



**THE INSTITUTE OF CHARTERED ACCOUNTANTS
OF NIGERIA**

PATHFINDER

MAY 2012 INTERMEDIATE EXAMINATION

Question Papers

Suggested Solutions

Plus

Examiners' Reports

PATHFINDER

FOREWORD

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

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

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

It is hoped that the suggested answers will prove to be of tremendous assistance to students and those who assist them in their preparations for the Institute's Examinations.

NOTES

Although these suggested solutions have been published under the Institute's name, they do not represent the views of the Council of the Institute. The suggested solutions are entirely the responsibility of their authors and the Institute will not enter into any correspondence on them.

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TABLE OF CONTENTS

SUBJECTS	PAGES
COSTING AND QUANTITATIVE TECHNIQUES	3 - 38
AUDIT AND ASSURANCE	39 - 65
TAXATION	66 - 94
BUSINESS COMMUNICATION AND RESEARCH METHODOLOGY	95 - 118

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THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA
INTERMEDIATE EXAMINATION - MAY 2012
COSTING AND QUANTITATIVE TECHNIQUES
Time allowed - 3 hours

SECTION A: Attempt all questions

PART I: MULTIPLE-CHOICE QUESTIONS (20 Marks)

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

1. Cost Accounting system that takes only nominal account into consideration is referred to as
 - A. Back flush costing
 - B. Integral accounting
 - C. Interlocking accounts
 - D. Profit and loss account
 - E. Trading account

2. The running charges of service costing are equally known as
 - A. Fixed charges
 - B. Operating charges
 - C. Maintenance charges
 - D. Expenses charges
 - E. Service expenditure charges

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Use the information below to answer questions 3 and 4

	Sales £	Profit £
January	2,000,000	(400,000)
February	18,000,000	6,000,000

3. The Profit Volume (PV) ratio is
- A. 30%
 - B. 40%
 - C. 50%
 - D. 60%
 - E. 65%
4. The fixed cost is
- A. £1,000,000
 - B. £1,200,000
 - C. £1,400,000
 - D. £2,400,000
 - E. £3,500,000
5. Which of the following combinations is considered as relevant costs in the determination of Economic Order Quantity (EOQ) whenever purchasing price is constant?
- A. Ordering cost + carrying cost
 - B. Ordering cost + carrying cost + purchasing price
 - C. Order cost + purchasing price
 - D. Carrying cost + purchasing price
 - E. Ordering cost + carrying cost + discount received
6. Which ONE of the following is NOT a feature of overtime work?
- A. Jobs are occasionally delayed in order to wait for overtime

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- B. Health conditions of the workers are affected
- C. Overtime rate comprises normal and premium
- D. The fatigue created increases production losses
- E. All overtime payments are abnormal in nature

7. Which ONE of the following is NOT an objective of uniform costing?

- A. To discourage fixing of high prices
- B. To reduce production losses
- C. To assist in performance evaluation

- D. To compare with the best performing firm globally
- E. To discourage unhealthy competition

8. Which ONE of the following statements is NOT a type of replacement situation?

- A. When the old item has failed completely
- B. When the old item is expected to fail shortly
- C. When the old item has deteriorated
- D. When to reconsider replacement of the item in question
- E. When a better design of equipment has been developed

9. Suppose a basket contains 100 red balls and 50 white balls. If two balls are drawn one after the other without replacement at random, what is the probability that they will both be of the same colour?

- A. 0.335
- B. 0.353
- C. 0.355
- D. 0.535
- E. 0.553

10. If a Linear Programming has two unknowns, it may be solved by

- A. Problem formulation
- B. Graphical method
- C. Sensitivity analysis

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- D. Dual formulation method
- E. Arithmetic method

11. Which ONE of the following is NOT a problem in constructing price index?
- A. The purpose of the index
 - B. The base period
 - C. The choice of the weight
 - D. Value index
 - E. Weighting system
12. Which ONE of the following is NOT a cost centre in a commercial bank?
- A. Onitsha Branch
 - B. Motor Vehicles
 - C. Branch Manager
 - D. Automated Teller Machine
 - E. Branch Creditors
13. Which ONE of the following underlisted tools is NOT used for cost reduction?
- A. Value Analysis
 - B. Budgetary Control
 - C. Total Quality Management (TQM)
 - D. Just-in-Time (JIT) processes
 - E. Work study
14. Which ONE of the following is NOT a feature of process costing?
- A. This method can be used for any type of production
 - B. Costs can be averaged over the units produced during the period
 - C. Continuous operations or process
 - D. Total costs divided by number of units to give average cost per unit
 - E. Virtually identical units of output

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5. Which ONE of the following is a basic assumption that the application of C-V-P analysis depends on?
- A. It is assumed that there will be uncertainty
 - B. The analysis is not restricted to the relevant range only
 - C. Level of technology and efficiency remain unchanged
 - D. That within the relevant range, cost and revenue behave in a non-linear fashion
 - E. All other variable costs are constant
16. If the cost function of a product is given by $C = (3x - 5)^2$, then the marginal cost when 10 units of the product are purchased is
- A. ~~₹~~50
 - B. ~~₹~~100
 - C. ~~₹~~150
 - D. ~~₹~~200
 - E. ~~₹~~250
17. If A and B are two matrices, the difference $A - B$ exists when the number of
- A. Rows of matrix A is equal to number of columns of matrix B
 - B. Rows of both matrices are equal and the number of columns of both matrices are also equal
 - C. Columns of A is equal to the number of rows of B
 - D. Columns of A is equal to the number of columns of B
 - E. Rows of A is equal to the number of rows of B
18. A survey conducted on 70 graduates of Accountancy from a higher institution revealed that they belong to either ACA or ICA professional bodies. 30 of them

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belong to both ACA and ICA. If the number of members of ACA only is the same as those of ICA only then the number of graduates that belong to ICA is

- A. 20
 - B. 30
 - C. 40
 - D. 50
 - E. 60
19. Which of the following is NOT true about unbalanced transportation problem?
- A. The total demand is greater than total supply
 - B. The total supply is equal to total demand
 - C. The dummy supply with zero cost is introduced to make it balance
 - D. The initial feasible solution is attained on creation of dummy row or column
 - E. The total supply is greater than the total demand
20. In the Simplex method of solving linear programming problem, the role of surplus variable is to
- A. Have inequalities of type greater than in equation form
 - B. Have inequalities of type less than in equation form
 - C. Aid in finding dual problem
 - D. Make the linear programming feasible
 - E. Start phases of simplex method

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PART II: SHORT-ANSWER QUESTIONS

(20 MARKS)

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

1. The quantity of work achievable at standard performance expressed in terms of a standard unit of work in a standard period of time is commonly referred to as.....
2. A technique used in the preparation of ad-hoc information in which only cost and income differences between alternative courses of action are taken into consideration is known as.....

Use the information below to answer questions 3 and 4

The total cost and production level for the two periods are given below:

	Period 1	Period 2
Machine hours	17,000	18,500
Production overhead	£246,500	£251,750

3. Determine the fixed cost for the period
4. What is the variable cost per unit?
5. In Cost-Volume Analysis, the term used to indicate by how much sales may decrease before a loss occurs is known as.....
6. The difference between budgeted hours of work and the actual hours worked, multiplied by the standard absorption rate per hour is known as.....

Use the information given below to answer questions 7 and 8

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A business sells a single product at a selling price of ₦40 and a contribution margin of 30%. The fixed costs for the period amount to ₦240,000.

7. What is the number of units to be produced to breakeven?
8. If the business wishes to make a profit of ₦60,000, the number of units that must be sold is.....
9. A budgeting system that recognises the difference in the behaviour between fixed and variable costs in relation to fluctuations in output is called.....
10. The production system which entails the instant receipt of each component in a production line only when needed is referred to as.....
11. Ateco Company Limited orders 12,500 units of material X quarterly, with ordering cost of ₦1,000 per order. The material costs ₦50/unit with holding cost of 20% per annum.

What is the Economic Order Quantity?

12. Given $A = (1, 2, 3, 4)$ and $B = (2, 6, 10)$. The intersection of A and B is.....
13. The concept of costing which tracks and accumulates costs and revenues attributable to each product over the product duration is called.....
14. The following data relate to inventory: Minimum Usage 4000 units, Lead Time 10-14 days, Reorder Level 50,000 units and EOQ is 100,000 units. Calculate the Maximum Stock Level.
15. A cost estimation method that considers two extreme ends to separate fixed and variable cost is termed.....
16. In a factory at Nsukka, Mr. Chukwuma's clocking card showed an overtime of 72 hours in the month of January 2012. His overtime rate of pay per hour has been agreed at ₦100 while his fixed monthly salary is ₦50,000.

You are required to calculate his total earnings before tax for the month of January.

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17. The Laspeyre's and Paasche's indices are 130% and 140% respectively. Find the Fisher's index, to three significant figures.
18. In Linear Programming, if decision variables are more than two, then method is to be used for the solution.
19. The Hungarian Method (or Reduced Matrix Method) is the common technique used to solve.....
20. Individual replacement and group replacement policies are two types of policies used when replacement of an item is done based on

SECTION B: ATTEMPT ANY FOUR QUESTIONS

(60 Marks)

QUESTION 1

Africana Limited, a manufacturing organisation has a budgeted profit statement for its next financial year, when it is expected to be operating at 75% level of capacity.

The budget is given below:

	₹	₹
Sales 9,000 units at ₹ 32		288,000
Less: direct materials	54,000	
Direct wages	72,000	
Production overhead: fixed	42,000	
Variable	<u>18,000</u>	
		<u>186,000</u>
		102,000
Gross profit		
Less: Administration, selling & Distribution costs – fixed	36,000	
Variable	<u>27,000</u>	
		<u>63,000</u>
Net profit		<u><u>39,000</u></u>

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You are required to calculate

- (a) The breakeven point in units and in value. (7 Marks)
 - (b) Contribution/Sales ratio. (1 Mark)
 - (c) The number of units that must be sold to earn a profit of ₦52,000. (2 Marks)
 - (d) Calculate the profit that would be expected if the company operated at full capacity. (5 Marks)
- (Total 15 Marks)

QUESTION 2

Omololu operates a standard absorption costing system to control the manufacturing costs of its single products, "Bob Blocks". The following standards have been set:

	₦/unit
Direct material 2kgs at ₦6/kg	12
Direct labour 1 hr at ₦7/hr	7
Fixed overheads	9
Total production cost	28

The fixed overhead standard cost per unit is based on a budgeted monthly production of 4,000 units.

Actual results for the most recent month were

Production 4,300 units
Direct material cost ₦56,000 for 9,000kgs

Direct labour cost ₦32,800 for 4,600 hours paid, only 4,000 hours were worked

Fixed overhead ₦35,000

No direct material inventories are held.

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You are required to calculate the following variances:

- | | | |
|-----|----------------------------|------------------|
| (a) | Direct material price | (2 Marks) |
| (b) | Direct material usage | (2 Marks) |
| (c) | Direct labour rate | (2 Marks) |
| (d) | Direct labour efficiency | (2 Marks) |
| (e) | Idle time | (1 Mark) |
| (f) | Fixed overhead expenditure | (2 Marks) |
| (g) | Fixed overhead volume | (2 Marks) |
| (h) | Fixed overhead capacity | (2 Marks) |
| | | (Total 15 Marks) |

QUESTION 3

The opening Trial Balance of Maryland Limited as at 1 August 2010 is given as follows:

	DR	CR
	£	£
Work in progress	20,000	
Stores ledger control account	10,000	
Finished goods	30,000	
Debtors	70,000	
Finished assets at original cost:		
Factory	100,000	
Office	50,000	
Capital		165,000
Creditors		30,000
Provision for depreciation on factory assets		20,000
Provision for depreciation on office assets		20,000
Provision for bad debts on debtors		5,000
Wages accrued		6,000
Bank overdraft	<u> </u>	<u>34,000</u>
	<u>280,000</u>	<u>280,000</u>

Transactions for the month of August 2010 are provided as follows:

	£	£
Credit purchases on materials		400,000

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Normal loss on materials	3,000	
Wages paid		120,000
Analysis of wages allocated:		
On direct work	<u>100,000</u>	
On indirect work	<u>35,000</u>	135,000
Materials issued to factory		300,000
Manufacturing expenses incurred		130,000
Administration overhead incurred		140,000
Factory overhead recovered		180,000
Administration overhead absorbed		125,000
Finished goods produced for the month		500,000
Credit sales		900,000
Cheques received from debtors		750,000
Provide for depreciation on:		
Factory assets 10% on original cost		
Office assets -10% on original cost		
Cheques paid to creditors		570,000
Bad debts arising in the month		10,000
Closing finished goods		20,000

You are required to produce the ledger accounts listed below:

- (a) Stores ledger control account.
- (b) Wages control account.
- (c) Wages payable account.
- (d) Production overhead control account.
- (e) Work-in-progress control account.
- (f) Finished goods account.
- (g) Bank account.
- (h) Debtors control account.
- (i) Creditors control account.

Notes:

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- (i) Administration overheads are to be transferred to profit and loss account
- (ii) Make 5% provision on debtors.

(Total 15 Marks)

QUESTION 4

Omega Gold Limited is a company that produces wine which is bottled and sold in cases. The normal annual level of production on which the fixed production overhead absorption is based is 120,000 cases.

Data for the most recent financial year ended 31 December 2011 are as follows:

Production	145,000 cases
Sales	112,000 cases
Selling price	£ 2,000 per case
Cost:	
Direct material	600
Direct labour	520
Variable overhead	250
Fixed Production Overhead	1,820,000
Variable Selling & Distribution Cost	10% of sales revenue
Fixed Selling and Distribution Cost	£ 234,000

Assume no opening stocks.

You are required to prepare profit statements for the year ended 31 December 2011 based on

- (a) Marginal Costing (6½ Marks)
 - (b) Absorption Costing (8½ Marks)
- (Total 15 Marks)

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QUESTION 5

The cost (c) of producing q units of golden cups is modelled as $C = 15q + 130$ and the sales price P is given by $P = 220 - q$.

- (a) You are required to find the
- (i) Profit or loss of the firm if all the 200 units produced were sold. (3¹/₂ Marks)
 - (ii) Quantity of goods produced to give maximum revenue and hence, determine the maximum revenue at this level. (4 Marks)
- (b) If the average cost (AC) of producing q units of golden cups is given as $AC = q^2 - 20q - 400$, determine the value of q for which marginal cost is a minimum. (7¹/₂ Marks)
- (Total 15 Marks)

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QUESTION 6

A candidate offered the following three subjects at the Foundation Examination of The Institute of Chartered Accountants of Nigeria: Fundamental of Financial Accounting (A), Economics and Business Environment (B) and Corporate and Business Law (C) with the probabilities of success 0.4, 0.6 and 0.7 respectively.

It was observed that the chances of passing the subjects are independent of one another.

Required:

Calculate the probability that the candidate passes

- (a) Only one subject (7 Marks)
 - (b) Exactly two subjects (4 Marks)
 - (c) At least one of the subjects (4 Marks)
- (Total 15 Marks)

QUESTION 7

The demand function for a product is given by $p = 441 - 3q^2$, where q is the quantity demanded (in thousand units) and p is the price (in Naira) per unit.

You are required to determine the

- (a) Price and quantity for which revenue is a maximum. (9 Marks)
 - (b) The price elasticity of demand at the maximum quantity. Interpret and comment on the elasticity value. (6 Marks)
- (Total 15 Marks)

SOLUTION TO SECTION A

PART 1 MULTIPLE-CHOICE QUESTION

- 1. C
- 2. B
- 3. B
- 4. B

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

WORKINGS TO SOLUTIONS

$$\begin{aligned} 3. \quad \text{Change in Sales} &= \text{₹}18,000,000 - \text{₹}2,000,000 \\ &= \text{₹}16,000,000 \\ \text{Change in Profit} &= \text{₹}6,000,000 - (-400,000) \\ &= \text{₹}6,400,000 \end{aligned}$$

$$\therefore \text{PV Ratio} = \frac{\text{Change in Profit}}{\text{Change in Sales}}$$

$$= \frac{\text{₹}6,400,000}{\text{₹}16,000,000}$$

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$$\text{Probability that both are of the same colour} = \frac{100 \times 99}{150 \times 149} + \frac{50 \times 49}{150 \times 149}$$

$$= 0.44295 + 0.1096$$

$$= \underline{0.553}$$

EXAMINERS' REPORT

The questions test a reasonable part of the syllabus.

Performance was comparatively very poor as about 30% of the candidates scored 50% and above.

Persistent shortfall was that most candidates could not easily decipher the correct options in the various provided. In general, most candidates could not recollect and apply some appropriate formulae.

It is recommended that candidates should

- Endeavour to master related formulae required in the Costing and Quantitative Techniques paper.
- Cover the syllabus reasonably well.
- Work and practise with past question papers, most especially with the use of the PATHFINDER.

PART II SHORT-ANSWER QUESTIONS

1. Standard Hour
2. Differential Costing
3. ₹187,000
4. ₹3.50

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5. Margin of Safety
6. Fixed Overhead Capacity Variance
7. 20,000 units
8. 25,000 units
9. Flexible Budget
10. Just-In-Time
11. 3,162 units
12. 2
13. Life Cycle Costing
14. 110,000 units
15. High and Low method
16. ~~157,200~~
17. 135%
18. Simplex
19. Assignment or Transportation problem
20. Sudden Failure

WORKINGS

3 and 4

	Period 1	Period 2	Difference
Machine Hours	17,000	18,500	1,500
Production overhead (14)	246,500	257,750	5,250

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= 134.91%

= 135%

EXAMINERS' REPORT

The questions test a reasonable part of the syllabus.

Performance was abysmally poor. Less than 20% of the candidates scored 50% and above.

Common mistake was candidates' inability to be exact, particularly when answers required an expression in decimal or in percentage, in units or in Naira. Candidates were also unable to recall major Costing and Quantitative Techniques terminologies

It is recommended that candidates should familiarise themselves with common terminologies peculiar to this paper in addition to extensively covering the syllabus.

SECTION B

SOLUTION 1

Igbalaye Ltd

i. Computation of breakeven point in units and in value

		₦000	₦000
Sales			288
Variable cost:			
	Direct materials	54	
	Direct wages	72	
	Var. production overhead	18	
	Var. Adm. and distr. Costs	<u>27</u>	
			<u>171</u>
Total contribution			<u>117</u>
Contribution/unit =	$\frac{\text{Total contribution}}{\text{Sales (Units)}}$	=	$\frac{117,000}{9,000}$
		=	₦13

Break Even Point = $\frac{\text{Fixed Cost}}$

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(BEP)

Contribution/unit

$$= \frac{\text{₱}42,000 + 36,000}{\text{₱}13} = \frac{78,000}{13} = \underline{6,000} \text{ units}$$

BEP in sales value = $\frac{\text{Fixed Cost} \times \text{S.P}}{\text{Contribution/unit}}$
 $\frac{78,000 \times \text{₱}32}{13} = \underline{\text{₱}192,000}$

ii. Contribution/sales ratio = $\frac{\text{Contribution}}{\text{Sales Value}} \times \frac{100}{1}$
 $= \frac{117,000}{288,000} = \underline{40.6\%}$

iii. Number of units to be sold to earn a profit of ₱52,000 = $\frac{\text{Fixed cost of Target Profit}}{\text{Contribution/unit}}$
 $= \frac{\text{₱}78,000 + \text{₱}52,000}{\text{₱}13} = \underline{10,000} \text{ units}$

iv. Computation of Expected Profit at full capacity 100%

		₱'000
Sales at full capacity	$\frac{9000}{0.75} = 12,000$	384
Variable costs:		
Direct materials	72	
Direct wages	96	
Variable production/s	24	
Variable Adm, Selling and distribution	<u>36</u>	
		228
Contribution		156
Less Fixed cost		<u>78</u>
Profit		<u>78</u>

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EXAMINERS' REPORT

The question tests candidates' understanding of the concept of Marginal Costing with respect to Profit-Volume Analysis

About 70% of the candidates attempted this question.

Performance was fairly good as about 60% of the candidate scored 50% and above.

Common pitfalls include

- Bad presentation.
- Candidates were confused in the application of Marginal Costing and Absorption Costing.
- Candidates' inability to recall relevant formulae.

It is recommended that candidates should

- Read and understand the requirements of the question before attempting it
- Learn and appreciate correct methods of presentation required in this paper
- Study the right texts including the ICAN Pathfinder

SOLUTION 2

(a) Direct Material Price Variance = (Standard Price - Actual Price) Actual Quantity
= (~~₹6~~ - ~~₹6.2222~~) 9000kg
= ₹2,000 (A)

(b) Direct Material Usage Variance = (Standard Quantity - Actual Quantity) Standard Price
= (8600kg - 9000kg) ~~₹6~~
= ₹2,400 (A)

(c) Direct Labour Rate Variance = (Standard Rate - Actual Rate) Actual Hrs paid
= (~~₹7~~ - ~~₹7.1304~~) 4600 hours
= ₹600 (A)

(d) Direct Labour Efficiency Variance = (Standard Hour - Actual Hour) Std Rate
= (4300 - 4000) ~~₹7~~

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= ~~₹~~2,100 (F)

- (e) Idle Time Variance = Idle Hours x Standard Rate
= (600 hours x ~~₹~~7)
= ~~₹~~4,200 (A)
- (f) Fixed Overhead Expenditure Variance = Budgeted fixed overhead - Actual fixed overhead cost
= ~~₹~~36000 - ~~₹~~35000
= ~~₹~~1000 (F)
- (g) Fixed Overhead Volume Variance = (Standard production - Actual Production) Fixed overhead Absorption Rate
= (4000 - 4300) ~~₹~~9
= ~~₹~~2,700 (F)
- (h) Fixed Overhead Capacity Variance = (Budgeted Hours - Actual Hours) Fixed overhead Absorption Rate
(4000 - 4000) ~~₹~~9
= NIL

Working Notes

1. Computation of Standard Quantity
Actual Quantity x Material per unit
4300 x 2kg
= 8600kg
2. Computation of Actual Price
Direct Material/Total Units of material cost
~~₹~~56,000/9000kgs = ~~₹~~6.2222
3. Computation of Actual Rate
Direct labour/Actual Hours cost paid
~~₹~~32800/4600 hours = ~~₹~~7.1304
4. Computation of Standard Hours
Total Production units x Std Hour per unit
4300 units x 1 hour = 4300
5. Computation of budgeted fixed overhead
Budgeted Monthly Production x Fixed overhead cost per unit

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$$4000 \text{ units} \times \text{N}9 = \text{N}36,000$$

EXAMINER'S REPORT

The question tests candidates' understanding of the requirements in Standard Costing with particular reference to Variance Analysis.

This question was very popular among candidates as about 90% of the population attempted this question.

Performance was very poor. About 30% of the candidates who attempted the question scored 50% and above.

Common inadequacies include the following:

- Candidates were unable to recall and apply the appropriate formulae
- In most cases, candidates did not address the requirements of the question
- Candidates could not display official knowledge of the requirements of Variance Analysis

It is recommended that

- Candidates should improve on their preparation by covering the syllabus more extensively.
- Candidates should CONSULT more relevant texts particularly those recommended by Institute of Chartered Accountants of Nigeria (ICAN).
- Attend good quality Tuition Houses from the list of those recommended.

SOLUTION 3

(a)

		<u>Store Ledger Control Account</u>	
		<u>₦</u>	<u>₦</u>
1/8/2010	Balance b/d	10,000	Normal Loss
	Creditors	400,000	3000
		410,000	300,000
			31/8 Balance c/d
			107,000
			410,000

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9/2010 Balance b/d 107,000

(b)

<u>Wages Control Account</u>			
	Wages Payable	135,000	
		<u>135,000</u>	
			WIP 100,000
			Production Overhead <u>35,000</u>
			<u>135,000</u>

(c)

<u>Wages Payable Account</u>			
	Bank	120,000	
31/8/2010	Balance c/d	21,000	
		<u>141,000</u>	
			1/8/2010 Balance b/d 6000
			Wages control <u>135,000</u>
			<u>141,000</u>
			1/9/2010 Balance b/d 21000

(d)

<u>Production Overhead Control Account</u>			
	Provision for depreciation:		
	Factory Assets	10,000	
	Wages Control A/c	35,000	
	Manufact expense (Creditors)	130,000	
	P & L A/c (over recovery)	<u>5000</u>	
		<u>180,000</u>	
			WIP 180,000
			<u>180,000</u>

(e)

<u>Work-In-Progress Control Account</u>			
1/8/2010	Balance b/d	20,000	
	Wages Control a/c	100,000	
	Store Ledger Control Account	30000	
			Finished Goods 500,000
			31/8/2010 Balance c/d 103,000

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(Normal/loss)

Store Ledger			
	Control Account	300,000	
Issues			
	Production overhead control	180,000	
		603,000	603,000

(f)

<u>Finished Goods Account</u>			
	Balance b/d	30,000	
	WIP	<u>500,000</u>	
		530,000	
	Balance b/d	20,000	
			Trading Account
			Balance c/d
			<u>20,000</u>
			530,000

(g)

<u>Bank Account</u>			
	Debtors	750,000	
		750,000	
	Balance b/d	26,000	
			1/8/2010 Balance b/d
			Wages
			Creditors
			Balance c/d
			<u>34,000</u>
			<u>120,000</u>
			<u>570,000</u>
			<u>26,000</u>
			<u>750,000</u>

(h) 1/8/2010

<u>Debtor Account</u>			
	Balance b/d	70,000	
	Sales	900,000	
		970,000	
			Bad debts
			Bank
			Balance c/d
			<u>10,000</u>
			<u>750,000</u>
			<u>210,000</u>
			<u>970,000</u>

(i)

<u>Creditors Control Account</u>			
	Bank	570,000	
	Balance c/d	130,000	
			1/8/2010 Balance b/d
			Store Ledger Control
			- Purchases
			Production overhead
			<u>30,000</u>
			<u>400,000</u>

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	control	130,000
	Admin overhead control	<u>140,000</u>
700,000		<u>700,000</u>
	1/9/2012 Balance b/d	130,000

EXAMINERS' REPORT

The question tests candidates' ability to post and update cost control Ledger Accounts.

The question was fairly popular among candidates as about 60% of them attempted this question.

Performance was fairly good as about half of the candidates scored 50% and above

Common mistakes exhibited by candidates include

- Poor presentation of answers
- Lack of understanding of the duality concept
- Inadequate description of Ledger Account Names

For improved performance in future, it is recommended that

- Quality of preparation must improve.
- Candidates should read good quality texts apart from the ICAN Pathfinder.
- Candidates should regularly practise with past question papers apart from attending a recommended tuition house.

SOLUTION 4

ILE OLUJI LTD
Profit Statement for the year Ended 31st December 2011

(a) Marginal Costing £'000 £'000

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Sales		224,000
Less: variable costs:		
Direct Material	67,200	
Direct Labour	58,240	
Variable Overhead	28,000	
Variable Selling & Distribution overhead	<u>22,400</u>	<u>175,840</u>
Contribution		48,160
Less: Fixed overheads:		
Production	1,820	
Selling and Distribution	<u>234</u>	<u>2,054</u>
Profit		<u>46,106</u>

(b)		
Absorption Costing	₦'000	₦'000
Sales		224,000
Less:		
Production Cost	200,849.65	
Less: Closing stock	<u>(45,710.6)</u>	
	155,139.05	
Less: Over absorption of overhead	<u>(379.65)</u>	<u>154,759</u>
Gross Profit		<u>69,241</u>
Less: Selling and Distribution overhead		
Fixed	234	
Variable	<u>22,400</u>	<u>22,634</u>
Net Profit		<u>46,607</u>

WORKINGS

a) Marginal Costing:-

(i)	Sales 112,000 units at ₦2,000	=	₦224,000,000
(ii)	Direct Material 112,000 units at ₦600	=	₦67,200,000

EXAMINER'S REPORT

The question tests candidates' ability to post profit status using the Marginal Costing and Absorption Costing approaches.

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The topic was relatively popular among candidates as about 70% of them attempted this question.

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

Fairly common pitfalls include

- Poor presentation of answers.
- Candidates displayed lack of official knowledge of the key topics in the question.
- That some candidates did not show workings was a serious inadequacy.

It is recommended that candidates should

- Improve on their preparation through controlling good and up-to-date texts.
- Attend good and recommended Tuition Houses
- Do more practise with past question papers and the Pathfinder

SOLUTION 5

(a) Given the total cost $C = 15q + 130$ in Naira and sales price $P = 220 - q$ in Naira
The revenue $R = \text{price} \times \text{quantity} = (220 - q)q = 220q - q^2$

$$(i) \quad \text{Profit } \Pi = R - C = (220q - q^2) - (15q + 130) \\ = 220q - q^2 - 15q - 130 = 205q - q^2 - 130$$

When $q = 200$,

$$\text{Profit (loss)} = 205(200) - (200)^2 - 130 = 41,000 - 40,000 - 130 \\ = \text{N}870$$

Since the answer is positive, then ~~N~~870 is a profit.

(ii) Since $R = 220q - q^2$,

$$\text{Then } \frac{dR}{dq} = 220 - 2q$$

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At turning point, $\frac{dR}{dq} = 0$

$$\text{i.e. } 220 - 2q = 0$$

$$\therefore q = \frac{220}{2} = 110$$

To test the turning point, gives

$$\frac{d}{dq} \left[\frac{dR}{dq} \right] = -2 < 0$$

Hence $q = 110$ gives maximum revenue

$$\begin{aligned} \therefore \text{Maximum revenue} &= 220(110) - (110)^2 \\ &= 24,200 - 12,100 \\ &= \text{R}12,100 \end{aligned}$$

(b) Given that the average cost $AC = q^2 - 20q - 400$

But $AC = \frac{TC}{q}$ or Total cost

$$\begin{aligned} \therefore \text{Total cost} &= (q) AC = q(q^2 - 20q - 400) \\ &= q^3 - 20q^2 - 400q \end{aligned}$$

$$\begin{aligned} \text{Marginal cost } MC &= \frac{d}{dq} (\text{Total Cost}) = \frac{d(q^3 - 20q^2 - 400q)}{dq} \\ &= 3q^2 - 40q - 400 \end{aligned}$$

To determine the value of q for which the MC is a minimum, we proceed as follows:

At the turning point of the MC function,

$$\begin{aligned} \frac{d}{dq} (MC) &= 0 \\ \text{i.e. } \frac{d}{dq} (3q^2 - 40q - 400) &= 0 \\ &= 6q - 40 = 0 \end{aligned}$$

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$$\text{or } 6q = 40$$

$$\therefore q = \frac{40}{6} = 6.6667$$

To test the turning point,

$$\frac{d}{dq}(\text{MC}) = 0$$

$$dq$$

$$\text{i.e. } \frac{d}{dq}(6q - 4) = 6 > 0$$

$$dq$$

$\therefore q = 6.6667$ gives a minimum marginal cost.

ALTERNATIVE METHOD

Given the total cost (in Naira) $C = 15q + 130$ and sales price (in Naira) $P = 220 - q$

Profit = Total revenue - Total cost for quantity

If $q = 200$

$$\therefore \text{Selling price, } P = 220 - 200 = \text{N}20$$

$$\text{Cost price, } C = 15(200) + 130 = \text{N}3,130$$

$$\therefore \text{Revenue or Total sales, } R = \text{N}20 \times 200 = \text{N}4,000$$

$$\therefore \text{Profit } R - C = \text{N}4,000 - \text{N}3,130 = \text{N}870$$

EXAMINERS' REPORT

The question tests candidates' knowledge of the application of differentiation with respect to cost and revenue functions.

About 85% of the candidates attempted this question.

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Performance was poor as about half of the candidates who attempted the question scored less than 50%

Major pitfalls include the following:

- Candidates displayed lack of good understanding of the topic.
- Many candidates confused the cost function with that of the revenue function.
- In some cases, Total Revenue (TR) was confused with Selling Price (SP).
- In some cases, candidates were non-specific in their answers as to whether their final figure was in quantity or value.

Performance will be better if candidates

- Improve on their preparation
- Attend good quality Tuition Houses and make use of books recommended in the syllabus in addition to the effective use of the ICAN PATHFINDER

SOLUTION 6

Given that A = Fundamental of Financial Accounting
B = Economics and Business Environment
C = Corporate and Business Law

Let the probabilities of passing A, B & C respectively be P(A), P(B) AND P(C) and the probabilities of not passing them be respectively P(A'), P(B') and P(C')

$$\begin{aligned} \text{i.e } P(A) &= 0.4 \Rightarrow P(A') = 0.6 \\ P(B) &= 0.6 \Rightarrow P(B') = 0.4 \\ P(C) &= 0.7 \Rightarrow P(C') = 0.3 \end{aligned}$$

$$\begin{aligned} \text{(a) The probability that the candidate passes only one subject is} \\ P(A \cap B' \cap C') \text{ or } P(A' \cap B \cap C') \text{ or } P(A' \cap B' \cap C) \\ = P(A) \times P(B') \times P(C') + P(A') \times P(B) \times P(C') + P(A') \times P(B') \times P(C) \\ = 0.4 \times 0.4 \times 0.3 + 0.6 \times 0.6 \times 0.3 + 0.6 \times 0.4 \times 0.7 \\ = 0.048 + 0.108 + 0.168 = 0.324 \end{aligned}$$

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- Confusion of Probability Theory with Set Theory.
- Inability to appreciate the concept of Independent Events and Mutually Exclusive Events.

It is recommended that candidates should

- Take time to understand the requirements of a question before attempting it.
- Create more time for preparation before the examination.
- Learn from the contents of the ICAN PATHFINDER.

SOLUTION 7

Given that demand function $P = 441 - 3q^2$

(a) Revenue $R = \text{price} \times \text{quantity} = P \times q = (441 - 3q^2) \cdot (q)$

$$\therefore R = 441q - 3q^3$$

$$\text{At turning point, } \frac{dR}{dq} = 0 = 441 - 9q^2$$

$$\text{i.e. } 9q^2 = 441 \Rightarrow q = \sqrt{\frac{441}{9}} = 7.$$

To test the turning point, we have

$$\frac{dR}{dq} = \frac{d}{dq} (441 - 9q^2) = -18q.$$

$$\text{At } q = 7, \frac{d^2R}{dq^2} = -18 \times 7 = -126 < 0 \Rightarrow \text{maximum}$$

Hence the price and quantity for which revenue is maximum are respectively

$$P = 441 - 3(49) = 294, \text{ and}$$

$$\text{Quantity } q = 7 \times 1000 = 7,000 \text{ units}$$

(b) The Price Elasticity of demand $E = \left[\frac{p}{1} \right] \left[\frac{1}{p} \right]$

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

1. Auditors need to ensure compliance with accounting and auditing standards in the discharge of their professional duties. Which ONE of the following is NOT a sanction for erring members?
 - A. Arrest and detentions
 - B. Loss of membership status
 - C. Reprimands
 - D. Fines on non-grievous cases
 - E. Facing ICAN disciplinary committee

2. Which ONE of the following is NOT an ethical principle that governs the auditors' professional responsibilities?
 - A. Consistency
 - B. Objectivity
 - C. Integrity
 - D. Independence
 - E. Competence

3. Which of the following is NOT a classification of CAATs?
 - A. Data analysis
 - B. Network security monitoring software/utilities
 - C. Inputting like items at the same time

 - D. OS and DBMS security monitoring software/utilities
 - E. Software and code testing tools

4. The duties of Auditors on working papers include all matters listed below EXCEPT
 - A. Preparing working papers which are sufficient, complete and detailed to provide an overall understanding of the audit

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- B. Recording all the working papers, information on planning the audit work, the nature, timing and extent of the audit procedures performed, result thereof and the conclusions drawn from the audit evidence obtained
 - C. Documenting areas involving difficult questions of principle or judgement
 - D. Requiring the permission of the top management for the approval of the working papers
 - E. Recording the relevant facts known to the auditor at the time the conclusions were reached on matters of judgements or principles
5. Which ONE of the following matters needs not be considered by the auditor in relation to audit evidence?
- A. The nature
 - B. The quality
 - C. The sufficiency
 - D. The appropriateness
 - E. The evaluation
6. Which of the following is NOT one of the matters set out in the Sixth Schedule to the Companies and Allied Matters Act Cap C20 LFN 2004?
- A. Basis of preparation of the entity's financial statements
 - B. Respective responsibilities of the directors and the auditors
 - C. Basis of the auditors' opinion
 - D. Whether proper books of account have been kept
 - E. Quality of audit personnel
7. Which ONE of the following is NOT a factor to consider in audit planning?
- A. Clearance from board and management in writing the audit plan
 - B. Assisting the auditors to achieve their audit objectives
 - C. To enable the auditor to determine the time it will take to complete the audit assignment

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- D. To enable the auditor to determine the number of staff required to complete the audit assignment
- E. To enable the auditor to determine the cost of resources to complete the audit assignment
8. Which of the following is NOT an advantage of audit programmes?
- A. To serve as a guide to audit staff members during the course of the audit
- B. To provide a means for ensuring that the audit work is put into action at the execution stages
- C. The use of audit programmes serves as a means for training audit staff members
- D. To serve as a means of determining personnel requirements and costs implications
- E. The use of audit programme enables the auditor determine performance of management
9. The permanent file of an auditor's working papers would NOT include a copy of the
- A. Memorandum and Articles of Association
- B. Pension Plan contract
- C. Bank Reconciliation Statements
- D. Title deeds of freehold and leasehold properties
- E. Organisation chart with extra details for the finance department
10. Letter of representation from a client to an auditor acknowledging that all known facts had been disclosed in financial statements being audited should normally be signed by
- A. Chairman of Audit committee and the Managing Director
- B. The Managing Director and the Company Secretary
- C. Chairman of the Board and the Managing Director
- D. Chairman of the Board and Finance Director
- E. Managing Director and Finance Director

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11. Which ONE of the following is an advantage of Computer-Assisted Audit Techniques (CAATs)?
- A. The CAATs programmes are all written in one computer language
 - B. The software can be used for audits of clients that use differing computer equipment and the file formats
 - C. CAATs have reduced the need for the auditor to study input controls for computer related procedures
 - D. The use of CAATs can be substituted for a relatively large part of the required testing
 - E. To arrange data in a logical manner for processing purposes
12. The enormous variety of configurations used in computer-based accounting systems can be split into the following EXCEPT
- A. Mainframe computers
 - B. Mini computers
 - C. Computer bureaux
 - D. System architecture
 - E. Micro computers
13. Which ONE of the following is NOT an audit objective for fixed assets verification?
- A. The fixed assets in the accounts exist
 - B. The fixed assets are owned or leased under capital leases by the entity
 - C. No material items are charged to an expense account that should have been capitalised
 - D. The colour and mixture of the assets must be stated
 - E. Additions and disposals have been duly authorised and accurately recorded
14. Which ONE of the following is NOT an element of an assurance service?
- A. A two-way relationship between a professional accountant and the

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client

- B. A three-party relationship involving a professional accountant, a client and intended users
 - C. An appropriate subject matter
 - D. Suitable criteria
 - E. Sufficient appropriate evidence
15. Which of the following types of adjustment is NOT required purely for the purposes of preparing group accounts (consolidating adjustments)?
- A. Adjustments required because certain subsidiaries have based their financial statements on accounting policies different from those of the rest of the group
 - B. Adjustments for unrealised profits not yet considered
 - C. Adjustments for unrealised inter-company profits on the transfer of inventory and non-current assets
 - D. Adjustments for inter-company charges
 - E. Adjustments for in-transit items
16. Which of the following sources of audit evidence is most reliable?
- A. Accounting system
 - B. Accounting records
 - C. Management reports
 - D. Sales invoices
 - E. Purchases invoices
17. An attribute that includes a questioning mind and a critical assessment of audit evidence is referred to as
- A. Due professional care
 - B. Auditor's independence
 - C. Professional scepticism
 - D. Reasonable assurance
 - E. Supervision

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18. Which of the following elements underlies the application of generally accepted auditing standards particularly the standards of fieldwork and reporting?
- A. Internal control
 - B. Corroborating evidence
 - C. Quality control
 - D. Materiality concept
 - E. Relative risk
19. Auditing standards differ from audit procedures in that procedures relate to
- A. Audit assumption
 - B. Acts to be performed
 - C. Quality control
 - D. Methods of work
 - E. Internal audit system
20. Analytical procedures are least likely to be used in the audit of
- A. Cash balances
 - B. Investments
 - C. Bills receivable
 - D. Debtors
 - E. Bills payable

PART II: SHORT ANSWER QUESTIONS

(20 MARKS)

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

1. TWO major actors in company's statutory audits are and
2. The Institute of Chartered Accountants of Nigeria ensures that the professional accountant maintains the highest quality of performance through and
3. That engagement in which an Audit Practitioner is assigned to issue or does issue a report on a subject matter or an assertion about the subject which is the responsibility of another party is called

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4. The code of best practices on corporate governance is treated under four major headings. TWO of these headings are and
5. The analysis of significant ratios and trends including the resulting investigation of fluctuations and relationships that are inconsistent with other relevant information or deviate from predictable amounts is referred to as
6. The risk that a misstatement that could occur in an account balance or class of transactions and would not be prevented or detected and corrected on a timely basis by the accounting and internal control systems is known as
7. A situation in which a firm or a member of the assurance team could benefit from a financial interest in or other self-interest conflict with an assurance client is described as
8. The opinion that is expressed when the effect of a disagreement is so material and pervasive to the financial statements that the auditor concludes that a qualification of the reports is not adequate to disclose the misleading or incomplete nature of the financial statements is called
9. A service in which a professional accountant expresses a conclusion designed to enhance the degree of confidence of the intended users other than the client about the outcome of the evaluation or measurement of a subject matter against criteria is referred to as
10. An item is if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial statements.
11. Uncertainty and are two circumstances that may lead to the qualification of audit report.
12. The auditor shall, in the case of a public company, also make a report to an established by the public company.
13. The reaction of the auditor on a transaction which is unusual and may not have been conducted in the established company's procedure is known as

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14. No person shall act in the office of the Auditor-General for a State for a period exceeding unless the House of Assembly sanctions it.
15. The Auditor-General shall within of receipt of the Accountant-General's financial statements submit his reports to the National Assembly.
16. The right of accountants to retain physical control over any books of accounts, files and papers which have come into their possession in the course of their ordinary professional work is known as
17. A review carried out during the course of the audit by a second partner not connected with the audit is known as
18. Auditors must always approach their work with integrity and objectivity. The approach must be in a spirit of
19. The auditor of a company has a right of access at all times to the company's books, accounts and according to S.360 of the Companies and Allied Matters Act Cap C20 LFN 2004.
20. An engagement letter is only sent to a client before the first audit. TRUE OR FALSE?

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SECTION B (ATTEMPT ANY FOUR QUESTIONS)

(60 MARKS)

QUESTION 1

Oriental Group Limited is taking over the business of Alpha Din Limited including its assets and liabilities.

Required:

- (a) List SEVEN verification principles you would adopt to ascertain the existence of the assets and liabilities. (7 Marks)
- (b) Explain FIVE procedures which the auditors normally adopt to obtain their evidence. (5 Marks)
- (c) List THREE audit objectives that are applicable to inventories. (3 Marks)
(Total 15 Marks)

QUESTION 2

Insurance Act 2003 (as amended) provides for the different classes of insurance business in Nigeria.

- (a) (i) What are the TWO main classes of insurance? (2 Marks)
- (ii) State THREE categories of each of these classes of insurance. (3 Marks)
- (b) List the minimum paid up share capital of the different classes stated above. (2 Marks)
- (c) State any EIGHT records to be kept by an insurer. (8 Marks)
(Total 15 Marks)

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QUESTION 3

Hitose Limited is a fast growing company with diversification into different fields and hoping to attract foreign investors in the nearest future. The company currently needs to reorganize its operations.

You are required to

- (a) Outline any SIX roles expected of the senior management and board in the re-organization. (6 Marks)
 - (b) Explain the role of the external auditors and their future responsibility in the preparation of the financial statements. (5 Marks)
 - (c) Itemise other regulatory needs expected to be fulfilled by Hitose Limited. (4 Marks)
- (Total 15 Marks)

QUESTION 4

The International Federation of Accountants (IFAC) issues ethical standards to accountants to guide them in their business and professional relationships.

Required:

- (a) Explain the FIVE ethical standards issued by IFAC as guides to accountants. (5 Marks)
 - (b) Highlight how the ethical standards explained above are enforced by the Institute of Chartered Accountants of Nigeria (ICAN) (5 Marks)
 - (c) State and explain FIVE matters which auditors must consider before accepting a new audit. (5 Marks)
- (Total 15 Marks)

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QUESTION 5

Forensic auditing covers a broad spectrum of activities, with terminology not strictly defined in regulatory guidance.

Required:

- (a) What is Forensic Audit? (2 Marks)
 - (b) State TEN situations which might require the services of a forensic auditor. (5 Marks)
 - (c) State FIVE qualities of a forensic auditor. (5 Marks)
 - (d) State THREE differences between forensic audit and financial audit. (3 Marks)
- (Total 15 Marks)

QUESTION 6

Audit is an official and independent examination of the quality or standard of a process in order to assess and ascertain whether the process corresponds with set standard and assertions on established criteria and objective.

Required:

- (a) Explain any FIVE of the following types of audit:
 - (i) Management Audit
 - (ii) Private Audit
 - (iii) Effectiveness Audit
 - (iv) Social Audit

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(v) Compliance Audit

(vi) Environmental Audit

(10 marks)

(b) State FIVE other services provided by auditors to their clients. (5 marks)

(Total 15 marks)

SOLUTIONS TO SECTION A

PART I MULTIPLE-CHOICE QUESTIONS

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

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19. B

20. A

EXAMINERS' REPORT

The questions are varied and cover a wide spectrum of the syllabus.

General performance of the candidates was average.

Candidates should improve on their performances by reading relevant literature.

PART II SHORT ANSWER QUESTIONS

1. (a) Directors or Management, Statutory Auditors, Shareholders (Members), Audit Committee Members. (Any two)
2. (i) Code of conduct (ii) Continuing Professional Education
(iii) Monitoring (any two)
3. Attest engagement
4. Board of Directors, Shareholders, Audit committee and; Other stakeholders (any two)
5. Analytical procedures
6. Control Risk
7. Self Interest threat
8. Adverse opinion
9. Assurance service
10. Material
11. Disagreement
12. Audit committee
13. Put on enquiry

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14. Six months
15. 90 days
16. Accountants' lien or auditors' lien
17. Hot review/peer review
18. Independence
19. Vouchers
20. False

EXAMINERS' REPORT

The questions in this part cover a wide area of the syllabus.

Candidates' performance was generally average.

Candidates are well advised to prepare better by reading the recommended texts.

SOLUTIONS TO SECTION B

QUESTION 1

- (a) Verification principles to ascertain the existence of assets and liabilities of Alpha Din Limited include
 - i. Physical inspection of fixed assets such as plant and machinery, furniture, equipment and motor vehicles to confirm existence
 - ii. Obtaining direct confirmation from third parties through circularisation to confirm existence and in some cases, visits to the premises of debtors and creditors may be carried out
 - iii. Inspection of title documents to confirm ownership of fixed assets such as Land, Building, Motor vehicles etc.

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- iv. Obtaining certificate of assertion of existence of assets and liabilities from the company's directors in form of letter of representation.
 - v. Obtaining certificate of balances from third parties e.g Bank balances, goods on sale or return basis, trade debtors, trade creditors etc.
 - Vi Obtaining copies of all patents and trade-marks held by the patent agents.
 - vii. Inspection of certificates of titles on investments held by third parties who are not bona fide custodians.
 - viii For the revalued properties, obtaining a copy of the valuation report done by a professional valuer noting that the valuer is independent and applied acceptable basis of valuation.
- (b) i. Inspection:
- This provides reliable audit evidence about the existence of the tangible assets inspected but not necessarily as to the ownership or value of such assets.
- It also involves examining records, documents that provide audit evidence like certificates of securities, certificates of registration of trademarks and copyrights.
- ii. Observation:
- The auditor observes a procedure being performed by others e.g counting of stock by the entity's staff, year-end cash count etc.
- iii. Enquiry and confirmation:
- Enquiry involves seeking information within and outside the entity. Confirmation involves obtaining response to an enquiry to corroborate information previously made available to the auditors in the course of the audit.

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Performance on part (a) was poor. The candidates misinterpreted the question to mean internal control procedures.

Candidates understanding of part (b) and (c) was better so marks were deservedly earned in parts (b) and (c).

Candidates should understand the requirements of questions before giving answers.

SOLUTION 2

(a) i. The two main classes of insurance are

- Life Insurance business
- Non-life or General Insurance business

ii. Categories of life Insurance Business include:

- Individual Life Insurance Business
- Group Life Insurance and Pension Business
- Health Insurance Business

Categories of Non-life or General Insurance Business include:

- Fire insurance business
- General accident insurance
- Motor vehicle insurance

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- Marine insurance
 - Oil and gas insurance
 - Engineering insurance
 - Bonds, credit guarantee and suretyship insurance
 - Aviation insurance
- (b) Minimum Paid up Capital are:
- (i) Life Insurance not less than ₦2 billion
 - (ii) Non-life insurance not less than ₦3 billion
 - (iii) Composite insurance not less than ₦5 billion
 - (iv) Re-insurance not less than ₦10 billion
- (c) The records to be kept by an insurer include:
- (i) The memorandum and articles of association
 - (ii) A record containing the names and addresses of the owners of the insurance business
 - (iii) The minutes of any meeting of the owners and of the policy making executive shall be entered in respect of every policy issued
 - (iv) A register of all claims in which shall be entered every claim made together with date of claim
 - (v) A register of different categories of investment
 - (vi) A register of its assets
 - (vii) A register of reinsurance ceded in Nigeria and outside
 - (vii) A cash book
 - (viii) A current account book
 - (ix) A register of open policies in respect of maritime insurance transactions
 - (x) Management report by external auditors
 - (xi) Additional records
 - a register of assured under group policies

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- a register of loans on policies
- a register of each cash surrendered value
- a register of lapsed and expired policies.

EXAMINERS' REPORT

The question is in three parts.

It tests candidates' knowledge of insurance business.

About 75% of the candidates attempted the question. Performance was above average.

The major pitfall was that candidates displayed lack of knowledge of current provisions of insurance legislation. Candidates should be up and doing in their studies.

QUESTION 3

(a) Hitose Limited

To re-organise its operations, the board and senior management are to ensure that:

- (i) A good organisational structure with chart is established in such a way as to best achieve its objectives or goals.
- (ii) Each structure level shall be manned by competent hands who are knowledgeable in their respective areas.
- (iii) Proper accounting records are maintained
- (iv) Effective internal control procedures are instituted and maintained.
- (v) Judgements and estimates made are reasonable and prudent.
- (vi) There is effective communication with shareholders, stakeholders, and the investing public in general.
- (vii) The company complies with its Memorandum and Articles of Association.
- (viii) The company defines the scope of approval of relevant policies by the board.

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In part (c). Performance was below average and 40% of the candidates attempted the question.

Candidates should study well for examinations and interpret questions correctly before attempting to answer them.

QUESTION 4

- (a) The five Ethical Standards Issued by International Federation of Accountants (IFAC) to guide members are as follows.
- (i) Integrity:
A professional accountant is expected to be straightforward and honest in all professional and business relationships. This implies honesty as well as truthfulness and fair dealing.
- (ii) Objectivity:
A member must be and be seen to be fair in each assignment. He should not allow bias, conflict of interest or undue influence to override his professional or business judgments.
- (iii) Professional competence and due care:
To maintain professional knowledge and skill at the level required to ensure that a client or employer receives competent professional services based on current developments in practice, legislation and techniques and act diligently and in accordance with applicable technical and professional standards.
- (iv) Confidentiality:
To respect confidentiality of information acquired as a result of professional and business relationship and therefore, not disclose any such information to

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third parties without proper and specific authority, unless there is a legal or professional right or duty to disclose, nor use the information for the personal advantage of the professional accountant or third parties.

(v) Professional behaviour:

To comply with relevant laws and regulations and avoid any action that discredits the profession. He should conduct himself with courtesy and consideration towards others.

(b) The following steps are taken in the enforcement of standards by the Institute:

(i) Where a report is received by the Institute alleging a case of misconduct or non compliance with the relevant standards against a member, such a member shall be invited by the Investigating panel to provide his defence within 14 days of the receipt of the request.

(ii) If the member fails to respond within the stipulated time, he shall be sent a first reminder requesting him to send his defence within 7 days.

(iii) If the member fails to respond after the first reminder, a formal charge of disrespect shall be preferred against the member before the disciplinary tribunal.

(iv) If the investigating panel is of the opinion that the member has committed misconduct and requires disciplinary action, it will proffer a formal complaint to the Disciplinary Tribunal to determine whether a complaint of misconduct is proved and pass sanctions on the member. However, such a member has a right of appeal to the Court of Appeal.

(c) Before an auditor accepts a new audit, he must consider the following matters

(i) Capability

He must consider if the firm has the capacity and resources to carry out the audit. To determine this, the auditor will need to consider

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- The size, location and level of business of the prospective client
- The number and level of experience of the audit staff required
- The current commitment of the firm
- The firms experience in the audit of such a business

(ii) Independence

The auditor must ensure that no circumstances that will constitute threat to the independence of the firm in carrying out the audit engagement

(iii) Compliance with the rules of change of audit engagement when there is a change of audit engagement.

When there is a change of audit engagement, the incoming auditor before accepting the assignment must observe the rules guiding the change as pronounced by the Institute.

(iv) Risk exposure

In accepting new audit engagement, the auditor must consider both the external and internal risk factors. This will enable him to determine the level of risk exposure which he will face in taking up the assignment.

(v) Compliance with statutory and regulatory requirement

In taking up a new audit engagement, the auditor must consider if there is any threat to compliance with fundamental accounting standards, guidelines, procedures and statutory requirements.

(vi) Threats

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In taking up a new audit engagement, the auditor must ensure that the firm will be free from intimidation threat, familiarity threat, integrity threat and self interest threat.

(vii) Potential client

The auditor needs to investigate or access the potential client as to the owners, the management and the type and legality of the business to be audited. He could undertake due diligence test on the company.

EXAMINERS' REPORT

The question is on ethical standards in parts (a) and (b) and steps to be taken by an auditor before accepting an audit in part (c).

About 80% of the candidates attempted the question. Performance in parts (a) and (c) were fair but the candidates did not show sufficient understanding of ethical standards as published by the Institute. Candidates are advised to be more familiar with ICAN publications.

QUESTION 5

- (a) Forensic audit refers to the procedures carried out in order to obtain reliable and acceptable evidence for anticipated disputes or litigation. It involves the use of auditing and investigative techniques to identify and gather evidence. The forensic auditor is often required to act as an expert witness when matters are brought up in court.
- (b) Situations requiring the service of forensic auditors include;
- (i) Theft and frauds
 - (ii) Bribery allegations

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- (iii) Tax evasion
 - (iv) Insider dealings
 - (v) Wrongful dismissals
 - (vi) Business interruptions
 - (vii) Property losses
 - (viii) Insurance claims
 - (ix) Personal liability claims
 - (x) Construction claims
 - (xi) Bankruptcies
 - (xii) Breach of contract
 - (xiii) Stock market manipulations
 - (xiv) Arson
 - (xv) Matrimonial Divorce claims
 - (xvi) Investment scam
 - (xvii) Management/employee wrong doing
 - (xviii) Royalty audits
 - (xix) Expert witness testimony
- (c) Qualities of a forensic Auditor
- (i) Ability to identify fraud with minimal information
 - (ii) Identification of financial issues significant to the matter
 - (iii) Knowledge of investigative techniques
 - (iv) Knowledge of the rules of evidence in court
 - (v) Ability to interpret financial information
 - (vi) Ability to communicate findings in a language that is understandable by a layman

 - (vii) Possession of investigative skills
 - (viii) Possession of investigative mentality
 - (ix) Computer literacy
- (d) Differences between Forensic Audit and Financial Audit include
- (i) Financial audit aims at giving an audit opinion on the financial statements while forensic audit aims at detecting material frauds and misstatements
 - (ii) Financial audit depends on examination of audit trail while forensic audit depends on examination of events and activities behind the documents

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- (iii) Financial audit is conducted strictly according to standards, guidelines and applicable legislations, whereas no such restriction is placed on the scope of work of Forensic Auditor
- (iv) Financial audit is usually statutory whereas forensic audit is not
- (v) The auditor reports to members of the auditee organisations while Forensic auditor reports to the persons who appointed him

EXAMINERS' REPORT

The question tests candidates' knowledge of forensic audit. About 50% of the candidates that attempted the question performed below average. Their understanding of the requirements of the question was poor.

Candidates are expected to read widely and prepare well for examinations.

QUESTION 6

(a) i. Management audit:

This is an objective and independent appraisal of the effectiveness of management in the application of its resources to achieve organisation's objectives and policies. Its aim is to identify existing and potential management weaknesses within the organization and to recommend ways to rectify the identified weaknesses in order to optimize the organisation's performance.

ii. Private Audit:

This is an audit conducted into the affairs of an entity by independent auditors because the owners desire it and not because the law requires it. It is usually related to audits not required by the Companies and Allied Matters Act CAP C20 LFN 2004 such as sole traders, partnership and other relevant entities.

iii. Effectiveness Audit:

This is an audit which is carried out in public sector organisations to examine whether programmes or projects undertaken to meet established policies goals or

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objectives have met their prospective targets. It is an aspect of value for money audit or performance audit

iv. Social Audit:

This is an audit which is carried out to consider the effect of an organisation's activities on stakeholders like the shareholders, debtors, creditors, employees and the members of the general public and government

v. Compliance Audit:

This is an audit carried out to determine whether an organization is following specified procedures, laws or regulations. For instance, it could be used to determine whether the accounting personnel in an organization are following procedures prescribed by the company manuals. The results of compliance audits are usually addressed to management of the organization

vi. Environmental Audit:

This is an audit which considers objective evaluation of how well an organisation's management and equipment are performing with the aim of contributing to safeguarding the environmental practices such as environmental hazards, climate change and global warming.

(b) Other services rendered by auditors to clients include:

- (i) Accounting services
- (ii) Taxation advisory services
- (iii) Management advisory services
- (iv) Receivership
- (v) Liquidations
- (vi) Trusteeship
- (vii) Recruitment services

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- (viii) Human resources training
- (ix) Forensic investigations
- (x) Share and business valuation
- (xi) Financial consultancy
- (xii) Company secretarial services
- (xiii) Acting as Reporting Accountants as regards public issues

EXAMINERS' REPORT

The question is in two parts. Part (a) tests on various types of audit while part (b) requires candidates to state other services that the auditors can render to their clients.

Performance on part (a) was below average as candidates displayed ignorance of the various types of audit. Part (b) was generally well attempted.

Candidates are advised to digest the syllabus well before sitting for examinations.

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA
INTERMEDIATE EXAMINATION - MAY 2012
TAXATION

Time Allowed - 3 hours

SECTION A: Attempt All Questions

INTERMEDIATE EXAMINATION - MAY 2012

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PART I: MULTIPLE - CHOICE QUESTIONS

(20 MARKS)

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

1. Which of the following is the statutory period within which tax returns of new companies should be filed at the nearest tax authority?
 - A. Within eighteen months from the date of incorporation
 - B. Within eighteen months from the date of incorporation or not later than six months after the end of its first accounting period, whichever is earlier
 - C. Within eighteen months from the date of incorporation or not later than six months after the end of its first accounting period
 - D. Within the first six months after the end of its first accounting period
 - E. Within a year from the end of its first accounting year

2. Which ONE of the following information is NOT disclosed in a Tax Clearance Certificate?
 - A. Tax identification number of the payee
 - B. Expiry date
 - C. Tax paid
 - D. Date of receipt
 - E. Name of the payee company

3. Which of the following is the term used when the liability of a taxpayer is reduced through an illegal act?
 - A. Tax shifting
 - B. Tax allowance
 - C. Tax avoidance
 - D. Tax incidence

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E. Tax evasion

4. The restriction of capital allowances claimable on assessable profits by companies other than those engaged in manufacturing and agricultural business is
- A. 75%
 - B. 100%
 - C. $66\frac{2}{3}\%$
 - D. 66%
 - E. 67%
5. Which of the following is NOT a benefit of applying computer models in tax administration?
- A. Improved efficiency
 - B. Reliability of data
 - C. Improved productivity
 - D. Inadequacy of Information Technology literacy and skills among revenue officials
 - E. Accuracy of tax computation
8. What is the estimated tax life of a qualifying capital expenditure of ₦500, 000, incurred by Olumide Limited, where the rates of initial and annual allowances are 25% and 20% respectively?
- A. 4 years
 - B. $4\frac{1}{2}$ years
 - C. $5\frac{1}{2}$ years
 - D. 2 years
7. Which of the following is NOT a condition for an expense to qualify as allowable deduction?
- A. Wholly
 - B. Exceptionally
 - C. Reasonably
 - D. Necessarily
 - E. Exclusively

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8. On which basis is capital allowances of a qualifying capital expenditure of a partnership converted to a limited liability company computed?
- A. Tax life of the qualifying capital expenditure
 - B. Unexpired tax life of the qualifying capital expenditure
 - C. Annual allowance of the qualifying capital expenditure
 - D. Initial allowance
 - E. Both the initial and annual allowances
9. Which of the following is a person appointed by a Will or Codicil to administer the Estate of a deceased?
- A. Executor
 - B. Administrator
 - C. Testator
 - D. Settlor
 - E. Beneficiaries
10. Which of these is the meaning of 'executed' and 'execution' with reference to Instruments not under seal?
- A. Implemented
 - B. Signed
 - C. Signature
 - D. Paid
 - E. Signed and signature
11. What number constitutes a quorum of a meeting of a State Board of Internal Revenue?
- A. Two
 - B. Five
 - C. Ten
 - D. Three
 - E. Seven
12. The principle of a good tax system capable of adjusting to changing circumstances is its

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- A. Certainty
B. Equity
C. Adjustability
D. Simplicity
E. Flexibility
13. Which ONE of the following is not a “person” in the context of the Personal Income Tax Act CAP P8 LFN 2004 as amended?
- A. An Executor
B. A Community
C. A Co-operative society
D. A Family
E. A Trustee
14. The following information is provided in respect of Chief Elemure for 2008 Assessment Year:
- | | |
|-----------------------------|--------------|
| | ₺ |
| Salary | 240,000 |
| Profit on sale of assets | 82,500 |
| Proceeds from State lottery | 50,000 |
- How much should Chief Elemure report in his tax returns?
- A. ~~₺~~240,000
B. ~~₺~~322,500
C. ~~₺~~372,500
D. ~~₺~~290,000
E. ~~₺~~92,500
15. The relevant tax authority for the assessment of partners in a partnership business is
- A. Federal Inland Revenue Service
B. State Board of Internal Revenue
C. Local Government Revenue Committee
D. Joint Tax Board
E. State Joint Tax Board

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6. The relevant tax law that governs taxation of Trusts, Settlements and Estates is
- A. Companies Income Tax Act CAP C21 LFN 2004 as amended
 - B. Personal Income Tax Act CAP P8 LFN 2004 as amended
 - C. Capital Gains Tax Act CAP C1 LFN 2004
 - D. Pioneer legislation
 - E. Executor laws
17. The following conditions are required to be satisfied in order to claim capital allowances on qualifying capital expenditure EXCEPT that
- A. The qualifying capital expenditure must not be financed by a loan
 - B. The qualifying capital expenditure must be owned by the tax payer as at the end of the basis period
 - C. The qualifying capital expenditure must be in use as at the end of the basis period
 - D. The qualifying capital expenditure must be used for the purpose of the trade or business
 - E. An acceptance certificate must be obtained if the qualifying capital expenditure is more than ₦500,000
18. According to Section 19(1) of Companies Income Tax Act CAP C21 LFN 2004 as amended, the following profits are not taxable EXCEPT
- A. Profit of any company being a statutory or registered friendly society in so far as such profits are not derived from a trade or business
 - B. Profit of a Co-operative society registered under the law relating to Co-operative societies
 - C. Profit of a company engaged in ecclesiastical, charitable or educational activities of a public character
 - D. Profit of a small business with turnover below ₦500,000
 - E. Profit of a company established under any local government law or edict in any State in Nigeria
19. The taxpayer's option to "right of election" on commencement of business is
- A. First three years of assessment
 - B. Second year of assessment
 - C. Third year of assessment
 - D. Both the second and third years of assessment
 - E. Both first and second years of assessment

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20. Which ONE of the following Auto sum functions will display the smallest number in a selected range of cells?

- A. Max
- B. Average
- C. Sum
- D. Min
- E. =Min

PART II: SHORT ANSWER QUESTIONS

(20 MARKS)

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

1. An assessment on a taxpayer based on a flat rate of tax on his total assessable income is called.....
2. Which tier of government collects rates and fees?
3. What is the title of the head of Federal Inland Revenue Service Board?
4. A Tax Clearance Certificate issued by the FIRS must also disclose chargeable income and tax paid by a tax payer for the last..... years of assessment.
5. Under the Personal Income Tax Act CAP P8 LFN 2004 as amended, what is the rate of minimum tax payable on total income?
6. What is the relief granted to any person (individual) or company that incurs capital expenditure during a basis period in respect of fixed assets bought and in use for the purpose of a trade or business called?
7. Which relevant tax authority administers the taxes of members of the Nigerian Police Force?
8. Stamp duties that are assessed at a flat rate and which do not vary with the consideration payable on a transaction is called.....

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9. In excel program, state a formula that can be used to add cells A1, B1 and C1.
10. A tax system whereby the percentage tax rate decreases as the tax base increases is known as..... system.
11. What is a “Principal Place of Residence” in relation to an individual with no source of income other than pension in Nigeria?
12. What is the name given to the power of the Revenue to enforce the payment of tax from a defaulting tax payer.
13. The investigation carried out by the Revenue to correct inadequate assessment made in previous years is called.....
14. A person who fails to deduct or remit withholding tax on rent, interest, royalties, or dividends is liable to a fine of.....
15. A person who receives a regular yearly fixed income from a Settlement, or Trust is called an.....
16. A document which the Revenue issues in favour of a tax payer as evidence that the payment it receives has suffered withholding tax at source is called.....
17. The trading loss adjusted for tax purposes at the date of cessation of business is called.....
18. A person appointed by a “Will” to administer the Estate of a deceased person is known as an
19. An allowance claimable on assets acquired for use in rural areas where there is no facility at all, is called.....
20. In Computer-Assisted Tax Planning and Management, an equation that performs operations on values is called

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SECTION B: ATTEMPT ANY FOUR QUESTIONS

(60 Marks)

QUESTION 1

Holuholu Limited has been in business for many years making up its accounts to 31st December, before it changed its accounting date to 30th April. The relevant Assessable

Profits are as follows:

	₦'000
12 months to 31 December 2001	180,000
12 months to 31 December 2002	240,000
16 months to 30 April 2004	336,000
12 months to 30 April 2005	144,000
12 months to 30 April 2006	175,000

You are required to:

- Compute the Assessable Profits of Holuholu Limited for the relevant years of assessment taking into consideration relevant options available to the Revenue.
(7 Marks)
 - Explain briefly FIVE principles of taxation.
(5 Marks)
 - Discuss the provisions of the law and the practice of the Revenue when a taxpayer changes accounting date.
(3 Marks)
- (Total 15 marks)

QUESTION 2

Polymar Nigeria Limited has been in business for over five years as an Internet Service Provider. In addition to the activities of its technical staff, it also contracts out client site engineering services to registered professional companies and individuals who submit their bills for payment after the contracts have been executed.

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The company is about to declare dividend out of its profit and it needs advice on how to handle issues on withholding tax, which have been a constant source of concern.

Required:

- (a) What is the taxable entity for the purpose of assessing withholding tax?
(2 Marks)
 - (b) State the relevant tax authority for the collection of withholding taxes in Nigeria and their applicable tax entity. (2 Marks)
 - (c) List any SIX contents of a remittance schedule which is usually forwarded by a tax payer to the relevant tax authority in respect of withholding tax deducted
(6 Marks)
 - (d) List FIVE dividends exempted from withholding tax (5 Marks)
- (Total 15 Marks)

QUESTION 3

- (a) Withholding taxes are either paid to the State governments or Federal government.

You are required to:

- (i) State THREE withholding taxes NOT payable to the Federal Government
(3 Marks)
 - (ii) Enumerate THREE information that should be included in the remittance schedule to the Federal Inland Revenue Service. (3 Marks)
- (b) You are required to show the journal entries for the treatment of the following transactions:
 - (i) Education tax per accounts amounted to ₦2,800,000
 - (ii) Income tax under-provided for by ₦500,000
 - (iii) ₦2,750,000 paid as part of outstanding Income Tax

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The Trust provides discretionary payments to the children towards their maintenance and education as follows: Woleida ₦24,000, Sunmisola ₦23,000, Semilogo ₦25,000. Capital allowance was agreed at ₦24,000. It is stipulated in the Trust that the beneficiaries are to share half of the distributable income equally. ₦30,000 of other expenses are not tax deductible.

Required:

- (a) Calculate the Net Computed Income and the amount each beneficiary will include in his/her income tax returns in the relevant year of assessment.

(10 Marks)

- (d) Define the following terms:

- | | |
|-----------------------|----------|
| (i) Estate | (1 Mark) |
| (ii) Trust | (1 Mark) |
| (iii) Annuity | (1 Mark) |
| (iv) Residual Legatee | (1 Mark) |
| (v) Executor | (1 Mark) |

(Total 15 Marks)

QUESTION 5

Crafted Wood Nigeria Limited is a company incorporated in Nigeria and has been in construction business for many years. The detailed profit and loss account for the year ended December 31 2009 is as follows:

	₦'000	₦'000
Value of work done		4,074,568
Miscellaneous income		<u>718,262</u>
		4,792,830
Salaries and Wages	273,427	
Transport and Freight	57,640	
Repairs and Maintenance	3,939	
Hire of equipment	20,196	
Rent of warehouse	52,004	
Insurance and licence	117,097	
Travelling expenses	37,936	
Stationery and services	13,878	
Canteen expenses	16,547	
Postages and telephone	10,087	

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Medical expenses	9,191	
Professional charges	18,628	
Directors' fees	25,000	
Accountancy fees	10,000	
Bank charges and interest	721,730	
Depreciation of fixed assets	99,144	
Tender expenses	21,381	
Loss on foreign exchange	244,857	
Direct materials	25,315	
Fuel and oils	57,911	
Test and technical radiograph	330	
Decrease (increase) in W.I.P.	<u>2,768,747</u>	<u>4,604,985</u>
		<u>187,845</u>

Net Profit

The following information is also relevant:

- (i) Tax deducted at source from rental income which forms part of the miscellaneous income amounted to ₦47,965,000
- (ii) Tax written down value of assets disposed of was ₦117,785,000 and sales proceeds amounted to ₦253,752,000.
- (iii) Only ₦10,628,000 of the amount charged as professional charges has been agreed to be admissible for tax purposes.
- (iv) Total capital allowances for the year amounted to ₦136,600,000.
- (v) Unutilised capital allowances brought forward from the immediate preceding year amounted to ₦357,484,000.

Required:

- (a) Compute the tax liabilities of Crafted Wood Nigeria Limited for the relevant year of assessment. (9 Marks)
- (b) Explain the concept "Wholly, Reasonably, Exclusively and Necessarily" incurred expenses. (4 Marks)

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- (c) Section 33 of CITA CAP C21 LFN 2004 as amended, specifies a category of companies to which Minimum Tax Provision is not applicable. List any TWO of such Companies.

(2 Marks)
(Total 15 Marks)

QUESTION 6

Marpoly Nigeria Limited was incorporated on February 1 2005, and commenced business on May 1 2005. The company makes up its accounts to 31st August of each year. The following information relates to its activities.

	₦'000
Adjusted profit/(loss) for:	
- Period ended August 31 2006 (16 months)	(160,000)
- Year ended August 31 2007	80,000
- Year ended August 31 2008	40,000

	₦'000
Capital allowances are as follows:	
2005	10,000
2006	7,000
2007	5,400
2008	5,000
2009	4,600

Required:

- (a) Determine the basis periods and the tax liabilities for the relevant years of assessment. (Ignore the tax payer's right of election). (10 Marks)
- (b) It is logical to assume that before arriving at any gain or profit, any loss incurred in the same trade should be deducted from the total income of the tax year. State

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FIVE dissimilarities between Current Year Loss Relief and Carry Forward Loss Relief.

(5 Marks)

(Total 15 Marks)

TAXATION

SOLUTIONS TO SECTION A

PART I - MULTIPLE- CHOICE QUESTIONS

1. B
2. D
3. E
4. C
5. D
6. B → $(100 \div 20) = 5 \text{ years}$
7. B

8. B
9. A
10. E
11. B
12. E
13. C
14. A → (Only salary is taxable, other two sources of income are not)
15. B
16. B
17. A

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The administrative costs should not be higher than the revenue to be realized. This principle of taxation requires that taxes should not be imposed if the cost of collection is excessive. Tax can be considered to be economical if the cost of collection is not excessive.

(ii) SIMPLICITY:

A good tax system must be easy to administer. It must be possible to know the tax base and it must be possible to collect tax once levied. Ambiguities in assessment and collection should be avoided.

(iii) CERTAINTY:

The procedure must be objective, certain and specific, for example, two taxpayers applying the same tax law and given same information must arrive at the same tax liability.

(iv) EQUITY:

The tax must not be arbitrary and the amount payable should not be influenced by prejudice or personal feelings. It must make taxpayers in the same circumstance pay the same tax.

There are however two types of equity as discussed below;

- Horizontal Equity: People in similar situations are treated in a similar way. Equity is concerned with the distribution of the tax burden.
- Vertical Equity: People in unequal situations are treated with the necessary degree of inequality. The rich are expected to pay more than the poor.

(v) CONVENIENCE:

The tax payer must not incur great cost or inconvenience simply because he wants to comply with the tax obligation. In fact, the cost of compliance must be zero.

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(vi) FLEXIBILITY:

The tax system should be flexible especially in a Federal and Democratic country where there are always changes of government. This principle appreciates the fact that instead of rigid tax system, a tax system that is responsive to changing realities is preferred. An adjustable tax system would allow any tax considered obsolete to be scrapped and replaced with a meaningful and collectible tax.

(vii) NEUTRALITY:

A tax is said to be neutral if it does not distort economic choices. Any tax that impinges on economic activity cannot be completely neutral in its effect.

(c) Procedure for change of accounting date:

- (i) Identify the year of change;
- (ii) Identify the two years immediately following the year of change in (i) above ;
- (iii) Compute the Assessable Profits for the three relevant years (i and ii above) based on preceding year basis (PYB) for the old accounting date;
- (iv) Compute the Assessable Profits for the three relevant years (i and ii above) on (PYB), based on the new accounting date;
- (v) Aggregate and compare the assessable profits under old and new accounting dates; and
- (vi) The higher aggregate usually serves as the basis of assessment.

EXAMINER'S REPORT

The question tests candidates' understanding on how to assess taxpayers when there is change of accounting date.

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Most candidates attempted the question. The performance was good. The commonest pitfall was the inability of candidates to identify the year of change.

Candidates are advised to pay attention to situations where there are abnormal basis periods (change in accounting date, commencement of business and cessation of business).

SOLUTION TO QUESTION 2

- (a) The first step is to ascertain whether or not the services or goods of the taxable entity are liable to Nigerian Tax. The taxable entity liable to withholding tax is that entity from whom the withholding tax has been deducted. This entity could be a Corporate body, an un-incorporated body or individuals.
- (b) Relevant tax authorities for collecting withholding taxes in Nigeria and their taxable entities are as follow:

<u>Tax Authority</u>	<u>Taxable Entity</u>
Federal Inland Revenue Service (FIRS)	Corporate bodies, Enterprises and Partnerships resident in Abuja.
State Internal Revenue Service (SIRS)	Unincorporated bodies, Individuals and Partnerships resident in the States

- (c) Contents of a remittance schedule on withholding tax will include:
- (i) The name of the Company making the remittance
 - (ii) The Tax Identification Number (TIN) of the company making the remittance
 - (iii) Names of the taxpayer who suffered the deduction
 - (iv) Address of the taxpayers on whom the deduction was made
 - (v) Nature of the goods supplied /service rendered and the period covered
 - (vi) The Tax Identification Number (TIN) of the companies on whom the deductions were made (for federal remittances)

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- (vii) The Personal Identification Number (PIN) of the un-incorporated entity or individual on whom the deductions were made (for State remittances)
 - (viii) The total invoice amount on individual transaction
 - (ix) The withholding tax rate applied on individual transaction
 - (x) The amount of tax withheld on individual transaction
 - (xi) The net amount paid to the body that suffered the deduction
 - (xii) The cheque number and date of payment of total sum withheld and now being remitted.
- (d) Dividends exempted from withholding tax are:
- (i) Dividend paid out of pioneer profit.
 - (ii) Dividend paid by a Unit Trust.
 - (iii) Dividend from small companies engaged in manufacturing during the first 5 years of their operations.
 - (iv) Dividend from wholly export-oriented companies.
 - (v) Dividend paid out of profit from petroleum operations.
 - (vi) Dividend from companies in the petrochemical and liquid natural gas industry.
 - (vii) Dividend of a Nigerian Company in respect of goods exported from Nigeria and used exclusively for the purchase of raw materials, plant, equipment and spare parts.
 - (viii) Dividend derived by a company from a country outside Nigeria through government- approved channels.

EXAMINERS' REPORT

The question tests candidates' understanding of the treatment of withholding tax.

The commonest pitfall was the inability of the candidates to demonstrate good knowledge of taxable entity and the exemptions granted on withholding tax.

It is recommended that students should read the various sections of the law relating to withholding tax.

SOLUTION 3

- (a) i Withholding taxes not payable to the Federal Government include:
- Taxes on: rent received by individuals from any State other than the Federal Capital Territory

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- Taxes on: supplies by enterprises other than a Limited Liability company;
 - Taxes on professional fees received by individuals in any State other than the Federal Capital Territory; and
 - Taxes on Dividends, Interests, Royalties and Commissions in any State other than the Federal Capital Territory
- (ii) The following details should be included in the schedule accompanying payment of withholding taxes to the Federal Government:
- Name and address of the company withholding the taxes
 - The Tax identification number
 - Value of the transaction therein
 - Amount of tax withheld
 - The nature of the transactions/ services
 - The applicable tax rate

(b)	DR	CR
(i) Profit and Loss Appropriation Account	₦2,800,000	
Provision for Education Tax Account		₦2,800,000
(ii) Profit and Loss Appropriation Account	₦500,000	
Provision for Income Tax Account		₦500,000
(iii) Income Tax Account	₦2,750,000	
Bank Account		₦2,750,000
(v) Profit and Loss Appropriation Account	₦570,000	
Deferred Tax Account		₦570,000

(c) (i) PAYMENT CERTIFICATE AND TREASURY RECEIPT

When payments are made to the tax office in respect of withholding taxes deducted at source, a payment certificate is issued in favour of the tax agent. This certificate serves as the documentary evidence that the tax agent should have, pending the issuance of the treasury receipt by the Inland Revenue. It should be noted, however, that the receipt is issued only when it is confirmed

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that the cheque paid by the agent has been cleared.

(ii) REFUNDS AND SET-OFFS

Where it is proved that the person who suffered a withholding tax deduction is not liable to income tax for the year or that the tax withheld is in excess of the tax assessed, the Board has the obligation to grant a refund of the over-payment. However, Section 63(7) of CITA provides further, that any excess withholding tax shall not be refunded but will be allowed as a set-off against future taxes, if application is dully filed within 90 days.

(d)

JALIKI LIMITED

COMPUTATION OF PENALTY ON LATE PAYMENT

The Penalty for late payment commences from the date, the Notice of Assessment was issued.

01/09/2009- 31/12/2009	4 months
01/01/2010 - 31/12/2010	12 months
01/01/2011 - 30/9/2011	9 months

Penalty Rate is 10% Per annum (p.a).

		₤
2009	₤ 350,000 @ 10% for 4 months	11,667
2010	₤ 140,000 @ 10% for 12 months	14,000
2011	₤ 140,000 @ 10% for 9 months	10,500
Total penalty due on September 30 2011		<u>36,167</u>

COMPUTATION OF INTEREST ELEMENTS

Year		₤
2009 (4months)	₤350,000 @ 21% x 4/12	24,500
2010 (12months)	₤140,000 @ 21%	29,400
2011 (9months)	₤140,000 @ 21% x 9/12	22,050
		<u>55,950</u>

NOTE:

Section 77 of Personal Income Tax Act Cap P8 LFN has been amended so that calculation of interest on late payment of personal income tax will be on annual basis. Put differently,

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such interest would be compounded, as against the flat/simple interest basis that was previously applied.

EXAMINERS' REPORT

The question tests candidates' understanding of the assessment and the preparation of withholding tax accounts.

Not many students attempted the question and performance was poor. The commonest pitfall was the inability of the candidates to prepare accounts for withholding tax deductions.

It is recommended that candidates should pay attention to all aspects of the syllabus

SOLUTION 4

(a) (i)

MALLAM HASSAN FILADE TRUST
COMPUTATION OF NET COMPUTED INCOME
FOR 2006 TAX YEAR

	₦	₦
Adjusted Trading Profit	240,000	
Less: Capital Allowance	<u>(24,000)</u>	216,000
Profit on sale of assets		45,000
Rental Income (gross)		110,000
Other Income	100,000	
Less: other expenses allowable ₦ (44,000-30,000)	<u>14,000</u>	<u>86,000</u>
Total Computed Income		457,000
Less: allowable payments:		
Fixed annuity (Woleola)	12,000	
Trustee's remuneration:		
Fixed	8,000	
Other (5% x ₦ 457,000)	<u>22,850</u>	<u>(42,850)</u>
		414,150
Less: Discretionary payments:		
Woleola	24,000	

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Unabsorbed capital allowance c/f	297,425	-----
Taxable profit		<u>234,297</u>
Income tax liability @ 30% ₹ 234,297		70,289
Less: Withholding tax on rent		(47,965)
		<u>22,324</u>
Education Tax (2% of ₹ 294,989)		5,900

Working

Determination of Balancing Charge (w1)

		₹'000
Sales proceeds	253,752	
Tax written down value		(117,785)
Balancing charge		<u>135,967</u>

(b)

- (i) Wholly: This means that the expenditure was incurred only for the purpose of the business.
- (ii) Reasonably: The expenditure must be moderate, right and acceptable and not excessive, having regard to the particular circumstance.
- (iii) Exclusively: The purpose for which the expenditure is made must be directly in pursuance of the income or profit, where there is more than one purpose, apportionment must be made.
- (iv) Necessarily: The expenditure must be mandatory/critical, for the purpose of producing the income.

(c) Minimum tax provision is not applicable to the following companies:

- (i) A company carrying on agricultural trade or business.

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- (ii) A company with at least 25% imported Equity Capital.
- (iii) A company that has not been in operation for more than four calendar years.

EXAMINERS' REPORT

The question tests candidates' knowledge and understanding of some of the adjustments necessary on a Profit and Loss Account for tax purposes.

Many students attempted the question and performance was good. The commonest pitfall was the inability of the candidates to distinguish between allowable and disallowable expenses.

It is recommended that candidates should familiarize themselves better with the nature of the essential adjustments to the Profit and Loss Account for tax purposes.

SOLUTION 6

(a)

MARPOLY NIGERIA LIMITED					
DETERMINATION OF BASIS PERIOD					
YOA	BASIS PERIOD				Assessable Profit/(Loss) ₦'000
	01/05/05-31/12/05 (⁸ / ₁₆ X ₦ 160,000)				(80,000)
2005					
	01/05/05-30/04/06 (¹² / ₁₆ X		X		(120,000)
2006	₦ 160,000)				
	01/09/05-31/08/06 (¹² / ₁₆ X		X		(120,000)
2007	₦ 160,000)				
	01/09/06-31/08/07				80,000
2008					
	01/09/07 - 31/08/08				40,000
2009					

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MARPOLY NIGERIA LIMITED

COMPUTATION OF TAX LIABILITIES FOR THE RELEVANT YEARS OF ASSESSMENT

	₦'000	₦'000
<u>2005</u> YOA		
Adjusted profit/(loss)		(80,000)
Loss Relieved		<u>0</u>
Unrelieved loss c/f		<u>(80,000)</u>
Capital Allowance	10,000	
Absorbed	<u>0</u>	
Unrecovered capital allowance c/f	<u>10,000</u>	
Tax liability		Nil
<u>2006</u> YOA		
Adjusted profit /(loss)		(120,000)
Unrelieved loss b/f		<u>(80,000)</u>
Unrelieved loss c/f		<u>(200,000)</u>
		<u>(160,000)</u>
Loss c/f restricted to		
Capital Allowance for the year	7,000	
Capital allowance b/f	<u>10,000</u>	
Unabsorbed Capital allowance c/f	<u>17,000</u>	
Tax Liability		<u>Nil</u>
<u>2007</u> YOA		
Adjusted profit/(loss)		(120,000)
Unrelieved loss b/f		<u>(160,000)</u>
		<u>(280,000)</u>
Loss c/f restricted to		<u>(160,000)</u>
Capital allowance for the year	5,400	
Capital allowance b/f	<u>17,000</u>	
Unabsorbed Capital Allowance c/f	<u>22,400</u>	
Tax liability		<u>Nil</u>
<u>2008</u> YOA		
Adjusted profit		80,000

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Unrelieved loss b/f restricted to actual loss	(160,000)	
Relieved	<u>80,000</u>	(80,000)
Unrelieved loss c/f	<u>(80,000)</u>	<u>0</u>
Capital allowance for the year	5,000	
Capital allowance b/f	<u>22,400</u>	
Unabsorbed Capital Allowance c/f	<u>27,400</u>	
Tax liability		<u>Nil</u>

2009 YOA

Adjusted profit		40,000
Unabsorbed loss b/f	(80,000)	
Relieved	<u>40,000</u>	(40,000)
Unrelieved loss c/f	<u>(40,000)</u>	<u>0</u>
Capital Allowance for the year	4,600	
Capital allowance b/f	<u>27,400</u>	
Unabsorbed Capital Allowance c/f	<u>32,000</u>	
Tax liability		<u>Nil</u>

- (b)(i) Under current year loss relief, the relief is available to only individuals, while carry forward loss relief is available to both individuals and companies.
- (ii) In current year loss relief, loss can be recouped from all sources of income in the first year, while loss can only be recouped from that same source that sustained the loss originally in the carry forward loss relief.
- (iii) There is need to obtain permission from the Revenue authorities before a loss can be recouped under the current year loss relief, whereas permission is automatically granted under the carry forward loss relief.
- (iv) In the current year loss relief, losses are recouped in the same accounting year they are incurred i.e. Actual Year Basis, while in the Carry forward loss relief, recoupment is on preceding year basis.

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- (v) Current year loss relief is not available for property letting but the carry forward loss relief is available for property letting.

EXAMINERS' REPORT

The question tests candidates' understanding of the commencement rules in taxation.

Candidates demonstrated a good understanding of the question and performance was fair. The commonest pitfall was the candidates' poor understanding of the dissimilarities between Current Year Loss Relief and Carry Forward Loss Relief.

Candidates are advised to diligently cover the entire syllabus before sitting for examinations.

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA
INTERMEDIATE EXAMINATION - MAY 2012
BUSINESS COMMUNICATION AND RESEARCH METHODOLOGY

Time Allowed - 3 hours

SECTION A: Attempt All Questions

PART I: MULTIPLE-CHOICE QUESTIONS (20 Marks)

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

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An organisation is interested in finding solution to a particular problem within its industry through the application and testing of established theories. Which of the following is most suitable for the organisation?

- A. Descriptive research
 - B. Evaluation research
 - C. Applied research
 - D. Basic research
 - E. Action research
2. Which of these is NOT the reason for research activities in our society?
- A. To provide research centres in our locality
 - B. To solve identified problem
 - C. To reduce level of uncertainly in our environments
 - D. To widen the horizon of knowledge
 - E. To establish relationship between variables
3. The major feature of experimental research is
- A. Establishing relationship between variables
 - B. Applying existing theories in solving problems
 - C. Controlling independent variables to describe the effects on dependent Variables
 - D. Examining past events to understand the present and predict the future
 - E. Discovering the needs of consumers
4. The statement that “the level of standard of living of Nigerians improved after the removal of oil subsidy” is a hypothesis
- A. Directional
 - B. Non-directional
 - C. Statistical
 - D. Null
 - E. Two-tail test
5. One of the steps NOT considered in a sequence of scientific research process is

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- A. Conceptualisation of the problem of investigation
 - B. Statement of the study objectives
 - C. Collection of relevant data
 - D. Analysis of data
 - E. Implementation of the research report
6. In a research study “The impact of Auditing on Banks’ Performance in Nigeria”, the study population is
- A. The aggregate of all auditing firms in Nigeria
 - B. Totality of workers in the banking industry
 - C. The commercial banks in Nigeria
 - D. All banks in Nigeria
 - E. The aggregate of all auditors in the banking industry
7. When a researcher consulted an article in a journal and uses the American Psychological Association (APA) style of referencing, which of the following is italicised?
- A. The author’s name
 - B. Year of publication
 - C. Title of the article
 - D. Title of the journal
 - E. The volume of the journal
8. A research consultant was commissioned to conduct a survey research on the remote causes of oil subsidy protest in Nigeria. Which of the following is NOT a suitable instrument of data collection?
- A. Post the questionnaire to the respondent
 - B. Mail the questionnaire on the internet
 - C. Personal administration of the questionnaire
 - D. Conduct face-to-face interview
 - E. Extract responses from daily print media

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9. If a medical doctor confirms with a thermometer that the difference between 39°C and 44°C in the temperature of an accused fraudster in an Accounts Department of a firm is the same as in the difference between 43°C and 48°C in any similar situation. The thermometer is a good example of
- A. Nominal scale
 - B. Ordinal scale
 - C. Interval scale
 - D. Ratio scale
 - E. Quantitative nominal scale
10. Which of the following is TRUE of test-re-test reliability of a measuring instrument?
- A. The higher the correlation between the two measurements, the higher the reliability
 - B. The higher the correlation between the two measurements, the lower the reliability
 - C. The lower the correlation between the two measurements, the higher the reliability
 - D. The correlation between the two measurements indicates no reliability
 - E. The correlation between the two measurements indicates spurious reliability
11. In which style of referencing is the author's name and year of publication written in parentheses in the text?
- A. The Chicago style
 - B. Kate Turabian style
 - C. American Psychological Association style
 - D. Modern Language Association
 - E. Library of Congress
12. Which of the following is NOT included in an abstract of a research report?
- A. The problem investigated
 - B. Method of data analysis
 - C. Salient findings
 - D. The cited references

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E. The nature of data used

13. One of the factors that affects the external validity of research design is
- A. History
 - B. Maturation
 - C. Experimental mortality
 - D. Instrumentation
 - E. Experimental artificiality
14. Which of the following is NOT a measure of dispersion?
- A. Harmonic mean
 - B. Range
 - C. Co-efficient of variation
 - D. Variance
 - E. Standard deviation
15. In the construction of an histogram, as a means of data presentation for a class of unequal intervals, the plotting of the graph is
- A. Cumulative frequency against the class limits
 - B. Cumulative frequency against the class boundaries
 - C. Frequency against the class limits
 - D. Adjusted frequency against the class boundaries
 - E. Adjusted frequency against the class limits
16. The sampling error, in test of hypothesis, is
- A. The difference between a sample statistic and a population parameter
 - B. The difference between correlation coefficient and variance
 - C. The difference between the Z value and the mean
 - D. Equal to the population value
 - E. The difference between the mean and variance
17. Which of the following best describes the methods of organisational communication?

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- A. Downward and upward communication
 - B. Grapevine and formal communication
 - C. Oral/spoken word, written and non-verbal
 - D. Diagonal and visual communication
 - E. Horizontal and lateral communication
18. The process of communication involves TWO of the following stages:
- A. Ideation, message encoding, selection of appropriate medium
 - B. Message decoding, interpretation/analysis and feedback
 - C. Ideation, interpretation and feedback
 - D. Appropriate medium, conception and ideation
 - E. Decoding, interpretation and feedback
- A. (ii) and (iii)
 - B. (i) and (ii)
 - C. (i) and (iii)
 - D. (iii) and (iv)
 - E. (iv) and (v)
19. The market research is interested in the relationship between quantity of goods sold and the number of consumers. What is the appropriate unit of analysis?
- A. The consumer of goods
 - B. The nature of goods
 - C. The quality of goods
 - D. The quantity of goods
 - E. The price of goods
20. Which of the following research methods emphasizes measurement of variables and their relationship?
- A. Applied
 - B. Quantitative
 - C. Action

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D. Experimental

E. Qualitative

PART II: SHORT-ANSWER QUESTIONS

(20 MARKS)

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

1. The type of research that analyses the past occurrence of events to determine the influence on present situation as well as to predict the future events is
2. The process of assigning numerical values and qualitative attributes to objects according to some specified rules is known as
3. An investigation conducted by a research and development manager to determine the perception of consumers' satisfaction and price paid on a product is called
4. The technique of sampling that ensures that different groups of the homogenous study population are adequately represented is referred to as
5. The extent to which a measuring instrument reflects accurately what it was intended to measure is
6. In an experiment, the variable that is not systematically manipulated but may still affect the behaviour being observed is
7. Given that the n th value of a serially listed population is 500 with a sample selection interval of 5. If the first selection from the series is the 8th subject, the third selection from the sample is
8. The consistency between independent measurements of the same phenomenon is called

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9. The type of questions that enable the respondents to freely express their opinions about a particular phenomenon is referred to as
10. An attempt to measure how adequately an instrument measures the actual meaning of a concept is referred to as.....
11. In a research, the results obtained are used only for the situation and population that are investigated.
12. Oral presentation, at a seminar or workshop, must be followed by a session
13. A style of referencing in the field of Social and Management Sciences that is very similar to the American Psychological Association's (APA) style of referencing books and other publications is known as.....
14. There are many ways by which encoders and decoders react to situations; the body language is a form of communication.
15. A receiver's response, which indicates that a message has been received through the appropriate channel, shows that the message has been given correct.....
16. In a sample test of means, for independent samples, if $n_1 = 12$ and $n_2 = 10$ the degree of freedom in the test is
17. In a one-way Analysis of Variance (ANOVA), K refers to the.....
18. The level of measurement required for the goodness-of-fit test is.....
19. "Nominal scale is used to identify or categorise entities and does not place them along a continuum". Is this statement True or False?
20. The plan, structure and strategy of investigation conceived to obtain answers to research questions and control variance is.....

SECTION B: ATTEMPT ANY FOUR QUESTIONS

(60 Marks)

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QUESTION 1

One of the sequential stages through which deductive research will progress is deducting hypothesis from theory. In view of this,

- (a) What do you understand by the term hypothesis? (7 Marks)
 - (b) Outline FIVE functions of hypothesis in research study. (5 Marks)
 - (c) Of what relevance is the level of significance in hypothesis testing? (3 Marks)
- (Total 15 Marks)

QUESTION 2

Researchers are usually interested in the adequacy of their research designs in eliciting desired responses. They therefore seek to validate their measuring instruments.

- (a) Define the concept of validity of measuring instruments. (2 Marks)
 - (b) Differentiate between internal and external validity of findings. (3 Marks)
 - (c) Explain briefly FIVE factors that affect internal validity. (10 Marks)
- (Total 15 Marks)

QUESTION 3

A research report is not limited to a formal statement of the result of an investigation but includes other supportive materials and information that could enable the readers do further referencing.

Required:

- (a) What is a reference list? (3 Marks)
- (b) Assuming you decide to adopt the American Psychological Association (APA) style of referencing, demonstrate with an example of each, how a book and journal cited can be referenced at the end of the chapter. (6 Marks)

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- (c) Give FOUR reasons why it is necessary to reference materials used in a study

(6 Marks)

(Total 15 Marks)

QUESTION 4

Distinguish between the following commonly used pair of terms in research:

- (a) Type I error and Type II error. (3 Marks)
(b) Sample and population. (3 Marks)
(c) Random Sampling and Purposive Sampling. (3 Marks)
(d) Questionnaire and interview schedule. (3 Marks)
(e) Primary data and Secondary data. (3 Marks)

(3 Marks)

(Total 15 Marks)

QUESTION 5

Researchers in Nigeria face a lot of challenges in the process of Research.

- (a) Enumerate any FIVE major constraints faced by the Nigerian Researcher.

(5 Marks)

- (b) Explain any FIVE features of a good research report.

(10 Marks)

(Total 15 Marks)

QUESTION 6

A large manufacturing company is investigating the cause of sickness amongst production workers who have been employed by the company for more than one year. The following regression equation, based on a random sample of 50 of such production workers was derived for 2010:

$$y = 15.6 - 1.2x, \text{ Where}$$

y represents the number of days of absence because of sickness and x represents the number of years of employment with the company.

The coefficient of determination (r^2) is calculated to be 0.9.

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You are required to:

- (a) State and interpret the value of the correlation coefficient (4 Marks)
 - (b) State the meaning of the coefficients in the regression equation (5 Marks)
 - (c) Predict the number of days an employee, who has spent eight years in the company, would have been absent because of the sickness. (3 Marks)
 - (d) Give ONE example each of a pair of variables you would expect to be positively and negatively correlated, respectively. (3 Marks)
- (Total 15 Marks)

SOLUTIONS TO SECTION A

PART I MULTIPLE-CHOICE QUESTIONS

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

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3. E

14. A

15. D

16. A

17. A

18. B

19. E

20. B

EXAMINERS' REPORT

The questions test different aspects of the syllabus on basic concepts and simple application of research, statistics and communication skills in accounting field.

About 60% of the candidates scored above 50% of the marks allocated.

Candidates were unable to pick the most appropriate option to some questions.

It is, however, recommended that candidates should get familiar with basic concepts so that they can easily recall.

PART II SHORT-ANSWER SOLUTIONS

1. Historical Research
2. Measurement
3. Market Survey/Market Research
4. Stratified Sampling
5. Content validity or face validity

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6. Extraneous Variable
7. 18th
8. Reliability

9. Open Ended
10. Construct Validity
11. Case Study
12. Question and Answer/interactive session
13. Harvard
14. Non-verbal
15. Interpretation
16. 20
17. Number of Treatment/groups
18. Nominal
19. True
20. Research Design

Tutorial

(i) Question 7

$$1^{\text{st}} \text{ Sample} = 8$$

$$2^{\text{nd}} \text{ Sample} = 8 + 5$$

$$3^{\text{rd}} \text{ Sample} = 9 + 5 + 5 = 18$$

OR

$$U_n = 9 + n(n-1)d$$

$$U_3 = 9 + 2d$$

$$= 8 + 2 \times 5$$

$$= 8 + 10 = 18$$

(ii) Question 16

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degree of freedom, for difference between means is $N_1 + N_2 - 2 = 12 + 10 - 2 = 20$

EXAMINERS' REPORT

The questions test different aspects of the syllabus on basic concepts and simple application that require short answers on research, statistics and communication skills in accounting field.

About 55% of the candidates scored above 50% of the marks allocated.

Candidates were unable to identify key words leading to the solutions of the required questions.

It is recommended that candidates get familiar with technical terms on basic concepts of each topic as they study.

SOLUTIONS TO SECTION B

SOLUTION 1

- (a) Hypothesis can be defined as a tentative statement about the expected relationship between variables that is subject to empirical testing. It can be rejected or accepted.

Hypothesis can be stated in Null and Alternate forms. The null hypothesis assumes that no significant difference exists between the observed and expected occurrences while the alternate hypothesis assumes that significant difference exists between the observed and expected occurrences.

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A good researchable hypothesis must be capable of being verified with data and must be stated clearly. It can also relate the major variables in the research problem being investigated.

Hypothesis could be stated in directional or non-directional form representing one-tail or two-tail test hypothesis respectively.

For example, if skin cancer is directly related to ultraviolet light, then people with a high exposure to ultraviolet light will have a higher frequency of skin cancer,

- (b) Five functions of hypothesis in research study include:
- (i) Transforming the researcher's idea into testable forms: This could be possible when research hypotheses are translated into statistical hypotheses and adopt suitable-technique for testing.
 - (ii) Helping to specify what variables are to be measured by the researcher in order that he may have the expected results.
 - (iii) Guiding the researcher in his research design which helps in the collection of the required data. The way the hypothesis is stated and the variables contained therein determine to a large extent, the method of data collection and analysis.
 - (iv) Showing the direction of data analysis: When the hypothesis is well formulated, it dictates the method of analysis. For instance, 'there is a positive relationship between training and productivity' could require the use of correlation analysis or regression analysis as tools of analysis.
 - (v) Helping the researcher to properly organize his research report: When the hypotheses have been properly tested, the consequent results will assist the researcher in his conclusion, recommendation and other aspects of his report.
 - (vi) Helping the researcher to focus his attention and efforts in the right direction.
 - (vii) Serving as a link between the world of reality and the world of theory.
 - (viii) Assisting the researcher to uphold or reject the stated propositions.

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(c) The relevance of the level of significance in hypothesis testing:

The level of significance is the maximum probability of committing type 1 error (Rejecting a null hypothesis when it should be affected) in hypothesis testing. It helps in the determination of the critical value which will be subsequently used in accepting, or rejecting the stated hypothesis.

Thus, the higher the level of significance, the higher the chances of rejecting the hypothesis. Alternatively, the higher the level of significance, the lower the level of confidence. For example, if the level of significance is 5%, the level of confidence is 95%.

EXAMINERS' REPORT

The question tests the concept of hypothesis and the relevance of the level of significance in hypothesis testing.

About 75% of the candidates attempted this question. Out of this, about 60% scored above 50% of the mark allocated.

Candidates' commonest pitfall lay in their inability to state the relevance of significance level in hypothesis testing.

It is recommended that candidates study in-depth this concept using illustrative instances as guide.

SOLUTION 2

- (a) Validity of a measuring instrument is the degree to which a measuring instrument (such as questionnaire) measures what it is designed to measure.
- (b) Internal validity expresses the extent to which a study evaluates the intended prepositions or hypotheses. It addresses the question whether the research design actually elicit the appropriate responses for which it was designed. For instance, whether the manipulated variables actually have the expected effect on the observed variables.

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External validity expresses the extent to which the results of a study extend beyond the limited sample used for the study. In other words, it is the extent to which relationships among the variables can be generalized to other settings, treatment variables and other population. For example, a study on the prices of food items in Lagos can be used to generalize or estimate the prices of food items in Abuja

(c) FACTORS THAT AFFECT INTERNAL VALIDITY INCLUDE

- (i) History: This may include some events that the respondents might have experienced during the process of data administration. Such changes caused by events can affect the result of variables being measured.

Some examples of such events include emotional stress and pains resulting from previous arguments.

- (ii) Testing: The effect of pre-test produces a sort of experience gathered by the subjects on a second testing. In most experimental studies, the subject is aware of what is happening and as such tend to practice more for the next test therefore the difference between the mean scores of the two tests will be too significant that it can constitute threat to the result.
- (iii) Maturation: This is similar to testing but it is usually not as a result of the experiential events. Maturation refers to the experience acquired over time and this can cause change in the result, for instance, a change in the emotional status of the respondent can affect the result of an experiment.
- (iv) Experimental Mortality: This occurs in experiments that take longer period of time. For example, if one or more of the respondents from within the group is lost due to illness, sickness or even death, the experiment becomes invalid because the sample size must have been distorted.
- (v) Instrumentation: This can vary the findings in an experimental study if the measuring instruments used to measure some kind of behavior are unreliable. Such unreliable behavior may be due to inaccurate measuring equipment or inexperienced observer.
- (vi) Experimental Bias: This is where the researcher is has a previous knowledge about the subject or respondents involved in an investigation. This may

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affect the objectivity of the result and as such a preconditioned judgement could be made.

- (vii) Bias in Selection: This is represented by the inequality of the groups under study (ie the experimental control). For instance, an unorganized or bias study manager may decide to select some inexperienced set of respondents for his/her study. Many administer a set of questionnaires to their friends thereby causing threat to the desired result.

- (viii) Statistical Regression: This is when individuals are selected for an intervention or treatment on the basis of extreme scores on a pre-test. Extreme scores are more likely to reflect larger (positive or negative) errors in measurement (chance factors). Such extreme measurement errors are not likely to occur on a second testing.

- (ix) Interaction of selection with other factors affecting internal validity: This occurs when intact groups, which may not be equivalent, are selected to participate in research interventions. For example, three different classrooms may be exposed to different treatments, but one of them might be composed of students having achievement trajectories.

- (d) REASONS WHY IT IS NECESSARY TO REFERENCE MATERIALS USED IN A STUDY
 - (i) To avoid plagiarism: This is an act of using someone's idea, works or words without proper citation. It is unethical, illegal and attracts penalties. To avoid plagiarism, reference citation must be included in your report to give credit to the person or persons whose ideas or works have been published; and you have cited.
 - (ii) To appreciate and give credit to scholarly works: Referencing gives credit to academic ideas and encourage creativity in research works.
 - (iii) To enable the readers do a follow-up and read more about the cited author's views/ideas.

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- (iv) To enable the readers verify quotations and other information: References help the readers to verify the quotations in the various sources cited, which gives credence to the quality of research study.
- (v) It could determine the extent of investigations the researcher made in the process of the investigation.

EXAMINERS' REPORT

The question tests validity of measuring instruments for the purpose of research administration.

About 30% of the candidates who attempted the question scored above 50% of the marks allocated.

Most of the candidates did not know the relevant factors and points and as such they could not provide the required solution.

Candidates are advised to use good texts as they study this aspect.

SOLUTION 3

- (a) A reference list contains the full details of all and only the citations made in the body of the research report. The information in the cited material include the name of the author with the surname first, year of publication, title of the book (which must be italicized or underlined), place of publication and name of the publishers. For articles in Journal, title of article, title of the journal (which is italicized or underlined) volume number, issue number and page(s). The reference list comes at the end of the report and is arranged in alphabetical order. Surnames of authors are stated first.
- (b) Using the APA style of referencing for books cited the arrangement of the information is as follows: Author's name with surname first, initials (year of publication). Title of the textbook. place of publication: and the publishers.

Example

Okorie, R.O (2011). *Research design and methods*

Lagos: Longman Plc.

PATHFINDER

~~For journals that are cited, the information arrangement is as follows: Author's name (surname first), Year of publication, title of article, title of the journal, volume number issue number, and pages.~~

Example

Olatunji, K.O. (2010). Financial ratios and the performance of organisations. *The Accountants* 26 (4), 15 - 22.

- (c) Four reasons why it is necessary to reference materials used in a study.
- (i) To avoid plagiarism: This is an act of using someone's idea, works or words without proper citation. It is unethical, illegal and attracts penalties. To avoid plagiarism, reference citation must be included in your report to give credit to the person or persons whose ideas or works have been published; and you have cited.
 - (ii) To appreciate and give credit to scholarly works: Referencing gives credit to academic ideas and encourages creativity in research works.
 - (iii) To enable the readers do a follow-up and read more about the cited author's views/ideas.
 - (iv) To enable the readers verify quotations and other information: Reference helps the readers to verify the quotations in the various sources cited. This gives credence to the quality of research study.
 - (v) To give credit to the concepts and ideas of other authors.
 - (vi) To provide the reader (often the marker/examiner of the assignment) with evidence of the breadth and depth of one's reading.
 - (vii) To enable those who read one's work to locate the cited references easily.

EXAMINERS' REPORT

PATHFINDER

The question tests the concept of research report with reference to style of referencing research report.

About 90% of the candidates answered this question and about 60% of them scored 50% of marks allocated.

Candidate's commonest pitfall is their inability to distinguish book and journal referencing from bibliography.

It is recommended that candidates expand their hours on study habit in order to be able to distinguish between these concepts.

SOLUTION 4

- (a) Type I Error is committed when the Null hypothesis is rejected when it should be accepted.
Type II Error is committed when the Null hypothesis is accepted when it should be rejected.
- (b) Sample is a reasonable number of selected traits, events, subjects, or members taken from the population as a representative of that population.
Population is made up of all specific conceivable traits, events, elements, people, subjects or observations which relate to the situation of interest in the study to be conducted.
- (c) Random sampling is a form of sampling technique in which every member of the population has equal chance of being selected as part of the sample.
Purposive sampling is a form of sampling technique in which members of the samples are chosen based on certain criteria such as age, sex, race or colour.

PATHFINDER

SOLUTION 5

- (a) Major constraints faced by the Nigerian researcher are:
- (i) Inadequate funds to finance researches.
 - (ii) Inadequate infrastructural resources such as power supply, good roads, means of transportation, accessibility to internet facilities.
 - (iii) Inadequate training in the methodology of research.
 - (iv) Insufficient interaction between university research departments and business establishment, government departments and research institutions.
 - (v) Business unit's suspicion that researchers may misuse information and materials supplied to them for their studies.
 - (vi) Inability to publish research reports on time.
 - (vii) Non-availability of current research data such as journals, periodical reports and even books in the libraries.
 - (ix) Lack of confidence to take up a new study, especially explorative study.
 - (ix) Expensive nature of publishing research report.
 - (x) Inadequate sponsorship.
 - (xi) Non-usage of research findings and inadequate compensation by private and public sectors.
- (b) The features of a good report include:
- (i) A systematic structure with specific steps to be taken in a particular sequence in accordance with well-defined set of rules.
 - (ii) A logical arrangement guided by logical reasoning: The logical process of induction and deduction, are of great value in carrying out research study.

PATHFINDER

- (iii) An empirical evidence of inter-related aspects of a real situation. This also deals with concrete data that provides a basis for external validity to research result.
- (iv) Replicability in the sense that it allows research result to be verified by replicating the study and thereby building a sound basis for decisions.
- (v) Reliability, that is, a proof of the usefulness of the outcome of the research for the purpose it was embarked upon in the first instance.
- (vi) Serving as a reference point for future investigations.
- (vii) Problem identification, diagnosis, analysis and profferment of reasonable solutions, suggestions or recommendations that would solve the problem.
- (viii) Objectivity based on verifiable facts and figures, not on personal opinions, religious or tribal sentiments, emotions and preconceived notions. All the pieces of information gathered must be analysed, interpreted and evaluated on merit. They must be written in an impartial manner and fair.
- (x) Being written in an understandable language: it should be devoid of ambiguities. All technical terms should be explained.
- (x) A division into appropriate headings and/or sub-headings
- (xi) Freedom from bias, that is, avoiding personal feelings about the subject in order to reflect the appropriate meaning of the topic that is being investigated.
- (xii) Showing clearly all the relevant keys for interpreting the code and icons used.
- (xiii) Signatures of all the members who participated in its preparation, especially the chairman.

EXAMINERS' REPORT

PATHFINDER

The question tests the features of a good research report and constraints of research in Nigeria. About 90% of the candidates attempted this question but the performance level here was low as only 40% of the candidates scored 50% of the marks.

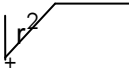
The major pitfall in candidates' response was in mistaking academic research project for research report.

It is recommended that relevant textbooks be used by candidates and their tutors.

SOLUTION 6

Given the regression equation $Y = 15.6 - 1.2x$

Hint: Since the regression coefficient (the slope) has a negative sign ie (-1.2), it implies that there is a negative relationship between the two variables under consideration.

- (a) (i) The value of the correlation coefficient (r) is - 
- = - 0.9486
+
- \therefore - 0.95 (since the slope is negative)

- (ii) The Interpretation of the correlation coefficient
This implies that there is very strong negative relationship between the number of days of absence and the number of years of employment with the company.

- (b) The Meaning of the Coefficients in the regression equation.

- (i) The first coefficient (the intercept) 15.6 implies that the number of days of absence through sickness when the number of years of employment with the company is zero, means the minimum number of days of absence for any worker is 15.6.

PATHFINDER

- (ii) The second coefficient (the slope or gradient) – 1.2 implies that for every extra year of service with the company, an employee will take 1.2 fewer days sick off, per year.
- (c) Given that $Y = 15.6 - 1.2x$, the number of days an employee who has spent 8 years in the company would have been absent is
- $$\begin{aligned} Y &= 15.6 - 1.2(8) \\ &= 15.6 - 9.6 \\ &= 6 \text{ days} \end{aligned}$$
- (d) The price of a common good correlates negatively with the demand of the good. The performance of a worker correlates positively with the level of experience

EXAMINERS' REPORT

The question tests candidates' knowledge and understanding of statistical concepts on correlation and regression analysis.

About 20% of the candidates answered this question and about 60% of them scored above 50% of the marks allocated.

The commonest pitfall of the candidates was their inability to interpret the analysis deduced from the equation used, thus they were unable to make correct predictions.

It is recommended that candidates use appropriate text materials to study in depth, and to constantly practice with related questions.