THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

PATHFINDER

NOVEMBER INTERMEDIATE EXAMINATION

Question Papers

Suggested Solutions

Plus

Examiners’ Reports
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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SECTION A: Attempt all questions

PART I: MULTIPLE-CHOICE QUESTIONS (20 Marks)

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

1. Which ONE of the following is used for differentiating cost behaviours?
   A. Budgeting and Standard Costing
   B. Job costing
   C. Standard Marginal Costing
   D. Process costing
   E. Marginal costing

2. Which of the following is NOT a functional classification of cost?
   A. Selling and distribution cost
   B. Semi-fixed cost
   C. Research and development cost
   D. Production cost
   E. Administration cost

3. Where labour is regarded as principal budget factor, it means labour
   A. will determine cash available
   B. and sales are competing.
   C. is in short supply.
   D. is the largest item in the budget.
   E. hours budgeted are too high.
4. In a cost accounting system, prime cost is
   A. Indirect costs in operating a product
   B. Production overhead cost
   C. All costs incurred in the production of an item
   D. Material cost of a product
   E. Total of direct costs

5. Which of the following is NOT a store department?
   A. Main store for material
   B. Tools store under planning department
   C. Finished goods store
   D. Part finished goods store
   E. Consumable store

6. Which of the following is the primary objective of Total Quality Management (TQM)?
   A. Satisfying customer requirement
   B. Improving the profit of the company
   C. Meeting management goals
   D. Meeting shareholders’ dividend goals
   E. Meeting budgetary targets

7. Bus Stat Ltd purchased 6,850 kg. of material at a total cost of ₦21,920. The material price variance was ₦1,370 favourable. The standard price per kg. is
   A. ₦3.00
   B. ₦3.45
   C. ₦3.40
   D. ₦3.20
   E. ₦3.25
8. From the following data, calculate the break-even sales volume (in Naira). Forecast sales N120,000, Variable Costs N80,000, Fixed Costs N35,500.

A. N106,000
B. N106,250
C. N105,500
D. N106,510
E. N106,100

9. A supervisor’s salary of N200,000 per month in a factory in Akwa Ibom is an example of a

A. Mixed cost
B. Free trade zone cost
C. Step cost
D. Variable cost
E. Fixed cost

10. An equipment lease that specifies a payment of N100,000 per month plus N100 per machine hour used is an example of a

A. Current cost
B. Mixed cost
C. Total cost
D. Fixed cost
E. Direct cost

11. A company needs to produce 340 litres of Chemical X. There is a normal loss of 10% of the material input into the process. During a given month, the company produced 340 litres of good production, although there was an abnormal loss of 5% of the material input into the process.

How many litres of material were input into the process during the month?

A. 387 litres
B. 394 litres
C. 450 litres
D. 391 litres
E. 400 litres
12. In a particular process, the input for the period was 2,000 units. There were no inventories at the beginning or end of the process. Normal loss is 5% of input. In which of the following circumstances is there an abnormal gain?

(i) Actual output = 1,800 units
(ii) Actual output = 1,950 units
(iii) Actual output = 2,000 units

A. (i) only
B. (ii) only
C. (i) and (ii)
D. (i), (ii) and (iii)
E. (ii) and (iii)

13. The difference between the latest allowable time and earliest expected time for an activity is called

A. Forward pass
B. Optimistic time
C. Pessimistic time
D. Float
E. Critical time

14. The demand function is given by \( P = 50x - x^2 \), find the elasticity of demand at \( x = 2 \).

A. 1.04
B. 1.00
C. 0.96
D. 0.90
E. 0.10

15. If four coins are tossed together, find the probability of obtaining four tails.

A. 0.5
B. 0.25
C. 0.1875
D. 0.125
E. 0.0625
16. What type of coefficient matrix will not make solution to a set of linear equations possible?

A. Diagonal matrix  
B. Square matrix  
C. Triangular matrix  
D. Singular matrix  
E. Symmetric matrix

17. A feasibility region in a linear programming is relevant in

A. The formulation of constraints  
B. The choice of slack variables  
C. The formulation of the objective function  
D. Graphical method of solution  
E. Simplex method of solution

18. There are 600 men in a club. 50 of them play Darts game only while 80 play Darts game and Lawn Tennis. If half of the men in the club do not play either game, how many of the men play Lawn Tennis only?

A. 300  
B. 250  
C. 200  
D. 190  
E. 170

19. The number of stocks (in millions) of XYZ Company for 8 months is given in the table below:

<table>
<thead>
<tr>
<th>Month</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of stocks</td>
<td>15</td>
<td>7</td>
<td>13</td>
<td>8</td>
<td>5</td>
<td>12</td>
<td>10</td>
<td>14</td>
</tr>
</tbody>
</table>

If the quantity relative index for the month of April is 100%, then the quantity relative index for the month of June is

A. 150%  
B. 120%  
C. 108%
20. A policy where an item is replaced immediately it fails is known as

A. Individual policy
B. Group policy
C. Ordinary policy
D. Objective policy
E. Special policy

PART II: SHORT-ANSWER QUESTIONS (20 Marks)

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

1. Small groups of related manufacturing processes organised in clusters to assemble parts of finished products are called __________________________.

2. The sequence of activities within the firm that begins with research and development, followed by design, manufacturing, marketing/distribution and customer service is called __________________________.

3. A method for analyzing how operating decisions and marketing decisions affect net income, based on an understanding of the relationship between variable costs, fixed costs, unit selling price, and the output level is called __________________________.

4. The standard price of a product is N20. If the standard quantity required for production was 53,000 kg and there was a usage variance of N40,000 adverse, what was the actual quantity used?

5. A planned positive approach to reducing expenditure is known as ________________.

6. A method of budgeting where each cost element needs to be justified as though the activities to which the budget relates were being undertaken for the first time is regarded as __________________________.
7. An equipment was purchased many years ago for N2,000,000. The book value is N600,000. The scrap value is N70,000. What is the sunk cost?

8. The rate of change in the work force of an organization is referred to as ............

9. Use the following information to compute the variable cost per unit. The total cost and production levels for two periods are given as follows:

<table>
<thead>
<tr>
<th>Period 1</th>
<th>Period 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cost</td>
<td>N60,000</td>
</tr>
<tr>
<td>Production units</td>
<td>8,000</td>
</tr>
</tbody>
</table>

10. The amount held back by the contractee after the completion of a contract is called....................

11. The difference between the actual number of working hours and the maximum possible number of working hours in a budget period is called......................

12. Physical stock plus outstanding replenishment orders less unfulfilled requirements or allocation is called............................

13. Float is always associated with.......................activities

14. The maximum profit is obtained when the difference between marginal revenue and marginal cost is..............................

15. In a survey of household effects, 45% of the tenants have satellite dish units while 65% have DVD players. The probability that a tenant chosen at random had either a satellite dish unit or a DVD player is.............................

16. If \( P = \begin{pmatrix} 5 & 6 \\ 8 & 9 \end{pmatrix} \), \( Q = \begin{pmatrix} 2 & 3 \\ 1 & 2 \end{pmatrix} \) and \( P+Q = \begin{pmatrix} x+y & 9 \\ 9 & x+2y \end{pmatrix} \) then \( 2x + 3y \) equals......................

17. When a resource in linear programming problem is under-utilised, the amount involved is called .........................
18. In an Euler–Venn diagram represents the universal set while represents any other set.

19. The unit prices of a bar soap in March 2006 and March 2008 are given as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit price</td>
<td>N140</td>
<td>N175</td>
</tr>
</tbody>
</table>

The price relative for the soap in March 2008 with March 2006 as the base month was .

20. Replacement of components as they fail is called maintenance.

SECTION B  ATTEMPT ANY FOUR QUESTIONS OUT OF WHICH AT LEAST TWO MUST COME FROM EACH SUBSECTION (60 Marks)

SUB-SECTION I: COST ACCOUNTING  ATTEMPT ANY TWO QUESTIONS

QUESTION 1

a. Define briefly and explain the following with examples:

(i) Job costing
(ii) Service costing
(iii) Joint products
(iv) By-products (8 Marks)
b. The Holdings Construction Company Limited began to work on July 1 on a sewage contract awarded by Next Level Company Limited valued at N14,000,000. The retention is 10%. As at December 15, the certified work done (gross) amounted to N6,400,000. The following information regarding the contract is available:

- Materials delivered direct to contract: N1,600,000
- Materials issued from stores: N240,000
- Wages: N3,000,000
- Apportionment of overhead to Dec. 31: N500,000
- Plant sent to contract at valuation: N27,000,000
- Plant returned from contract on Nov. 30 at valuation: N17,800,000
- Plant remaining on contract at Dec. 31 at valuation: N8,600,000
- Accrued wages to Dec. 31: N130,000
- Work done not yet certified at Dec. 31, at cost: N480,000
- Materials on site at Dec. 31: N350,000

You are required to prepare the contract account and recommend the profit to be recognised at Dec. 31 (7 marks)

(Total 15 marks)

**QUESTION 2**

Egbuyah Limited, a multi product company is in the process of preparing its cash budget for the next quarter starting in April. Budgeted sales and purchases are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Sales</th>
<th>Purchases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N'000</td>
<td>N'000</td>
</tr>
<tr>
<td>February</td>
<td>60,000</td>
<td>37,200</td>
</tr>
<tr>
<td>March</td>
<td>75,000</td>
<td>46,500</td>
</tr>
<tr>
<td>April</td>
<td>65,000</td>
<td>40,300</td>
</tr>
<tr>
<td>May</td>
<td>55,000</td>
<td>34,100</td>
</tr>
<tr>
<td>June</td>
<td>70,000</td>
<td>43,400</td>
</tr>
<tr>
<td>July</td>
<td>75,000</td>
<td>46,000</td>
</tr>
</tbody>
</table>
Sales are received 10% in cash at the point of sale, 65% in the month following and 25% in the month after. Sales of scrap constitute other income and are estimated at 5% of preceding month’s sales. Creditors for purchases are paid 60% in the month of purchase and 40% in the month following. Other monthly cash expenses estimated to be the same for the next three months are:

N’000
Fuel and oil 1,750
Office expenses 800
Transport and travels 300
Salaries 2,650
Telephone 450
Others 1,000

According to the policy of the company, depreciation on fixed assets is estimated at N6,000 per month.

Payment for the purchase of a new fixed asset costing N70 million is to be effected unfailingly in the months of May and June on equal instalmental basis.

Ignore opening cash balance.

You are required to:

(a) Prepare the cash budget of Egbuyah Ltd for the quarter April to June. (13 marks)
(b) Advise the management based on your findings in (a) above. (2 marks)
Show all workings. (Total 15 marks)
QUESTION 3

XYZ Limited manufactured 20,000 units of a product in a period and 2,000 units were carried forward as stock to the next period. Costs and revenues were:

<table>
<thead>
<tr>
<th></th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>18,000,000</td>
</tr>
<tr>
<td>Production costs:</td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>7,000,000</td>
</tr>
<tr>
<td>Fixed</td>
<td>3,000,000</td>
</tr>
<tr>
<td>Administrative and selling:</td>
<td></td>
</tr>
<tr>
<td>Overheads (fixed)</td>
<td>5,000,000</td>
</tr>
</tbody>
</table>

You are required to:

(a) (i) Prepare operating statements based upon marginal costing and absorption costing principles. (6 Marks)

(ii) Compute the closing stock valuation using:
- Absorption costing
- Marginal costing (3 Marks)

(b) Compare and contrast marginal costing method with absorption costing method. (4 Marks)

(c) Give the TWO main uses of marginal costing. (2 Marks)
   (Total 15 marks)

QUESTION 4

Activity Based Costing (ABC) is considered to be the most appropriate means of absorbing overheads for production costs.

(a) Describe THREE benefits which might be adduced to the introduction of an Activity Based Costing System. (3 Marks)

(b) State TWO limitations of this system. (2 Marks)
(c) Describe **TWO** circumstances in which the Activity Based Costing would be a more appropriate approach to product costing than traditional procedures to overhead absorption. (4 Marks)

(d) The budgeted production overhead for the coming period of XYZ Limited’s production department has been analysed as follows:

<table>
<thead>
<tr>
<th>Cost Pool</th>
<th>Cost Driver</th>
<th>Budgeted driver activity for the period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rents, rates, power and depreciation</td>
<td>Machine hours</td>
<td>1,640</td>
</tr>
<tr>
<td>Set-up costs</td>
<td>Number of production runs</td>
<td>30</td>
</tr>
<tr>
<td>Goods inwards</td>
<td>Number of requisitions</td>
<td>120</td>
</tr>
<tr>
<td>Finished goods inspection costs</td>
<td>Number of production runs</td>
<td>30</td>
</tr>
<tr>
<td>Despatch costs</td>
<td>Number of sales orders</td>
<td>60</td>
</tr>
</tbody>
</table>

You also ascertained that the cost drivers for the overhead activities in order to make costing reflect the usage of resources are as follows:

You are required to:

Calculate the budgeted cost driver rate for each overhead activity. (6 Marks)

(Total 15 Marks)
SUB-SECTION II: QUANTITATIVE TECHNIQUES ATTEMPT ANY TWO QUESTIONS

QUESTION 5

A random experiment consists of tossing two coins and a die together.

(a) Draw up a table of the sample space for the experiment. (7 Marks)

(b) i. The Board of Directors of a bank decides to set up a new branch if at least a tail and an odd number are obtained. Determine the probability that a new branch of the bank would be set up. (3 Marks)

(ii) The Board also decides that the branch set up will be headed by an accountant provided a head and an even number show up. What is the probability that an accountant would not head the branch? (5 Marks)

(Total 15 marks)

QUESTION 6

A manufacturing company produces three types of items A, B, and C using three different plants I, and II and III. The daily capacities (in hundreds of unit) and the total production cost (₦) of the three plants are as follows:

<table>
<thead>
<tr>
<th>Plants</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Total Production Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>₦22,000</td>
</tr>
<tr>
<td>II</td>
<td>1</td>
<td>6</td>
<td>4</td>
<td>₦20,000</td>
</tr>
<tr>
<td>III</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>₦10,000</td>
</tr>
</tbody>
</table>

The company’s objective is to fix a selling price for each type of item in order to break even.

You are required to:

(a) Formulate relevant equations for the problem. (4 marks)

(b) Use Cramer’s rule to obtain the selling price for each type of item in order to meet the company’s objective. (11 marks)

(Total 15 marks)
QUESTION 7

AWSOL engineering company uses 1,000 original metal cutting tools in its construction at any given time. The actual cost of each tool is ₦1,500. The cost of replacing an individual tool is ₦4,800 while the cost for group replacement is ₦2,000. The table below shows the tool life relating to normal load and operating conditions if the entire 1,000 tools are replaced at once.

<table>
<thead>
<tr>
<th>Month after replacement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative percentage (%) of tools that failed by the end of the month</td>
<td>10</td>
<td>25</td>
<td>50</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>

You are required to:

(a) Calculate:

(i) The average lifetime of the tool and hence the average replacement per month

(ii) The cost of individual replacement. (7 Marks)

(b) Determine:

(i) The number of failures in each month, to the nearest whole number, given that the failures are replaced and hence determine the cost of group replacement

(ii) Average monthly cost. (7 Marks)

(c) Recommend the replacement policy based on your results in (a) and (b) above. (1 mark)

(Total 15 marks)
SOLUTIONS TO SECTION A

PART 1 - MULTIPLE-CHOICE QUESTIONS

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

Q7. Actual cost = ₦21,920
   .. Standard Cost = ₦21,920 + ₦1,370 (Fav.)
   = ₦23,290

   Std price per kg = \[
   \frac{23,290}{6,850}
   \]
   = ₦3.40 (Option C)

Q8. BEP (₦) = \[
\frac{\text{Fixed Cost}}{\text{Contribution Margin Ratio}}
\]

\[
\text{CMR} = \frac{\text{Total Sales} - \text{Total Variable Cost}}{\text{Total Sales}}
\]

\[
\text{CMR} = \frac{120,000 - 80,000}{120,000} \times 100%
\]

= 33.33%

\[
\text{BEP} = \frac{₦35,500}{₦33.33%}
\]

= ₦106,510 (Option D)

Q11. Normal Loss is 10%
     Abnormal Loss is 5%
     Total Loss 15%

     Good production 85%
                   100%

     85% = 340 litres

     100% = 400 litres (Option E)
Q12. Input is 2,000 units
Normal loss
5% x 2,000 = 100 units
Expected production = 1,900 units

Actual Output 1800 Abnormal Loss 100
Actual output 1950 Abnormal Gain 50
Actual output 2000 Abnormal Gain 100

(Question E)

Q14. \( p = 50x - x^2 \)
\[
\frac{dp}{dx} = 50 - 2x
\]

Elasticity of demand \((\text{ed})\)

\[
\text{ed} = \left| \begin{array}{cc}
-1 & \frac{p}{q} \\
\frac{dp}{dq} & q
\end{array} \right|
\]

\[
\text{ed} = \left| \begin{array}{cc}
-1 & \frac{50 - x^2}{x} \\
50 - 2x & x
\end{array} \right|
\]

\[
= \left| \begin{array}{c}
(50 - x) \\
50 - 2x
\end{array} \right|
\]

at \( x = 2 \), \( \text{ed} = \frac{50 - 2}{50 - 2(2)} = 1.04 \) (option B)

Q15. \( \text{Pr (4 tails)} = \left( \frac{1}{2} \right)^4 = 0.0625 \) (option E)
Q18.  D _Darts, L _Lawn Tennis

\[ n(U) = 600 \]

.. LT only is
\[ 300 - 50 - 80 = 170 \]
i.e \[ 600 - 300 - 50 - 80 = 170 \]

Q19.  Since the quantity relative index for April = 100%
then April is the base month
.. quantity relative index for June is
\[ \frac{12 \times 100}{8} = 150\% \] (option A)

EXAMINERS’ REPORT

The questions cover a sizeable proportion of the syllabus and were attempted by all
the candidates who sat for the examination. Performance was fairly good, as about
half of the candidates scored 40% and above.

Improvement will come through wider coverage of the syllabus for future
examinations.

PART II - SHORT-ANSWER QUESTIONS

1.  Work cells
2.  Life cycle
3.  Cost-Volume-Profit Analysis (CVP Analysis)
4.  55,000 kg
5.  Cost reduction
6.  Zero-based budgeting
7. ₦1,930,000
8. Labour turnover
9. ₦3 per unit
10. Retention money
11. Standard capacity usage variance
12. Free stock balance
13. Non-critical
14. Zero
15. 0.8075
16. 18
17. Slack variables or unused capacity
18. Rectangle, circle (in that order)
19. 125%
20. Remedial or Individual

Workings

(4) Let x be actual (act) quantity.

\[
(\text{std price} \times \text{std qty} - \text{act. qty} \times \text{std}) = \text{Usage variance}
\]

\[
[20 \times 53,000 - x (20)] = -40,000
\]

\[
1,060,000 - x = -40,000
\]

-20x = 1,060,000 - 40,000
-20x = 1,100,000

x = \frac{1,100,000}{20}

\text{Qty} = 55,000 \text{ kg}

(7) ₦2,000,000 - ₦70,000 = ₦1,930,000
(9) \[
\begin{align*}
\text{P2} & \quad 90,000 \\
\text{P1} & \quad 18,000 \\
\hline
60,000 & = 8,000 \\
30,000 & = 10,000 \\
\hline
30,000 & = N3 \\
10,000 & = N3
\end{align*}
\]

(15) \[P(\text{AUB}) = P(\text{A}) + P(\text{B}) - P(\text{AAB}) = 0.45 + 0.65 - (0.45)(0.65) = 0.8075\]

(16) \[P + Q = \left(\begin{array}{cc} 5 & 6 \\ 8 & 9 \end{array}\right) + \left(\begin{array}{cc} 2 & 3 \\ 1 & 2 \end{array}\right) = \left(\begin{array}{cc} 7 & 9 \\ 9 & 11 \end{array}\right)\]

i.e. \[\begin{align*}
x+y & = 9 \\
x+2y & = 11
\end{align*}\]

\[\therefore x+y = 7 \quad (i)\]

\[\begin{align*}
x + 2y & = 11 \quad (ii) \\
y & = 4
\end{align*}\]

Using (iii) in (i) \[\rightarrow x = 7\cdot y = 7\cdot 4 = 3\]

\[\therefore 2x + 3y = 2(3) = 3(4) = 18\]

(19) Price relative for 2008 = \[\frac{175}{140} \times \frac{100}{1} = 125\%\]

EXAMINERS’ REPORT

The questions cover a good proportion of the syllabus.

All the candidates attempted the questions. Performance was below average as about 70% of the candidates scored 40% and below. The major pitfall was in the candidates’ inability to demonstrate a good knowledge of CQT terminologies.
Candidates are advised to

- extend and expand their coverage of the syllabus; and
- acquaint themselves with current and up-to-date texts including the Study Packs.

SOLUTIONS TO SECTION B

QUESTION 1

(a)i. Job Costing

Job costing is the method used for two types of work.

- Contracts such as those undertaken by builders, civil engineering contractors, ship builders etc
- Job orders undertaken in factories and workshops.

The principle is the same in the examples cited above but the difference lies in the nature of work involved. In one case, there are a few large contracts; whereas in the other there are likely to be numerous smaller jobs.

(ii) Service Costing

Service costing is applied to the cost of operating services such as those provided by hospitals, railways, airlines, buses, goods haulage, canteens etc.

The precise headings of the accounts used to record the expenditure will vary with the kind of undertaking, but the methods of accounting used will be similar to unit costing.

Under this method, there is the need to determine the cost of operating a service. The units to use when goods are being manufactured are simple enough but the units of measurement to use to express the cost of service are somewhat more difficult and open to various decisions.
(iii) **Joint Products**

When individual products in a group are simultaneously produced, with each product having a significant relative sales value, the outputs are usually called joint products. The products are not identifiable as different individual products until a certain stage of production known as the split-off point. All costs incurred prior to the split-off point are called joint-product cost. Examples include chemicals, petroleum products, soap making, flour milling etc.

(iv) **By-Products**

By-products are products that have minor sales value as compared with that of the major or chief products e.g. mill ends of the cloth and carpets. The net realizable value is treated as a deduction from the main product.

(b) **Holdings Construction Limited**

<table>
<thead>
<tr>
<th></th>
<th>Contract Account</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Material direct</td>
<td>1,600,000</td>
<td>Plant returned</td>
<td>17,800,000</td>
</tr>
<tr>
<td>Material ex-store</td>
<td>240,000</td>
<td>Plant on site c/d</td>
<td>8,600,000</td>
</tr>
<tr>
<td>Wages</td>
<td>3,000,000</td>
<td>Material on site c/d</td>
<td>350,000</td>
</tr>
<tr>
<td>Overhead</td>
<td>500,000</td>
<td>Work in Progress at</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dec. 31st @ cost c/d</td>
<td>5,720,000</td>
</tr>
<tr>
<td>Plant</td>
<td>27,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accrued waged c/d</td>
<td>130,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>€</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>32,470,000</td>
<td>32,470,000</td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bal b/d</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work in Progress</td>
<td>5,720,000</td>
<td>Accrued wages</td>
</tr>
<tr>
<td>Plant on site</td>
<td>8,600,000</td>
<td></td>
</tr>
<tr>
<td>Materials on site</td>
<td>350,000</td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contract – Certificate Account</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance c/d</td>
<td>6,880,000</td>
<td>Certified Work</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Work done not yet certified @ cost</td>
</tr>
<tr>
<td></td>
<td>6,880,000</td>
<td></td>
</tr>
</tbody>
</table>
Contract – Profit Provision Account

\[
\begin{array}{ccc}
\text{N} & \text{N} \\
\text{Transfer of contract} & \text{Notional profit @ Dec. 31} & - \\
\text{Profit & Loss A/c} & 696,000 & 6,880,000 \\
& & \text{Certificates} \\
& & (5,720,000) \\
\text{Balance c/f} & 464,000 & 1,160,000 \\
\hline
1,160,000 & \text{Balance b/d} & 1,160,000 \\
\end{array}
\]

Profit taken = N1,160,000 \times \frac{2}{3} \times 90\% = N696,000

EXAMINERS’ REPORT

The question tests candidates understanding and appreciation of the requirements of job and contract costing.

The question was attempted by most of the candidates. Performance was very poor as 85% of the candidates who attempted the question scored less than 50% of the marks allocated.

Common pitfalls are as follows:

- Candidates were generally unable to compute the notional profit.
- Presentation of a Contract Account was badly demonstrated.
- Candidates showed poor understanding of the theoretical requirement.

It is recommended for future examinations that candidates should:

- improve on their preparation;
- study, master and understand the concept of notional profit in Contract Costing; and
- familiarise themselves with current and up-to-date texts while preparing for the examination.
### QUESTION 2

**EGBUYAH LIMITED**  
**CASH BUDGET FOR THE QUARTER APRIL TO JUNE**

<table>
<thead>
<tr>
<th></th>
<th>April</th>
<th>May</th>
<th>June</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inflows:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>70,250</td>
<td>66,500</td>
<td>59,000</td>
</tr>
<tr>
<td>Other Income</td>
<td>3,750</td>
<td>3,250</td>
<td>2,750</td>
</tr>
<tr>
<td><strong>Total (A)</strong></td>
<td>74,000</td>
<td>69,750</td>
<td>61,750</td>
</tr>
<tr>
<td><strong>Outflows:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchases</td>
<td>42,780</td>
<td>36,580</td>
<td>39,680</td>
</tr>
<tr>
<td>Fuel &amp; Oil</td>
<td>1,750</td>
<td>1,750</td>
<td>1,750</td>
</tr>
<tr>
<td>Office Expenses</td>
<td>800</td>
<td>800</td>
<td>800</td>
</tr>
<tr>
<td>Transport &amp; Travels</td>
<td>300</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Salaries</td>
<td>2,650</td>
<td>2,650</td>
<td>2,650</td>
</tr>
<tr>
<td>Telephone</td>
<td>450</td>
<td>450</td>
<td>450</td>
</tr>
<tr>
<td>Others</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Fixed Assets</td>
<td>-</td>
<td>35,000</td>
<td>35,000</td>
</tr>
<tr>
<td><strong>Total (B)</strong></td>
<td>49,730</td>
<td>78,530</td>
<td>81,630</td>
</tr>
<tr>
<td><strong>Bal b/f</strong></td>
<td>-</td>
<td>24,270</td>
<td>15,490</td>
</tr>
<tr>
<td><strong>Surplus/(Deficit) (A – B)</strong></td>
<td>24,270</td>
<td>(8,780)</td>
<td>(19,880)</td>
</tr>
<tr>
<td><strong>Bal c/f</strong></td>
<td>24,270</td>
<td>15,490</td>
<td>(4,390)</td>
</tr>
</tbody>
</table>
WORKINGS NOTES

1. **Computation of Cash Receipt from Sales**

<table>
<thead>
<tr>
<th></th>
<th>Feb</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>₦60,000</td>
<td>₦75,000</td>
<td>₦65,000</td>
<td>₦55,000</td>
<td>₦70,000</td>
<td>₦75,000</td>
</tr>
<tr>
<td>Cash Receipt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Receipt (10%)</td>
<td>₦6,000</td>
<td>₦7,500</td>
<td>₦6,500</td>
<td>₦5,500</td>
<td>₦7,000</td>
<td>₦7,500</td>
</tr>
<tr>
<td>2nd Receipt (65%)</td>
<td>-</td>
<td>₦39,000</td>
<td>₦48,750</td>
<td>₦42,250</td>
<td>₦35,750</td>
<td>₦45,500</td>
</tr>
<tr>
<td>Final Receipt (25%)</td>
<td>-</td>
<td>-</td>
<td>₦15,000</td>
<td>₦18,750</td>
<td>₦16,250</td>
<td>₦13,750</td>
</tr>
<tr>
<td>Total Receipt</td>
<td>₦60,000</td>
<td>₦46,500</td>
<td>₦70,250</td>
<td>₦66,500</td>
<td>₦59,000</td>
<td>₦66,750</td>
</tr>
</tbody>
</table>

2. **Cash Receipt from Scraps**

<table>
<thead>
<tr>
<th></th>
<th>Feb</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>₦60,000</td>
<td>₦75,000</td>
<td>₦65,000</td>
<td>₦55,000</td>
<td>₦70,000</td>
<td>₦75,000</td>
</tr>
<tr>
<td>Cash Receipt (5%)</td>
<td>-</td>
<td>-</td>
<td>₦3,000</td>
<td>₦3,750</td>
<td>₦3,250</td>
<td>₦2,750</td>
</tr>
</tbody>
</table>

3. **Computation of Cash Payment to Creditors for Purchases**

<table>
<thead>
<tr>
<th></th>
<th>Feb</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchases</td>
<td>₦37,200</td>
<td>₦46,500</td>
<td>₦40,300</td>
<td>₦34,100</td>
<td>₦43,400</td>
<td>₦46,000</td>
</tr>
<tr>
<td>Cash Payment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Payment (60%)</td>
<td>₦22,320</td>
<td>₦27,900</td>
<td>₦24,180</td>
<td>₦20,460</td>
<td>₦26,040</td>
<td>₦27,600</td>
</tr>
<tr>
<td>Final Payment (40%)</td>
<td>-</td>
<td>₦14,880</td>
<td>₦18,600</td>
<td>₦16,120</td>
<td>₦13,640</td>
<td>₦17,360</td>
</tr>
<tr>
<td>Total Payment</td>
<td>₦22,320</td>
<td>₦42,780</td>
<td>₦42,780</td>
<td>₦36,580</td>
<td>₦39,680</td>
<td>₦44,960</td>
</tr>
</tbody>
</table>

b) **Recommendation**

The company is advised to source for additional cash for the month of June because there will be cash shortage during the month.

EXAMINERS’ REPORT

The question tests candidates’ ability to prepare Cash Budget and to discuss the results thereof.
The topic was fairly popular among candidates as most of them attempted this question.

Performance was fairly good. About half of the candidates who attempted the question scored 50% and above. Major pitfalls noticed included:

- Candidates’ inability to determine the correct monthly balances;
- Many candidates did not understand the implication of the monthly balances and could therefore not interpret correctly;
- Advice to management was faulty in most cases; and
- Faulty presentation and arithmetic.

It is recommended for future examinations that candidates

- should endeavour to cover the contents of the syllabus;
- improve on presentation and arithmetic; and
- use good quality texts including the Study Packs

**QUESTION 3**

**XYZ LIMITED**

(a)(i) Operating Statement

- **Marginal Costing**:

<table>
<thead>
<tr>
<th>€’000</th>
<th>€’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>18,000</td>
</tr>
</tbody>
</table>

Less: Marginal Cost 7,000
Closing Stock (700)
Marginal cost of sales 6,300

Contribution 11,700

Less: Fixed costs:
- Production 3,000
- Admin & Selling o/h 5,000 (8,000)

Net Profit 3,700

- **Absorption Costing**:

<table>
<thead>
<tr>
<th>€’000</th>
<th>€’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>18,000</td>
</tr>
</tbody>
</table>
Less: Cost of sales  
Production cost 10,000
Less: Closing stock (1,000) 9,000

Gross Profit 9,000
Less: Admin & Selling o/h 5,000
Net Profit 4,000

(ii) Valuation of closing stock:

**Marginal costing:**

\[
\text{Variable Cost} \times \text{Closing Stock} = \frac{\text{Quantity produced}}{20,000}
\]

\[
= \frac{\text{₦7,000,000} \times 2,000}{20,000} = \text{₦700,000}
\]

**Absorption Costing**

- Total Production Cost \times \text{Closing Stock} = \frac{\text{Quantity Produced}}{20,000}

\[
= \frac{\text{₦7,000,000} + \text{₦3,000,000} \times 2,000}{20,000}
\]

\[= \frac{\text{₦500} \times 2000}{\text{₦1,000,000}}
\]

(b) Absorption Costing, also known as total absorption, is the basis of all financial statements and used for cost ascertainment.

In absorption costing:

- all costs are absorbed into production. It does not distinguish between fixed and variable costs.
- The valuation of stock consequently contains both fixed and variable costs.
In Marginal Costing on the other hand,

- Fixed costs are not absorbed into production. They are treated as operating expenses
- Stocks are valued at prime cost plus variable overheads at the end of the period
- Marginal cost of sales is deducted from sales revenue to arrive at the contribution.

(c) Uses of Marginal Costing:

(i) Used as a basis for providing information to the management for planning and decision-making.
(ii) It is appropriate for short run decisions involving changes in the volume or activity and the resulting cost changes.
(iii) It is used for flexible budgeting
(iv) It is used for transfer pricing

EXAMINERS’ REPORT

The question tests candidates’ understanding of the differences and similarities in Marginal Costing and Absorption Costing.

About 60% of the candidates attempted the question. Performance was fairly good. About half of the candidates scored 50% and above. Common pitfalls by candidates include:

- Difficulty in computing closing stock either for marginal costing or absorption costing;
- Wrong treatment of stock figure in the accounts;
- Arithmetic was poor; and
- Lack of understanding of the two topics.

Candidates are advised to:

- work harder by attempting to solve past questions;
- improve on their presentation; and
- use the right texts including the Study Packs.
QUESTION 4

Activity Based Costing (ABC) has the following benefits:

(a) (i) More realistic product costs are produced especially where support overheads are a significant proportion of total costs.

(ii) By focusing attention on cost-drivers, it will help managers understand and manage overhead costs.

(iii) An understanding of cost driver rate can help in budgeting expenditure.

(iv) ABC concerns itself with all overhead cost and as a consequence, it has proved very useful in service industries.

(v) More overheads can be traced to the cost unit, processes, customers and product cost.

(vi) ABC can help in distinguishing between profitable and unprofitable products and customers.

(vii) ABC system provides information to identify areas where process improvement is needed.

(b) Limitation of ABC system are:

(i) Finding the activity that causes some costs is impracticable therefore, arbitrary allocations are sometimes used.

(ii) It may be too expensive to administer.

(iii) An ABC system is time consuming to develop and implement.

(iv) Many practical problems are unresolved e.g. common costs, cost driver selection, non-humanity of cost driver rates.

(v) Its applicability to companies who used market-based pricing rather than cost-based pricing is questionable.

(c) Application of Activity Based Costing system will be more appropriate where,

(i) overheads form a high proportion of total cost.

(ii) more than one product is made.

(iii) different products result in different levels of activities and resource consumption.
(iv) overhead expenditure is not driven by volume of output, but by the complexity and diversity of operation e.g. banking, airline.

(d) Computation of budgeted cost driver rates:

<table>
<thead>
<tr>
<th>Cost Pool</th>
<th>Amount</th>
<th>Driver</th>
<th>Activity</th>
<th>Driver Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rates, rent etc</td>
<td>26,000</td>
<td>Machine hrs</td>
<td>1640 hrs</td>
<td>15.85 mach. hr</td>
</tr>
<tr>
<td>Set-up cost</td>
<td>15,000</td>
<td>Production runs</td>
<td>30</td>
<td>500/run</td>
</tr>
<tr>
<td>Goods inward</td>
<td>9,600</td>
<td>Requisitions</td>
<td>120</td>
<td>80 per req</td>
</tr>
<tr>
<td>Finished goods insp.</td>
<td>5,250</td>
<td>Production runs</td>
<td>30</td>
<td>115 per run</td>
</tr>
<tr>
<td>Finished goods – desp.</td>
<td>9,750</td>
<td>Sales Order</td>
<td>60</td>
<td>162.50 per order</td>
</tr>
</tbody>
</table>

Driver Rate = $\frac{\text{Amount}}{\text{Driver Activity}}$

e.g. Machine Hour Rate = $\frac{26,000}{1640} = 15.85$

EXAMINERS’ REPORT

The question tests some areas in new developments in Cost Accounting which include Activity Based Costing and Cost Drivers. The topic appears unpopular among candidates as only about 20% of the candidates attempted this question.

Performance was abysmal. Most candidates who attempted this question scored 40% and below. Common pitfalls included:

- Candidates inability to compute Overhead Absorption Rates (OAR); and
- Demonstration of insufficient knowledge of new developments in Cost Accounting.

Recommendations for improved performance include:

- better and improved quality preparation;
- showing more interest in all new developments in Cost Accounting; and
- improvement in tenses.
QUESTION 5

(a) Sample space for 2 coins

<table>
<thead>
<tr>
<th></th>
<th>H</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>HH</td>
<td>HT</td>
</tr>
<tr>
<td>T</td>
<td>TH</td>
<td>TT</td>
</tr>
</tbody>
</table>

Sample space for the experiment

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>HH</td>
<td>HH1</td>
<td>HH2</td>
<td>HH3</td>
<td>HH4</td>
<td>HH5</td>
<td>HH6</td>
</tr>
<tr>
<td>HT</td>
<td>HT1</td>
<td>HT2</td>
<td>HT3</td>
<td>HT4</td>
<td>HT5</td>
<td>HT6</td>
</tr>
<tr>
<td>TH</td>
<td>TH1</td>
<td>TH2</td>
<td>TH3</td>
<td>TH4</td>
<td>TH5</td>
<td>TH6</td>
</tr>
<tr>
<td>TT</td>
<td>TT1</td>
<td>TT2</td>
<td>TT3</td>
<td>TT4</td>
<td>TT5</td>
<td>TT6</td>
</tr>
</tbody>
</table>

(b) Total number of sample points = 24

(i) No of sample points for at least one T and an odd no (1, 3, 5) is 9 B1
\[ \text{Prob of setting up a new branch} = \frac{9}{24} = 0.375 \]

(ii) No of sample points with a head and an even no (2, 4, 6) is 6 B1
\[ \text{Prob. of accountant heading the branch} = \frac{6}{24} = 0.25 \]

Prob. that an accountant does not head the branch = 1 - 0.25 = 0.75 M(A)

EXAMINERS’ REPORT

The question tests candidates’ understanding of the concept of Probability and Random Experiment.

About half of the candidates attempted the question, few of the candidates scored 50% and above.

Candidates’ major pitfall was in their inability to form the sample space.

Candidates are advised to

- cover the syllabus more effectively;
- work through past questions; and
- use the Study Packs.
QUESTION 6

(a) Let a be the selling price for item A
Let b be the selling price for item B
Let c be the selling price for item C

For the company to break even total revenue must be equal to total cost.

i.e. \(4a + 5b + 3c = 22,000\)
\(a + 6b + 4c = 20,000\)
\(2a + 3b + c = 10,000\)

(b) \[
\begin{pmatrix}
4 & 5 & 3 \\
1 & 6 & 4 \\
2 & 3 & 1
\end{pmatrix}
\begin{pmatrix}
a \\
b \\
c
\end{pmatrix} =
\begin{pmatrix}
22,000 \\
20,000 \\
10,000
\end{pmatrix}
\]

\[A \times X = B\]

\[\begin{vmatrix} a \\ b \\ c \end{vmatrix} = \begin{vmatrix} 4 & 5 & 3 \\ 1 & 6 & 4 \\ 2 & 3 & 1 \end{vmatrix} = 4(6 - 12) - (1 - 8) + 3(3 - 12) = -24 + 35 - 27 = -16\]

\[\begin{vmatrix} a \\ b \\ c \end{vmatrix} = \begin{vmatrix} 22000 & 5 & 3 \\ 20000 & 6 & 4 \\ 10000 & 3 & 1 \end{vmatrix} + 3(60000 - 60000) = -32000\]

\[\begin{vmatrix} a \\ b \\ c \end{vmatrix} = \begin{vmatrix} 4 & 22000 & 3 \\ 1 & 20000 & 4 \\ 2 & 10000 & 1 \end{vmatrix} = 4(20000 - 40000) - 22000(1 - 8) + 3(10000 - 40000) = -16000\]

\[\begin{vmatrix} a \\ b \\ c \end{vmatrix} = \begin{vmatrix} 4 & 5 & 22000 \\ 1 & 6 & 20000 \\ 2 & 3 & 10000 \end{vmatrix} = 4(60000 - 60000) - 5(10000 - 40000) + 22000(3 - 12) = -48000\]

\[\frac{a}{A} = \frac{-32000}{-16} = 2000\]
b = \triangle b = \frac{16,000}{-16} = 1000

\triangle A

c = \triangle c = \frac{-48,000}{-16} = 3000

\triangle A

A. = \frac{a}{100} = \text{₦20}

B. = \frac{b}{100} = \text{₦10}

C. = \frac{c}{100} = \text{₦30}

EXAMINERS’ REPORT

The question tests candidates’ understanding of the application of matrices to solve Linear Programming problems. The question was well attempted by candidates.

Performance was average. The common pitfall was candidates’ inability to transform the problem into matrices form; and many candidates used other methods of obtaining selling price instead of the CRAMER’S rule.

It is recommended that candidates should acquaint themselves with relevant texts including the Study Packs.

QUESTION 7

Portion of the tool failing in each month is

Month 1 = 10% = 0.1
Month 2 = (25 – 10)% = 15% = 0.15
Month 3 = (50 – 25)% = 25% = 0.25
Month 4 = (80 – 50)% = 30% = 0.3
Month 5 = (100 – 80)% = 20% = 0.2
The average lifetime of the tool is \( = (1 \times 0.1) + (2 \times 0.15) + (3 \times 0.25) + (4 \times 0.3) + (5 \times 0.2) = 3.35 \) months

(i) The average monthly replacement cost:
\[
\begin{align*}
\text{Average monthly replacement cost} & = \frac{1000}{3.35} \\
& = 298.5079 \\
& = 299
\end{align*}
\]

(ii) Individual replacement cost:
\[
\text{Individual replacement cost} = 4800 \times 299 = 1,435,200 \text{ per month}
\]

(b) Monthly failures:

- Month 1: \(0.1 \times 1000 = 100\)
- Month 2: \((0.15 \times 1000) + (0.1 \times 100) = 160\)
- Month 3: \((0.25 \times 1000) + (0.15 \times 100) + (0.1 \times 160) = 281\)
- Month 4: \((0.3 \times 1000) + (0.25 \times 100) + (0.15 \times 160) + (0.1 \times 281) = 377\)
- Month 5: \((0.2 \times 1000) + (0.3 \times 100) + (0.25 \times 160) + (0.15 \times 281) + (0.1 \times 377) = 350\)

To the nearest whole number:

- Month 1 = 100; month 2 = 160; month 3 = 281
- Month 4 = 377; month 5 = 350

Cost of group replacement:

<table>
<thead>
<tr>
<th>Month</th>
<th>Individual replacement cost (₦)</th>
<th>Cumulative Individual Replacement Cost (₦)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4800 x 100 = 480,000</td>
<td>480,000</td>
</tr>
<tr>
<td>2</td>
<td>4800 x 160 = 768,000</td>
<td>1,248,000</td>
</tr>
<tr>
<td>3</td>
<td>4800 x 281 = 1,348,800</td>
<td>2,596,800</td>
</tr>
<tr>
<td>4</td>
<td>4800 x 377 = 1,809,600</td>
<td>4,406,400</td>
</tr>
<tr>
<td>5</td>
<td>4800 x 350 = 1,680,000</td>
<td>6,086,400</td>
</tr>
<tr>
<td>Month</td>
<td>Cumulative total cost Inclusive (2,000 x 1000) Group replacement (₦)</td>
<td>Average monthly cost (₦)</td>
</tr>
<tr>
<td>1</td>
<td>2,480,000</td>
<td>2,480,000</td>
</tr>
<tr>
<td>2</td>
<td>3,248,000</td>
<td>1,624,000</td>
</tr>
<tr>
<td>3</td>
<td>4,596,800</td>
<td>1,532,266.67</td>
</tr>
<tr>
<td>4</td>
<td>6,406,400</td>
<td>1,601,600</td>
</tr>
<tr>
<td>5</td>
<td>8,086,400</td>
<td>1,617,280</td>
</tr>
</tbody>
</table>
(c) Group replacement policy at the end of third month is the least (i.e. ₦1,532,266.67) which is more than the individual replacement (i.e. ₦1,435,200).

Therefore, it is recommended that the company should adopt the individual replacement.

EXAMINERS’ REPORT

The question tests candidates’ understanding of the theory of Replacement Analysis for both individual and group replacements of tools.

The topic appears less popular among candidates as about 45% of candidates attempted the question.

Performance was very poor.

Common pitfalls of candidates included their inability

- to distinguish between cumulative and ordinary percentages; and
- to differentiate and appreciate the cost implications of individual and group replacement.

It is recommended that candidates should:

- Improve on their preparation;
- Read current and good quality texts; and
- Practise with past question papers;
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THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA
INTERMEDIATE EXAMINATION - NOVEMBER 2011
AUDIT AND ASSURANCE
Time Allowed - 3 hours

SECTION A: Attempt All Questions

PART I: MULTIPLE-CHOICE QUESTIONS (20 Marks)

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

1. Which of the following is NOT a type of Computer Assisted Audit Techniques?
   A. Data Collection Technique
   B. Test Data Packs
   C. Program Code Examination
   D. Snapshot
   E. Tracing Software

2. Public Accounts Committee is a committee of
   A. House of Representatives
   B. Joint Consultative Arm of Peoples Representative Council
   C. Senate and State Assembly
   D. House of Representatives and Senate
   E. Senate, House of Representatives and State Assembly.

3. Which of the following is NOT an approach adopted when auditing a computer based accounting system?
   A. Auditing with the computer
   B. Auditing on the computer
   C. Auditing around the computer
   D. Auditing the computer system
   E. Auditing through the computer
4. Which of the following is NOT true about the procedure for the final audit?

A. Comparisons
B. Reviews
C. Investigation
D. Representations
E. Confirmations and verification

5. Which of the following is NOT part of the services the Forensic Auditor provides?

A. Fraud deterrence engagement
B. Acting as counsel in a fraud case
C. Investigating corporate failure and insurance claims
D. Calculation of and quantifying damages
E. Providing expert opinion on financial statements in a court of law

6. Which of the following may NOT be part of financial statements to be filed by private companies according to the Companies and Allied Matters Act Cap C20 LFN 2004.

A. Statement of Accounting Policies
B. Balance sheet
C. Profit and Loss Account
D. Notes to the Accounts
E. Directors’ Report.

7. The overall attitude and awareness of an entity’s board of directors concerning the importance of internal control is usually referred to as

A. Control environment
B. Computer-based control
C. System of segregation of duties
D. Safeguard over access to assets
E. Human resource control
8. Which of the following would be least likely considered as an objective of internal control?

A. Detecting management fraud
B. Checking the accuracy and reliability of accounting data
C. Safeguarding assets
D. Ensuring a judicious allocation of the company’s resources
E. Encouraging adherence to management policies

9. The principal objective of an audit is the examination of financial statements of an enterprise with a view for the auditor to form and express an independent opinion on the truth and fairness for the benefit of which one of the following?

A. The members
B. Corporate Governance
C. The Corporate Affairs Commission
D. Government authorities
E. The management

10. Which of the following is NOT a matter to be considered in determining whether confidential information may be disclosed?

A. When disclosure is authorised
B. When disclosure is required by law
C. When there is a professional duty or right to disclose
D. Public duty demands it
E. When the company makes wrong assertions in the accounts

11. Which of the following, in relation to audit letter of engagement, is NOT true?

A. It outlines requirements of an audit engagement
B. It is sent by the client to the auditor
C. It is sent before commencing the audit assignment
D. It confirms auditor’s acceptance of his appointment
E. It outlines both the auditors’ and the directors’ responsibilities
12. When performing forensic investigation, the auditor should be concerned with which one of the following?

A. Sorting  
B. Analysis  
C. Evaluation  
D. Preservation  
E. Disclosure

13. The primary purpose of meeting with the client prior to formally finalizing the audit is to

A. Confirm that the auditor did not overlook any important issue  
B. Gain agreement on the findings  
C. Receive feedback on the adequacy of the audit procedure  
D. Demonstrate audit communication skills  
E. Test the structure of the final presentation

14. The auditor reviews the organization’s chart primarily for the purpose of

A. Understanding of the workflow  
B. Investigating the various communication channels  
C. Understanding the responsibility and authority of individuals  
D. Understanding of the entity and its environment  
E. Ensuring that the audit is conducted both methodically and systematically.

15. An auditor would most likely extend substantive tests of payroll when

A. Payroll is extensively audited by a state government agency.  
B. Payroll cost is substantially higher than in the prior year  
C. Overpayments are discovered in performing test of details  
D. Employee complains to management about excessive work hour  
E. Employees complain to management about unfavourable shifting work.
16. If the auditor discovers weaknesses in the Internal Control System of a company, he is required to communicate the condition to the

A. Senior management and the Board of Directors
B. Executive Directors
C. Managing Director
D. Board of Directors
E. Audit Committee

17. The most reliable form of evidence among the following is

A. Minutes of meetings
B. Copy invoices
C. Directors’ representation
D. Bank letters
E. Staff payroll

18. Which of the following is NOT part of the planning phase of auditing?

A. Knowing the client
B. Internal control review
C. Evaluation of audit risk
D. Developing the audit programme
E. Audit testing

19. The following are contents of the Permanent Audit file EXCEPT

A. History of the business
B. Flowcharts and system notes
C. Royalty agreements
D. Engagement letter
E. Letter of representation
The situations below reflect circumstances leading to qualification of audit reports under disagreements EXCEPT

A. Failure to comply with the Statements of Accounting Standard
B. Disagreement as to facts or figures
C. Absence of proper accounting records
D. Company follows an inappropriate Statement of Accounting Standard
E. Disagreement as to facts and figures.

PART II SHORT- ANSWER QUESTIONS (20 MARKS)

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

1. The systems programs used for performing routine data processing tasks are known as ……………………………

2. The audit risk which is NOT controllable by the Auditor is known as …………………

3. What is the overall effect of using computer on the audit objective?

4. Post balance sheet events that concern the condition not existing at the balance sheet date are known as ……………………………

5. Which arm of government is permitted to conduct investigation under the 1999 Nigerian Constitution?

6. Techniques used in conducting audit procedures by entering data results obtained with predetermined results is referred to as ……………………………

7. The type of audit that verifies the fact that expenditure has been incurred on approved services and in agreement with statutory and other regulations and authorities governing them is known as ……………………………

8. A way of concealing overdraft by a company drawing a cheque on one bank for deposit into another bank but not recording the transaction is called ……………………………
9. Threats which may affect compliance with ethical rules could be eliminated by .................................

10. Tests of specific balances in the balance sheet is .............................

11. The type of audit evidence obtained by checking the mathematical accuracy of documents and records is known as .................................

12. If there is vacancy in the office of an Auditor of a company,a .................. can act as auditors

13. Accounting standards are not law, but they have the effect of law since departure from them attracts sanctions from .................................

14. According to section 334 of the Companies and Allied Matters Act CAP C20 LFN 2004, preparation of financial statements is specifically imposed on the Directors. Which part of these financial statements is NOT the direct responsibility of the Directors?

15. The basis of accounting under which transactions and other events are recognized only when cash or its equivalent is received or paid is known as .................................

16. Accounting as it is known today, developed in ................................. and introduced into Nigeria by the .................................

17. Warrants that authorize the Accountant-General of the Federation to release funds to Ministries, Departments and Agencies are issued by the .................................

18. Structured Query Language (SQL) is a type of .................................

19. Audit queries raised by an Internal Auditor in the public service are called .................................

20. The term used to alter the appearance of the balance sheet before the year-end date is .................................
SECTION B: ATTEMPT ANY FOUR QUESTIONS (60 MARKS)

QUESTION 1

In the course of the audit of the accounts of Kunu Plc, a company manufacturing dairy products and confectioneries, the auditors discovered that the company did not comply with some standards issued by the Nigerian Accounting Standards Board (NASB).

You are required to:

(a) Explain why Kunu Plc should comply with standards issued by NASB. (2 Marks)

(b) State what should be the reaction of the auditors in regard to the non-compliance with the standards developed and issued by NASB. (2 Marks)

(c) What actions would NASB take on discovery of this infraction of non-compliance against the company and the auditors? (2 Marks)

(d) What is the implication of the adoption of IFRS by Nigeria in 2012 on your answer in (a) above? (3 Marks)

(e) Explain SIX components of the Audit Planning Memorandum. (6 Marks)

(Total 15 Marks)

QUESTION 2

SABATACO AND Ogunlaiye NIGERIA LIMITED is a private company offering public relations services to the public through a network of branches in Lagos State. The company has some 250 staff in all. The board consists of six members made up of a part time Chairman, a Chief Executive, two full-time Executive Directors and two representatives of the shareholders.
The company has an internal audit department headed by Mr. Kasotito, who is a young Chartered Accountant and one qualified accounting technician. They report their activities monthly in detail to the board.

You are required to

(a) State **FOUR** of the principal objectives of establishing an internal audit department.  

(b) Describe **FOUR** qualities demanded of an Internal Auditor.  

(c) Explain **FOUR** fundamental differences between Internal and External Auditors.  

(d) Should the External Auditor place reliance on the work of the Internal Auditor? If so, in what ways?  

**QUESTION 3**

(a) State **FIVE** ways by which an entity’s assets can be misappropriated and give an example in each case.  

(b) Explain the responsibilities of the Auditor for detecting material misstatements due to fraud.  

(c) List any **FIVE** of the contents of a typical letter of engagement.  

**QUESTION 4**

In planning an audit, the auditor should consider how the presence of a computer information system may affect the client’s accounting and internal control system and the conduct of the audit.
You are required to

(a) State the main factors the auditor will put into consideration in planning such an audit. (4 Marks)

(b) Enumerate the difficulties that may arise when auditing the output of a complex computerized accounting system. (4 Marks)

(c) State those characteristics of a computer information system that may create problems both for the client and the auditor in his risk assessment and how the associated risk may be mitigated. (7 Marks)

(Total 15 Marks)

QUESTION 5

The Auditor-General for the Federation is the officer recognised by the constitution of the Federal Republic of Nigeria and the Audit Act to audit the Federation’s accounts.

You are required to

(a) State the duties of the Auditor-General for the Federation. (5 Marks)

(b) Who appoints the Auditor-General for the Federation? List the steps for his appointment. (5 Marks)

(c) What are the steps involved in carrying out Value–For-Money Audits? (5 Marks)

(Total 15 Marks)

QUESTION 6

AMAZING GRACE INDUSTRIES LIMITED is the bottler of Naija Kola, a fast selling carbonated soft drink. It has contracted your firm of Chartered Accountants to provide professional services to give credence to the weekly national draw of coupons on television.

The sales promotion draws are organised for the patrons of the drink.
You are required to

(a) Identify and explain this type of professional services. (4 Marks)

(b) Enumerate FIVE other areas where these types of professional services are required. (5 Marks)

(c) State the procedures your firm would apply on the television show that would justify your client’s appointment. (6 Marks)

(Total 15 marks)

SOLUTIONS TO SECTION A

PART 1  MULTIPLE-CHOICE QUESTIONS

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

The questions test the major areas of the syllabus. Performance was average. Candidates are advised to prepare well for examinations.

PART II SHORT-ANSWER QUESTIONS

1. Utility programs
2. Inherent risk/ control risk
3. None /No effect
4. Non-adjusting post balance sheet events
5. National Assembly
6. Test data packs
7. Regulatory/ compliance audit
8. Kiting, kite-flying
9. Safeguards
10. Substantive tests
11. Re-Computation
12. Surviving or continuing auditor
13. Legal and regulatory authorities
14. Auditors’ Report
15. Cash basis
16. Great Britain; British
17. Minister of Finance
18. Computer Audit Package
19. Pre-audit queries
20. Window dressing

EXAMINERS’ REPORT

The questions adequately cover the syllabus. Performance was below average. Candidates did not understand the questions well before providing answers.

Candidates should interprete the questions very well before answering.

SOLUTIONS TO SECTION B

QUESTION 1

(a) Reasons why Kunu Plc should comply with standards set by Nigerian Accounting Standards Board (NASB) include:

i. The standards help the company to guide its reporting and provide framework for the presentation and interpretation of financial information contained in financial reports.

ii. The standards reduce the areas of uncertainty and subjectivity in accounts.

iii. To narrow the areas where different accounting policies can be adopted.

iv. The standards aid comparison between companies within an industry, among industries and among different countries.

v. To comply with provisions of the Companies and Allied Matters Act CAP C 20 LFN 2004
vi. To avoid sanctions from NASB

(b) The reaction of the auditors as regards the non-compliance with the standards developed and issued by the Nigerian Accounting Standards Board (NASB)

i) In the circumstances where the company departs from complying with the relevant accounting standards, and the auditor agrees, with the departure, no disclosure is required by the auditor.

ii) In the circumstances where the company departs from the relevant accounting standard but the auditor disagrees, the auditor is required to disclose the fact, quantify the effect and qualify his report.

(c) The actions that the Nigerian Accounting Standards Board (NASB) would take on the discovery of infraction, against the company and the auditors are as follow:

(i) Any person who fails to comply with the prescribed statement of accounting standards in the preparation of a financial statement commits an offence and shall be liable on conviction to a fine of N5 million or to imprisonment for a term not exceeding one year or both.

(ii) Any accountant, auditor or firm of accountants found liable under NASB Act commits an offence and shall, in addition to a fine provided for in subsection (1) of this section, be liable on conviction to:-

In the case of an individual
- Imprisonment for a term not exceeding one year
- Outright proscription or de-listing for such period as the court may deem fit to order in the circumstances.

In the case of a firm of accountants
- Outright proscription or de-listing for such period as the court may deem fit to order in the circumstances.
(d) The implications of the adoption of International Financial Reporting Standards by Nigeria from 2012, by organisations like Kunu Plc. are as follows:

(i) Since International Financial Reporting Standards are implemented in many parts of the world, it will be beneficial to Nigerian investors and other users of Financial Statements by reducing the costs of comparing alternative investments and increasing the quality of information.

(ii) Kunu Plc. is also expected to benefit as investors will be more willing to provide financing.

(iii) Companies that have high level of international activities would benefit from a switch to International Financial Reporting Standards due to the increased trans-border comparability of financial statements.

(iv) Companies that have international affiliations with Nigerian companies, like Kunu Plc. will have confidence and can place reliance on financial statements prepared by Nigerian Companies.

(v) Adoption of International Financial Reporting Standards by Nigeria by 2012 by companies, like Kunu Plc, will ensure compliance with the provisions of the International Accounting Standards Board (IASB).

(e) Components of the Audit Planning Memorandum

(i) Client’s Background: The auditor will need to give a brief history of the client’s business with special highlights on aspects that influence the audit plan.

(ii) Reporting requirements: The auditor must distinguish between statutory and client’s requirements and must pay particular attention to the deadlines.

(iii) Accounting and internal control systems including the role of the internal audit department, if any, must be noted.

(iv) The level of reliance on the work of the internal audit department.
(v) Critical audit areas including a reference to the audit programme designed to ensure that adequate work is carried out on them.

(vi) Staffing requirements and time budget at the planning stage. A budget should be prepared allocating the time of each member, staff requirements and grade of staff needed for the audit.

(vii) Client interface: Clients communication is important throughout the audit process. A review of main staff contacts such as the Managing Director, and Finance Director should be made. The use of information Technology should be reviewed.

(viii) Final audit consideration on issues like a review of organization for stock taking procedures, important rates, materiality, guidelines and circularization proceedings to be employed must all be taken into consideration.

EXAMINERS’ REPORT

The question tests candidates’ understanding of the provisions of regulatory authorities (NASB and IASB) and components of the Audit Planning Memorandum.

Candidates exhibited poor understanding of Audit Standards (both local and international). Their performance was below average. Candidates are advised to cover the syllabus adequately and be abreast of current developments.

QUESTION 2

(a) Internal audit is performed to achieve the following:

(i) Review of compliance with laws, regulations, other external requirements, internal policies, directives and other internal requirements including appropriate authorizations;

(ii) Check whether existing internal control is adequate and effective in relation to the size of the organization;
(iii) Ensure that all assets of the organization are properly safeguarded. If not, report to management about the weakness and make recommendations.

(iv) Highlight the weak areas of the organization and make suggestions to strengthen them.

(v) Ensure the proper functioning of the non-financial controls.

(vi) Review economy, efficiency and effectiveness of operations.

(vii) Make special investigations into particulars areas, for example, suspected fraud.

(viii) Examine financial and operating information for management including detailed testing of transactions, balances and business processes.

(b) **Qualities demanded of an internal auditor.**

(i) **Integrity:**

Internal auditor is expected to discharge his duties and responsibilities with high level of integrity. He should demonstrate honesty, fairness and truthfulness in the course of discharging his responsibilities within and outside the organisation for which he works.

(ii) **Objectivity:**

An internal auditor must be seen to be objective in all his dealings while carrying out his responsibilities.

(iii) **Independence:**

The internal auditor must be independent and he should report directly to Managing Director or the Audit Committee, where necessary. This will help him to perform his functions unhindered and without fear or favour.
(iv) **Competence:**

The internal auditor must be seen to be competent in the discharge of his duties and responsibilities and must as well be able to carry out professional duties with relevant skills. The competence can be derived from the acquired qualifications, training and retraining as well as practical experience.

(v) **Work attitude:**

An internal auditor must approach his duties with thoroughness and attitude of professional scepticism. He must assess critically the information and explanations obtained in the course of his work and such additional evidence as he considers necessary.

(vi) **Confidentiality:**

An internal auditor must treat all information at his disposal confidentially. He should not disclose privileged information under his custody to any unauthorized persons during and even after his employment.

(vii) **Judgment:**

An internal auditor must apply sound professional judgment, for example, taking account of materiality in the context of the matters on which he is reporting.

(viii) **Clear Communication:**

The auditor’s report must be relevant and contain clear expressions of opinion which are set out in writing for proper understanding.

(c) **The fundamental differences between internal and external auditors are as follows:**

i) **Scope:** The role of internal auditor is determined by management and the directors who set the organizational objectives. The statutory auditor has specific duties placed upon them, which cannot be limited by members
or directors of the organization. For example, the Companies and Allied Matters Act CAP C.20 LFN 2004 makes void any article or agreement which purports to exempt the statutory auditor from liability which might be attached to them because of their negligence or breach of trust.

ii) **Remuneration and Position:** The internal auditor is paid and promoted by the management, which limit his independence. The statutory auditor is employed and remunerated by the members of the organisation.

iii) **Approach:** The internal auditor’s approach is with a view to ensuring that the accounting and operating systems are efficient, so that the information presented to management throughout the period is accurate, reliable and discloses material facts and that the operations of the organization comply with applicable legislations and regulations. The statutory auditor’s approach is governed by his duty to satisfy himself that the financial statements to be presented to members or owners of the business show a true and fair view of the results for the financial period and of the state of the organisation’s affairs at the end of that period.

iv) **Responsibility:** The internal auditor’s responsibility is to management whereas the statutory auditor has primary responsibility to the members of the organization. It follows that the internal auditor being an officer of the company, does not have total independence which the external auditors possess.

(d) The external auditor could place reliance on the work of the Internal Auditor especially in areas where their work is similar to save audit time.

**Such areas include:**

i. Cash count exercise  
ii. Stocktaking exercise  
iii. Visits to branches  
iv. Preparation of schedules

Some of the factors the external auditor should consider before placing reliance on the internal auditors work include:

- The internal auditor’s technical training and proficiency
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- Supervision and review of the work of the internal auditor’s staff
- Conclusions reached and management action

It should be noted that whether he places reliance on the work of the internal auditor or not, the responsibility for the audit opinion is that of the external auditor.

EXAMINERS’ REPORT

The question tests candidates’ understanding of the differences and similarities between the functions of internal and external auditors.

Majority of the candidates attempted the question. Parts (b) and (c) were well attempted whereas parts (a) and (d) were answered poorly.

Candidates are advised to prepare well for future examinations.

QUESTION 3

(a) The ways by which an entity’s assets can be misappropriated are as follows:

(i) Embezzling receipts (for example, misappropriating collection on accounts receivable or diverting receipts in respect of written-off accounts to personal bank accounts).

(ii) Stealing physical assets or intellectual property (for example, stealing inventory for personal use or for sale, stealing scrap for re-sale, colluding with a competitor by disclosing technological data in return for payments).

(iii) Causing an entity to pay for goods and services not received (for example, payments to fictitious vendors, kickbacks paid by vendors to the entity’s purchasing agents as return for inflating prices, payments to ghost employees).

(iv) Using an entity’s assets for personal benefit (for example, using the entity’s assets as collateral for a personal loan or a loan to a related party).

(v) Embezzling or converting cash takings (outright defalcation of cash).
(b) **Responsibilities of the auditor for detecting material misstatements due to fraud**

An auditor conducting an audit in accordance with Nigerian Standards on Auditing obtains reasonable assurance that the financial statements taken as a whole are free from material misstatements, whether caused by fraud or error. An auditor cannot obtain absolute assurance that material misstatements in the financial statements will be detected because of such factors as the use of judgments, the use of testing, the inherent limitations of internal control and the fact that much of the audit evidence available to the auditor is persuasive rather than conclusive in nature.

When obtaining reasonable assurance, an auditor maintains an attitude of professional scepticism throughout the audit considers the potential for management overriding controls and recognises the fact that audit procedures that are effective for detecting errors may not be appropriate in the context of an identified risk of material misstatement.

(c) **The contents of a typical engagement letter include the following items:**

(i) Nature of work to be performed (audit, tax work, write up work or any combination of those services).

(ii) The period of time over which the engagement is expected to be performed.

(iii) Limitations of the engagement regarding the auditors’ responsibility with respect to detecting errors, irregularities and misstatements.

(iv) In the case of non audit services, a statement that the engagement is not to be construed as an audit.

(v) The time expected to be spent on the engagement and the fee arrangements.

(vi) The directors’ responsibilities regarding proper accounting records and financial statements which show a true and fair view and comply with relevant legislations and regulations e.g. CAMA, BOFIA Insurance Act, Central Bank of Nigeria guidelines and circulars, SAS, International Financial Reporting Standards.
(vii) The board’s responsibility to make available to the auditors all the accounting records, other relevant records and minutes of meetings.

(viii) A request for written acknowledgement of the letter and that it creates contractual obligations.

(ix) Indication that letter of weakness will be sent to the management after the audit process.

EXAMINERS’ REPORT

The question tests candidates’ knowledge of fraud, misstatements and auditors’ responsibility in relation to them. Part (c) tests candidates understanding of the contents of a standard engagement letter.

Many candidates gave wrong solutions to parts (a) and (b) due to wrong interpretation of the questions but part (c) was well attempted.

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

QUESTION 4

(a) The main factors the auditor will put into consideration in planning an audit in a Computer Information System environment include:

(i) How to obtain a sufficient understanding of what may be a very complex accounting and internal control system.

(ii) Inherent, control and detection risks and how to assess them.

(iii) The design and performance of substantive and compliance tests.

(iv) The need for specialist computer literate audit staff.
(b) The difficulties that may arise when auditing the output of complex computerized systems are:

(i) The sheer volume of transactions processed means that details may be inaccessible.

(ii) The computer performs calculations without overtly demonstrating how it has done them e.g. interest charged to customers total overdue debts.

(iii) Transactions are exchanged electronically with other organisations (e.g. customers and suppliers) using advanced modern technologies.

(iv) Organisational aspects of computer information systems restrict segregation of duties and reduce manual review and supervisions.

(v) Data and balances may be difficult to access and may be short-lived.

(c) Characteristics of Computer Information Systems which create problem both for the client and the auditor in his risk assessment:

(i) A control environment where management often feels that it has no control over or understanding of transactions and records.

(ii) A lack of transactions trail or audit trail.

(iii) Uniform and totally accurate processing eliminates clerical errors. This is a plus point, if available.

(iv) Lack of segregation of duties.

(v) The potential for fraud and error as a result of system or program faults.

(vi) The initiation or execution of transactions may be automatic. The system may be fraudulently programmed to produce fraudulent transactions or transactions may be processed erroneously.

(vii) Output may not be complete, as required.
(viii) Management may have the use of sophisticated search, selection, calculational and comparative analytical techniques which may enhance control, if only available.

(ix) Concentration of activities in the computer department that tend to restrict access to processing activities.

To mitigate risks associated with these problems, the auditor needs to assess the risks – business, inherent, control and audit which impinge on the audit. The auditor may be able to use Computer Assisted Auditing Techniques (CAATs).

EXAMINERS’ REPORT

The question tests candidates’ knowledge of audit planning and auditing in a Computer Information System environment.

Few candidates attempted the question. Even those who did performed poorly apparently due to lack of understanding of the question.

Candidates are advised to pay attention to this area of the syllabus.

QUESTION 5

(a) Duties of the Auditor–General for the Federation

The Auditor-General for the Federation is expected to carry out the following statutory functions:

(i) Financial audit in accordance with the laws in order to determine whether the accounts have been satisfactorily and faithfully kept.

(ii) Appropriation audit to ensure that funds are expended as appropriated by the National Assembly.

(iii) Financial control audit, to ensure that laid down procedures are been observed in tendering, contracts executions and storekeeping with a view to preventing waste, pilferages and extravagance.
(iv) Value-For-Money (performance audit): to ascertain the level of economy, efficiency and effectiveness derived from Government projects and programmes.

(v) Control of losses of funds: It is audit responsibility to test the internal control system and other procedures and practices for weaknesses and to draw the attention of the management of the agency concerned and the Accountant-General to the possibility of loss of funds or other government property when the need arises.

(b) **The Auditor-General for the Federation is appointed by the President of the Federal Republic of Nigeria.**

The steps for the appointment of the Auditor-General are as follows:

(i) Appointment by the President on the recommendation of the Federal Civil Service Commission

(ii) Confirmation of appointment is by the senate.

(iii) The power to appoint a person to act as Auditor-General is vested in the President.

(iv) Acting Appointment is for a period not exceeding six months.

(v) The sanction of a resolution duly passed by the senate is necessary for an acting appointment exceeding six months.

(c) **Steps involved in carrying out Value-For-Money audit**

(i) Proposal phase: The aim of this phase is to justify the study of a particular area, authorize initial resources and determine further initial financial statistics, audit cost and other performance indicators.

(ii) The scooping phase: This aims at gathering sufficient details. It embraces gathering working information, studying related legislations and testing control act. At this stage, there will be comprehensive management systems and objective review.
(iii) The planning phase: This aims at planning to fully develop identified potentials. The planning and control processes are properly analysed and methods of reviewing operating results are examined through analysis of control and reporting system.

(iv) Implementation phase: This aims at reporting the audit results to those responsible for receiving or acting on them.

(v) Evaluation phase: This is to evaluate the audit result, methodology and performance of the audit staff. The focus here will be assessment of efficiency and effectiveness review.

EXAMINERS’ REPORT

The question tests candidates’ knowledge of the appointment and duties of Auditor General for the Federation and steps involved in Value-For-Money audit

Parts (a) and (c) were poorly attempted while part (b) was well attempted. Poor understanding of the requirement of the question was the commonest pitfall.

Performance was poor. Candidates are advised to prepare well for the Institutes examinations.

QUESTION 6

(a) The type of professional service expected to be provided for the bottler of Naija Kola is “assurance services”. It is defined as “independent professional services that improve the quality of information or its context for decision makers”. The services may be financial or non-financial in nature. Managers or decision makers demand accurate or dependable data before right management decisions are made, thereby reducing business risk. Assurance services assist managers on the provision of such information and the “assurance” thereof by the professional accountants, because of their pedigree, experience, training, expertise and judgment.
(b) **Other areas where these types of services are required include:**

(i) Comprehensive risks assessment – identifying and assessing the various risks facing an organisation.

(ii) Electronic commerce – addresses risks and promotion of integrity and security of electronic transactions.

(iii) Information System review – review of the design and the operation of the system, including Information Technology.

(iv) Policy compliance – ensures that the organisation complies with its policies.

(v) Mergers and acquisitions – provision of insight into the client records and practices.

(vi) Accounts receivable review – reviews debtors accounts operations and collections.

(c) **Subject to the terms of engagement, the general procedures the firm would apply on the television show that would justify their appointment include:**

(i) Ensuring that the drawn coupons presented are original and official.

(ii) Ensuring that the drawn coupons comply with the rules of the competition.

(iii) Rejection of the invalid coupons while expressing openly, satisfaction with the drawn valid coupons.

(iv) Observation of the procedure of declaration of the winner and ensuring that procedures are followed.

(v) Ensuring that transparency of the procedures and their implementation are manifest to the viewing public.

(vi) Ensuring that the integrity of the firm is projected and protected during the draw.
EXAMINERS’ REPORT

The question tests candidates’ knowledge of “Assurance Services”.

Few candidates attempted it and the performance was generally poor due to lack of understanding of the requirements of the question.

Candidates are advised to pay adequate attention to current areas of the syllabus.
SECTION A: Attempt All Questions

PART I: MULTIPLE-CHOICE QUESTIONS (20 MARKS)

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

1. Under the commencement rule, when can a taxpayer exercise his right of election on actual basis?
   A. 1st and 2nd years of assessment
   B. 2nd and 3rd years of assessment
   C. 2nd and 4th years of assessment
   D. 3rd and 4th years of assessment
   E. 1st and 4th years of assessment

2. In whose hands is the income of a trust taxed?
   A. Accountant
   B. Finance Director
   C. Beneficiary
   D. Trustee
   E. Investor

3. For tax purposes, how many directors are allowable in terms of remuneration for a property holding company?
   A. Maximum of two
   B. Maximum of three
   C. Maximum of four
   D. Maximum of five
   E. Maximum of six
4. What is the period within which a notice of appeal must be filed from the date of service of notice of assessment?

A. 15 days  
B. 30 days  
C. 60 days  
D. 75 days  
E. 90 days

5. A small business is one whose turnover does not exceed

A. ₦100,000  
B. ₦250,000  
C. ₦500,000  
D. ₦750,000  
E. ₦1,000,000

6. Which tier of government collects tenement rates and slaughter slab fees?

A. Local government  
B. Federal government  
C. State government  
D. Municipal government  
E. Provincial government

7. What is the formula for determining Adjusted Profit Ratio in the taxation of profits of Air and Shipping businesses in Nigeria?

A. \( \frac{\text{Adjusted Profit}}{\text{Total revenue sum receivable}} \times 100\% \)

B. \( \frac{\text{Net Profit}}{\text{Sales}} \times 100\% \)

C. \( \frac{\text{Gross Profit}}{\text{Revenue}} \times 100\% \)

D. \( \frac{\text{Profit} - \text{Sales}}{\text{Revenue}} \times 100\% \)
8. Minimum tax is not applicable to a company for the first .................. calendar years of its commencement of business.
   A. 2  
   B. 4  
   C. 5  
   D. 6  
   E. 12

9. Tax on spending expected to be borne by the final consumer of goods and services is called ......................
   A. Input added tax  
   B. Income tax  
   C. Education tax  
   D. Value added tax  
   E. Output tax

10. If the Commonwealth Rate (CR) of tax exceeds \( \frac{1}{2} \) of Nigerian Rate (NR), relief granted shall be
    A. \( \frac{1}{2} \) CR  
    B. \( \frac{1}{2} \) NR  
    C. \( \frac{1}{3} \) NR  
    D. \( \frac{1}{4} \) CR  
    E. \( \frac{3}{4} \) CR

11. Which of the following includes any disposition, trust, covenant, agreement or transfer of assets?
    A. Shipment  
    B. Settlement  
    C. Administration
D. Tenement
E. Contentment

12. Basis of assessment for an old established company is

A. Actual basis
B. Preceding year basis
C. Succeeding year basis
D. Accrual basis
E. Continuity basis

13. “Executed” and “Execution” with reference to instruments not under seal, mean

A. Signed
B. Signed and signature
C. Signature
D. Implement
E. Complement

14. Tax Clearance Certificate (TCC) for limited liability companies is a certificate issued by

A. the Presidency
B. the Consultant
C. Federal Inland Revenue Service
D. Ministry of Finance
E. State Internal Revenue Service

15. Which of the following is not an investment income on which withholding tax is deductible?

A. Consultancy and professional services
B. Dividend
C. Interest
D. Royalty
E. Rent
16. The main objective of Double Taxation Relief is to
   A. Redistribute the income
   B. Ensure that the tax payer pays twice
   C. Encourage tax payer to pay twice on income
   D. Prevent income from being taxed twice
   E. Prevent income from being taxed once

17. What is the technical name given to a tax borne by a person other than the tax payer?
   A. Value Added Tax
   B. Direct Tax
   C. Proportionate Tax
   D. Indirect Tax
   E. Personal Income Tax

18. What is unrelieved loss that cannot be carried forward upon cessation of business?
   A. Carry forward loss
   B. Current year loss
   C. Terminal loss
   D. Cessation loss
   E. Marginal loss

19. The purpose of VAT Form 004 is to
   A. Register with the tax office
   B. Compute the output tax
   C. Render returns of VAT collected to Federation Account
   D. Summarise returns from local VAT offices
   E. Render returns to State Government Account

20. In relation to Personal Income Tax computation, what is the name given to a combination of formatting characteristics such as Font, Font size, and Indentation that you name and store as a set in Excel Spreadsheet?
   A. Format Style
   B. Custom View
PART II: SHORT-ANSWER QUESTIONS  

(20 Marks)

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

1. A person who is empowered by law to administer the estate of a deceased person is called .....................

2. Who presides over the Local Government Revenue Committee?

3. How do you classify investment income?

4. How do you describe a tax system whereby the percentage of income paid as tax is the same irrespective of the size of income?

5. How many members shall constitute a quorum of the meetings of the Joint Tax Board?

6. The medium through which information usually move from one network to another is known as ..........................

7. The general administration of Personal Income Tax Law in each state of the Federation is vested in .........................

8. State the relevant tax authority in charge of Education Tax in Nigeria.

9. The time that the computer stays in an inactive condition is referred to ..............................

10. Unrelieved loss which can no longer be carried forward upon the cessation of a business is known as .........................

11. A collection of servers in one location is often referred to as a .........................

12. Assets which collectively constitute a pension fund are called ...........................
13. An assessment raised due to non-submission of tax returns is called ____________________________.

14. Which relevant tax authority administers the VAT systems?

15. The difference between the sales proceeds and the tax written down value of an asset disposed of is referred to as ____________________________.

16. Where a company is in receivership or liquidation, the company shall be chargeable to income tax in the name of the ____________________________.

17. What is the basis of assessing incomes from Settlements, Trusts or Estates?

18. Benefits enjoyed from employment but not in monetary terms are referred to as ____________________________.

19. Practices which have evolved from case laws, for the purpose of determining whether an activity constitutes a trade or not and the consequent chargeability thereof to income tax, are called ____________________________.

20. In a change of accounting date, who has the right of election as regards the basis period for assessment?

SECTION B: ATTEMPT ANY FOUR QUESTIONS (60 Marks)

QUESTION 1

1. The Profit and Loss Account for Abolore, Okonjo & Zenaib (Partners) for the year ended 31 December 2008 is as stated below:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Profit</td>
<td>800,000</td>
</tr>
<tr>
<td>Expenses</td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>5,000</td>
</tr>
<tr>
<td>Interest on Capital:</td>
<td></td>
</tr>
<tr>
<td>Abolore</td>
<td>2,000</td>
</tr>
<tr>
<td>Okonjo</td>
<td>2,000</td>
</tr>
<tr>
<td>Zenaib</td>
<td>4,000</td>
</tr>
<tr>
<td>Salaries – Okonjo</td>
<td>8,000</td>
</tr>
<tr>
<td>Miscellaneous expenses</td>
<td>1,800</td>
</tr>
<tr>
<td>Interest on Loan from Zenaib</td>
<td>8,000</td>
</tr>
<tr>
<td></td>
<td>6,000</td>
</tr>
</tbody>
</table>


**Rent**  
**Travelling expenses**  4,000  
**Purchase of equipment**  400,000  
**Purchase of typewriter**  40,000  (480,800)  
**Net Profit**  319,200

Additional information:

(a) The salary paid to Okonjo was agreed with effect from 1/7/08 but the amount reflected in the accounts shows the salary per annum.

(b) Cost of passage to each partner is as stated below:  
    Abolore – ₦3,000, Okonjo – ₦3,200 and Zenaib – ₦4,000

(c) The stated rent was on the building rented from Zenaib.

(d) The share of Profit or Loss is 3:2:1 for Abolore, Okonjo and Zenaib respectively.

**You are required to compute the income of each partner from the partnership.**

(Total 15 Marks)

**QUESTION 2**

One of your clients had a discussion with you recently on information technology as it relates to tax planning. Based on the discussion, the Managing Director advised that you make a submission why it may be advantageous to computerize the tax records.

You are required to

(a) State **FIVE** advantages and **FIVE** disadvantages inherent in applying computer models in tax administration. (10 Marks)

(b) State any **FOUR** functions of a Commissioner of Stamp Duties. (4 Marks)

(c) When can an assessment be said to be final and conclusive?  (1 Marks)

(Total 15 Marks)
QUESTION 3

XBB Limited is based in Lagos. The company has been making its accounts to 30 June each year but in 2003, decided to change its accounting year to 31 December.

The adjusted profits as extracted from the books are as follows:

<table>
<thead>
<tr>
<th>Year ended</th>
<th>N'000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year ended 30/06/2001</td>
<td>300,000</td>
</tr>
<tr>
<td>Year ended 30/06/2002</td>
<td>600,000</td>
</tr>
<tr>
<td>Period ended 31/12/2003 (18 months)</td>
<td>909,000</td>
</tr>
<tr>
<td>Year ended 31/12/2004</td>
<td>558,000</td>
</tr>
<tr>
<td>Year ended 31/12/2005</td>
<td>840,000</td>
</tr>
</tbody>
</table>

You are required to

(a) Compute the company's assessable profits for all the relevant years of assessment. 

(b) State any SIX functions of the Joint Tax Board.

(Total 15 Marks)

QUESTION 4

Mr. Okanlawon commenced business on 1 October 2000 and prepares his accounts to 30 September each year. His profits are as follows:

<table>
<thead>
<tr>
<th>Year ended</th>
<th>N'000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year ended 30/09/2001</td>
<td>300,000</td>
</tr>
<tr>
<td>Year ended 30/09/2002</td>
<td>380,000</td>
</tr>
<tr>
<td>Year ended 30/09/2003</td>
<td>400,000</td>
</tr>
<tr>
<td>Year ended 30/09/2004</td>
<td>410,000</td>
</tr>
<tr>
<td>Year ended 30/09/2005</td>
<td>450,000</td>
</tr>
<tr>
<td>Period to 31/03/2006</td>
<td>180,000</td>
</tr>
</tbody>
</table>

Due to shortage of a major raw material, Mr. Okanlawon ceased business on 31 March 2006.
You are required to

(a) Compute the assessable profits of Mr. Okanlawon for the relevant years of Assessment. (12 Marks)

(b) What would you advise Mr. Okanlawon on his right of election? (3 Marks)

(Total 15 Marks)

QUESTION 5

Okon Hotel and Suites Ltd., a company located in the Central Business District of Ikeja, is a Five Star Hotel. The company prepares its accounts up to 31 December of every year and it is a registered VAT agent of Federal Inland Revenue Service (FIRS). Its ledger for the year ended 31st December 2007 revealed the following:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAT paid on materials for kitchen</td>
<td>88,000</td>
</tr>
<tr>
<td>VAT paid on drinks for resale</td>
<td>10,000</td>
</tr>
<tr>
<td>VAT paid on equipment</td>
<td>12,500</td>
</tr>
<tr>
<td>VAT on legal &amp; prof. fee</td>
<td>4,500</td>
</tr>
<tr>
<td>Amount remitted to FIRS</td>
<td>200,000</td>
</tr>
<tr>
<td>Balance as at 31/12/07 c/d</td>
<td>181,000</td>
</tr>
<tr>
<td></td>
<td>496,000</td>
</tr>
<tr>
<td>VAT charged on food &amp; beverage</td>
<td>154,000</td>
</tr>
<tr>
<td>VAT on accommodation</td>
<td>251,000</td>
</tr>
<tr>
<td>VAT on services</td>
<td>91,000</td>
</tr>
</tbody>
</table>

You are required to

(a) Compute the total amount of VAT due to FIRS for 2007 year of assessment. (6 Marks)

(b) Ascertain the balance remittable for that year. (4 Marks)

(c) State any THREE penalties imposed on a company for failure to file self assessment. (5 Marks)

(Total 15 Marks)
QUESTION 6

Mr. James Koko retired from XYZ Limited in 2007 as the Chief Accountant. After a brief illness, he died in 2008. He had appointed Mr. Paul Hassan as the Executor to administer his Estate. He is survived by his wife and two children.

The accounts of the Executor revealed the following income and expenses for the year ended December 31, 2010.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income received from properties</td>
<td>N6,000,000</td>
</tr>
<tr>
<td>Staff salaries</td>
<td>750,000</td>
</tr>
<tr>
<td>Maintenance of properties</td>
<td>400,000</td>
</tr>
<tr>
<td>Rates and other government charges</td>
<td>210,000</td>
</tr>
<tr>
<td>Agent’s commission</td>
<td>150,000</td>
</tr>
<tr>
<td>Executor’s fees</td>
<td>300,000</td>
</tr>
</tbody>
</table>

The Executor is empowered by the Will to make ex-gratia payments to some of the beneficiaries but subject to a limit of N1,000,000 in any one year. During the year under review, the Executor paid N300,000 to each of the two sons.

The beneficiaries’ share of the Estate as per the Will is as stated here-under:

- Wife: 3
- First Son: 4
- Second Son: 4

You are required to

Calculate the amounts to be disclosed by the beneficiaries in their income tax returns for 2011 year of assessment. (15 Marks)
### TAX RATES

#### 1. CAPITAL ALLOWANCES

<table>
<thead>
<tr>
<th>Asset</th>
<th>Initial %</th>
<th>Annual %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Equipment</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>Office Building</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Furniture &amp; Fittings</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td>Industrial Building</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Non-Industrial Building</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Plant and Machinery:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Agricultural Production</td>
<td>95</td>
<td>NIL</td>
</tr>
<tr>
<td>- Others</td>
<td>50</td>
<td>25</td>
</tr>
</tbody>
</table>

#### 2. INVESTMENT ALLOWANCE

10%

#### 3. TAX – FREE ALLOWANCE:

<table>
<thead>
<tr>
<th>Allowance</th>
<th>Maximum Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent</td>
<td>₦150,000</td>
</tr>
<tr>
<td>Transport</td>
<td>₦20,000</td>
</tr>
<tr>
<td>Utility</td>
<td>₦10,000</td>
</tr>
<tr>
<td>Meal Subsidy</td>
<td>₦5,000</td>
</tr>
<tr>
<td>Entertainment</td>
<td>₦6,000</td>
</tr>
<tr>
<td>Leave</td>
<td>10% of Annual Basic Salary</td>
</tr>
</tbody>
</table>

#### 4. PERSONAL INCOME TAX RELIEFS / ALLOWANCES

(a) Personal Allowance – ₦5,000 plus 20% of Earned Income

(b) Children Allowance – ₦2,500 per annum per unmarried child subject to a maximum of four children.

(c) Dependent Relative – ₦2,000 each

(d) Disabled Persons – ₦5,000 or 10% of Earned Income (whichever is higher)

(e) Life Assurance – Actual Premium paid
5. **RATES OF PERSONAL INCOME TAX:**

<table>
<thead>
<tr>
<th>Taxable Income</th>
<th>Rate of Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>$₦$</td>
<td>%</td>
</tr>
<tr>
<td>First 30,000</td>
<td>5</td>
</tr>
<tr>
<td>Next 30,000</td>
<td>10</td>
</tr>
<tr>
<td>Next 50,000</td>
<td>15</td>
</tr>
<tr>
<td>Next 50,000</td>
<td>20</td>
</tr>
<tr>
<td>Over 160,000</td>
<td>25</td>
</tr>
</tbody>
</table>

*Note:* Annual income of $₦30,000 and below is exempted from tax but a minimum tax of 0.5% will be charged on the total income.

6. **COMPANIES INCOME TAX RATE**

7. **EDUCATION TAX**

8. **CAPITAL GAINS TAX**

9. **VALUE ADDED TAX**

10. **WITHHOLDING TAXES**

<table>
<thead>
<tr>
<th>Type of payment</th>
<th>Rates (Companies)</th>
<th>Rates (Non-corporate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividend, Interest, Rent</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Royalties</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Contract supplies</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Building construction activities</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Consultancy/Professional services</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Management services</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Commissions</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Technical services</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Directors fees</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>
SOLUTIONS TO SECTION A

PART I: MULTIPLE-CHOICE QUESTIONS

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

The questions test different areas of the syllabus.

Every candidate attempted the questions. Performance was very good.

Candidates are advised to cover the entire syllabus for improved performance in future examinations.

PART II: SHORT-ANSWER QUESTIONS

1. Executor or Administrator
2. Supervisor for Finance or Vice Chairman
3. Unearned income
4. Proportional tax system
5. Seven (7)
6. Cable or Communication Channel
7. State Board of Internal Revenue
8. Federal Inland Revenue Service
9. Downtime or Hibernation
10. Terminal loss
11. Server farm
12. Pension Fund Assets
13. Best of Judgment Assessment (BOJ)
14. Federal Inland Revenue Service
15. Balancing charge or balancing allowance
16. Receiver or Liquidator
17. Preceding year basis
18. Benefits-in-kind
19. Badges of trade
EXAMINERS’ REPORT

The questions test different areas of the syllabus.

All candidates attempted the questions. Performance was above average.

Candidates are advised to cover all the areas of the syllabus so as to improve on their performance in future.

SOLUTIONS TO SECTION B

QUESTION 1

(a)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Abolore</th>
<th>Okonjo</th>
<th>Zenaib</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><code>₦</code></td>
<td><code>₦</code></td>
<td><code>₦</code></td>
<td><code>₦</code></td>
</tr>
<tr>
<td>Interest on Capital</td>
<td>8,000</td>
<td>2,000</td>
<td>2,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Salary</td>
<td>4,000</td>
<td>-</td>
<td>4,000</td>
<td>-</td>
</tr>
<tr>
<td>Interest on loan</td>
<td>8,000</td>
<td>-</td>
<td>-</td>
<td>8,000</td>
</tr>
<tr>
<td>Rental Income</td>
<td>6,000</td>
<td>-</td>
<td>-</td>
<td>6,000</td>
</tr>
<tr>
<td>Cost of passage</td>
<td>10,200</td>
<td>3,000</td>
<td>3,200</td>
<td>4,000</td>
</tr>
<tr>
<td>Share of computed income</td>
<td>758,000</td>
<td>379,000</td>
<td>252,667</td>
<td>126,333</td>
</tr>
<tr>
<td></td>
<td>794,200</td>
<td>384,000</td>
<td>261,867</td>
<td>148,333</td>
</tr>
</tbody>
</table>
Working Notes
(1) Adjusted Profit of the Partnership

<table>
<thead>
<tr>
<th></th>
<th>₦</th>
<th>₦</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Profit</td>
<td></td>
<td>319,200</td>
</tr>
<tr>
<td>Add/(Deduct)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salary ((\frac{6}{12} \times 8,000))</td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>5,000</td>
<td></td>
</tr>
<tr>
<td>Purchase of equipment</td>
<td>400,000</td>
<td></td>
</tr>
<tr>
<td>Purchase of typewriter</td>
<td>40,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>449,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>768,200</td>
</tr>
</tbody>
</table>

(2) Calculation of Computed Income

Adjusted Profit 768,200

Deduct

Cost of Passage: Abolore 3,000
Okonjo 3,200
Zakari 4,000 (10,200)

Computed Income 758,000

(3) Share of Computed Income

<table>
<thead>
<tr>
<th>Name</th>
<th>Fraction</th>
<th>Computed Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abolore</td>
<td>3/6</td>
<td>379,000</td>
</tr>
<tr>
<td>Okonjo</td>
<td>2/6</td>
<td>252,667</td>
</tr>
<tr>
<td>Zenaib</td>
<td>1/6</td>
<td>126,333</td>
</tr>
</tbody>
</table>

EXAMINERS’ REPORT

The question tests the candidates’ ability to compute the income of partners in partnership.

Many candidates attempted the question. Performance was below average. The commonest pitfall was the inability of the candidates to understand what constitutes partnership income.

Candidates are advised to read relevant textbooks and take note of minute details for future examinations.
QUESTION 2

(a) The advent of information technology is taking its toll on every facet of economic activity, tax matters inclusive. To have an effective tax administration where the data will be captured accurately leading to reliable results, computerization of the records will be necessary.

FIVE ADVANTAGES OF COMPUTERISING RECORDS

(i) The tax computation will be more accurate
(ii) Tax administration will be faster with improved efficiency
(iii) The results are more reliable
(iv) There will be improved productivity
(v) The data will be readily available due to the storage facility

FIVE DISADVANTAGES OF COMPUTERISING RECORDS

(i) Computer programmes may constitute bottlenecks
(ii) Loss of data poses challenges
(iii) Level of computer literacy amongst tax officials may constitute problems
(iv) The cost of acquiring the computers may also be on a high side
(v) The staff may put up resistance to the change from manual to computer

(b) FUNCTIONS OF A COMMISSIONER OF STAMP DUTIES

He takes full control of administrative and technical operations in order to

(i) Ensure proper functioning of stamp duty office.
(ii) Assess documents on appropriate duties.
(iii) Ensure proper stamping and embossments of documents with dies, affixing stamps etc.
(iv) Take custody of dies and stamps.
(v) Adjudicate on the amount of duty payable on documents when the need arises.
(c) **AN ASSESSMENT BECOMES FINAL AND CONCLUSIVE**

(i) When no valid objection has been lodged within time limit stated in the notice of assessment

(ii) Where a tax payer and the Board have agreed as to the amount of tax liability of the tax payer after a valid objection has been made

(iii) Where no valid appeal has been lodged against decision of the Tax Appeal Tribunals or a judge.

**EXAMINERS’ REPORT**

The question tests candidates’ knowledge of advantages and disadvantages faced in applying computer models in tax administration, functions of Commissioner of Stamp Duties and when an assessment is final and conclusive.

About 80% of the candidates attempted the question. Candidates demonstrated a good understanding of the question, therefore, performance was good.

The commonest pitfall identified was inadequate understanding of the functions of the Commissioner of Stamp Duties.

Candidates are advised to read relevant materials in order to perform well in questions that cover different areas of the syllabus.

**QUESTION 3**

**XBB LIMITED**

(a) **COMPUTATION OF ASSESSABLE PROFITS FOR 2003 – 2005 YEARS OF ASSESSMENT**

<table>
<thead>
<tr>
<th>YOA</th>
<th>Basis Period</th>
<th>Note</th>
<th>Assessable Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>01/07/2001 - 30/06/2002</td>
<td></td>
<td>600,000</td>
</tr>
<tr>
<td>2004</td>
<td>01/07/2002 - 30/06/2003</td>
<td>1</td>
<td>606,000</td>
</tr>
<tr>
<td>2005</td>
<td>01/07/2003 - 30/06/2004</td>
<td>2</td>
<td>582,000</td>
</tr>
</tbody>
</table>

**Total**

\[
1,788,000
\]
NEW DATE (31/12)

2003  01/01/2002 - 31/12/2002  3.  603,000
2004  01/01/2003 - 31/12/2004  1.  606,000
2005  01/01/2004 – 31/12/2004  2.  558,000

1,767,000

NOTE:

The Federal Inland Revenue Service will choose the assessable profit based on the old accounting date basis because it is the higher of the two figures. The assessable profit is ₦1,788,000,000.

Workings (₦'000)

1. Old Date: \[ \frac{12}{18} \times \text{₦909,000} = \text{₦606,000} \]

2. \[ \frac{6}{18} \times \text{₦909,000} + \frac{6}{12} \times \text{₦558,000} = 303,000 + 279,000 \]

3. New Date: \[ \frac{6}{12} \times \text{₦600,000} + \frac{6}{18} \times \text{₦909,000} \]

\[ = 300,000 + 303,000 = \text{₦603,000} \]

(b) Functions of the Joint Tax Board (JTB)

The Board shall

(i) Exercise the powers or duties conferred on it by the Personal Income Tax Act (PITA); and other Acts.

(ii) Advise the Federal Government on request, in respect of double taxation arrangement with any other country.

(iii) Advise the Federal Government on request, in respect of rates of capital allowances and other taxation matters, having effect throughout Nigeria in respect of any proposed amendment of PITA.

(iv) Promote uniformity, both in the application of PITA and in the incidence of tax on individuals throughout Nigeria.
(v) Impose its decisions on matters of procedure and interpretation of PITA, on any state, for purposes of uniformity with agreed procedures or interpretations.

(vi) Resolve tax disputes amongst states.

(vii) To exercise any powers and duties conferred on it by any law enacted by the Federal Government of Nigeria regarding incomes and profits of Business Enterprises.

EXAMINERS’ REPORT

The question tests candidates’ knowledge of the basis of assessing a taxpayer when there is a change of accounting date.

More than 60% of the candidates attempted the question. Candidates demonstrated a good understanding of the question and its requirements, hence performance was good.

The commonest pitfalls were the inability of the candidates to identify the year of change and poor presentation.

Candidates are advised to familiarise themselves with this aspects of the syllabus.

QUESTION 4

MR. OKANLAWON

COMPUTATION OF ASSESSABLE PROFITS

<table>
<thead>
<tr>
<th>FOR 2000 – 2006</th>
<th>OPTION ON ELECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>YOA</td>
<td>Basis Period</td>
</tr>
<tr>
<td>2000</td>
<td>01/10/00 - 31/12/00</td>
</tr>
<tr>
<td>2001</td>
<td>01/10/00 - 30/09/01</td>
</tr>
<tr>
<td>2002</td>
<td>01/10/00- 30/09/01</td>
</tr>
<tr>
<td>2003</td>
<td>01/10/01 - 30/09/02</td>
</tr>
<tr>
<td>2004</td>
<td>01/10/02 - 30/09/03</td>
</tr>
<tr>
<td>2005(PYB)</td>
<td>01/10/03- 30/09/04</td>
</tr>
</tbody>
</table>
Notes

1. $\frac{3}{12} \times 300,000 = 75,000$
2. $1/10/00 - 30/9/01 = 300,000$
3. $1/10/00 - 30/9/01 = 300,000$
4. $1/01/01 - 31/12/01 = (\frac{9}{12} \times 300,000 + \frac{3}{12} \times 380,000) = 320,000$
5. $01/01/02 - 31/12/02 = (\frac{9}{12} \times 380,000 + \frac{3}{12} \times 400,000) = 385,000$
6. $01/01/05 - 31/12/05 = (\frac{9}{12} \times 450,000 + \frac{3}{6} \times 180,000) = 427,500$
7. $01/01/06 - 31/03/06 = \frac{3}{6} \times 180,000 = 90,000$

Mr. Okanlawon is advised not to exercise his right of election as doing so would lead to a higher assessment on him in 2001 and 2002 years of assessment.

EXAMINERS’ REPORT

The question tests candidates’ ability to compute the assessment of tax payers on cessation of business.

Almost all the candidates attempted the question and candidates demonstrated a good understanding of the question. Performance was above average.
The commonest pitfall was their inability to compute the assessment in the penultimate year and in identifying the correct option.

Candidates are expected to pay special attention to abnormal basis period situations.

**QUESTION 5**

**OKON HOTEL AND SUITES LIMITED**

**COMPUTATION OF TOTAL VAT PAYABLE TO FIRS FOR 2007 YEAR OF ASSESSMENT**

(a)

<table>
<thead>
<tr>
<th>Output VAT</th>
<th>₦</th>
<th>₦</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAT charged on</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Food and Beverage</td>
<td>154,000</td>
<td></td>
</tr>
<tr>
<td>- Accommodation</td>
<td>251,000</td>
<td></td>
</tr>
<tr>
<td>- Services</td>
<td>91,000</td>
<td></td>
</tr>
<tr>
<td><strong>Less:</strong> Input VAT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- VAT paid on materials for kitchen</td>
<td>88,000</td>
<td></td>
</tr>
<tr>
<td>- VAT paid on drinks for resale</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td><strong>Total VAT due to FIRS</strong></td>
<td>398,000</td>
<td></td>
</tr>
</tbody>
</table>

(b) **COMPUTATION OF BALANCE OF VAT REMITTABLE**

<table>
<thead>
<tr>
<th></th>
<th>₦</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total amount due</td>
<td>398,000</td>
</tr>
<tr>
<td>Deduct:</td>
<td></td>
</tr>
<tr>
<td>Amount already remitted</td>
<td>200,000</td>
</tr>
<tr>
<td><strong>Balance remittable</strong></td>
<td>198,000</td>
</tr>
</tbody>
</table>

(c) The penalties imposed on a tax payer for failing to file self assessment returns are as follows:

(i) Penalty of ₦25,000 payable by every company in the first month the failure occurs and thereafter ₦5,000 penalty for each month the failure persists.

(ii) Denial of instalmental payment privilege.
(iii) Payment of interest on tax liability unpaid for the period of the default.
(iv) Denial of Tax Clearance Certification.
(v) Possibility of raising a Best of Judgment assessment.

EXAMINERS’ REPORT

The question tests candidates’ ability to identify Input and Output VAT and the reconciliation of the account for the purpose of arriving at amount remittable to FIRS.

Candidates demonstrated a good understanding of the question and performance was well above average. Candidates’ commonest pitfall was their inability to state penalties imposed on a company for failure to file self assessment returns.

Candidates are advised to pay attention to theoretical requirements of the tax laws.
QUESTION 6

ESTATE OF MR. JAMES KOKO
COMPUTATION OF INCOME FOR YEAR ENDED DECEMBER 31 2010

<table>
<thead>
<tr>
<th></th>
<th>Wife</th>
<th>1st Son</th>
<th>2nd Son</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income: Rent</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Less: Maintenance of property</strong></td>
<td>400,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Rates and other govt. charges</strong></td>
<td>210,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Agent’s Commission</strong></td>
<td>150,000</td>
<td>760,000</td>
<td></td>
</tr>
<tr>
<td><strong>Commission</strong></td>
<td>5,240,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Less: Other expenses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Staff salaries</strong></td>
<td>300,000</td>
<td>1,050,000</td>
<td></td>
</tr>
<tr>
<td><strong>Executor’s fees</strong></td>
<td>750,000</td>
<td>4,190,000</td>
<td></td>
</tr>
<tr>
<td><strong>Less: Executor’s discretionary payment</strong></td>
<td>600,000</td>
<td>300,000</td>
<td>300,000</td>
</tr>
<tr>
<td><strong>Amount available for distribution in the ratio 3:4:4</strong></td>
<td>3,590,000</td>
<td>979,091</td>
<td>1,305,454.5</td>
</tr>
<tr>
<td><strong>Amount to be shown in tax returns for 2011 year of assessment</strong></td>
<td>979,091</td>
<td>1,605,454.5</td>
<td>1,605,454.5</td>
</tr>
</tbody>
</table>
EXAMINERS’ REPORT

The question tests candidates’ knowledge of the taxation of Executors.

About 40% of the entire candidates attempted the question. Performance was average.

The commonest pitfall was their inability to correctly distribute the residual income to beneficiaries.

Candidates are advised to read wide to cover all topics of the syllabus.
Write only the alphabet (A, B, C, D or E) that corresponds to the correct option in each of the following questions.

1. Which of these statements would depict “gossip” as unethical?
   A. If it is done in the open
   B. If you have promised to keep information secret
   C. If it begins unexpectedly
   D. If it affects workers’ performance
   E. If everyone involved sees nothing wrong with it

2. Which of these combinations of elements can make a public speech succeed?
   A. Personality, occasion, venue
   B. Occasion, preparation, logic
   C. Proverbs, rib crackers, seriousness
   D. Humour, pronunciation, panache
   E. Organisation, content, delivery

3. Which of the following reports would NOT require conclusions and recommendations as mandatory in its write-up?
   A. Regular report
   B. Progress report
   C. Analytic report
   D. Technical report
   E. Information report
4. The internet is used to store information hence it can be called .....................
of information
   A. Host
   B. Source
   C. Archive
   D. Library
   E. Loop

5. Which of the following concepts depicts the value that occurs most often in a
given set of data?
   A. Mean
   B. Median
   C. Geometric mean
   D. Mode
   E. Harmonic mean

6. A characteristic feature of a symmetric distribution is that the
   A. Mean is larger than the median
   B. Mode is the largest value
   C. Mean, median and the mode are equal
   D. Mean is smaller than the median
   E. Variance, median, and the standard deviation are all equal

7. All the following are measures of Central Tendency **EXCEPT**
   A. Deciles
   B. Mode
   C. Arithmetic mean
   D. Harmonic mean
   E. Geometric mean
8. Which of these items is a visual aid that is used in data presentation?

A. Interview  
B. Observation  
C. Questionnaire  
D. Tables  
E. Chairs

9. A major reason for sampling is reduction of

A. Techniques  
B. Cost and time  
C. Results  
D. Choices  
E. Value

10. Which of the following is an Information Communication Technology device that enables phones and computers to be connected over short distances without using wires?

A. Bluechip  
B. Bluetooth  
C. Bluetit  
D. Blueteeths  
E. Bluelink

11. Noise reduces fidelity of communication in

A. Encoder only  
B. Decoder only  
C. Channel only  
D. All the elements  
E. Message only
12. The following rate of returns were released on an investment over a 5-year period:

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of returns</td>
<td>0.10</td>
<td>0.22</td>
<td>0.06</td>
<td>(0.05)</td>
<td>0.20</td>
</tr>
</tbody>
</table>

Compute the median of the rate of returns.

A. (0.05)
B. 0.06
C. 0.10
D. 0.20
E. 0.22

13. Values of a variable in a set of data that lie far from the other values are referred to as

A. Outliers
B. Extraneous
C. Limits
D. Excess
E. Extreme

14. Which of the following is NOT useful for public presentation?

A. Flip chart
B. Multi-media projector
C. Poster
D. Overhead projector
E. Scanner

15. A glossary in a report represents

A. A list of equipment used in an experiment.
B. A brief on the report.
C. Raw data not essential to the report.
D. Definition of unfamiliar terms in the report.
E. A citation of references.
16. People interested in a particular topic and maintaining communication through e-mail, belong to

A. Data converge  
B. *Audience d'ellarte*  
C. Mailing list group  
D. Blog group  
E. Linked com-con

17. Which of these does **NOT** represent a single route information flow?

A. Channel  
B. Diagonal channel  
C. Lateral channel  
D. Multi-channel  
E. Informal channel

18. The collection of all possible individuals, objects and measurements for the purpose of research is known as

A. A sample  
B. A ratio measurement  
C. An inference  
D. A population  
E. A survey

19. Which of the following describes the frequency distribution in which most data fall into categories above or below the median?

A. Skewed distribution  
B. Kurtosis distribution  
C. Normal distribution  
D. Uniform distribution  
E. Leptokurtic distribution
20. To draw a conclusion about a defined population relying on a sample drawn from that population requires the intervention of

A. Variance statistic  
B. Standard deviation statistic  
C. Inferential statistic  
D. Mean statistic  
E. Descriptive statistic

PART II: SHORT-ANSWER QUESTIONS (20 MARKS)

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

1. A statement that the population parameter is some value other than the value stated by the null hypothesis is known as.................................................

2. A statistical method that can be used to statistically equate groups that differ on a pretest or some other variable is known as.................................

3. A personal computer requires..................software before it can be used for specific tasks.

4. The page on the internet where users log on to get information is..........................

5. A note at the bottom of a page supplying additional information about an item in the body of a report is known as..............

6. The grapevine channel of communication is also called the ...............channel.

7. The measuring scale used by researchers to differentiate between male and female respondents in a survey is.................................

8. The web-based internal network of electronic communication systems that link employees is called..........................
9. When looking for information on a particular topic, the best web-based resource to use is ……………………………

10. A type of bar chart which contains two or more classes for each category of data is ……………………..

11. A standardised method of acknowledging sources of information and ideas used in write-ups is called………..

12. The summary of the work done by a researcher is…………………..

13. The two types of errors in hypothesis testing are…………………..and…………………..

14. A system of sounds and words used by human beings to communicate is……………………………..

15. The fastest means of communication is……………………………..

16. A word spelt like another word but differentiated by meaning and pronunciation is called a……………………………..

17. This is the book which Soyinka wrote. The underlined word is ……………………..pronoun.

18. An independent variable is also known as……………………………..

19. The variable a researcher is seeking to measure is……………………………..

20. The degree of linear association between two variables is measured by……………………………..
SECTION B: ATTEMPT ANY FOUR QUESTIONS (60 Marks)

QUESTION 1

(a) Explain briefly any FIVE individual barriers to effective communication. (5 Marks)

(b) Explain briefly ways in which communication can be applied to perform the following functions of management:

(i) Decision making
(ii) Motivation
(iii) Controlling
(iv) Leadership
(v) Planning (10 Marks)

(Total 15 Marks)

QUESTION 2

A researcher wrote a computer program to simulate the way a prospective Accountant responds to a standard I.Q. Test. To test the simulation program, 15 different I.Q. Tests were generated from the simulation. The table below is the result of the simulation:

Simulated Accountants I. Q. Test table

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>134</td>
<td>136</td>
<td>137</td>
<td>138</td>
<td>138</td>
<td></td>
</tr>
<tr>
<td>143</td>
<td>144</td>
<td>144</td>
<td>145</td>
<td>146</td>
<td></td>
</tr>
<tr>
<td>146</td>
<td>146</td>
<td>147</td>
<td>148</td>
<td>153</td>
<td></td>
</tr>
</tbody>
</table>

You are required to:

(a) Compute the

i. Mean (1 Mark)
ii. Variance and the Standard Deviation (2 Marks)
iii. Coefficient of Variation. (2 Marks)
(b) Distinguish between the following research concepts and give ONE example each.

i. Dependent and independent variables. (2 Marks)
ii. Research questions and hypotheses. (2 Marks)
iii. Extraneous and controllable variables. (2 Marks)

(c) Describe any FOUR essential steps in Sample Survey. (4 Marks)  
(Total 15 Marks)

**QUESTION 3**

(a) Define each of the following Concepts:

(i) Reference (1½ Marks)
(ii) Bibliography (1½ Marks)

(b) State THREE differences between Reference and Bibliography. (3 Marks)

(c) State THREE types of referencing style. (3 Marks)

(d) Show by illustration, how each style in (c) is used in referencing books. (6 Marks)  
(Total 15 Marks)

**QUESTION 4**

(a) Explain briefly the term “research population” (2 Marks)

(b) Define and distinguish between probability and non-probability sampling. (3 Marks)

(c) State FOUR reasons why non-probability sampling is used (4 Marks)

(d) Explain any THREE of these types of research:

i. Applied research
ii. Basic research
iii. Survey research
iv. Historical research
v. Ex-post-facto research (6 Marks)  
(Total 15 Marks)
QUESTION 5

(a) Explain briefly the following terminologies in relation to speech delivery:

i. Recognition  
   (1½ Marks)

ii. Oral Style  
   (1½ Marks)

(b) Discuss briefly any THREE methods of speech delivery.  
    (6 Marks)

(c) Explain the THREE problems associated with pronunciation in speech delivery.  
    (6 Marks)

(Total 15 Marks)

QUESTION 6

A survey was conducted on students’ interest in joining a popular readers’ club in Lagos. Two Hundred students were interviewed and some indicated their intention to join such a club. The 200 responses are classified into the four categories shown in the accompanying table:

<table>
<thead>
<tr>
<th>Living Arrangement</th>
<th>Intend to join</th>
<th>Number interviewed</th>
<th>Expected Frequency (percent x 60)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hostel accommodation</td>
<td>16</td>
<td>90</td>
<td>27</td>
</tr>
<tr>
<td>Apartment nearby</td>
<td>13</td>
<td>40</td>
<td>12</td>
</tr>
<tr>
<td>Apartment distant</td>
<td>16</td>
<td>40</td>
<td>12</td>
</tr>
<tr>
<td>Live at home</td>
<td>15</td>
<td>30</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>200</td>
<td>60</td>
</tr>
</tbody>
</table>

The result is to be analysed by type and location to students’ housing.

You are required to

(a) Formulate the appropriate hypothesis to be tested.  
    (2 Marks)

(b) State the appropriate statistical test to be conducted.  
    (2 Marks)

(c) State the test statistic to be used and calculate its value.  
    (4 Marks)

(d) Interprete your result, given that the critical value is 7.82  
    (3 Marks)

(e) Describe any FOUR methods of data collection.  
    (4 Marks)

(Total 15 Marks)
SOLUTIONS TO SECTION A

PART I  MULTIPLE-CHOICE QUESTIONS

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

The questions cover the syllabus adequately.

Over 75% of the candidates scored above 50% of the marks allocated.

PART II     SHORT-ANSWER QUESTIONS

1. Alternate or Alternative

2. T-test, or Z-test, or ANOVA, or F-test, or Equality of several means

3. Application

4. Website

5. Footnote

6. Informal

7. Nominal

8. Intranet

9. Search engine

10. Multiple bar chart or component bar chart

11. Referencing

12. Abstract

13. Type I and Type II

14. Language

15. Face-to-face/oral
16. Homograph

17. Relative

18. Explanatory or determining or predictive or treatment or exogenous

19. Dependent/Response

20. Coefficient of correlation

EXAMINERS' REPORT

The questions cover the syllabus adequately.

All the candidates attempted the questions but less than 45% of them scored above 50% of the marks allocated. Candidates did not understand the requirements of the questions. They are advised to cover the syllabus adequately.

SOLUTIONS TO SECTION B

QUESTION 1

(a) Five individual barriers to effective communication are

i. **Perception:** Perception is the way an individual sees a situation or person. The way individuals see things differ. What an individual perceives is based on his training and experiences, with experiences playing a major role and sometimes overshadowing training because it is widely believed that training is theory and experience is the real thing and that the situation many times determines how theoretical knowledge is to be applied. Where an individual has had a particular experience in which he has had to conduct a procedure in a certain way before he could produce the required result, the next time he would carry out the procedure, he would be inclined to do it the way he did it earlier. This is because his experience has conditioned him to think that without doing it the way he did it before, he would not produce the required result.
ii. **Semantics**: The meaning of words and the way words are used to derive meaning out of them could be problematic and could be a barrier to effective communication. Words may be used in a way that what they mean in their context of use is ambiguous. Also, where sender and receiver do not share the same meaning and frame of reference in regard to words, words used in a particular context may mean different things in different contexts. Also, words could be used with denotative meaning by the sender while the receiver may be thinking of the word in a connotative sense. This way, the use of words may be a barrier to effective communication.

iii. **Bias**: Bias is preconceived negative notion about a person or situation. A sender or receiver may have certain preconceptions about the receiver or sender or about the situation which the message is about. This preconceived negative notion would adversely affect the communication because the message would be exchanged along with the preconceived notion. This means the encoding of the message and the decoding of the message would be affected by the preconceived notion that either party had prior to the commencement of communication.

iv. **Feelings**: Feelings are emotions and there is usually a distance between emotion and reason. For example, individuals have feelings of hatred and love for one another but these are feelings which determine how they relate to one another and what they allow and what they forbid. However in a situation that demands objectivity, feelings would not permit the person to be objective. The feelings of hatred or love would determine what the individual does in that situation and that would be a hindrance to objective communication.

v. **Stereotypes**: People and individuals have fixed patterns of regarding certain situations. Phenomena and people that they encounter are then classified according to these fixed patterns. A number of these stereotypes are based on bias i.e. negative preconceived notions. However, a number of stereotypes are also based on positive preconceived notions whereby a person may be favourably disposed to certain individuals and groups and may not exercise due diligence and caution in dealing with them. For example, people from some ethnic backgrounds are regarded as being unintelligent while clergymen are regarded as generally honest and well behaved. These are general categorisation, and conceptions based on certain facts and factors which may not apply to every individual in this group. Additionally, bias may be based on prejudice and may not have any objective basis.
vi. **Source Credibility:** Source credibility could also be a problem. Where the source is regarded as not being credible, people would not believe what the speaker is saying and in a situation where the speaker should be given the benefit of the doubt, they would not be ready to give such benefit. This is because the speaker is not regarded as meriting being given that credit. A source is regarded as being credible when it is believed to be trustworthy, appropriately trained, experienced and equipped for the responsibility the speaker is handling. Also, where a source is believed to possess the wherewithal to deliver on the responsibility saddled with, it would be regarded as a credible source.

vii. **Clarity and Correctness:** The message has to be clearly conceived and encoded with clarity. The message intended should be clear from the way it is expressed. Where a message is incompetently put together, it would affect the way the message is decoded and the bad form of the message would be a barrier to effective communication. Also, errors of construction and expression should be avoided. Errors of grammar, construction and structuring would constitute barriers to effective communication.

(b) (i) **Decision-making:** Decision making is necessary in all management functions. Managers at different levels of the organisation have the responsibility to take decisions from time to time. These decisions that are taken are responsible for ensuring that the organisation makes progress and stays on course to achieve the aims and objectives for which it was established in the short and long terms. Decisions are taken to affect minute tasks and carry them through and also to advance the mega aims and directions of the organisation.

In order for decisions to be taken by people in management, they need a lot of information from subordinates, colleagues and superiors. For this reason, managers need to receive reports, peruse memos, convene meetings to access these information and for making decisions when necessary and on diverse issues. These methods enable the manager to access the information and inputs needed for quality decisions; in actual fact, a meeting creates a forum for decision making.
ii. **Motivation:** Management is responsible for motivating individuals and groups in the organisation. The purpose of this act of motivation is to ensure that such workers and worker groups as are energized as a direct attuning to the fulfillment of organisational goals. Motivation to achieve targets depends on how the targets are communicated. Written and non-verbal methods determine to what extent the motivation to action is effective. Also, organisational culture needs to be communicated from the perspective of motivation. Workers have to be motivated to imbibe organisational culture. For example, one of the purposes of induction training is the communication of organisational culture.

Also, motivation requires insistence, tenacity and confidence on the part of the manager. The manager cannot take it for granted that once he states the information it would be accepted and acted upon. He has the responsibility to check, double check and monitor to ensure that there is compliance. There is a saying that people do not do what is expected but what is inspected. Inspection in this regard is a way to monitor and ensure compliance. It is a strategy in motivating subordinates to comply with and actualise management policies, programmes and directives. To do this right, the manager needs constant feedback so that he knows what is not being properly done so that he can guide and further direct as to what to do.

iii. **Controlling:** Controlling is done by exercising powers to align units and individuals within the organisation to organisational goals, aims and objectives. It is a measure of bringing the organisation and its units in line with the pursuits and targets of the organisation. It ensures that units within the organisation are pulling their weight the way they should to ensure that once each unit does its bit, an aggregation of these diverse contributions progress towards the same destination and would ensure that the organisation reaches its goal eventually.

Controlling demands that the goals, targets and objectives of the organisation have to be properly set out and communicated at the beginning so that individuals and units know what the expectations of the organisation are. Also, from time to time, measurements have to be taken to determine compliance and where there is compliance, commendation has to be communicated and where there is no compliance, measures to ensure that there is compliance have to be communicated. In all these, the pattern of reporting within the organisation should ensure that critical factors are reported in a manner that they do not get lost in the maze of communication within the organisation.
In addition, objective measurement instruments have to be designed and properly communicated. In some organisations, the chart for individual performance is conspicuously displayed and the target is made to pursue the officer to perform and keep the officer on his toes.

iv. Leadership: The responsibility for achieving organisational goals, objectives and targets lies with the management of the organisation and must provide leadership in the organisation in the realisation of all these. This is because if the management abdicates the responsibility to do this, that management may lose credibility and create a situation for its replacement with external people who can lead the organisation or insiders who would have filled the vacuum of leadership created by management’s attitude.

One of the traits the management must communicate is commitment. The management must at all times and, in all situations, even adverse ones, communicate commitment in verbal, written and non-verbal ways to the organisation and her goals and objectives. Another way in which leadership is shown in the organisation is through identity. Management has to totally identify itself with the organisation and show itself to be totally committed to the organisation.

Management has to demonstrate identification with organisational products in using them, organisational colours and logos by displaying and wearing them. Management must also always speak of the policies, and principles of the organisation even in unlikely and remote environments. Another trait of management is responsibility. Management must take responsibility for shouldering the hard tasks of the organisation and for resolving situations in the organisation no matter how complex. Management must not pass the buck but must take responsibility for actions and inactions. Management must also relate properly with subordinates, communicate with them, mentor them, commend them where necessary and communicate direction to them.
v. **Planning:** Communication is used by management to perform the function of planning. Planning, in a sense, is getting the organisation ready for the future. Management needs to communicate organisational goals and objectives clearly to employees, departments and units. Effective communication of goals and objectives guide the future of the organisation and guides units, departments and individuals to what the organisation is working towards. This guides planning. Also, in the process of planning, planners have to communicate with other units in the organisation to ensure synergy and unity of purpose.

**EXAMINERS’ REPORT**

This question tests candidates’ knowledge of barriers to effective communication and the application of communication in management functions.

Candidates’ performance was poor. The major pitfall was that many of them interpreted “individual barriers “to mean personal peculiar negative attributes of the parties in communication, in part (a) of the question. Their expression was poor.

Candidates should endeavour to improve the quality of their expression and knowledge of organizational communication.

**QUESTION 2**

<table>
<thead>
<tr>
<th>Simulated values ( x )</th>
<th>freq ( f )</th>
<th>( fx )</th>
<th>( fx^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>134</td>
<td>1</td>
<td>134</td>
<td>17,956</td>
</tr>
<tr>
<td>136</td>
<td>1</td>
<td>136</td>
<td>18,496</td>
</tr>
<tr>
<td>137</td>
<td>1</td>
<td>137</td>
<td>18,769</td>
</tr>
<tr>
<td>138</td>
<td>2</td>
<td>276</td>
<td>38,088</td>
</tr>
<tr>
<td>143</td>
<td>1</td>
<td>143</td>
<td>20,449</td>
</tr>
<tr>
<td>144</td>
<td>2</td>
<td>288</td>
<td>41,472</td>
</tr>
<tr>
<td>145</td>
<td>1</td>
<td>145</td>
<td>21,025</td>
</tr>
<tr>
<td>146</td>
<td>3</td>
<td>438</td>
<td>63,948</td>
</tr>
<tr>
<td>147</td>
<td>1</td>
<td>147</td>
<td>21,609</td>
</tr>
<tr>
<td>148</td>
<td>1</td>
<td>148</td>
<td>21,904</td>
</tr>
<tr>
<td>153</td>
<td>1</td>
<td>153</td>
<td>23,409</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>2,145</td>
<td>307,125</td>
</tr>
</tbody>
</table>

(a) (i) \[ \text{Mean} = \frac{\sum fx}{\sum f} = \frac{2145}{15} = 143 \]
(ii) Variance = \( \frac{\sum fx^2}{\sum f} - \left( \frac{\sum fx}{\sum f} \right)^2 \)

\[
= \frac{307,125}{15} - (143)^2 \\
= 20,475 - 20,449 \\
= 26
\]

Standard deviation = \( \sqrt{\text{Variance}} \)

\[
= \sqrt{26} = 5.099
\]

(iii) Coefficient of Variation = \( \frac{\text{Standard Deviation}}{\text{Mean}} \times 100\% \)

\[
= \frac{5.099 \times 100}{143} \\
= 3.566\% \\
= 3.6\%
\]

Alternative method to solution (a)

(i) Mean = \( \frac{\text{Sum of the simulated values}}{\text{Number of simulated values}} \)

\[
=(134+136+137+138+138+143+144+144+145 \\
+146+146+146+147+148+153) \\
= \frac{2,145}{15} = 143
\]

(ii) Variance = \( \frac{\sum x^2}{n} - \left( \frac{\sum x}{n} \right)^2 \)

\[
= \frac{(134^2+136^2+137^2+138^2+138^2+143^2+144^2+144^2+145^2 \\
+146^2+146^2+146^2+147^2+148^2+153^2)}{15} - 143^2 \\
= \frac{207,125}{15} - 20,449 \\
= 26
\]
Standard Deviation $= \sqrt{26}$
$= 5.099$

(iii) Coefficient of variation (C.V) = $\frac{\text{Standard Deviation} \times 100}{\text{Mean}}$

$= \frac{5.099 \times 100}{143}$
$= 3.566$
$= 3.6\%$

OR

\[
\overline{X} = \frac{\sum x}{n} = \frac{2145}{15} = 143
\]

11. \[
\begin{array}{|c|c|c|}
\hline
X & \overline{X} - x & (X - \overline{X})^2 \\
\hline
134 & -9 & 81 \\
136 & -7 & 49 \\
137 & -6 & 36 \\
138 & -5 & 25 \\
138 & -5 & 25 \\
143 & 0 & 0 \\
144 & 1 & 1 \\
144 & 1 & 1 \\
145 & 2 & 4 \\
146 & 3 & 9 \\
146 & 3 & 9 \\
146 & 3 & 9 \\
147 & 4 & 16 \\
148 & 5 & 25 \\
153 & 10 & 100 \\
\hline
\end{array}
\]

$390 = \sum (x - \overline{x})^2$
Variance \( (S^2) = \frac{\sum(x-x\bar{ })^2}{n} \)

\[ = \frac{390}{15} = 26.0 \]

Standard deviation

\[ = \sqrt{\text{Variation}} \]

\[ = \sqrt{26} \approx 5.1 \]

iii. Coefficient of variation (C.V) = \( S \times \frac{100}{\bar{x}} \)

\[ = \frac{5.099 \times 100}{143} \text{ } 1 \]

\[ = 3.6\% \]

(b) (i) **DEPENDENT AND INDEPENDENT VARIABLES:**

Dependent variable is a variable in a relationship whose value or behavior depends on other variable in the same relationship or model. For instance, in a research topic ‘the impact of motivation on productivity of employees’, the concept of productivity is dependent variable because its value depends on the level of motivation of the employees. Independent variable is a variable in a relationship or model that determines the value or behavior of other variable(s). In the example of motivation and productivity, motivation is an independent variable.

(ii) **RESEARCH QUESTIONS AND HYPOTHESES**

Research questions are interrogative relational statements that enable a researcher to provide solutions to identified questions. They are usually in question forms, e.g. what are the various forms of motivations used by an organisation? What is the relationship between motivation and productivity? Research question leads to objective.
Hypothesis is a tentative statement that relates two or more variables which has the possibilities of empirical testing. It is always in a statement form and it can be stated as Null and Alternative forms. For instance, there is no significant relationship between motivation and productivity of employees. Alternative form; there is a significant relationship between motivation and productivity of employees.

(iii) EXTRANEOUS AND CONTROLLABLE VARIABLES

Extraneous variables are variables that are not within the scope of the study or specified relationship but in the problem identified. Thus, they are not within the manipulation of the researcher in a specific study. This notwithstanding, their effects could be significant on the analysis of the researcher’s data. They could also be reduced by holding them constant or ignoring them.

Controllable variables are those that can be manipulated by the researcher to achieve their desired objectives. These variables are common in experimental research but not common in survey research.

(c) ESSENTIAL STEPS IN SAMPLE SURVEY INCLUDE THE FOLLOWING:

(i) State the research objectives. These must be clearly stated to guide the researcher in the choice of appropriate sample and subsequent collection of data.

(ii) The problem should be hypothesized to further direct the researcher in his data collection procedure.

(iii) State the appropriate research design

(iv) Identification or definition of the research population. This is necessary to ensure the application of the research outcome or result; and to enable the researcher select appropriate sample.

(v) Define the sample size. The sample size should be representative in terms of the major variables in the population and the population size. The sample size could be defined using the scientific method or rule of thumb.

(vi) Select appropriate sample technique. The appropriate sampling technique (such as simple random, systematic, stratified, cluster, quota etc) that meets the objectives of the study should be selected.
(vii) Proceed to collect the relevant data.

EXAMINERS’ REPORT

The question tests candidates’ knowledge of Central Tendency, Measure of Dispersion, Research Concepts and Methodology.

About 90% of the candidates attempted this question. Out of this number, 40% scored over 50% of the allocated marks. The commonest pitfall was that candidates did not understand the essential steps involved in Sample Survey.

Candidates are advised to be well grounded in Research Concepts and steps involved in Sample Survey.

QUESTION 3

(a) **Reference** is a method of acknowledging the sources of information and ideas used in the body of a research report. It uses resources from both published and unpublished works.

**Bibliography** is a conventional method of acknowledging the sources of information or ideas that are used in the body of a research work. It acknowledges casual observation or experiences that are relevant to the topic of the research study.

(b) (i) While references are listed in alphabetical order by author’s surname, bibliography may be sectionalized and arranged in sequences of books, journals, articles, newspapers and so on. They are also arranged in alphabetical order with surname first.

(ii) Bibliography appears once in the entire work and at the last section of the report while references are cited in the text and appears at the end of each chapter, depending on the style used.

(iii) In bibliography, the authors’ last names are written first before initials or other names while the references may have surnames of the authors before the initials, depending on the style of referencing.
(iv) References make use of works (Books, journals etc.) that are actually sighted in the research report while bibliography are works whether used or not but are related to the research report.

(c) Types of referencing style are
- American Psychology Association (APA)/Harvard Style
- Chicago Style/Kate Turbian Style
- Modern Language Association (MLA) style

(d) Illustrations for types of referencing style itemized in (c) are

i) APA STYLE (Books)

ii) CHICAGO STYLE (Books)
   Onuka Francis, *Come To Grief* (Lagos; Longman, 1994.).

MLA (Books)

EXAMINERS’ REPORT

The question tests candidates’ knowledge of referencing.

About 90% of the candidates attempted the question and performance was average. The commonest pitfalls identified were the inability of candidates to illustrate the different referencing styles and differentiate between references and bibliography.

Candidates are advised to carefully study and understand the concepts of references and bibliography as well as referencing.
QUESTION 4

(a) Research Population

This is the entire number of items or objects or people about which the researcher wants to obtain information. It could also be defined as an aggregate of elements from which the sample is actually selected. It refers to any group of people or objects which are similar in one way or the other and which form the subject of study in a particular survey. The research population must be clearly defined. Population could be finite or infinite.

(b) Probability and non-probability sampling

Probability sampling is a sampling technique in which the sample items are chosen randomly. That is every item in the population is given equal chance of being selected. Probability sampling includes simple random, stratified, systematic and cluster sampling.

Non-probability sampling technique is a sampling technique that does not give individual items in the population equal chance of being selected. It is therefore biased in its selection processes. The method includes Quota, Judgemental and Convenience sampling.

(c) Reasons why non-probability sampling techniques are used in research study include.

(i) Where the researcher finds that he is dealing with infinite population.

(ii) Where random sampling techniques are not likely to guarantee the inclusion of typical cases.

(iii) Where the resources such as finance, time and human that are required to conduct the study are not sufficient.
(iv) The type of statistical analysis envisaged may determine the use of non-probability sampling techniques.

(v) The objective of the researcher will also determine the use of non-probability sampling techniques.

(d) (i) **Applied Research**

This is a research conducted with a view to testing and applying the established theories as well as evaluating the usefulness of such theories in solving practical problems. It is concerned mostly with the application of theories. Thus, Applied Research complements basic research. This is because while basic research provides the theory, applied research provides the necessary data to support the theory and in the same process attempts to suggest ways of improving the theory or the development of new theory.

(ii) **Basic Research**

This is basically a fact-finding research and it is sometimes referred to as fundamental research or pure research. It is a research conducted for the purpose of establishing or developing theories. It therefore provides theories which may lead to finding solutions to problems. Basic research seeks to ask questions such as “what is the effect of the study on the proposed goals and objectives? What are the factors affecting the outcome of the study? etc.”

(iii) **Survey Research**

This is a research that involves collecting data through the administration of questionnaire, interviews and observation. It gives a critical examination of events, objects or ideas with the intent of providing information about the conditions of such situation.

The primary concern of survey research is the study population, but it makes use of the selected sample that would be seen as a representative of the entire population.
(iv) **Historical Research**

This is a type of descriptive research. It makes use of mainly dates and occurrence of events' analysis to determine the influence of events on present situation as well as to predict the future with such findings. Conclusions in historical research are subject to the opinion of the researcher.

(v) **Ex-Post facto Research**

This research takes place after the event has occurred. This is also known as Casual Comparative Research. It determines cause and effect relationship by examining the conditions that are traceable to the probable casual factor of the event under investigation. The effect and cause have already occurred but these conditions are studied in retrospect. Its findings could be used to prevent future occurrence of such problem or event.

**EXAMINERS’ REPORT**

The question tests candidates’ knowledge of population, probability, non-probability sampling techniques and types of research.

About 95% of the candidates attempted the question. Out of this number, about 40% scored 50% of the allocated marks. The commonest pitfall identified was the inability of candidates to understand types of research and research concepts.

Candidates are advised to pay particular attention to research concepts in general.

**QUESTION 5**

(a) (i) **Recognition:** A speech is an oral presentation that has a specific event as its context. In this sense, recognition is an important aspect of the speech. Dignitaries at the speech event should be accorded due respect and recognition before the speaker launches into the speech. They should be addressed in a way that properly reflects their social standing.
(ii) **Oral Style:** A speech has an oral style. It shows elements of oral delivery with characteristics such as direct address, direct reference to speaker and audience and reference to the speech event. These elements communicate immediacy and make the speech dynamic and adaptable to the situation of speech delivery.

(b) (i) **Impromptu:** This method of speech delivery that does not permit the speaker prior preparation as invitation to speak usually comes suddenly and unexpectedly. In terms of spontaneity, the impromptu method of speech delivery is the most effective. This method of speech making is recommended only for experienced public speakers with a deep understanding of their subjects.

(ii) **Extemporaneous method:** This method allows the speaker to write down brief notes under headings of the principal parts of speech. Such notes are used as a guide while the actual composition of the speech is done as delivery is made. Extemporaneous delivery is spontaneous and allows the speaker to maintain eye contact with the audience.

(iii) **The manuscript speech:** This is a method that allows for reasonable prior preparation. It is used for formal occasions. The entire speech is written verbatim. The speaker has all the time to revise what is written, correct errors and organize his material in a logical order. This method is most suitable for presenting numeric information. It is also suitable for future reference as a copy can be preserved.

(iv) **Memorised speech:** This method is similar to the written method in preparation, as the entire speech is written in verbatim and subsequently committed to memory. The speaker appears on stage before the audience without any notes and recites what he has memorised. The speaker creates in the audience the impression of a good orator as a result of his fluent delivery.

(c) Problems associated with the pronunciation are in the areas of

i. Sound
ii. Stress
iii. Intonation
Sound: English sounds are made up of vowels and consonants. Vowel sounds are either short or long. The use of a short vowel in place of a long vowel can change the meaning and function of the word. For example, ‘sit/seat’. The first word has a short vowel and functions as a verb while the second one has a long vowel and functions as a noun. An interchange of these vowels will reveal an error of misuse. Certain consonant sounds like /b/ of ‘comb’ ‘climb’ ‘plumb’ and /l/ of ‘alms’, ‘calf’ ‘walk’ are not pronounced. Many speakers show their ignorance when the sound of such consonants appears in their pronunciation.

Stress: This is the relative force with which the segment of a word is pronounced. Stress tends to shift backwards. That is, most two-syllable words are stressed on the first syllable; most three-syllable words have their stress on the second syllable and so on. Most Nigerians who speak English Language do not realise this. As a result, arbitrariness takes prominence in their speech which is unintelligible in an international gathering.

Intonation: This is the relative rise and fall of the pitch of voice when speaking or reading aloud. Intonation is used to distinguish sentences by function. Statements, commands and questions are what they are because of intonation. Any misuse of intonation can lead to a change of meaning and function. Intonation, therefore, is a feature of a whole sentence and not of the individual elements making up the sentence.

EXAMINERS’ REPORT

The question tests candidates’ knowledge of oral method of communication, that is, speech delivery.

The question was not popular among candidates as only about 10% of them attempted it. Performance was poor. The commonest pitfall identified was that candidates were not familiar with the oral communication aspect tested viz. theory of speech deliveries, sound articulation and vocalization.

Candidates are advised to study formal and informal speech deliveries, speech sounds and articulation.
QUESTION 6

(a) \( H_0: \) The proportion in the population who intend to join the club is independent of living arrangement

\( H_1: \) The proportion in the population who intend to join the club is dependent on living arrangement.

(b) The statistical test to be used is \( X^2 \) – test (chi-square).

The \( X^2 \) – test is used because the responses are classified into nominal categories and there are sufficient observations.

(c) Test statistic to be used is given by the formula

\[
X^2 = \sum \frac{(o_i - e_i)^2}{e_i}
\]

\[
X^2 = \frac{(16 - 27)^2}{27} + \frac{(13 - 12)^2}{12} + \frac{(16 - 12)^2}{12} + \frac{(15 - 9)^2}{9}
\]

\[
= 4.48 + 0.08 + 1.33 + 4.0 = 9.89
\]

(d) Interpretation

The calculated value is greater than the critical value (i.e. 9.89 > 7.82), so the Null Hypothesis is rejected and we conclude that the proportion of students in the population who intend to join the readers club is dependent on their living arrangement.

(e) Four methods of data collection

(i) **Interview:** This is a data collection method in which two or more people are involved – the interviewer and interviewee(s) who interact face-to-face or through telephone or any other electronic media. It could be personal or telephone, structured or unstructured interview, patterned or unpatterned, directed or non-directed
(ii) **Questionnaire:** It is a data collection method in which the researcher designs questions on the research objective or problem and sends them to the respondents for appropriate responses.

(iii) **Observation:** It is the data collection method in which the researcher observes the behaviour or activities of the variable(s) directly or indirectly and systematically records his observations.

(iv) **Experimentation:** A research method in which a researcher manipulates independent variable(s) in order to produce some effects on the dependent variable.

(v) **Records:** A research method in which the researcher looks into existing records in order to extract relevant information for research purpose(s).

EXAMINERS’ REPORT

The question tests candidates’ knowledge of chi-square and its application and methods of data collection.

About 65% of the candidates attempted the question and only 45% of them scored above 50% of the marks allocated. The commonest pitfall identified was that candidates could not state the Null and the Alternate Hypothesis correctly.

Candidates should be familiar with the various test statistics for hypothesis testing.