty and interest for defaulters.

### SOLUTION 2

#### (a) SOURCES OF NIGERIAN TAX LAWS

These are:

- (i) Practices of the Revenue  
These are various actions taken by Revenue in the treatment of issues arising during the course of its operations from year to year
- (ii) Constitution of Federal Republic of Nigeria.  
The constitution serves as the basis of imposition of tax on Nigerian citizens
- (iii) Department and official circulars:  
These are the guidelines, circulars issued by the Federal Inland Revenue Service or any other relevant tax authority in the administration of the taxes



## PATHFINDER

- (iv) Opinions of income tax experts and authors recognised by courts of law
- (v) Court judgements which decide income tax cases and establish income tax principles which are binding and must be followed in similar cases until overruled
- (vi) The various income tax laws, the State and Federal laws including the Federal Government Acts and the State Government laws
- (vii) Customary laws:  
These are the native laws and customs governing the taxation of incomes, goods and properties of persons or communities within an ethnic group

**(b) NOTABLE LEGISLATIONS ENACTED TO ADDRESS TAX PROBLEMS IN NIGERIA**

The various legislations enacted to address tax problems in Nigeria include the following:

- (i) Personal Income Tax (Amendment) Act, 2011
- (ii) Companies Income Tax Act Cap C21 LFN 2004 (as amended)
- (iii) Petroleum Profits Tax Act Cap P13 LFN 2004.
- (iv) Capital Gains Tax Cap C1 LFN 2004
- (v) Value Added Tax Cap VI LFN 2004 (as amended)
- (vi) Tertiary Education Tax Act Cap E4 LFN 2004
- (vii) Stamp Duties Act Cap S8 LFN 2004
- (viii) National Information Technology Development Agency Act 2007

**(c) (i) RELEVANT TAX PAYERS**

- Trade John Ltd.
- Lajoka Sule
- John Tade
- Employees of Trade John Ltd.

- (ii) Relevant tax authorities to be responsible for registration of the tax payers are:

**Tax payers**

- Trade John Ltd.
- Lajoka Sule
- John Tade
- Employees of Tade John Ltd.

**Tax Authorities**

Federal Inland Revenue Service  
State Board of Internal Revenue  
State Board of Internal Revenue  
State Board of Internal Revenue  
unless they are resident in  
Abuja

# PATHFINDER

## EXAMINER'S REPORT

This question tests candidates' knowledge of sources of tax laws, relevant legislations to address, challenges of tax collection and relevant tax authorities.

Performance was above average. A good percentage of the candidates demonstrated thorough understanding of the question. The commonest pitfall was the inability of candidates to list the sources of Nigerian Tax Laws.

It is recommended that candidates should pay attention to the theories and principles of tax laws.

## SOLUTION 3

### SWEET BOOM NIGERIA LIMITED

#### (a) COMPUTATION OF ASSESSABLE PROFITS AND TAX PAYABLE FOR THE RELEVANT YEARS OF ASSESSMENT

Year of change – 2009		(Based on old date)
<u>Years of Assessment</u>	<u>Basis Period</u>	<u>Assessable Profit</u> ₦
2009	1/10/2007 - 30/9/2008	1,500,000
2010	1/10/2008 - 30/9/2009	2,200,000
	$12/15 \times \text{₦}2,750,000$	
	1	
2011	1/10/2009 – 30/9/2010	2,987,500
	$(3/15 \times \text{₦}2,750,000) + (9/12 \times \text{₦}3,250,000)$	
	(₦550,000 + ₦2,437,500)	
		<u>6,687,500</u>

(Based on New Date)		<u>Assessable Profit</u> ₦	<u>Income Tax</u> ₦	<u>Education Tax</u> ₦
<u>Year of Assessment</u>	<u>Basis Period</u>			
2009	1/1/2008 – 31/12/2008			
	$(9/12 \times \text{₦}150,000) + (3/15 \times \text{₦}2,750,000)$			
	1			
	1			
	(₦1,125,000 + ₦550,000)	1,675,000	502,500	33,500

## PATHFINDER

2010	1/1/2009 – 31/12/2009	2,200,000	660,000	44,000
	$\frac{12}{15} \times \frac{1}{1} \times \frac{2,750,000}{1}$			
2011	1/1/2010 – 31/12/2010	<u>3,250,000</u>	<u>975,000</u>	<u>65,000</u>
		<u>7,125,000</u>	<u>2,137,500</u>	<u>142,500</u>

**Decision:** The computation based on the New Accounting date will be chosen by the Tax Authority as it produces higher total assessable profits for the relevant years.

### Assumptions

- (i) Given the fact that capital allowances were not provided in the question, assessable profits were assumed to be total profits.
  - (ii) Computation of tax payable for each of the relevant years of assessment will be limited to assessable profits based on the new accounting date.
- (b) **OPTIONS AVAILABLE TO A TAX PAYER ON COMMENCEMENT OF BUSINESS IF HE DECIDES TO EXERCISE HIS RIGHT OF ELECTION**

The tax payer has the right of election to have the assessable profits for the second and third assessment years revised to actual basis with the following conditions.

- i. Notice of intention to exercise the right of election to the Federal Inland Revenue Service in writing.
- ii. The notice must be given within two years, after the end of the second year of assessment
- iii. The election to be assessed on actual must be for the second and third years together and not for one or the other.
- iv. Notice to revoke the right of election must be given in writing within twelve months, after the end of the third year of assessment, if the tax payer so decides.

## PATHFINDER

### EXAMINERS' REPORT

The question tests candidates' understanding of assessment of tax payers when there is a change of accounting date and on commencement of business.

Candidates' performance was above average. The commonest pitfall was the candidates' inability to state the rules to be followed when a company intends to exercise the right of election.

Candidates are advised to pay attention to situations when tax payers have abnormal basis periods.

### SOLUTION 4

DAN ONYECHI

#### COMPUTATION OF TAX LIABILITY FOR 2012 YEAR OF ASSESSMENT

	₦	₦
Gratuity		<u>3,000,000</u>
Salary		7,200,000
Benefits in kind:		
Official car	175,000	
Company accommodation	<u>720,000</u>	<u>895,000</u>
Gross emoluments		8,095,000
Less Reliefs		
(i) Consolidated Relief Allowance		
( <del>₦</del> 200,000 + 20% x 8,095,000)	1,819,000	
(ii) Life Assurance Relief	60,000	
(iii) Contribution to Pension Scheme	<u>180,000</u>	<u>2,059,000</u>
Chargeable Income		<u>6,036,000</u>

## PATHFINDER

### Calculation of tax payable

	<b>₦</b>			<b>₦</b>
First	300,000	@	7%	21,000
Next	300,000	@	11%	33,000
✓	500,000	@	15%	75,000
✓	500,000	@	19%	95,000
✓	1,600,000	@	21%	336,000
✓	<u>2,836,000</u>	@	24%	<u>680,640</u>
	<b><u>6,036,000</u></b>			

Total tax payable	=	<u>₱1,240,640.00</u>
Monthly tax deduction	=	<u>₱103,386.67</u>
12		

**Note:**

Section 3(1b) of Personal Income Tax (Amendment) Act, 2011, defines Income chargeable as “any salary”, wage, fee, allowance or premiums, benefits or other perquisites allowed, given or granted by any person to any temporary or permanent employee .....

## EXAMINERS' REPORT

The question tests candidates understanding of the taxation of individuals in employment.

The performance was poor due to candidates' inability to display knowledge of the effects of the recent changes in the rules governing the taxation of individuals.

**It is advised that candidates should be fully abreast of the provisions of the Personal Income Tax (Amendment) Act, 2011.**

# PATHFINDER

## SOLUTION 5

### (a) THREE WAYS IN WHICH AN INDIVIDUAL CAN OBTAIN LOSS RELIEF

Chief Jodab can obtain loss relief in the following ways:

- (i) By setting off the loss against other incomes of the year of assessment in which the loss was incurred (i.e. current year loss relief);
- (ii) By setting off the loss against incomes of the subsequent years from the same trade, business, profession or vocation in which the loss was incurred (i.e. carry forward loss relief); and
- (iii) By a combination of methods (i) and (ii) above.

### (b) BARRYJAY LIMITED

#### COMPUTATION OF INCOME TAX LIABILITIES FOR 2011 YEAR OF ASSESSMENT

	₦'000	₦'000
Net profit per accounts		37,500
Add: Non allowable expenses		
Donation to staff club	1,500	
General Provision for bad debts	1,200	
Depreciation of fixed assets	4,500	
Loss on sale of fixed assets	<u>2,250</u>	<u>9,450</u>
		46,950
Less: Franked investment income		<u>1,300</u>
Adjusted profit		45,650
Less: Unrelieved loss b/f		<u>3,150</u>
		42,500
Less: Capital Allowances		
	32,250	
Restricted to: $(66\frac{2}{3}\% \times \text{₦}45,650)$		<u>30,433</u>
	<u>30,433</u>	
Unrelieved capital allowances c/f to 2012		
	<u>1,817</u>	
Total profit		<u><u>12,067</u></u>

## PATHFINDER

	=	3,620,100
Income tax payable @ 30% x	₦	
₦12,067,000		

Education tax payable @ 2% x	=	913,000
₦45,650,000	₦	
Total tax liability		<u>4,533,100</u>
	₦	

### EXAMINERS' REPORT

The question tests candidates' knowledge of rules governing loss reliefs and the computation of tax payable by companies.

Candidates displayed a good understanding of the question. Performance of the candidates was above average. The commonest pitfall was the poor presentation of the computation.

It is advised that candidates should pay attention to the standard method of presentation of tax computations.

### SOLUTION 6

#### (a) INSTRUMENTS THAT ARE REQUIRED BY LAW TO BE STAMPED

- i. Leases
- ii. Contract Notes
- iii. Bills of Lading
- iv. Agreements
- v. Duplicates and Counterparts
- vi. Marketable Securities
- vii. Mortgages
- viii. Notarial Acts
- ix. Policies of Insurances
- x. Receipts
- xi. Settlements
- xii. Share Warrants
- xiii. Warrant for Goods

## PATHFINDER

- xiv. Appraisement
- xv. Instrument of Apprenticeship
- xvi. Bank Notes, Bills of Exchange and Promissory Notes
- xvii. Conveyances of sale
- xviii. Exchange Partition or Division
- xix. Letters of Powers of Attorney and Voting Papers
- xx. Other Conveyances
- xxi. Capital of Companies

**(b) BASIC PRINCIPLES AND CONCEPTS OF EXCEL FUNCTION**

Some basic principles and concepts of Excel Software are:

- Referencing
- Relative
- Partial (column or row)
- Absolute
- Creating of View
- Use of IF function
- Excel comparison operator
- Naming function

**(c) CONTENTS OF WITHHOLDING TAX PAYMENT SCHEDULE**

- (i) Names of tax payers who suffered the deductions
- (ii) Taxpayers addresses
- (iii) The nature of their activities/services and period covered
- (iv) The tax file numbers (tax identification number) (TIN)
- (v) The total amount payable
- (vi) The rate of tax applied
- (vii) The amount of tax withheld
- (ix) The balance paid to the tax payer



## **PATHFINDER**

- (x) The tax contract for which returns were being made
- (xi) The date of payment
- (xii) The cheque number and date

### **EXAMINERS' REPORT**

The question tests candidates' understanding of rules relating to stamp duty, Information Technology and contents of a Withholding Tax schedule.

Most candidates performed below average. The commonest pitfall was lack of understanding of instruments to be stamped and the Excel office tool.

Candidates are advised to pay attention to laws relating to stamp duties and information technology.

# PATHFINDER

## 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. TERTIARY EDUCATION TAX

(2% of Assessable Profit)

### 6. CAPITAL GAINS TAX

10%

### 7. VALUE ADDED TAX

5%

# PATHFINDER

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

INTERMEDIATE – NOVEMBER 2013

BUSINESS COMMUNICATION & RESEARCH METHODOLOGY

Time Allowed: 3 hours

SECTION A: PART I

MULTIPLE-CHOICE QUESTIONS

(20 Marks)

ATTEMPT ALL QUESTIONS IN THIS SECTION

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

1. Which of the following must the sender and receiver share for communication to be possible?
  - A. Assets and liabilities
  - B. Responsibilities and roles
  - C. Language and frame of reference
  - D. Feedback
  - E. Grapevine
2. Which of the following is **NOT** expected to be included in the conclusion of a report?
  - A. Ideas left out in the report's analysis
  - B. Indications from data gathered from the field
  - C. Outcomes and consequences of findings
  - D. Closure on arguments and analysis in the body of the report
  - E. Final judgements on issues covered in the report
3. The following are characteristics of the title of a report **EXCEPT**
  - A. Clarity
  - B. Cluster
  - C. Conciseness
  - D. Preciseness
  - E. Correctness

## PATHFINDER

4. What barrier is in operation where people do **NOT** express displeasure despite glaring misconduct and compromises?
  - A. An obvious barrier
  - B. A conceptual barrier
  - C. A communication barrier
  - D. An ethical barrier
  - E. An ideal barrier
5. The following are feedback sources **EXCEPT**
  - A. Audit of quality assurance process
  - B. Staff appraisal
  - C. Quarterly sales reports
  - D. Responses to questions
  - E. Codes for logging into a site
6. Which of the following do feedback facilities rely on?
  - A. Task completion
  - B. Error and distortion correction
  - C. Peer review
  - D. Electronic presentations
  - E. Sensory barriers
7. Which of the following does **NOT** affect sender's and receiver's interpretation of messages?
  - A. Mood
  - B. Values
  - C. Context
  - D. Non-verbal cues
  - E. Undecoded messages

## PATHFINDER

8. The XYZ Company reported the mean and median sales of Company A and Company B respectively. The mean and the median are:  $\bar{X}_A = 25$ ,  $\bar{X}_B = 25$ ,  $\text{Med}_A$  and  $\text{Med}_B = 25$ .

This implies that:

- A. The distribution of sales is symmetrical
  - B. The distribution of sales is asymmetrical
  - C. Company A is better than Company B
  - D. Company B is better than Company A
  - E. Company A and B are different from each other
9. The following are **NOT** measures of central tendency **EXCEPT**
- A. Coefficient of variation
  - B. Range
  - C. Variance
  - D. Standard deviation
  - E. Mean
10. Several potential relationships between values of a dependent variable and an independent variable are depicted by:
- A. Regression
  - B. Scatter plot
  - C. Correlation
  - D. Contingency
  - E. Goodness of fit
11. What is the relationship that exists between the response variable and the explanatory variable in which response and the explanatory variables increase at the same rate?
- A. Negative perfect
  - B. Positive perfect
  - C. Positive
  - D. Negative
  - E. Nil

## PATHFINDER

12. The following are necessary steps required in testing a hypothesis **EXCEPT**
- A. Statement of the hypothesis
  - B. Statement of the decision rule
  - C. Recommendation and policy implication
  - D. Determination of the critical value
  - E. Specification of suitable test statistic
13. In a Survey Research, which of the following methods is **NOT** suitable for data collection?
- A. Extraction from existing records
  - B. Participatory observation
  - C. Use of questionnaire
  - D. Personal interview
  - E. Focus group interview
14. In which of the following sampling techniques is the study population divided into different homogeneous classes?
- A. Cluster
  - B. Systematic
  - C. Simple random
  - D. Stratified
  - E. Quota
15. In which of the following research studies are the independent variables controlled to minimise their effects on the dependent variable?
- A. Laboratory experiment
  - B. Field survey
  - C. Correlational research
  - D. Ex-post-facto research
  - E. Field experiment

## PATHFINDER

16. Research studies are conducted in organisations for the following reasons **EXCEPT**
- A. Assist management in decision making
  - B. Widen the horizon of knowledge
  - C. Increase the level of uncertainty
  - D. Provide solutions to complex business problems
  - E. Establish relationship between variables
17. The problems and gaps identified which necessitate the conduct of a particular research study are stated in
- A. Background to the study
  - B. Scope of the study
  - C. Statement of the problem
  - D. Significance of the study
  - E. Operational definition of terms
18. The hypothesis stated in a research study must have relationship with the
- A. Research questions
  - B. Limitation of the study
  - C. Method of data collection
  - D. Style of referencing
  - E. Identification of the problem
19. What is the term “advertisement” in the research topic “the impact of advertisement on organisation’s performance”?
- A. Explained variable
  - B. Explanatory variable
  - C. Endogenous variable
  - D. Dependent variable
  - E. Constant
20. Which of the following is **NOT** a good characteristic of sample?
- A. Representativeness of the population
  - B. Sample size should relate to the population size

## PATHFINDER

- C. Contains the major features in the population
- D. Invalidates the population parameter
- E. Should be well defined

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

#### ATTEMPT ALL QUESTIONS IN THIS SECTION

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

1. The communication barrier in which ambiguity is the problem is .....
2. The purpose of communication in which the sender aims to convince his audience is .....
3. The principle of communication which the sender applies by making his message error-free, accurate and true to his intention is .....
4. Unverified information within a communication system is .....
5. A body of words, rules and systems used by a community, nation, and race is called .....
6. The method of communication prevalently used for face-to-face communication is .....
7. A self-contained communication system that processes messages by receiving, storing, retrieving and decoding information is .....
8. A measure of variation that tends to overcome the range of susceptibility to extreme value is called .....
9. The clustering of data around a middle value is called .....
10. A measure of central tendency that takes into account the importance of each value in a given set of data is referred to as .....



## PATHFINDER

11. Assume that there are 56,000 auditors in Nigeria. The proportion of auditors on each week day is  $\frac{4}{25}$  and each weekend is  $\frac{3}{25}$ . The number of auditors on a weekday is .....
12. Kate Turabian Style of referencing rests mainly on the use of ..... and .....
13. A general pattern of organisation and arrangement of research report is called .....
14. A research instrument used for collecting data is included in the .....
15. At the end of a research work, reference list is arranged .....
16. A scientific way of validating hypothesis for policy analysis requires ..... statistics.
17. Parametric and non-parametric statistics are based on which type of sampling?
18. A statistical tool used to determine whether or not there is a relationship between two or more variables is .....
19. Every recommendation must be based on a particular ..... of the study undertaken.
20. Creativity and originality of research can be developed from similar existing research through the use of .....

### SECTION B:

### ATTEMPT ANY FOUR QUESTIONS

(60 Marks)

#### QUESTION 1

A committee has been set up by the President, Institute of Chartered Accountants of Nigeria (ICAN) to:

- (i) Investigate reasons why there is increase in the number of candidates seeking to become professional accountants through ICAN.
- (ii) Collate the needs of students taking ICAN professional examinations.

## PATHFINDER

- (iii) State the challenges faced by candidates taking ICAN examinations.
- (iv) Make recommendations to reposition ICAN to consolidate her position as the leading professional accounting body in Nigeria and Africa.

The committee has been given eight weeks to undertake this assignment.

### Required:

As the Secretary of the committee, present the outline/structure of your report.  
(15 Marks)

### QUESTION 2

A recent survey report in your company has identified:

- (i) Workers' attitude
- (ii) Language
- (iii) Timing

as communication factors responsible for the low productivity of the company.

### You are required to:

Identify and explain briefly the relevant issues in relations to the **THREE** factors stated in the report in order to improve the company's productivity.

(15 Marks)

### QUESTION 3

The Nigeria Crime Fighter magazine reported the following information from a random sample of 830 stolen cars: 140 were Nissan, 100 were Kia, 270 were Toyota, 230 were Honda and 90 were other brands. Suppose it is known that 15% of all the cars were Nissan, 15% were Kia, 35% were Toyota, 30% were Honda and 5% others.

### You are required to:

Use Chi-square goodness of fit test with significance level  $\alpha = 0.01$  to test the hypothesis that proportions of stolen cars are identical to population brand proportions.  
(15 Marks)

## PATHFINDER

### QUESTION 4

Observation plays vital roles as a data collection method in a research design but not popularly used due to its associated threats.

**You are required to:**

(a) Explain briefly any **THREE** differences between observation and survey methods of data collection. (6 Marks)

(b) Discuss briefly any **THREE** factors that affect the choice of participants in an experimental design. (9 Marks)

**(Total 15 Marks)**

### QUESTION 5

Research provides insight into every functional area of business. It can be classified according to the procedure of investigation.

**You are required to:**

Explain any **FIVE** classifications of research in behavioural sciences by methods.

**(15 Marks)**

### QUESTION 6

(a) i. What is internal validity? (2 Marks)

ii. Describe briefly **THREE** factors that affect internal validity. (3 Marks)

(b) i. What is external validity? (2 Marks)

ii. Describe briefly **THREE** factors that affect external validity. (3 Marks)

(c) i. Explain what is meant by validity of a measure. (2 Marks)

ii. Explain briefly any **THREE** types of validity of a measure. (3 Marks)

**(Total 15 Marks)**

# PATHFINDER

## SOLUTIONS TO SECTION A

### PART I MULTIPLE-CHOICE QUESTIONS

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

### EXAMINERS' REPORT

The questions cover the entire syllabus. About 80% of the candidates scored 50% and above of the allocated mark. The major pitfall of the candidates was their inability to understand the concepts and principles involved in this subject.

## PATHFINDER

Candidates should learn how to recognise the correct option by having the proper and adequate understanding of concepts and principles involved in this subject for better performance in future.

### PART II SHORT-ANSWER SOLUTIONS

1. Semantic
2. Persuasion/persuasiveness
3. Correctness/Fidelity/Effectiveness
4. Rumour
5. Language
6. Verbal/Oral
7. Intrapersonal communication/soliloquy
8. Interquartile range
9. Central tendency
10. Weighted average
11. 8960
12. Footnotes and endnotes; numerical numbering/ superscript numbering
13. (Report) format/table of contents
14. Appendices
15. Alphabetically/in alphabetical order
16. Inferential
17. Random/probability (Sampling)
18. Correlation
19. Finding
20. Methodology/Literature review

# PATHFINDER

## Tutorials

$$\begin{aligned} 11. \quad & \frac{4}{25} \times \frac{56000}{1} \\ & = 4 \times 2240 \\ & = 8960 \end{aligned}$$

## EXAMINERS' REPORT

The questions cover the entire syllabus. About 30% of the candidates scored 50% and above of the mark allocated. Candidates did not understand most of the concepts and principles tested in this section. They should familiarise themselves with the concepts and principles contained in the syllabus to better their performance in subsequent examinations.

## SOLUTIONS TO SECTION B

### QUESTION 1

#### 1.0 Heading

Report of the committee on reasons why there is increase in the number of candidates seeking to become professional accountants through Institute of Chartered Accountants of Nigeria (ICAN) submitted on 19<sup>th</sup> November, 2013.

#### 2.0 Introduction

The President of ICAN set up a committee to investigate reasons for increase in number of candidates wishing to become professional accountants through ICAN, analyse their needs, challenges faced by them and make appropriate recommendations.

#### 3.0 Membership

List of members of the committee.

#### 4.0 Methodology/Methods of Investigation

Method(s) of investigation employed in carrying out the assignment e.g. questionnaire/interview, and the method of administering the instrument e.g. random sampling.

## **PATHFINDER**

### **5.0 Findings**

List findings during investigation

- Rate of increase in candidates' number and what has been responsible for this
- Needs of candidates in terms of availability of study materials in different forms
- Challenges faced by candidates with respect to syllabus, access to tutorials and libraries.

### **6.0 Observations**

What was observed during investigation

- ICAN remains a market leader in professional examination administration in the field of accounting in Nigeria;
- ICAN maintains a well organised structure with district level activities;
- ICAN presence and visibility on national stage and active defence of members' interests make membership of the Institute a worthwhile choice;
- ICAN's syllabus needs to be broken down into more details in order to make learning and teaching easier.

### **7.0 Conclusion**

Conclusions drawn from findings and observation

- ICAN is a leading professional examination administrator in Nigeria;
- ICAN needs to sustain and strengthen members' participation and benefits;
- ICAN has a wide range of candidates with specific and special needs;
- ICAN needs to continue to fine-tune her activities.

### **8.0 Recommendations**

List of committee's recommendations

- ICAN needs to strengthen her membership sustenance services;
- The Institute is to remain visible at the national level
- The Institute is to initiate the process for expanding the syllabus into detailed document;

## PATHFINDER

- The Institute needs to conduct needs analysis of her candidates;
- The Institute needs to produce her literature in electronic format and make them available as e-books.

### 9.0 Appendices

Questionnaire administered

### 10.0 References

### 11.0 Circulation/Distribution list

## EXAMINERS' REPORT

The question tests candidates' ability to write a report outline. About 60% of the candidates attempted the question. The performance of candidates was very poor as only about 2% of them scored 50% and above of the allocated marks. Candidates' major pitfalls are:

- lack of adequate knowledge of the concept of 'outline';
- ignorance of the components of a report;
- lack of and inadequate idea of what to write under the few components identified by candidates.

Candidates should learn the different parts of a report and know the features of the different parts for better performance in future examinations.

## SOLUTION 2

The relevant issue in relation to the factors of workers' attitude, language and timing are

- (i) Workers' attitude
  - (a) emotion as a basis of attitude
  - (b) arrogance of authoritarian communication



## PATHFINDER

(ii) Language

- (a) Polysemy or diversity of meanings
- (b) Context of use to determine actual meaning
- (c) Use of jargon as a communication barrier

(iii) Timing

- (a) Right timing of communication
- (b) Time of convenience

(i) Workers' attitude

The attitudes of parties in communication in an organisation are among the most important things in achieving effective understanding. No human being is absolutely rational in his/her thinking or actions. Most of the time, people react to situations or communications emotionally. Since emotion is the basis for attitude, the attitude of the communicator can affect the emotion and therefore the attitude of the receiver positively or negatively. Since communication usually originates from the top and vertically flows down to the shop floor workers, the initiator must do everything possible to do away with emotional words and imperative expressions that can trigger emotional reactions from the receivers. A trace of arrogance or authoritarianism in the communication will offend the sensibility of the workforce which may give rise to industrial unrest and consequently a loss of many man-hours and huge profits to the company.

(ii) Language

The language of communication must be understandable. By nature, English words are polysemantic or diverse in meanings. Such words often give rise to ambiguity which the receiver may not be able to resolve. This often leads to reading between the lines. The initiator of communication must use such words in context to disambiguate his message. Where the receiver is not sufficiently skilled or knowledgeable to use the context to determine meaning, poor understanding or outright misunderstanding will occur. The communicator, in order to achieve understanding, must use familiar words.

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If a familiar word is used in an unfamiliar manner, the communicator must give the meaning that he intends the receiver to get from the message. The communicator must be ready to explain or avoid every jargon or technical language that may lead to communication breakdown if unexplained. When communication breaks down in an organisation, productivity will be adversely affected and this may lead to the collapse of the organisation.

### (iii) Timing

In workplace communication, timing can make or mar the effectiveness of the communication process. An important message delivered too late will become irrelevant and unprofitable. A message delivered at a time the receiver is not receptive is wasted. Good timing is of the essence in communication. Improperly timed communication may lead to reduced effectiveness of the message and interaction. No worker appreciates being given an urgent task that must be finished close to the end of the working hour, particularly on the last working day of the week. Such a task will not be properly executed and may prove costly. Communication received at a time of convenience will receive the attention and cooperation of the receiver. A request should not be placed with someone who is busy with an urgent matter of the moment because that request may generate anger in the intended receiver. This is because the timing is not convenient.

He may do a shoddy job which can prove costly to the company. For example, a bid for a contract may be lost if the bid is sloppily handled because such a bid will project an image of inefficiency.

### EXAMINERS' REPORT

The question tests candidates' ability to identify communication factors militating against productivity in an organisation. About 90% of the candidates attempted the question. Out of this, about 40% scored 50% and above of the allocated marks.

Many candidates did not understand the demand of the question. They were also unable to marshal their points as a result of poor expression.

Candidates should learn how to relate communication concepts to practical life situations. They should also make use of ICAN study pack and past questions for better performance in future.

### SOLUTION 3

$$\text{Nissan} = 830 \times \frac{15}{100} = 124.5$$

$$Kia = 830 \times \frac{15}{100} = 124.5$$

$$\text{Toyota} = 830 \times \frac{35}{100} = 290.5$$

**Honda =  $830 \times \frac{30}{100} = 249.0$**

$$\text{Other} = 830 \times \frac{5}{100} = 41.5$$

Category	Brand	Observed	Expected
1	Nissan	140	124.5
2	Kia	100	124.5
3	Toyota	270	290.5
4	Honda	230	249.0
5	Others	90	41.5

$H_1$ : The proportion of stolen cars are not identical to population brand proportion

**Step 3:**  $\chi^2 = \frac{\sum(O-E)^2}{E}$   
Where O is observed value  
E is expected value

**Step 4:**

$$\chi^2_{\text{cal}} = \frac{(140-124.5)^2}{124.5} + \frac{(100-124.5)^2}{124.5} + \frac{(270-290.5)^2}{290.5} + \frac{(230-249)^2}{249} + \frac{(90-41.5)^2}{41.5}$$
$$= 1.93 + 4.82 + 1.45 + 1.45 + 56.68$$
$$\chi^2_{\text{cal}} = 66.33$$

The table value of  $\chi^2$  with degree of freedom 4 at 0.01 level of significance is 18.46.  
(18.46 is obtained from statistical table).

## PATHFINDER

Step 6 = Decision rule. The decision rule states that if the calculated value of  $\chi^2$  test statistic is greater than the table value, reject the null hypothesis ( $H_0$ ); otherwise accept  $H_0$ .

Step 7 = Since  $\chi^2_{\text{cal}}$  value (66.33) is greater than the table value (18.46), the null hypothesis ( $H_0$ ) is rejected.

### EXAMINERS' REPORT

The question tests candidates' knowledge of hypothesis testing using chi-square test. About 90% of the candidates attempted the question and about 60% of them scored 50% and above the allocated marks.

Many candidates did not know the type of categorical data and goodness of fit using the chi-square. They did not state the hypothesis correctly. Candidates should learn all areas of hypothesis testing by using ICAN study pack and past questions for better performance in future examinations.

### SOLUTION 4

- (a) The differences between the observation and survey methods of data collection include the following:
  - (i) Observation method is the act of noting, recognising and watching situations or events of interest for the purpose of data collection, whilst the Survey method could use questionnaire, interview and focus group interview to collect data.
  - (ii) Observation method may not require active interaction between the respondents and the observer while survey method may require active interaction between the researcher and the respondents.
  - (iii) Under the observation method, participants may not be required to fill structured questionnaire while the survey method may require the respondent to fill structured and unstructured questionnaire. This makes the respondents to be restricted to certain options or opinions.

## PATHFINDER

- (iv) Under the observation method, the observer usually experiences a condition where one's reasoning is blinded by a preconceived idea while survey method is free from this condition.
  - (v) Data collected under the observation method are more difficult to score or analyse quantitatively than those collected through survey method.
  - (vi) Observation methods are more susceptible to bias than the survey methods.
- (b) Factors that affect the choice of participants in an experimental design includes
- (i) **Objectives of the study:**  
The objectives of the study which may include the research questions to answer and the hypothesis to test will determine the types and nature of participants to choose for the experimental design.
  - (ii) **The study population size:**  
The size of the population determines the number of the participants (sample size) of the experiment design. The larger the population size, the larger the sample size, and vice versa.
  - (i) **The shared characteristics of participants:**  
The features or characteristics of individuals' elements or objects in the population will determine the choice of participants. These characteristics could be homogeneous or heterogeneous. This helps in selecting representative participants.
  - (ii) **The number of groups involved in the study:**  
The more the number of groups and their characteristics either homogenous or heterogeneous could affect the choice of participants.
  - (v) **The study setting:**  
The study setting such as laboratory and field will influence the choice of participants. Some participants may not be suitable for laboratory or field experiment and this can influence the choice of participants.

## PATHFINDER

(vi) **The scope of the study:**

The scope of the study is the geographical area covered, period and the subject matter. Therefore the scope can influence the choice of participants.

### EXAMINERS' REPORT

The question tests candidates' understanding of data collection methods particularly the distinction between observation and survey methods of data collection. It also tests their knowledge of the factors affecting the choice of participants in an experimental design.

Above 85% of the candidates attempted the question. The performance was poor as about 30% scored 40% and above of the allocated marks.

Candidates' major pitfalls include:

- lack of adequate understanding of the question;
- Wrong interpretation of the demand of the (b) part of the question;
- Inability to differentiate between observation and survey methods of data collection;
- Inability to organise their points as a result of poor expression.

Candidates should always endeavour to understand the demand(s) of a question before attempting it.

### SOLUTION 5

The classification of research by method in behavioural sciences include:

(i) **Descriptive Research:**

This research entails the assessment and description of certain events or situations using some attributes, properties or characteristics. Descriptive research helps to explain relationship between variables, testing of hypothesis and development of generalization of principles or theories that have universal validity.

## PATHFINDER

(ii) **Survey Research:**

The survey research method investigates problems which are usually viewed with large population or studying the samples from the population so as to estimate the population parameters. It takes a critical examination of the events with the intent of providing the information about the condition of such situation. Survey research method uses research instruments like questionnaire, interview and observations for data collection. Survey research can be quantitative or qualitative.

(iii) **Historical Research:**

This research method takes a critical and systematic examination of the past events in order to understand the present and predict the future or occurrence of such events. The major feature of historical research is the records of dates of events and their possible influence of certain phenomena. The findings and conclusions could be subject to the researcher's opinion.

(iv) **Ex-post-facto Research:**

This is also known as causal comparative research which determines the cause and effect of an event. The Ex-post-facto research establishes relationship between cause and effect of an event by examining the conditions that are traceable to the probable causal factor of the event being studied. In ex-post-facto research, the researcher has no control of the variables because they are already in existence. However, the researcher can carry out further investigation into the effect and determine the causes of the events.

The major characteristic of this type of research is that it specifies the period as well as the population group to be studied.

(v) **Case-Study Research:**

This research uses a particular event or situation to study the population of interest. In the investigation process, the time frame or period must be clearly defined and the conclusion drawn from the particular event or situation is used to generalise or estimate the behaviour of the population.

The major characteristic of case-study research is the specification of the period of study as well as the population group to be studied.

## PATHFINDER

(vi) **Correlational Research:**

This is a research study that seeks to establish relationship between given variables and the type of relationship that exists between them. In the process of carrying out a correlational research, the researcher could specify a model relating the given variables. The relationship established can be used for prediction of future values of a given variable. Correlational research could be quantitative or qualitative.

(vii) **Experimental Research:**

This type of research investigates the possible cause-and-effect relationship between two or more groups. The major feature of this research is that it has a control or manipulating group. The effect of manipulation is achieved by using one or more descriptive methods. This is further achieved by exposing the experimental group (the group to be studied) to one or more treatments and comparing the result with the control group (the group that does not receive any treatment).

### EXAMINERS' REPORT

The question tests candidates' understanding of the basic classification of research methodology. About 80% of the candidates attempted the question. About 52% of this number of candidates who attempted the question scored 50% and above of the allocated marks.

The major pitfall of the candidates was their inability to explain clearly the different types of research methods.

Candidates should learn more about the classification of research methods in order to be able to differentiate between the different types, their uses and applications.

### SOLUTION 6

- (a) (i) Internal validity is the ability of a research design to adequately test the given hypothesis. Essentially, internal validity is the ability of a design to test the hypothesis that it was designed to test.



## PATHFINDER

(iii) Factors affecting internal validity are tabulated below

Factors	Descriptions
History	Specific events other than the treatment that occur between observations.
Maturation	Performance changes due to age or fatigue confound the effect of the treatment.
Testing	Testing prior to the treatment changes how subjects respond in post-treatment testing.
Instrumentation	Unobserved changes in observer criteria or instrument calibration confound the effect of the treatment.
Experimental mortality	Differential loss of subjects from the groups of a study results in non-equivalent groups.
Biased selection of subjects	Group of subjects exposed to different treatments are not equivalent prior to treatment.

(b) (i) A study has external validity to the degree that its result can be extended beyond the limited research setting and sample in which they were obtained. The idea seems to be that all studies should be conducted in such a way that the findings can be generalised immediately to real-world situations and to larger populations.

**b(ii) Factors affecting external validity are tabulated below**

Factors	Descriptions
Reactive testing	Occurs when a pretest affects participants' reaction to an experimental variable, making those participants' responses unrepresentative of the general population.

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## PATHFINDER

- **Criterion-related validity:**  
This reflects how adequately a test score can be used to infer an individual value of “criterion” measure. To determine the test’s criterion-related validity, you compare the value inferred from the test to the criterion values actually observed.
- **Construct validity:**  
This applies when a test is designed to measure a “construct”, which is a variable not directly observable, that has been developed to explain behaviour on the basis of some theory.

### EXAMINERS’ REPORT

The question tests candidates’ understanding of the concept of validity of measurement instrument in research.

About 75% of the candidates attempted the question. Out of this number, about 45% scored 50% and above of the allocated marks.

Candidates’ major pitfall was their inadequate knowledge of the concept of validity. For candidates to perform better in subsequent examinations, they should

- Learn the concept of validity
- Make use of ICAN study pack and Pathfinders.