



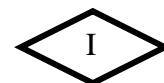
**THE INSTITUTE OF CHARTERED ACCOUNTANTS
OF NIGERIA**

PATHFINDER

NOVEMBER 2014 FOUNDATION EXAMINATION

**Question Papers
Suggested Solutions
Plus
Examiners' Reports**

◆————◆
FOUNDATION EXAMINATION – NOVEMBER 2014



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 thus the professional performance of candidates.

The answers provided in this publication do not exhaust all possible alternative approaches to solving these questions. Efforts had been made to use the methods, which will save much of the scarce examination time. Also, in order to facilitate teaching, questions may be edited so that some principles or their application 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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4. A company's net profit for the year ended 30 June, 2014 was ~~₦~~6,500,000. It was found that ~~₦~~1,800,000 paid for maintenance of motor vehicles had been debited to motor vehicle account and depreciated at 25% on cost (full year charge) in line with the company's policy. What would be the net profit after adjusting for the error?
- A. ~~₦~~1,350,000
 - B. ~~₦~~4,700,000
 - C. ~~₦~~5,150,000
 - D. ~~₦~~7,800,000
 - E. ~~₦~~8,300,000
5. A present obligation of an entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits, is known as
- A. An asset
 - B. A provision
 - C. A liability
 - D. A payable
 - E. A receivable
6. In preparing financial statements, the bad debts account is closed by a transfer to
- A. Statement of financial position
 - B. Provision for bad debt account
 - C. Statement of profit or loss
 - D. Trading account
 - E. Statement of cash flows
7. Which of the following would **NOT** be posted to the credit of payables control account?
- A. Total credit purchases
 - B. Transfer of credit balances from receivables' ledger
 - C. Transfer of debit balances to receivables' ledger
 - D. Set-off contra
 - E. Interest charged by suppliers

8. An item of property, plant and equipment costing ₦600,000 was bought on 1 January, 2011. Depreciation was provided at 20% annually on straight-line basis and computed up to the point of sale. It was sold on 30 June, 2014 for ₦157,500. In the year of sale, profit is
- A. Reduced by ₦22,500
 - B. Increased by ₦22,500
 - C. Reduced by ₦120,000
 - D. Increased by ₦157,500
 - E. Reduced by ₦157,500
9. The source of data for recording the Returns Inward Book of a business entity is
- A. Credit note
 - B. Debit note
 - C. Invoice
 - D. Payment voucher
 - E. Receipt
10. A loose tools record in the books of MYE Enterprises revealed the following:

	₦
Revaluation 1 January, 2013	200,000
Revaluation 31 December, 2013	250,000
Depreciation 31 December, 2013	100,000

What is the value of loose tools acquired during the year?

- A. ₦50,000
- B. ₦60,000
- C. ₦100,000
- D. ₦120,000
- E. ₦150,000

11. The three major activity groups in the preparation of statement of cash flows in order of presentation are
 - A. Operating activities, Financing activities and Investing activities
 - B. Investing activities, Operating activities and Financing activities
 - C. Operating activities, Investing activities and Financing activities
 - D. Financing activities, Operating activities and Investing activities
 - E. Operating activities, Direct activities and Financing activities
12. The journal entries required to record depreciation charge for the year in the financial records of an entity at the year-end are
 - A. Dr. Statement of Profit or Loss: Cr. Provision for Depreciation Account
 - B. Dr. Depreciation Account: Cr. Statement of Profit or Loss
 - C. Dr. Statement of Financial Position: Cr. Statement of Profit or Loss
 - D. Dr. Changes in Equity: Cr. Depreciation Account
 - E. Dr. Provision for depreciation account: Cr. Changes in equity
13. Given the following information:

	₹
Cost of property, plant and equipment	5,000,000
Administrative and general overhead	750,000
Installation cost of property plant & equipment	500,000
Cost of entertainment	150,000

What amount should be capitalised as cost of property, plant and equipment?

- A. ~~₦~~5,500,000
B. ~~₦~~6.250,000
C. ~~₦~~6.400,000
D. ~~₦~~6.700,000
E. ~~₦~~6.900,000
14. Which of the following is **ONE** of the contents of memorandum of association of a limited liability company?
- A. The transfer and transmission of shares
B. The voting rights of members

- C. The borrowing powers of the company
 - D. The object clause of the company
 - E. The appointment and powers of Managing Director
15. The cash book shows an overdrawn bank balance of ₦65,000 at 30 September, 2014. It was subsequently discovered that a standing order of ₦12,500 has been recorded twice and that a dishonoured cheque for ₦9,000 has been debited in the cash book instead of being credited. What is the correct bank balance?
- A. ₦66,700 O/D
 - B. ₦67,500 O/D
 - C. ₦70,500 O/D
 - D. ₦71,600 O/D
 - E. ₦72,500 O/D
16. Winning Nigeria Limited has compiled the following Information for the year ended 31 December, 2013:

	₦
Opening inventory	700,000
Purchases	1,200,000
Closing inventory	400,000

- The gross margin is 40%. Based on these figures, what is the sales revenue for the year?
- A. ₦1,500,000
 - B. ₦1,800,000
 - C. ₦2,000,000
 - D. ₦2,500,000
 - E. ₦2,700,000
17. The initial measurement of assets under IAS 16 (Property, Plant and Equipment) is at
- A. Net realisable value
 - B. Replacement cost

- C. Historical cost
 - D. Revaluation
 - E. Fair value
18. Accounting for the effects of transactions and other events and circumstances on a reporting entity's economic resources and claims in the period in which those effects occur even if the resulting cash receipts and payments occur in a different period is governed by which of the following accounting concepts.
- A. Cash basis
 - B. Accrual
 - C. Matching
 - D. Consistency
 - E. Going concern
19. Which of the following accounting records is used to determine the arithmetical accuracy of ledger posting?
- A. Sales day book
 - B. Control accounts
 - C. Trial balance
 - D. Statement of Profit or Loss
 - E. Statement of Financial Position
20. The following information relates to a retail trading business for the year ended 31 December 2013:

	₦'000
Accounts payables at 1 January, 2013	15,000
Accounts payables at 31 December, 2013	14,000
Total payments during 2013	90,000

What is the amount of the entity's credit purchases during the year 2013?

- A. ₦105,000
- B. ₦91,000
- C. ₦89,000
- D. ₦71,000
- E. ₦69,000

SECTION B: ATTEMPT ANY FOUR QUESTIONS

(80 MARKS)

QUESTION 1

A reliable financial statement is the product of properly maintained financial records and adequate use of necessary accounting concepts

a. Write short notes on the following accounting concepts:

- i. Business entity (2 Marks)
- ii. Going concern (2 Marks)
- iii. Matching (2 Marks)
- iv. Consistency (2 Marks)
- v. Materiality and aggregation (2 Marks)

(Total 10 Marks)

b. In accordance with IFRS Conceptual Framework, the following items/elements of financial statements have had their conceptual names changed:

- i. Trading profit and loss account
- ii. Stocks
- iii. Balance sheet
- iv. Trade debtors
- v. Net book value
- vi. Trade creditors
- vii. Fixed assets
- viii. Profit after tax
- ix. Shareholders' fund
- x. Long-term liability

State the new conceptual names for each of the items/elements above. (10 Marks)

(Total 20 Marks)

		₦'000
Jan 2	Cash at Eagles Bank	20,000
Jan 2	Petty cash in hand	1,400
Jan 3	Cheque issued for petty cash	19,600
Jan 5	Received from Fidelis, cheque in settlement of his account receivable of ₦32,600,000 less 10% discount	
6 Jan	Settled Tunde's account payable of ₦25,900,000 less 10% discount	
7 Jan	Sold for cash 20 recharge cards at ₦750 per card	
8 Jan	Transferred to current account from deposit account	70,000
10 Jan	Paid Lawal	4,800
16 Jan	Paid cheque for motor repairs	8,000
17 Jan	Paid Emeka	3,800
24 Jan	Paid Yaro	4,050
27 Jan	Paid Mazu	4,200
29 Jan	Payments from petty cash during the month were the following:	
	Stationery	8,000
	Trade expenses	2,000
	Sundry purchases	9,200

Required:

- i. Prepare a two-column cash book (showing discounts and bank columns only) for the month ended 31 January 2014. (7 Marks)
 - ii. Prepare petty cash book for the same period. (8 Marks)
- (Total 20 Marks)**

QUESTION 4

- a. State which of the following items should be classified as capital expenditure for the purpose of preparing Statement of Financial Position:
 - i. The purchase of leasehold premises
 - ii. The annual depreciation of leasehold premises
 - iii. Solicitor's fees in connection with the purchase of leasehold premises
 - iv. The costs of adding extra-storage capacity to a mainframe computer used by the business.

- v. Computer repairs and maintenance costs
- vi. Profit on the sale of an office building
- vii. Revenue from sales via credit cards
- viii. The cost of new machinery procured
- ix. Custom duty charged on machinery procured and imported into the country
- x. The carriage costs of transporting new machinery from the supplier's factory to the buyers premises
- xi. The wages of the machine operators
- xii. Cost of cleaning of the machine room
- xiii. Cost of oil and other materials purchased for the repairs of machine

(6 Marks)

- b. On 30 June 2014, MAXWELL's cash book showed that he had an overdraft of ~~₦~~300,000 on his current account at the bank. The bank statement as at the end of June 2014 showed that Maxwell was in credit by ~~₦~~65,000.

On checking the cashbook with the bank statement, you find the following discrepancies:

- i. Cheque drawn amounting to ~~₦~~500,000, had been entered in the cash book, but had not been presented.
- ii. Cheque received amounting to ~~₦~~400,000, had been entered in the cash book, but had not been credited by the bank.
- iii. On instructions from Maxwell, the bank had transferred interest of ~~₦~~60,000 from his savings account to his current account, recording the transfer on 5 July 2014. This amount had however been posted into the cash book as at 30 June 2014.
- iv. Bank charges of ~~₦~~35,000, shown in the bank statement had not been entered in the cash book.
- v. The payment side of the cash book had been under-cast by ~~₦~~10,000.
- vi. Dividend received amounting to ~~₦~~200,000 had been paid directly to the bank and not entered in the cash book.

- vii. A withdrawal of ~~₦~~50,000 from the savings account had been shown in the cash book as a drawing from current account.
- viii. A cheque for ~~₦~~25,000 issued to Jones over six months ago had been stale and was later replaced. It was entered again in the cash book and no other entry being made. Both cheques were included in the total of unpresented cheques shown above.

Required:

- i. Indicate the appropriate adjustments in the cash book. (8 Marks)
 - ii. Prepare a statement reconciling the amended balance with that shown in the bank statement. (6 Marks)
- (Total 20 Marks)**

QUESTION 5

Garuba and Ngozi have been together in partnership for several years in a newspaper publishing business, sharing profits and losses in the ratio 3:2 after charging salaries of ~~₦~~3,000,000 per annum for each partner.

On 1 September 2013, Bola was admitted into the partnership on the following terms:

- i. That he pays ~~₦~~2,800,000 to the original partners.
- ii. He would be entitled to salary of ~~₦~~2,700,000 per annum and a 20% share of profits after charging all salaries.

Garuba and Ngozi are to continue their old profit sharing ratios and Bola's 20% share of profit is guaranteed at a minimum of ~~₦~~1,500,000 per annum.

On 31 December 2013, the following balances were extracted from the partnership books of Garuba, Ngozi and Bola:

	₦'000	₦'000
Capital accounts		
- Garuba		28,000
- Ngozi		18,000
Current accounts		
- Garuba		4,000
- Ngozi		2,800

Amount paid in by Bola		2,800
Income		272,000
Purchases	190,000	
Wages	20,000	
Salaries	25,000	
General expenses	10,000	
Plant & machinery	25,000	
Motor vehicles	15,000	
Receivables	20,000	
Telephone expenses	3,750	
Payables		24,350
Inventory 1 Jan 2013	15,000	
Provision for bad debts		1,500
Bank balance	17,100	
Drawings:		
- Garuba	6,600	
- Ngozi	5,000	
- Bola	<u>1,000</u>	<u> </u>
	<u>353,450</u>	<u>353,450</u>

Additional information:

- i. Provision for doubtful debts should be maintained at 5% of receivables.
- ii. Inventory at 31 December 2013 was valued at ~~₦~~12,000,000.
- iii. Depreciation on plant and machinery to be 20% per annum and on motor vehicles 25% per annum.

You are required to prepare the following accounts:

- a. Statement of Profit or Loss for the year ended 31 December 2013 accounting for Bola on a pro rata time basis. (10 Marks)
 - b. Partners' Current Accounts for the period. (10 Marks)
- (Total 20 Marks)**

QUESTION 6

a. In relation to Statement of Cash Flows, define the following terms with two examples in each case:

i. Operating Cash Flows

ii. Investing Cash Flows

iii. Financing Cash Flows

(9 Marks)

b. The financial data extracted from the books of Solomon Enterprises Limited for the year ended 31 December 2013 are as follows:

	₦'000
Sales	55,924
Cost of sales	41,028
Selling and distribution expenses	2,748
Administration expenses	2,404
Interest expenses	1,528
Tax paid	1,584
Increase in inventories	11,868
Decrease in receivables	1,416
Increase in payables	4,944

Additional information:

Included in administration expenses are:

i. Depreciation charges for the year **₦500,000**

ii. Loss on disposal of assets **₦48,000**

Required:

Prepare the Statement of Cash Flows showing cash flow generated from operating activities using the indirect method.

Show all workings

(11 Marks)
(Total 20 Marks)

SECTION A

PART I - MULTIPLE-CHOICE SOLUTIONS

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

Workings

	₦'000
Q4. Net profit per statement	6,500
Add: Depreciation	<u>450</u>
	6,950

Less: Maintenance	<u>(1,800)</u>
Net profit	<u>5,150</u>

Q8. Accumulated Depreciation:

Year	₦'000
1	120
2	120
3	120
4	<u>60</u>
	<u>420</u>

Carrying amount = ~~₦600,000~~ - ~~₦420,000~~ = ~~₦180,000~~

Reduced by ~~₦22,500~~ i.e. ~~₦180,000~~ - ~~₦157,500~~

Q10. Loose Tools Accounts

	₦		₦
Balance b/d	200,000	Depreciation	100,000
Acquisition	<u>150,000</u>	Bal c/d	<u>250,000</u>
	<u>350,000</u>		<u>350,000</u>

	₦
Q15. Balance b/d	65,000
Less: outstanding	(12,500)
Add: dishonoured cheque	<u>18,000</u>
	<u>70,500</u>

	₦
Q16. Opening inventory	700,000
Purchases	1,200,000
Closing inventory	<u>(400,000)</u>
	<u>1,500,000</u>

Q20. Calculation of credit purchase figure

	₦'000
Closing balance	14,000
Amount paid to suppliers	<u>90,000</u>
Less opening balance	104,000
Credit purchase	<u>(15,000)</u>
	<u>89,000</u>

EXAMINER'S REPORT

The questions test and cover all aspects of the syllabus. Candidates' performance was above average. Few candidates lacked proper understanding of some of the questions. They are advised to prepare well for future examinations.

SECTION B

SOLUTION 1

a. (i) **Entity concept**

In accounting, every economic unit, regardless of its legal form of existence, is treated as a separate entity from parties having proprietary or economic interest in it. An entity can sue or be sued.

(ii) **Going Concern Concept**

The assumption is that the business unit will operate in perpetuity, that is, the business is not expected to be liquidated in the foreseeable future. A business is considered a going concern, if it is capable of earning a reasonable net income and there is no intention or threat from any source to curtail significantly its line of business in the foreseeable future.

(iii) **Matching/Accrual Concept**

The concept holds that for any accounting period, the revenue earned and all the costs incurred that generated that revenue must be matched and reported for the period. If revenue is carried over from a prior period or deferred to a future period, all elements of cost and expense relating to that revenue are usually carried over or deferred as the case may be.

(iv) **Consistency**

Usually, there is more than one way in which an item may be treated in the accounts, without violating accounting principles. The concept of consistency holds that when a company selects a method, it should continue (unless conditions warrant change) to use that method in subsequent periods so that a comparison of accounting figures over time

is meaningful. The concept ensures that the accounting treatment of like items is consistent, comparing one accounting period with another.

(v) **Materiality and Aggregation**

Each material class of similar items must be presented separately in the financial statements. Information is material, if its non-disclosure could influence the economic decisions of users taken on the basis of the financial statements.

(b)

S/No.	Names Under GAAP	Names under IFRS
i.	Trading, profit and loss account	Statement of profit or loss and other comprehensive income
ii.	Stocks	Inventories
iii.	Balance Sheet	Statement of financial position
iv.	Trade debtors	Trade receivables
v.	Net book value	Carrying amount
vi.	Trade creditors	Trade payables
Vii	Fixed assets	Non-current assets
viii.	Profit after tax	Profit for the period
ix.	Shareholders' fund	Equity
x.	Long-term liability	Non-current liability

EXAMINER'S REPORT

The question tests basic knowledge of accounting concepts and the conceptual terms under IFRS.

About 85% of the candidates attempted the question and the performance was average.

Candidates' commonest pitfalls were poor understanding and definitions of basic accounting concepts.

Candidates are advised to learn and understand the IFRS conceptual framework.

SOLUTION 2

ENDWELL & CO.

JOURNAL ENTRIES

(a)

	₦	₦
Receivables account	240,000	
Suspense account		240,000
Being correction of errors in the sales credited to a customer's account		
Receivables account	27,000	
Suspense account		27,000
Being correction of the error of debiting a customer with ₦3,000 instead of ₦30,000.		
Suspense account	18,000	
Purchases account		18,000
Being correction of error of overstating the total of purchases day book.		
Suspense account	60,000	
Payables account		60,000
Being correction of error of overstating a suppliers account		
Suspense account	9,000	
Receivables account		9,000
Being correction of omission from a customer's account		
Suspense account	4,800	
Discount allowed account		4,800
Being correction of error of overstating the discount allowed.		
Sales account	48,000	
Office machine disposal account		48,000
Being correction of error of disposal of machine erroneously credited to sales account		

(b) Suspense Account			
	₦		₦
Trial balance difference	175,200	Receivables	240,000
Purchases	18,000	Receivables	27,000
Payables	60,000		
Receivables	9,000		
Discount allowed	4,800		
	<u>267,000</u>		<u>267,000</u>

(c) **Statement of Adjustment in net profit**

	₦	₦
Net profit brought forward		210,000
Add:		
Discount allowed	4,800	
Purchases	<u>18,000</u>	<u>22,800</u>
		232,800
Less: Sales		<u>48,000</u>
Adjusted profit		<u>184,800</u>

EXAMINER'S REPORT

The question tests candidates' knowledge on correction of errors, preparation of journals and use of suspense account.

About 90% of the candidates attempted the question and the performance was well above average.

Candidates' commonest pitfalls were their inability to state narrations correctly for the journal entries and how to prepare a suspense account.

Candidates are advised to understand the application of the double entry principle.

SOLUTION 3

- (a) The differences between cash book and the petty cash book are as follows:
- Cash book is for main cash transactions while petty cash book is for small value transactions.

- ii. Cash book records mainly transactions between the entity and the bank while petty cash book records employees' official transactions of small value.
- iii. The cash book balance can either be debit or credit or nil balance while petty cash book can only either be debit or nil balance.
- iv. In an imprest system, the petty cash book is replenished from the main cash book but not otherwise.
- v. Maximum amount payable is usually set for a petty cash book while there is no such limit for main cash book.
- vi. The payment voucher, paying-in-slip, cheque stub and receipts are sources of information for posting main cash book while petty cash vouchers with supporting documents are the sources of information for posting petty cash book.
- vii. The cash book balance is verified through bank reconciliation while the total of petty cash vouchers and cash in hand must be equal to authorised float at a given time.
- viii. The petty cash is usually maintained on an imprest system, which allows the officer maintaining the petty cash book to be given a fixed amount of money known as float, for the purpose of making payments for the minor office expenses of the organisation with rules on re-imbursement, while there is no such special rules in the maintenance of the cash book.

b(i)

MERCY TRADING COMPANY

TWO-COLUMN CASH BOOK

Date	Particulars	Discount Allowed ₦'000	Bank ₦'000	Date	Particulars	Discount Received ₦'000	Bank ₦'000
2013				2013			
Jan 2	Balance b/d		20,000	Jan 3	Petty Cash		19,600
5	Fidelis	3,260	29,340	6	Tunde	2,590	23,310
7	Cash sales		15,000	10	Lawal		4,800
8	Deposit Account		70,000	16	Motor repairs		8,000
				17	Emeka		3,800
				24	Yaro		4,050

		<u>3,260</u>	<u>134,340</u>	27 31	Mazu Bal c/d	<u>2,590</u>	4,200 <u>66,550</u> <u>134,340</u>
Feb 1	Bal b/d		66,550				

PETTY CASH BOOK

Receipts	Fol	Date	Particulars	Pv No.	Total Amount	Stationeries	Trade Expenses	Sundry Purchases
₦'000		2013			₦'000	₦'000	₦'000	₦'000
1,400		Jan 2	Balance b/d					
19,600		3	Bank					
		29	Stationeries		8,000	8,000		
		29	Trade expenses		2,000		2,000	
		29	Sundry purchases		<u>9,200</u>			<u>9,200</u>
					19,200	<u>8,000</u>	<u>2,000</u>	<u>9,200</u>
		30	Bal c/d		<u>1,800</u>			
<u>21,000</u>					<u>21,000</u>			
1,800		Feb 1	Bal b/d					
19,200		Feb 1	Bank - Re-bursement					

EXAMINER'S REPORT

The question tests candidates' ability to prepare and distinguish between cash book and petty cash book.

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

Candidates' pitfalls were:

- i. their inability to distinguish between the cash book and the petty cash, book, poor presentation of answers and
- ii. inappropriate approximations of solutions to the nearest ₦'000.

Candidates are advised to pay attention to these inadequacies in future examinations.

SOLUTION 4

- (a) Items to be classified as capital expenditure for the purpose of preparing statement of financial position are as follows:
- (i) The purchase of leasehold premises.
 - (ii) Solicitors' fees in connection with the purchase of leasehold premises.
 - (iii) The costs of adding extra storage capacity to a mainframe computer used by the business.
 - (iv) The cost of new machinery procured.
 - (v) Custom duty charged on the machinery imported into the country.
 - (vi) The carriage costs of transporting the new machinery from the supplier's factory to the premises of the business purchasing the machinery.

(b)

MAXWELL ADJUSTED CASH BOOK

	₦'000		₦'000
Dividend-Direct lodgement	200	Balance b/d	300
Stale cheque	25	Bank charges	35
Withdrawal from saving account	50	Under cast	<u>10</u>
Balance c/d	<u>70</u>		
	<u>345</u>		<u>345</u>
		Balance b/d	70

BANK RECONCILIATION AS AT 30 JUNE 2014

	₦'000
Balance as per cash book (adjusted)	(70)
Unpresented cheques (₦500,000 – ₦25,000)	475
Uncredited cheques	(400)
Interest transferred from savings account not yet credited by the bank	60
Balance as per bank statement	65

EXAMINER'S REPORT

The question tests candidates' ability to distinguish between capital and recurrent expenditures, how to up-date cash book and prepare bank reconciliation statement.

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

Candidates' commonest pitfalls were their inability to properly differentiate between items for adjusted cash book and those for the bank reconciliation statement coupled with poor understanding of the rule of double-entry.

Candidates should know that only items that have not passed through the cash book at the bank reconciliation date and errors committed by the book keeper would affect the cash book. They are advised to learn these basic principles for better performance in future examinations.

SOLUTION 5

GARUBA, NGOZI AND BOLA

STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED 31 DECEMBER 2013

	₦'000	₦'000
Revenue		272,000
Less: Cost of sales		
Opening inventory	15,000	
Purchases	<u>190,000</u>	
	205,000	
Closing inventory	<u>(12,000)</u>	
	193,000	
Add: Wages	<u>20,000</u>	
		(213,000)
Gross Profit		59,000
Decrease in provision for bad debt		<u>500</u>
		59,500
Less <u>EXPENSES</u>		
Salaries	25,000	
General Expenses	10,000	
Telephone expenses	3,750	
Depreciation - plant & machinery 2% x 25,000,000	5,000	
- Motor vehicle 25% x 15,000,000	<u>3,750</u>	
		(47,500)
NET PROFIT		<u>12,000</u>

Statements of Distribution of profit

	1/1-1/9/2013	1/9-31/12/2013
	8 months	4 months
₦'000		₦'000
Net Profit	8,000	4,000
Partners' Salaries		
- Garuba $\frac{8}{12} \times 3,000$	(2,000)	$\frac{4}{12} \times 3,000$ (1,000)
- Ngozi $\frac{8}{12} \times 3,000$	(2,000)	$\frac{4}{12} \times 3,000$ (1,000)
- Bola		$\frac{4}{12} \times 2,700$ (900)
Divisibles profit	<u>4,000</u>	<u>1,100</u>
Profit shared		
- Garuba $4,000 \times \frac{3}{5}$	2,400	$\frac{3}{5} \times 600$ 360
- Ngozi $4,000 \times \frac{2}{5}$	<u>1,600</u>	$\frac{2}{5} \times 600$ 240
- Bola		See note 1 <u>500</u>
	<u>4,000</u>	<u>1,100</u>

Note 1: Share of profit from 1 Sept - 31 Dec 2013

20% of ₦1,100,000 = ₦220,000 less than = ₦500,000 i.e. $\frac{4}{12} \times ₦1,500,000$

Adjustable profit = ₦1,100,000

Thus, ₦500,000 guaranteed minimum is allocated to Bola and the remaining ₦600,000 is shared between Garuba and Ngozi in profit sharing ratio as follows:

	₦'000
Divisible profit 1/9-31/12/2013	<u>1,100</u>
Share of profits	
Garuba = $\frac{3}{5} \times 600$	360
Ngozi = $\frac{2}{5} \times 600$	240
Bola (Guaranteed)	<u>500</u>
	<u>1,100</u>

PARTNERS' CURRENT ACCOUNTS

	Garuba	Ngozi	Bola		Garuba	Ngozi	Bola
	₦'000	₦'000	₦'000		₦'000	₦'000	₦'000
Drawings	6,600	5,000	1,000	Bal b/f	4,000	2,800	-
Amount paid in by Bola			2,800	Amount paid in Partners' salaries	2,000	2,000	2,800
Bal c/d	4,840	3,760	400	Partners' salaries	1,000	1,000	900
				Share of Profit	2,400	1,600	-
				Share of Profit	360	240	500
				Distribution of			

				amount paid in by Bola	1,680	1,120	-
	<u>11,440</u>	<u>8,760</u>	<u>4,200</u>		<u>11,440</u>	<u>8,760</u>	<u>4,200</u>
				Bal b/d	4,840	3,760	400

EXAMINER'S REPORT

The question tests candidates' understanding of the preparation of partnership Accounts when a new partner is admitted. The question, which requires candidates to prepare statement of profit or loss, distribution of profits to partners and their current accounts, was attempted by about 75% of the candidates and performance was average.

Candidates' commonest pitfalls were their inability to:

- demonstrate clear understanding of the profit or loss distribution on pro rata basis,
- distinguish between items in partners' currents and capital accounts and
- Adjust for changes in allowances for bad and doubtful debts.

Therefore, candidates are advised to devote quality time to basic accounting principles, practice past examination papers and read examiners' reports.

SOLUTION 6

- i. **Operating Cash Flows:** These comprise receipts and payments relating to the normal activities of the firm as well as those items which do not specifically relate to the other activity groups such as investing and financing e.g.

Inflows: (a) Cash received from customers

- (b) Dividend received where the reporting entity exercises significant control of the investee's company. Where this condition is not met, the dividend is taken to investing activity.

Outflows: (a) Cash paid to suppliers and employees

(b) Taxes paid

(c) Cash paid for operating expenses

- ii. **Investing Cash Flows:** These involve cash associated with investments and realisation of investments made outside the business, e.g.

- Inflows: (a) Proceeds from sale of investments (stocks, bonds other than cash Equivalent).
 (b) Proceeds from sale of non-current assets and intangible assets
 (c) Loan collected or received
 (d) Interest received
 (e) Dividend received from investments
- Outflows: (a) Purchase of investments (excluding cash equivalents)
 (b) Purchase of non-current assets
 (c) Loan granted

iii. **Financing Cash Flows:** These comprise cash flows relating to issues and redemptions of securities for financing the business together with any expenses relating thereto, as well as any interest and dividends paid therein.

- Inflows: (a) Issue of bonds
 (b) Issue of ordinary shares
 (c) Issue of Notes payable
 (d) Issue of loan stock

- Outflows: (a) Repayment of bonds
 (b) Redemption of shares
 (c) Finance lease payment
 (d) Repayment of notes payable
 (e) Payment of dividends
 (f) Payment of interest on debt capital

(b) **Solomon Enterprises Ltd**
Statement of Cash Flows for the year ended
31 December, 2013

	₦'000	₦'000
Cash flow from operating activities:		
Profit before taxation (wi)		8,216
Depreciation		500
Loss on disposal of assets		48
Interest expenses		<u>1,528</u>
Operating profit before working capital changes		10,292
Working capital changes:		
Increase in inventories	(11,868)	
Decrease in receivables	1,416	
Increase in payables	<u>4,944</u>	
		(5,508)

Tax paid		(1,584)
Net cash flow generated from operating activities		<u>3,200</u>

Workings

i.

	₦
Revenue	55,924
Cost of sales	(41,028)
Gross Profit	14,869
Selling and Distribution Expenses	(2,748)
Administration Expenses	(2,404)
	9,744
Interest Expenses	(1,528)
Profit before taxation	<u>8,216</u>

EXAMINER'S REPORT

The question tests candidates' knowledge on how to prepare Statement of Cash Flows. About 75% of the candidates attempted the question and performance was poor.

Candidates' pitfalls were their poor understanding of the topic.

Candidates are advised to acquire good understanding of the technicalities involved in the preparation of statement of cash flows using both direct and indirect methods.

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

FOUNDATION LEVEL EXAMINATION - NOVEMBER 2014

MANAGEMENT INFORMATION

Time Allowed: 3 hours

SECTION A:

MULTIPLE-CHOICE QUESTIONS

(20 Marks)

ATTEMPT ALL QUESTIONS IN THIS SECTION

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

1. Use the high-low method to calculate the fixed and variable elements of the following costs:

Month	Activity	₦
January	600	1,700
February	800	1,900
March	650	1,750
April	850	1,950
May	900	2,100
June	1,350	2,300

- A. VC = ~~₦~~0.08/unit, FC = ~~₦~~1120
B. VC = ~~₦~~0.88/unit, FC = ~~₦~~1020
C. VC = ~~₦~~0.80/unit, FC = ~~₦~~1220
D. VC = ~~₦~~0.82/unit, FC = ~~₦~~1320
E. VC = ~~₦~~0.85/unit, FC = ~~₦~~1330

2. The objectives of storing materials vary from one organisation to another. Which of the following is **NOT** an advantage of a centralized storage?
- A. Stock taking is facilitated
 - B. Lower stock on average
 - C. Lower risk of duplication
 - D. Level of paper work is reduced
 - E. Loss of local knowledge from the user
3. Where there is active involvement of all departmental managers in the budgeting process, the budgeting approach is known as
- A. Bottom-up budgeting approach
 - B. Continuous budgeting approach
 - C. Feedback budgeting approach
 - D. Top-down budgeting approach
 - F. Activity based budgeting approach
4. The following data were extracted from the records of ABZ Limited for the month of July
- | | |
|-------------------------|-------|
| Budgeted Labour hours | 6,400 |
| Actual Labour hours | 6,240 |
| Standard hours produced | 6,480 |
- Calculate the capacity ratio:
- A. 103%
 - B. 102.56%
 - C. 98%
 - D. 97.5%
 - E. S 97%
5. The working capital cycle starts and ends with **ONE** of the following:
- A. Cash and Payables
 - B. Inventory and Receivables
 - C. Work in Progress and Inventory

- D. Cash and Inventory
 - E. Cash and Receivables
6. PQR Limited has an average usage of 1,200 units of stamps, minimum usage of 800 units and maximum usage of 2,000 units per day. If the lead time is 10 - 15 days and the previously calculated Economic Order Quantity is 6,000 units, calculate the Maximum Level.
- A. 30,000 units
 - B. 28,000 units
 - C. 18,000 units
 - D. 15,000 units
 - E. 8,000 units
7. Which of the following is a characteristic of the Push Production System?
- A. Elimination of non-value adding activities
 - B. Emphasis on perfect quality
 - C. Short set-ups
 - D. Production is in anticipation of customer order
 - E. Reduction of cost of carrying inventory
8. A company had opening inventory of 36,000 units of product Zee, production of 126,000 units and closing inventory of 31,500 units. Profit based on marginal costing was ₦2,250,000 and on absorption costing was ₦1,548,000. What is the fixed overhead absorption rate per unit?
- A. ₦156.00
 - B. ₦150.00
 - C. ₦62.50
 - D. ₦49.14
 - E. ₦5.37
9. The features of an open system include the following **EXCEPT**
- A. Attempt to monitor and anticipate environmental disturbances
 - B. Receive inputs from the environment
 - C. Pass outputs to its environment

- D. Limit exchanges with its boundary
 - E. They are not self-contained because they are influenced by external environmental behaviour
10. Which of the understated reports is **NOT** the responsibility of a Management Accountant?
- A. Operating Statement
 - B. Cash flow Statement
 - C. Statement of Assets and Liabilities
 - D. Statement of Profitability Analysis
 - E. Statement of Costs and Variance Returns
11. Management Information System (MIS) is a tool in business organisation for
- A. Senior Marketing Managers
 - B. Middle level Managers
 - C. Senior Sales Managers
 - D. Senior Managers
 - E. Senior Programming Managers
12. A processing technique that allows data to be accumulated before processing commences is
- A. Computer data processing
 - B. Multi-tasking
 - C. Data capturing
 - D. Batch processing
 - E. Multi-processing
13. What is the processing technique by which many processors are used to accomplish data processing?
- A. Multiple processing
 - B. Multi-processing
 - C. Multiple processors
 - D. Multi-programming
 - E. Multiple programming

18. What is a cost driver?
- A. An item of direct cost
 - B. A common cost which is shared over cost centres
 - C. An activity which generates costs
 - D. Any cost relating to transport activity
 - E. An item of production overhead
19. The cost behavioural pattern which shows element of fixed and variable components is
- A. Variable cost
 - B. Standard cost
 - C. Full cost
 - D. Semi-variable cost
 - E. Fixed cost
20. The output from the production process with little recoverable value is referred to as:
- A. Residue
 - B. Scrap
 - C. Waste
 - D. Good production
 - E. Left over

SECTION B: ATTEMPT ANY FOUR OUT OF SIX QUESTIONS (80 Marks)

QUESTION 1

- a. Working capital is generally understood to mean the difference between current assets and current liabilities. Explain the term working capital cycle. (2 Marks)
- b. List **FIVE** factors that determine the working capital requirements of a firm. (5 Marks)

- c. GLORY Limited has provided you with the following data regarding next year's budget that has just been presented to the board by the financial controller of the company:

	Budgeted average amount outstanding
	N
Inventory: Raw materials	480,000
Work-in-Progress	360,000
Finished goods	244,800
Receivables	600,600
Payables	<u>(422,400)</u>
Budgeted average working capital	<u>1,263,000</u>

	N
The following are available daily averages:	
Revenue	9,240
Cost of Sales	7,200
Purchases of raw materials	3,840

You are required to compute the working capital cycle based on the above figures
(13 Marks)
(Total 20 Marks)

QUESTION 2

LADUGBO Limited, a company which manufactures and sells a single product named BETA, has the following data relating to year 2015.

	N
Selling Price	45.00
Direct material cost	10.00
Direct wages cost	4.00
Variable overhead cost	2.50

The following forecasts of sales and production are expected during the first six months of year 2015.

	January - March	April – June
Sales (units)	60,000	90,000
Production (units)	70,000	100,000

Fixed production overhead costs are budgeted at ₦400,000 per annum. Normal production level is to be 320,000 units per annum.

Variable selling and distribution cost is ₦1.50 per unit sold while fixed administration cost is ₦240,000 per annum.

You are required to:

Prepare profit statement for each of the two quarters, in a columnar format using absorption costing approach. (20 Marks)

QUESTION 3

A company which operates below break-even point year-after-year needs to be restructured.

- a. What is break-even point? (2 Marks)
- b. Elebu Nig. Plc. manufactures four products at its GBOOPA Plant in Olorungbebe Industrial Estate.

The company sold 450,000 units of its product at ₦60 per unit. Variable costs are ₦45 per unit while the fixed cost incurred evenly throughout the year amounted to ₦2,916,000 which comprises of manufacturing costs of ₦1,800,000 and selling costs of ₦1,116,000.

You are required to calculate:

- a. The break-even point in units and in value (5 Marks)
- b. The number of units that must be sold to earn an income of ₦225,000 before income tax (3 Marks)

- c. The number of units that must be sold to generate after tax profit of ₦300,000 if the income tax rate is 40% (5 Marks)
- d. The number of units required to break-even if the fixed cost increases by 2.5% and variable cost increases by 5% (5 Marks)
- (Total 20 Marks)

QUESTION 4

The purpose of data processing is to make data presentable, meaningful and useful for a particular purpose.

Required:

- a. Name an example of an offline data processing technique and explain briefly **FIVE** of its characteristics. (11 Marks)
- b. i. Explain an online processing technique. (3 Marks)
- ii. Identify **TWO** of such techniques and explain briefly **TWO** characteristics of each. (6 Marks)
- (Total 20 Marks)

QUESTION 5

Data is converted to binary digits and forwarded to the desired location for the purpose of communication.

Required:

- a. With the aid of diagrams, explain **THREE** data transmission modes. In each case, give **ONE** relevant example. (9 Marks)
- b. State **ONE** difference between Parallel Data Transmission and Serial Data Transmission. (2 Marks)
- c. In a tabular form, state **TWO** differences between Asynchronous Data Transmission and Synchronous Data Transmission. (4 Marks)

- d. Enumerate **FIVE** attacks that could take place as a result of vulnerabilities of a computer system. (5 Marks)
(Total 20 Marks)

QUESTION 6

The initial principle identified from analysing the world's regulations is Technology Strategy Orchestration. While most businesses around the world have established a technical awareness and dependency on technology which is referred to as Directional Alignment, others have not integrated the business functions to reflect this relationship. The more organisations have visibility into how business processes rely on technology and the subsequent dependent relationships, the more likely business values will be identified and leveraged.

You are required to:

- a. State and explain briefly **THREE** ways that technology may enhance businesses. (6 Marks)
- b. State **FOUR** features of Directional Alignment. (6 Marks)
- c. State **FIVE** steps to be followed in the determination of the business values provided by Technology Strategy. (8 Marks)
(Total 20 Marks)

MULTIPLE CHOICE SOLUTIONS

1. C
2. E
3. A
4. D
5. E
6. B
7. D

8. A
9. D
10. C
11. B
12. D
13. B
14. C
15. B
16. D
17. D
18. C
19. D
20. B

Workings

1. Using the High-Low Method

	High	Low	Diff
Activity	240,000	140,000	100,000
Cost	₦3,900,000	₦3,160,000	₦740,000
Variable Cost	Per unit	= $\frac{\text{₦740,000}}{100,000}$	= <u>₦7.40</u>

4. Capacity Ratio = $\frac{\text{Actual Labour Hours Worked}}{\text{Budgeted Labour Hours}} \times 100$

$$= \frac{6240}{6400} \times 100 = 97.5\%$$

6. Maximum level = Reorder Level + EOQ – (Min. Usage x Mini Lead Time)
 (2000 x 15) + 6000 – (800 x 10)
 = 30,000 + 6,000 – 8,000
 = 28,000 units

8. Difference in Stock

Opening Stock = 36,000 units

Closing Stock = 31,500 units
 4,500 units

Difference in Profit

Marginal Costing = ~~₦~~2,250,000

Absorption Costing = ~~₦~~1,548,000
 702,000

Fixed overhead absorption rate per unit

$$\frac{\text{₦}702,000}{4,000}$$

$$= \text{₦}156$$

EXAMINER'S REPORT

The questions cover a sizeable proportion of the syllabus and performance was good as about half of the candidates scored 50% and above of the allocated marks. Candidates are advised to use standard study materials which should include the ICAN Study Packs, in their preparation.

SOLUTION 1

- a. Working capital cycle is the total length of time between investing cash in paying for raw materials at the start of the production process and its recovery at the end with the collection of cash from receivable.
- b. Determinants of working capital requirements:
- i. Production cycle
 - ii. Nature of business

- iii. Technology and Manufacturing Policy
- iv. Credit Policy
- v. Size of the firm
- vi. Credit granted by suppliers
- vii. Business fluctuations
- viii. Sales and demand conditions
- ix. Operating efficiency
- x. Price level changes

GLORY LIMITED
COMPUTATION OF WORKING CAPITAL CYCLE

					DAYS	
Raw Material	=	<u>R/M Stocks</u>	=	<u>₦480,000</u>	=	125
		Daily Purchases		₦3,840		
Work-In-Progress	=	<u>WIP</u>	=	<u>₦360,000</u>		
		Daily Cost of Sales	=	₦7,200	=	50
Finished Goods	=	<u>Finished Goods</u>	=	<u>₦244,800</u>	=	34
		Daily Cost of Sales		₦7,200		
Receivables	=	<u>Receivables</u>	=	<u>₦600,600</u>	=	65
		Daily Sales		₦9,240		
						<u>274</u>
Less Payables	=	<u>Payables</u>		<u>₦422,400</u>	=	110
		Daily R/M Purchases	=	₦3,840		
						<u>164</u>

The working capital cycle of Glory Limited is 164 days, indicating that it takes about 5½ months between the time the company pays for its raw materials to the time cash is received from receivables.

EXAMINER'S REPORT

This question tests candidates' understanding of the terms 'Working Capital' and 'Working Capital Cycle'.

About 75% of the entire candidates attempted this question and performance was very poor. About 20% of those who attempted this question scored 50% and above of the marks.

Major shortcomings exhibited by candidates include:

- i. Misplacement of working capital for working capital cycle and vice versa.
- ii. The term 'Working Capital Cycle' seemed strange to majority of the candidates who attempted the question.

To enhance performance in future, it is recommended that candidates should:

- i. Improve on their preparation.
- ii. Take time to understand the requirements of a question before attempting an answer.
- iii. Use standard study materials which should include the ICAN Study Packs.
- iv. Utilise past question papers as part of the preparation for future examinations.

SOLUTION 2

LADUGBO LIMITED

PROFIT STATEMENT FOR THE QUARTER ENDED JUNE 2015 BASED ON ABSORPTION COSTING APPROACH

	JANUARY - MARCH		APRIL - JUNE	
	₦'000	₦'000	₦'000	₦'000
Sales		2,700		4,050
Less: Production Costs:				
Opening Inventory	-		177.5	
Direct Material	700		1,000.0	
Direct Wages	280		400.0	
Variable Overhead	175		250.0	
Fixed Production O/H	87.5		125.0	
	1,242.5		1,952.5	
Less: Closing Inventory	<u>177.5</u>		<u>355.0</u>	

		<u>1,065</u>		<u>1,597.5</u>
		1,635		2,452.5
(Under)/Over-Absorbed O/H		<u>(12.5)</u>		<u>25.0</u>
		1,622.5		2,477.5
Variable Selling Costs		(90.0)		(135)
Fixed Administration Cost		<u>(60.0)</u>		<u>(60)</u>
Profit		<u>1,472.5</u>		<u>2,282.5</u>

Working:

i. Valuation of Closing Inventory

	₦
Direct Material	10.00
Direct Wages	4.00
Variable O/H	<u>2.5</u>
Variable Production Cost	16.5
Fixed Production O/H	<u>1.25</u>

$$17.75 \times 10,000 = \underline{177,500}$$

ii. Fixed Production Overhead per unit
= $\frac{\text{Budgeted Fixed Overhead}}{\text{Normal Activity Level}}$

$$= \frac{\text{₦400,000}}{320,000 \text{ units}} = \underline{\text{₦1.25}}$$

iii. Over/under absorbed overhead

Budgeted Production per quarter

$$= \frac{320,000 \text{ units}}{4} = 80,000 \text{ units}$$

$$\begin{aligned} &\text{January-March } (70,000 - 80,000) \times \text{₦1.25} = (12,500) \\ &\text{April - June } (100,000 - 80,000) \times \text{₦1.25} = 25,000 \end{aligned}$$

EXAMINER'S REPORT

The question tests candidates' ability to determine profit or loss using Absorption Costing.

The topic was very popular among the candidates as about 90% of them attempted this question.

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

The common pitfalls of the candidates who performed below average include:

- i. The question asked for a columnar presentation but most candidates presented their solution in 'T' format.
- ii. Cost of production was not properly broken down, as required, by most candidates.
- iii. Inability to compute over and under absorbed overhead.
- iv. Wrong apportionment of fixed overhead.
- v. The question asked for quarterly presentation whereas many candidates answered the question using monthly format.
- vi. Poor presentation.

To enhance performance in future, it is recommended that candidates should:

- i. Improve on the quality of their preparation.
- ii. Spend some time to appreciate the instruction before attempting a question.
- iii. Attend good quality tuition houses.
- iv. Use standard study materials which should include ICAN Study Packs.

SOLUTION 3

- a. Break-Even Point (BEP): This is the point where the company does not make any profit or loss. It is the point where contribution equals fixed cost, or where total cost equals sales. Any sales below the break-even point will result in a loss while sales above the break-even point will result in profit for the organization.
- bi. Break-even Point (Units) =
$$\frac{\text{Fixed Cost}}{\text{Contribution/Unit}}$$

$$\begin{aligned}
 &= \frac{\text{₦}2,916,000}{\text{₦}15} \\
 &= \frac{194,400 \text{ Units}}{\text{Fixed Cost}} \\
 \text{Break-even Point (Naira)} &= \frac{\text{Fixed Cost}}{\text{Contribution Margin Ratio}} \\
 &= \frac{\text{₦}2,916,000 \times \text{₦}60}{\text{₦}15} \\
 &= \text{₦}11,664,000
 \end{aligned}$$

ii. Units required to earn ₦225,000 profit

$$\begin{aligned}
 &= \frac{\text{Fixed Cost} + \text{Target Profit}}{\text{Contribution/Unit}} \\
 &= \frac{\text{₦}2,916,000 + \text{₦}225,000}{\text{₦}15} = \underline{209,400 \text{ Units}}
 \end{aligned}$$

iii. Units required to earn ₦300,000 profit after tax

$$\begin{aligned}
 &= \frac{\text{Fixed Cost} + (\text{Target Profit}/1 - \text{tax rate})}{\text{Contribution/Unit}} \\
 &= \frac{\text{₦}2,916,000 + (300,000/1-0.4)}{\text{₦}15} \\
 &= \frac{2,916,000 + 500,000}{\text{₦}15} = \underline{227,733 \text{ Units}}
 \end{aligned}$$

iv. Units required to breakdown (Revised)

$$\begin{aligned}
 &= \frac{\text{Fixed Cost (Revised)}}{\text{Contribution/Unit (Revised)}} \\
 &= \frac{\text{₦}2,916,000 \times 1.025}{\text{₦}60 - (45 \times 1.05)} = \frac{\text{₦}2,988,900}{\text{₦}12.75} \\
 &= \underline{\text{₦}234,424 \text{ Units}}
 \end{aligned}$$

Workings:

Contribution/Unit = Selling price – variable cost

		₦
=	Selling Price	60
	Variable cost	<u>45</u>
	Contribution/Unit	<u>15</u>

EXAMINER'S REPORT

The question tests candidates' understanding of the concept of Break Even Point in units and value. The implication of taxation on Break Even Point was also required.

The question is popular with the candidates as 95% of the candidates attempted it. Performance was good with about 60% of the candidates who attempted the question scored 50% and above of the marks allocated.

The commonest pitfalls observed among these candidates who performed below average include:

- i. Inability to compute Break Even Point together with tax implications thereon.
- ii. Inability to differentiate between Break Even Points in value and in units.

To enhance performance in future, it is recommended that candidates should:

- i. Understand the intricacies involved in the computation of Break Even Point with consideration for taxation implications.
- ii. Improve on the level and quality of their preparation for future examinations.
- iii. Use standard study materials which should include ICAN Study Packs.

SOLUTION 4

- (a) An example of offline data processing technique is Batch Processing Technique.

Characteristics of Batch Processing:

- i. The technique is system oriented since a user need not attend to the processing immediately.
 - ii. The technique is used to process activities that do not occur continuously e.g. payroll, since salaries are paid once or twice a month.
 - iii. The technique allows for delay in data processing, since data is grouped before processing will commence.
 - iv. The technique can be used to process large volume of data, since a batch can contain a very large amount of data.
 - v. The technique uses queueing model to process data since data is processed on First-In-First-Out basis.
 - vi. The turn-around time is high since the time between submission of a job and receiving output/result is high.
 - vii. The controls are based on batch concepts e.g. batch totals, hash total, batch quantity or values.
 - viii. Processing time is pre-determined e.g. 1 week, 1 month e.t.c.
 - ix. All or most of the transactions or records are required to be processed together i.e. in batches.
 - x. In Batch processing technique, transactions are accumulated into groups of suitable sizes before being processed at a pre-determined time. This means that transactions are not processed as they occur.
- b.(i) Online processing is a process in which transactions are entered directly into the computer system and processed immediately i.e. as data enters into the system, processing follows.

Examples of online processing techniques include the following:

Real-Time Processing
Time-Sharing Processing

Characteristic of Real-Time Processing Techniques:

- i. The technique is user oriented since users are attended to real time.
- ii. The technique eliminates delay in data processing i.e. turn-around time is very short.
- iii. It is used for critical activities e.g. airline reservation, international hotels reservation, and bank processes such as in Automated Teller Machines/Services.
- iv. Varied Traffic Pattern i.e. varied volume, varied transaction types, irregular timing of input and non-standard location of input.
- v. Direct input and direct access storage media are used.

Characteristic of Time-Sharing Processing Technique:

- i. The technique is user oriented based on time allocated to individual users.
- ii. The technique allows for computer resources to be shared by individual users on rotational basis. i.e. it discourages monopoly of resources because at the end of the time slot, the computer resource is allocated to another user on the system.
- iii. Time sharing allows several users to remotely use the system concurrently.
- iv. Users must have unique security codes e.g. ID number, password. etc.
- v. Storage devices are direct access.

EXAMINER'S REPORT

The question tests candidates' understanding of the techniques used in Data Processing with respect to offline and online techniques. It demands for the definitions and characteristics of both techniques.

About 50% of the candidates attempted this question. Performance was average with about 60% of the candidates who attempted the question scoring over 50% of the allocated marks.

The major shortcoming displayed by many candidates was that they juxtaposed the offline method with that of online method.

In order to improve on performance in future examinations, it is recommended that:

- i. Candidates need to study more on how to answer examination questions.
- ii. They should acquaint themselves with recommended texts on the syllabus.
- iii. They should use standard study materials which should include ICAN Study Packs.

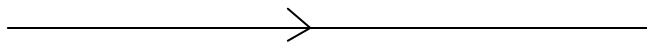
SOLUTION 5

a. Three Data Transmission modes are:

- i. Simplex
- ii. Half duplex
- iii. Duplex

Simplex

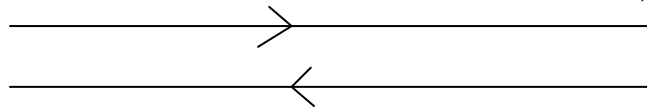
It is a data transmission mode that is uni-directional.



An example of such transmission mode is commercial broadcast - Radio or transmission television.

Half Duplex

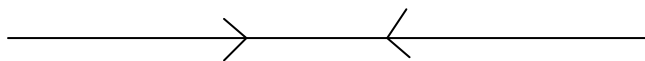
It is a data transmission mode that is bi-directional, but at different times.



An example is walkie-talkie telephoning.

Duplex

It is a data transmission mode that is bi-directional and concurrent. That is, transmission in both directions take place at the same time.



Examples are computer communication, mobile phone, etc.

- b. Differences between Parallel transmission and Serial transmission.
All bits in a data are transmitted together in a Parallel data transmission, but one bit of data is transmitted at a time in serial data transmission. That is, transmission is in a sequence.

- c. Differences between Asynchronous Transmission and Synchronous Data Transmission include:

Asynchronous Transmission	Synchronous Transmission
<ul style="list-style-type: none">• Transmission not regular	<ul style="list-style-type: none">• Transmission is regular i.e. consists of a stream of bits transmitted in a single channel
<ul style="list-style-type: none">• One character is transmitted at a time	<ul style="list-style-type: none">• Block of characters is transmitted at a time
<ul style="list-style-type: none">• Each character is preceded by a START signal and followed by A STOP signal	<ul style="list-style-type: none">• Information is synchronized by the user of "clock".

- d. Attacks that could take place as a result of vulnerability of a computer system include the following:

- i. Virus and Worms
- ii. Denial of Service
- iii. Theft of data
- iv. Unauthorised access
- v. Hacking
- vi. Hardware failure
- vii. Software failure
- viii. Alteration of data
- ix. Masquerading
- x. Personnel actions/errors
- xi. Espionage

EXAMINER'S REPORT

The question tests candidates' understanding of the different techniques of Data Transmission. It also demands for examples of attacks on computer systems.

About 50% of the candidates attempted the question. Performance was just average with only 40% of the candidates who attempted the question scoring over 50% of the allocated marks.

Major pitfalls exhibited by candidates include the following:

- i. Poor understanding of the requirements of the question.
- ii. Confusing Parallel Data Transmission Technique with Systems Changeover Technique.
- iii. Taking Data Transmission channels to mean Data Transmission Modes while many other candidates expressed Data Transmission Modes as Input, Process and Output

For future examinations, candidates are advised to:

- i. Improve on their preparations
- ii. Match preparation with the contents of the syllabus
- iii. Use standard study materials which should include ICAN Study Packs.

SOLUTION 6

- a. Technology may enhance businesses in the following ways:
 - i. **Product/Process Design** - Technology enables precise design of products, services and processes with detailed analysis of features.
 - ii. **Implementation/Production** - Production process is better handled by technology rather than numerous factory workers.
 - iii. **Delivery** - Products and services are quickly delivered to the end-users or customers using technology.
 - iv. **Marketing/Advertising** - These become easier to achieve by reaching all parts of the world with technology.
 - v. **Quality Assurance** - Technology ensures quality monitoring.

- vi. **E-Commerce** - Technology ensures that buying and selling are carried out without physical markets.
- vii. **Globalisation** – Technology allows businesses to link up with partners anywhere in the world.

b. Features of Directional Alignment:

- i. A shared understanding of how IT applications, technologies and services will contribute to business objectives - today and in the future.
- ii. A shared focus on where to expend scarce resources, time and money i.e. the tradeoffs that the enterprise is prepared to make.
- iii. A credible working relationship between the IT organisation and the rest of the business evidenced by reliable daily operations, responsive problem management and predictable innovative solution delivery.

c. Steps in Determining the Business Values provided by Technology Strategy

- i. Determine the long-term business strategy of the organisation, articulate and promote it.
- ii. Identify business priorities by identifying customer preferences.
- iii. Correlate the business values of the company within the systems IT network.
- iv. Determine the goodwill provided by business functions and then attribute portions to the appropriate technology systems.
- v. Establish a dynamic assignment of systems to business units, and create a means for management review of performance and controls.
- vi. Centralise projects and technology efforts and communicate any proposed or active projects to business owners who will be affected or benefited.
- vii. Conduct regular prioritisation efforts of systems, projects and business functions based on actual business valuation.

EXAMINER'S REPORT

This question is three-fold. It tests candidates' understanding in the following areas:

- a. The effect of technology on businesses.
- b. How technology allows businesses to focus.
- c. The procedure for evaluating the impact of technology on businesses.

About 85% of the candidates attempted this question. Performance was poor with about 40% of those who attempted the question scoring over 50% of the allocated marks.

Very common pitfalls include:

- i. Answers provided by many candidates did not address the requirement of the question.
- ii. Performances in (b) and (c) were abnormally low.

There will be considerable improvement in future if candidates:

- i. Note the contents of the syllabus.
- ii. Show more interest in the use of Study Packs.
- iii. Improve on examination techniques.
- iv. Improve on communication skill.
- v. Appreciate the requirements of a question which asks for 'List' and 'Develop'.
- vi. Use standard study materials which should include ICAN Study Packs.

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

FOUNDATION LEVEL - NOVEMBER 2014

QUANTITATIVE TECHNIQUES IN BUSINESS

Time Allowed: 3 hours

SECTION A:

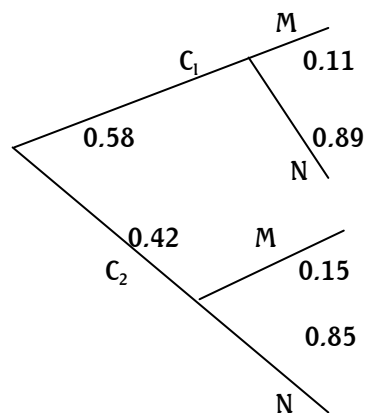
MULTIPLE-CHOICE QUESTIONS

(20 Marks)

ATTEMPT ALL QUESTIONS IN THIS SECTION

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

1. Two events are said to be mutually exclusive if
 - A. The occurrence (or non-occurrence) of one event does not affect the occurrence (or non-occurrence) of the other event
 - B. Both events can occur simultaneously
 - C. The occurrence of one event precludes the occurrence of the other event
 - D. Both are impossible events
 - E. The occurrence of one event depends on the occurrence of the other event
2. The following tree diagram shows the scenario with two paying cashiers (C_1 and C_2) at a Microfinance Bank where M represents mutilated notes and N represents new notes:



The probability that a customer of the bank does not receive a mutilated note is

- A. 0.8832
- B. 0.8732

- C. 0.8730
- D. 0.3570
- E. 0.1592

3. The daily sales figures of a supermarket follow a normal distribution with mean of ₦60,000 and standard deviation of ₦14,000. Find the probability that the sales figure of a certain day exceeds ₦46,000.

- A. 0.1587
- B. 0.1590
- C. 0.8413
- D. 0.8415
- E. 0.8423

4. An Accountant, with a fast food restaurant located in a professional examination centre, estimated that the regression equation relating to the total sales, y (in thousands of naira) and the number of candidates, x , that enrolled for the examination over 6 diets is given as $y = 150 + 5x$.

The number of candidates that will enrol for a particular diet if its estimated total sales is ₦950,000 is

- A. 160
- B. 360
- C. 450
- D. 620
- E. 700

5. The measure of relationship that exists between two or more variables is known as coefficient of

- A. skewness
- B. variation
- C. kurtosis
- D. determination
- E. correlation

6. The following are quantitative techniques of forecasting in business analysis **EXCEPT**
- Regression analysis
 - Delphi method
 - Moving average
 - Exponential smoothing
 - Time series analysis
7. The building blocks for a linear programming problem are
- A linear objective function and equality of constraints
 - A linear objective function and inequality constraints
 - A linear objective function, structural linear inequality constraints and non negativity constraints on the decision variables
 - A linear objective function, structural linear inequality constraints and negativity constraints on the decision variables
 - A linear objective function and structural non-linear inequality constraints.
8. The mean arrival rate (μ) in a bank is observed to be one customer in every 4 minutes and the mean service time ($1/\lambda$) is $2\frac{1}{2}$ minutes per customer, the average time of service in the bank is
- 1.04 minutes
 - 1.67 minutes
 - 6.67 minutes
 - 6.76 minutes
 - 10.0 minutes
9. The table below shows the frequency distribution of marks obtained by 36 students in a class

Class Marks	Frequencies
0 but less than 5	6
5 but less than 10	10
10 but less than 15	8

15 but less than 20

12

The first quartile of the distribution is

- A. 6.0
- B. 6.2
- C. 6.3
- D. 6.4
- E. 6.5

10. The following are the marks obtained by 10 students in a class mid-term examination: 30%, 40%, 50%, 30%, 30%, 30%, 40%, 60%, 40% and 30%. The cumulative frequency that corresponds to 50% is

- A. 1
- B. 5
- C. 8
- D. 9
- E. 10

11. The following data are for the travelling time to and from work in hours per day for a group of factory workers

No of hours	No of workers
Under 1	20
1 up to 2	10
2 up to 3	5
3 up to 4	4

The variance of the data is

- A. 1.00
- B. 1.01
- C. 1.02
- D. 1.12
- E. 1.22

12. Given the frequency distribution of weights of babies at the post-natal ward of a University Teaching Hospital as:

Weight (kg)	Number of babies
2 – 3	32
4 – 5	17
6 – 7	11

Which of the following values represents the relative frequency of the class 4-5 kg weight of babies in the ward?

- A. 0.17
 - B. 28%
 - C. 0.283
 - D. 17%
 - E. 0.17%
13. The mode in the set of data 2, 3, 5, 5, 5, 7, 7, 7 and 6 is described as
- A. Unimodal
 - B. Bimodal
 - C. Modal average
 - D. Trimodal
 - E. Multimodal
14. The mean deviation of the values: 7, 8, 10, 14, 25, 30 is
- A. 16.86
 - B. 14.89
 - C. 7.89
 - D. 6.89
 - E. 5.89
15. Assume that the standard selling price of a medium size detergent produced by BICU Nigeria Limited is ₦250 per unit. If the total fixed cost is ₦85,000 and cost

of producing each unit is ₦130. What is the smallest number of units which the company should produce in order to break even?

- A. 709
- B. 708
- C. 707
- D. 706
- E. 700

16. The number of units of goods produced when utilizing x units of labour and y units of capital is

$$f(x,y) = 80 x^{3/4} y^{1/4}$$

How many units of goods will be produced by using 81 units of labour and 256 units of capital?

- A. 2,880
- B. 2,908
- C. 2,960
- D. 5,360
- E. 8,640

17. A retailer sells 2,000 cups of ice cream daily at Bolekaja bus stop for ₦250 per cup. If the retailer's commission on each cup is 27% of the selling price, the estimated retailer's daily cost will be:

- A. ₦250,000
- B. ₦285,000
- C. ₦325,000
- D. ₦350,000
- E. ₦365,000

18. Annuity is defined as the

- A. Specific amount of money saved at regular intervals meant to be used in funding some future financial commitments
- B. Lump sum investment designed to produce a sequence of equal regular payments overtime
- C. Specific amount of money received at intervals which is not necessarily equal to fund some future financial commitments

- SECTION B: ATTEMPT ANY FOUR IN THIS SECTION (80 Marks)**
- QUESTION 1**

Required:

- i. Use the information above to write down a system of linear equations to describe the given cost scenario. (4 Marks)
- ii. Solve the resulting system of equations. (4 Marks)

- iii. Find the cost of each calculator and each book. (2 Marks)
- b. The Chief Accountant of Zeesco Plc. has a large sum of money which she plans to donate to 4 not-for-profit organisations. She plans to give $\frac{1}{3}$ of this amount to organisation A. Out of the remaining amount, she plans to give $\frac{2}{5}$ to organisation B. Also, she intends to give $\frac{1}{2}$ of the balance to organisation C and the rest to organisation D. If she plans to give 11 million naira to organisation D, how much does she plan to share among these organisations? (10 Marks)
- (Total 20 Marks)

QUESTION 2

In finance, the standard deviation is frequently used to measure the risk of an investment.

An investor is considering two possible investments A and B. A sample of 10 rates of return is recorded for each investment. These rates of return given as percentages are as follows:

Investment A

4, 6, 6, 5, 4, 5, 8, 5, 5, 8

Investment B

0, -2, 6, 12, 9, 16, -4, 16, 25, 12

Required:

- a. Calculate the mean rate of return for each of the two investments. (6 Marks)
- b. Calculate the standard deviation of the rate of return for each of the investments. (6 Marks)
- c. Which of the **TWO** investments is riskier and why? (8 Marks)
- (Total 20 Marks)

QUESTION 3

- a. Calculate the various control levels from the following data on a given inventory item:

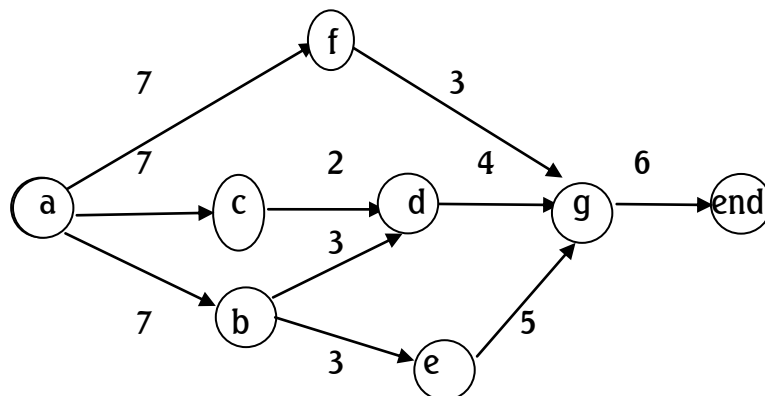
Normal usage	1,600 per day
Minimum usage	1,000 per day
Maximum usage	3,000 per day
Lead time	16 – 20 days
EOQ	40,000

(9 Marks)

- b. If the optimistic, most likely and pessimistic times are given as 11 days, 15 days and 18 days respectively, calculate the expected time of the project delivery.

(3 Marks)

- c. The network for a small building project is shown below together with the time in days required to complete each task.



Required:

- i. List the possible paths together with their durations through the network.
- ii. State the critical path and the project duration.

(2 Marks)
(Total 20 Marks)

QUESTION 4

The sales of PQR Nigeria Plc. in thousands of Naira are listed in the table below for each quarter for years 2005 – 2008.

Sales of PQR in ₦'000s				
Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4
2005	22	35	82	37
2006	24	46	81	44
2007	25	40	87	49
2008	29	42	100	55

Required:

- Calculate the trend in the above data using the Least Squares Method.
(12 Marks)
 - Estimate the sales for each quarter using the trend line.
(4 Marks)
 - Calculate the percentage variation for each quarter's actual sales from the estimate obtained in (b) above.
(4 Marks)
- (Total 20 Marks)**

QUESTION 5

- A business school preparing candidates for professional examinations conducted a mock examination to ascertain the level of preparedness of its candidates in two subjects: Quantitative Techniques in Business (QTB) and Management Information (MI).

The table below gives the scores of twelve selected candidates.

Candidates	1	2	3	4	5	6	7	8	9	10	11	12
Score in QTB (x)	35	77	95	28	76	80	90	62	39	65	90	37
Score in MI (y)	50	82	89	58	65	61	84	59	48	53	80	52

Required:

- Calculate the Spearman's rank correlation coefficient between x and y.
(9 Marks)
- Comment on the result in (i) above.
(1 Mark)

- b. In a particular organisation, an experiment which was conducted to determine the gasoline mileage of a particular type of car yielded the following data:

Miles per gallon	Per cent
10 and under 12	4
13 and under 15	8
16 and under 18	14
19 and under 21	26
22 and under 24	12
25 and under 27	11
28 and under 30	10
31 and under 33	7
34 and under 36	6
37 and under 39	2

You are required to draw:

- i. Frequency polygon for gasoline mileage (5 Marks)
 - ii. The ogive for gasoline mileage. (5 Marks)
- (Total 20 Marks)**

QUESTION 6

- a. If ₦250,000 is invested in an account that earns 4% per year compound interest, what is the
- i. value of the investment after 5 years? (3 Marks)
- ii. total interest earned? (2 Marks)
- b. When it was apparent that your parents could not afford to finance your university education, you sought and obtained a 4-year loan of ₦250,000.00 from Education Bank Limited. The bank imposed a simple interest rate of $7\frac{1}{2}\%$.
- i. How much do you need to pay-off the bank now (4 years after) that you are through with your study? (7 Marks)

- ii. If you decide to be paying ₦25,000 every month from now and the bank agreed to reduce the interest rate to 1% per month on the unpaid balance at the beginning of the month, how much additional total interest will be paid?

(8 Marks)

(Total 20 Marks)

SOLUTIONS

SECTION A: MULTIPLE CHOICE SOLUTIONS

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

EXAMINER'S REPORT

The questions fairly cover the syllabus.

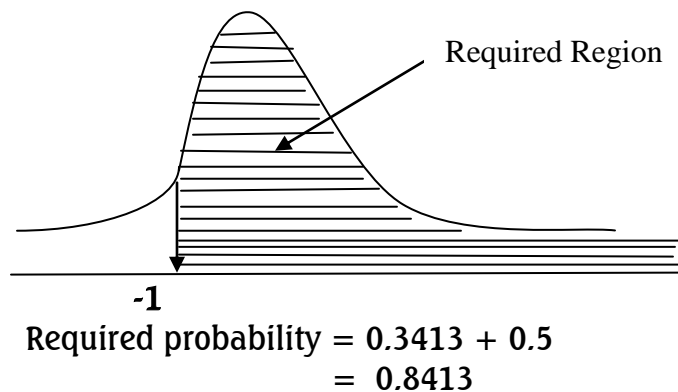
Candidates' performance was just fair as about 40% of the candidates scored less than 8 out of the marks.

Candidates are advised to cover the syllabus fairly well in future examinations.

Workings

2. Using the tree diagram, the question is answered by branch $C_1N + C_2N$
 i.e. $0.58 \times 0.89 + 0.42 \times 0.85$
 $= 0.8732$

3. Find the standard value of
 $X = 46,000$
 $Z = \frac{46,000 - 60,000}{14,000} = -1$



4. $y = 150 + 5x$

$$Y = \frac{950,000}{1,000} = 950$$

$$950 = 150 + 5x$$

$$5x = 800$$

$$x = \frac{800}{5} = 160$$

8. $m = \frac{1}{4} = 0.25$

$$\lambda = \frac{1}{2\frac{1}{2}} = \frac{2}{5} = 0.4$$

$$Ta = \frac{1}{\lambda - m} = \frac{1}{0.4 - 0.25} = \frac{1}{0.15} = 6.67$$

9.

Class	f	cf
0 – 5	6	6
5 – 10	10	16
10 – 15	8	24
15 – 20	<u>12</u>	36
	36	

$$\frac{N}{4} = \frac{36}{4} = 9$$

$$Q_1 = 5 + \left(\frac{9-6}{10} \right) 5 = 5 + 3 \left(\frac{5}{10} \right) = 5 + 1.5$$

$$= 6.5$$

12. Total frequency = 32 + 17 + 11 = 60
 \therefore Relative frequency of the class 4 – 5kg weight of babies in the ward
 $= \frac{17}{60} = \underline{0.283}$ option E

14.

X	f	$X - \bar{X}$	$f(X - \bar{X})$
7	1	-8.67	8.67
8	1	-7.67	7.67
10	1	-5.67	5.67
14	1	-1.67	1.67
25	1	9.33	9.33
30	1	14.33	<u>14.33</u>
	6		47.34

$$\bar{X} = \frac{7+8+10+14+25+20}{6} = \frac{94}{6} = 15.67$$

$$\therefore \text{Mean deviation} = \frac{47.34}{6} = \underline{7.89} \text{ Option C}$$

15. Let x represent the units produced
 \therefore Revenue, R = ~~N~~250x
 Variable cost Cv = ~~N~~130x
 Total cost = ~~N~~85,000 + 130x

∴ To break even

$$R = \text{Total cost}$$

$$\text{i.e. } 130x + 85,000 = 250x$$

$$\Rightarrow 120x = 85,000$$

$$\therefore x = 708.33$$

∴ The smallest number of units which the company should produce in order to break even is 709 units Option A

16. If $f(x, y) = 80x^{3/4}y^{1/4}$

Where $x = 81$, and $y = 256$

$$F(81, 256) = 80(81)^{3/4}(256)^{1/4}$$

$$= 80(3^3)(4)$$

$$= 80 \times 27 \times 4$$

$$= \underline{8640 \text{ units}} \quad \text{Option E}$$

17. 2000 cups at ₦250 each = ₦500,000

$$27\% \text{ of } ₦250 = ₦67.50$$

$$\therefore 2000 \text{ cups at } ₦67.5 \text{ each} = ₦135,000$$

$$\therefore \text{Retailer's daily cost} = ₦500,000 - ₦135,000 \\ = \underline{₦365,000} \quad \text{Option E}$$

SOLUTION 1

(a) Let x represent the cost of one calculator and y the cost of one book.

(i) If 8 calculators and 10 books are purchased at a combined cost of ₦158,000, the linear equation for this cost scenario is:

$$8x + 10y = 158,000 \quad \text{.....} \quad (1)$$

Also, if 15 calculators and 3 books are purchased at a combined cost of ₦123,000, the linear equation of the cost scenario becomes

$$15x + 3y = 123,000 \quad \text{.....} \quad (2)$$

The system of linear equations that describe the given cost scenario is

$$8x + 10y = 158,000 \quad \text{.....} \quad (1')$$

$$15x + 3y = 123,000 \quad \text{.....} \quad (2')$$

- (ii) Multiplying equation (1') by 3 and (2') by 10 transforms the system of linear equations into

$$24x + 30y = 474,000 \quad \text{.....} \quad (3)$$

$$150x + 30y = 1,230,000 \quad \text{.....} \quad (4)$$

Subtracting equation (3) from equation (4) gives:

$$\begin{aligned} 126x &= 756,000 \\ \Rightarrow x &= \frac{756,000}{126} = \text{N}6,000 \quad \text{.....} \quad (5) \end{aligned}$$

Substituting (5) into equation (3) gives:

$$\begin{aligned} 24(6000) + 30y &= 474,000 \\ \text{Or } 144,000 + 30y &= 474,000 \\ \text{Or } 30y &= 474,000 - 144,000 = 330,000 \\ \Rightarrow y &= \frac{330,000}{30} = \text{N}11,000 \end{aligned}$$

$$\begin{aligned} \therefore \text{Cost of one calculator (x)} &= \text{N}6,000 \\ \text{Cost of one book (y)} &= \text{N}11,000 \end{aligned}$$

- (b) Let x be the amount the Chief Accountant plans to share.

$$\text{The share of organisation A} = \frac{1}{3}x$$

$$\text{Remaining amount} = \frac{2}{3}x$$

$$\text{The share of organisation B} = \frac{2}{5} \left(\frac{2}{3}x \right) = \frac{4}{15}x$$

$$\text{Remaining amount} = \frac{2}{3}x - \frac{4}{15}x = \frac{2}{5}x$$

$$\text{The share of organisation C} = \frac{1}{2} \left(\frac{2}{5}x \right) = \frac{1}{5}x$$

$$\text{The share of organisation D} = \frac{1}{5}x$$

$$\Rightarrow \frac{1}{5}x = \text{N}11,000,000$$

$$\text{i.e. } x = \text{N}55,000,000$$

This implies that the Chief Accountant plans to share ₦55million among the Four organisations.

EXAMINER'S REPORT

The question tests candidates' ability to formulate and solve simultaneous equations in business context. It also tests candidates' ability in the use of fractional analysis in decision-making process.

About 95% of the candidates attempted the question and performance was good.

SOLUTION 2

A	$A - \bar{A}$	$(A - \bar{A})^2$	B	$B - \bar{B}$	$(B - \bar{B})^2$	A^2	B^2
4	-1.6	2.56	0	-9	81	16	0
6	0.4	0.16	-2	-11	121	36	4
6	0.4	0.16	6	-3	9	36	36
5	-0.6	0.36	12	3	9	25	144
4	-1.6	2.56	9	0	0	16	81
5	0.6	0.36	16	7	49	25	256
8	2.4	5.76	-4	-13	169	64	16
5	-0.6	0.36	16	7	49	25	256
5	-0.6	0.36	25	16	256	25	625
8	2.4	5.76	12	3	9	64	144
<u>56</u>		<u>18.4</u>	<u>90</u>		<u>752</u>	<u>332</u>	<u>1562</u>

(a) Mean of Investment A = $\frac{56}{10} = 5.6 = \bar{A}$

Mean of Investment B = $\frac{90}{10} = 9 = \bar{B}$

(b) Standard deviation for A = $\sqrt{\frac{\sum (A - \bar{A})^2}{n-1}}$
 $= \sqrt{\frac{18.4}{9}}$
 $= 1.43$

Standard deviation for B = $\sqrt{\frac{\sum (B - \bar{B})^2}{n-1}}$
 $= \sqrt{\frac{752}{9}}$
 $= 9.14$

- (c) Investment B with the larger standard deviation of 9.14 is riskier than investment A with smaller standard deviation of 1.43.

Investment B with a larger variance is more variable than investment A and therefore B is more likely to be less predictable than A.

Coefficient of Variation (CV) is used to compare the variability of two different sets of data as follows:

$$C.V_A = \frac{Sd}{\bar{x}} \times 100 = \frac{1.43}{5.6} \times 100 = 25.54\%$$

$$C.V_B = \frac{\text{std dev}}{\text{Mean}} \times 100 = \frac{9.14}{9} \times 100 = 101.56\%$$

Investment B has a larger coefficient of variation than A, hence it is riskier.

EXAMINER'S REPORT

The question tests candidates' understanding of and ability to compute the mean as a measure of central tendency and standard deviation (variance) as a measure of dispersion and their application in investment risk analysis.

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

The commonest pitfalls in the candidates' answers were:

- (i) inability to correctly compute the standard deviation of the rates of return for the two investments A & B and
- (ii) lack of understanding on how to use the calculated standard deviation outcomes for the risk analysis between the two investments A and B.

Candidates are advised to deepen their knowledge and understanding of measures of central tendencies and dispersion, their computations and simple applications.

SOLUTION 3

- (a) i. There are three control levels to be calculated namely:
 - Re-order level = Maximum usage x maximum lead time
= 3,000 x 20 = 60,000
 - Minimum level = Re-order level – Average usage for average

lead time

$$\begin{aligned} &= 60,000 - (1,600 \times 18) \\ &= 60,000 - 28,800 \\ &= 31,200 \end{aligned}$$

• Maximum level = Re-order level + EOQ – Minimum
Anticipated usage in lead time = $60,000 + 40,000 - (1,000 \times 16)$
= 84,000

ii. Expected Time (ET) is calculated as $= \frac{O + P + 4ML}{6}$

where O = optimistic time = 11 days

P = Pessimistic time = 18 days

ML = Most likely time = 15 days

$$\begin{aligned} ET &= \frac{11 + 18 + 4 \times (15)}{6} = \frac{89}{6} \\ &= 14.83 \text{ days} \end{aligned}$$

(b) i.	The possible paths	Path lengths in days
	A – F – G – END	16
	A – C – D – G – END	19
	A – B – D – G – END	20
	A – B – E – G – END	21

- ii. The critical path is the path with greatest length. That is
A – B – E – G
The project duration is 21 days.

EXAMINER'S REPORT

The question tests candidates' understanding of Inventory Control and Network Analysis.

The question was not popular as about 30% of the candidates attempted it.

Those that attempted the question demonstrated adequate understanding of its requirements and performance was quite good.

SOLUTION 4

- (a) Use the Least Squares Linear Regression Line $y = a + bx$ to obtain the trend in the given data as follows:

Year	X (quarters)	Y (Sales)	XY	X ²
2005	1	22	22	1
	2	35	70	4
	3	82	246	9
	4	37	148	16
2006	5	24	120	25
	6	46	276	36
	7	81	567	49
	8	44	352	64
2007	9	25	225	81
	10	40	400	100
	11	87	957	121
	12	49	588	144
2008	13	29	377	169
	14	42	588	196
	15	100	1500	225
	16	55	880	256
	$\sum X = 136$	$\sum Y = 798$	$\sum XY = 7316$	$\sum x^2 = 1496$

Using $y = a + bx$

where

$$b = \frac{n \sum xy - (\sum X)(\sum Y)}{n \sum X^2 - (\sum X)^2} \quad \text{and} \quad a = \bar{y} - b\bar{x} = \frac{\sum Y}{n} - b \left(\frac{\sum X}{n} \right)$$

we get

$$\begin{aligned} b &= \frac{16(7316) - 136(798)}{16(1496) - (136)^2} \\ &= \frac{8528}{5440} \\ &= 1.568 \end{aligned}$$

and

$$a = \frac{798}{16} - 1.568 \left(\frac{136}{16} \right)$$

$$= 36.547$$

The trend line is $y = 36.55 + 1.57X$.

- (b) The trend line is used to estimate the sales for each quarter as follows:

Quarter (x)	Sales (y)	Trend	$\frac{\text{Actual}}{\text{Trend}} \times \frac{100}{1}$
		$\hat{Y} = 36.55 + 1.57x$	
1	22	38.12	57.70
2	35	39.69	88.20
3	82	41.26	198.70
4	37	42.83	86.39
5	24	44.40	54.05
6	46	45.97	100.06
7	81	47.54	170.38
8	44	49.11	89.59
9	25	50.68	49.33
10	40	52.25	76.56
11	87	53.82	161.65
12	49	55.39	88.46
13	29	56.96	50.91
14	42	58.53	71.76
15	100	60.10	166.39
16	55	61.67	89.18

Column (3) in the above table gives the estimated sales value for each quarter using the trend line.

- (c) Column (4) of the table gives the calculated percentage variation for each quarter's actual sales in (a) to the estimates obtained in (b) above.

EXAMINER'S REPORT

The question tests candidates' understanding of the use of Least Square Method in trend analysis of time series data.

About 30% of the candidates attempted the question and performance was average.

The commonest pitfalls in the candidates' answers include the use of incorrect formulae for the computations of the parameter/coefficient estimates in the formulated linear regression model and their inability to sum up data correctly.

Candidates should understand the principle of the Least Squares Method and how it can be used to obtain the trend in given data situations.

SOLUTION 5

(a)

X	Y	Rank of X R_x	Rank of Y R_y	$D = R_x - R_y$	d^2
35	50	11	11	0	0
77	82	5	3	2	4
95	89	1	1	0	0
28	58	12	8	4	16
76	65	6	5	1	1
80	61	4	6	-2	4
90	84	2.5	2	0.5	0.25
62	59	8	7	1	1
39	48	9	12	-3	9
65	53	7	9	-2	4
90	80	2.5	4	-1.5	2.25
37	52	10	10	0	0
					$\sum d^2 = 41.5$

(i) The Spearman's rank correlation coefficient between X and Y is

$$\begin{aligned}
 R &= 1 - \frac{6 \sum d^2}{n(n^2 - 1)} \quad \text{where } n = 12 \\
 &= 1 - \frac{6(41.5)}{12(12^2 - 1)} \\
 &= 1 - \frac{249}{1716} = 0.855
 \end{aligned}$$

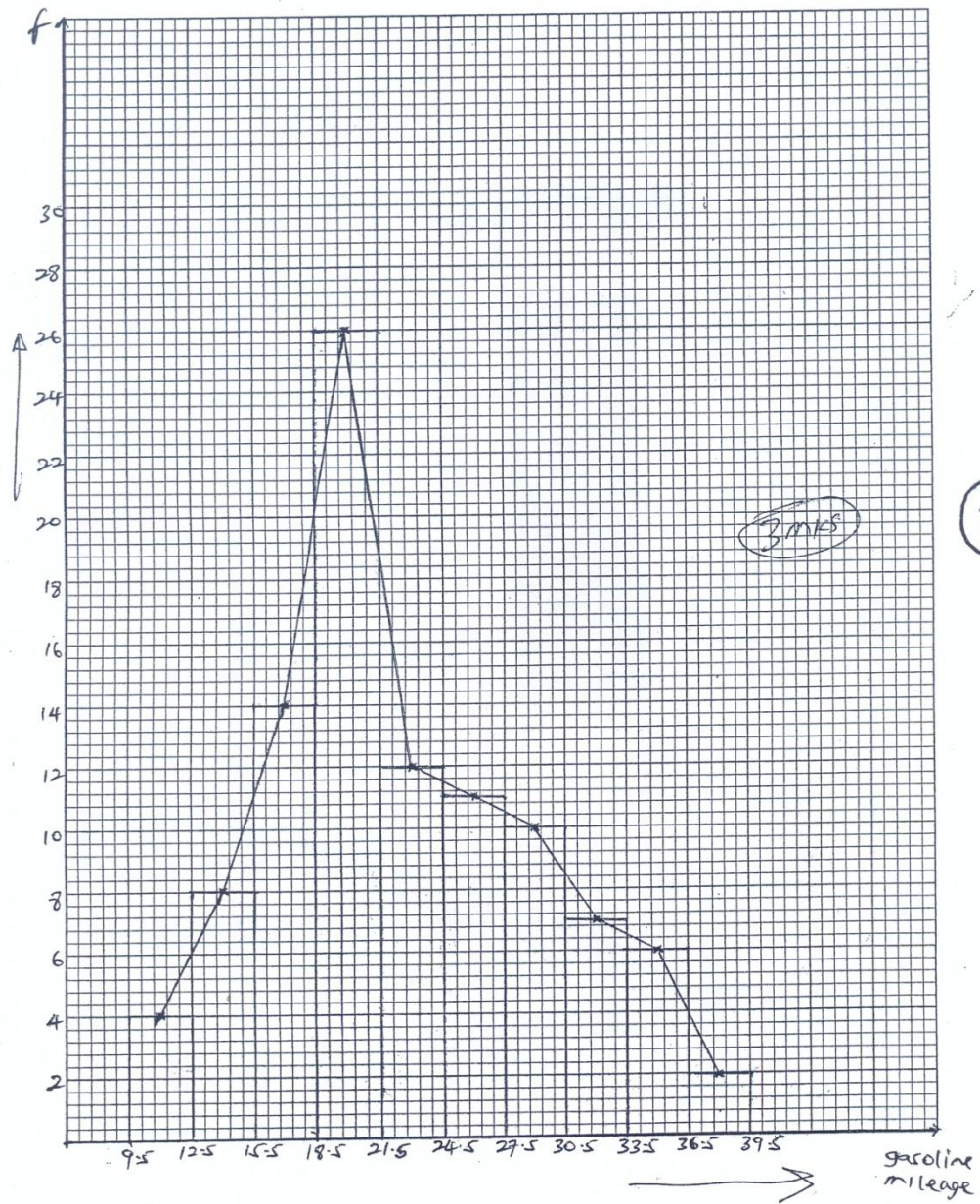
$$\Rightarrow R = 0.855$$

- (ii) The result in (i) shows that there is a strong positive correlation between the scores of the candidates in QTB and MI subjects.

b. Data Collection

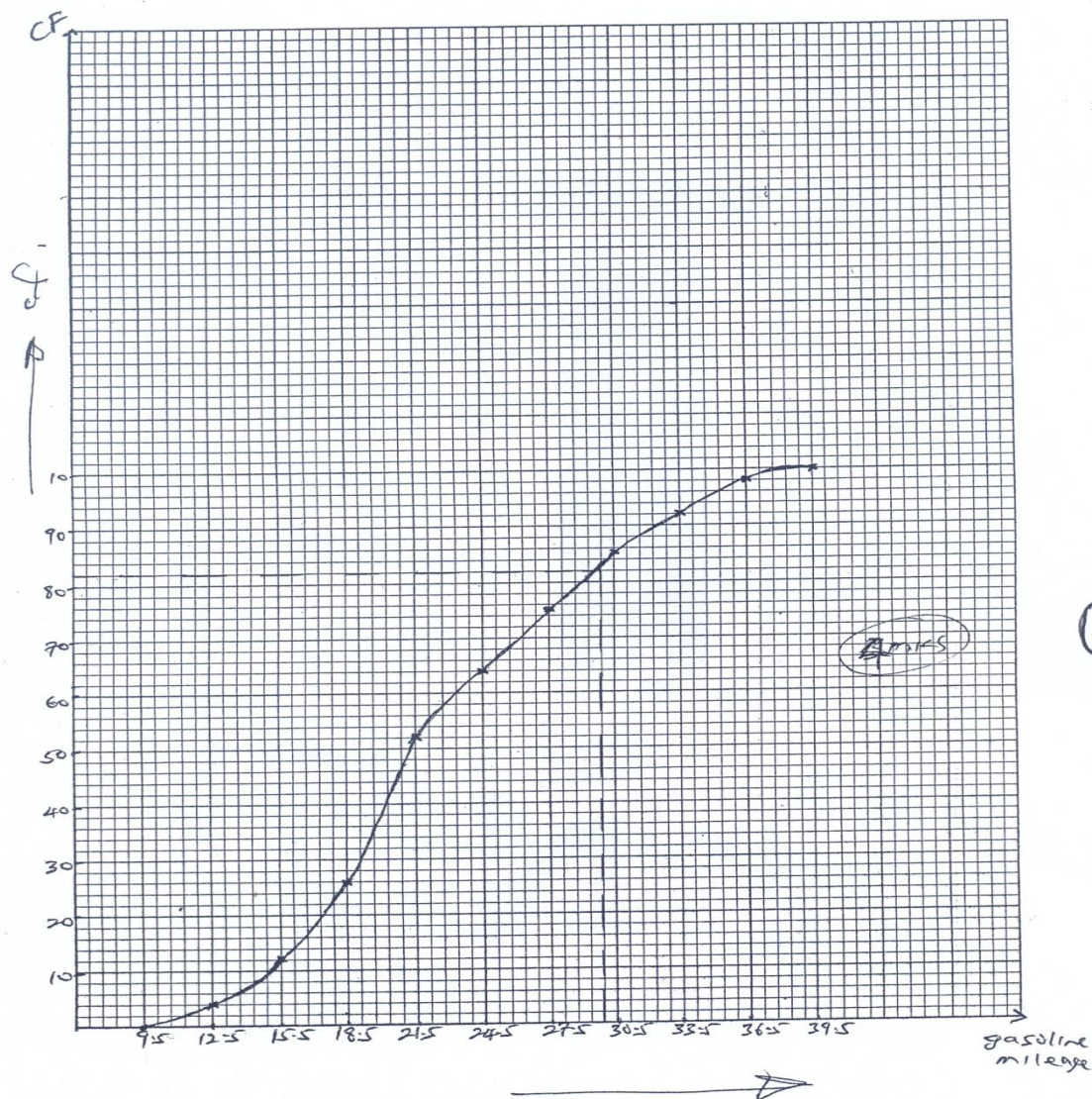
Miles per gallon	F	cf
9.5 – 12.5	4	4
12.5 – 15.5	8	4 + 8 = 12
15.5 – 18.5	14	12 + 14 = 26
18.5 – 21.5	26	26 + 26 = 52
21.5 – 24.5	12	52 + 12 = 64
24.5 – 27.5	11	64 + 11 = 75
27.5 – 30.5	10	75 + 10 = 85
30.5 – 33.5	7	85 + 7 = 92
33.5 – 36.5	6	92 + 6 = 98
36.5 – 39.5	2	98 + 2 = 100

- (i) Frequency polygon graph showing the gasoline mileage of a particular car in an organisation.



G.5

(ii) Cumulative Frequency Curve Ogive Curve/graph



G. 5

EXAMINER'S REPORT

The question tests candidates' knowledge of Rank Correlation and their ability to: (i) compute Spearman's rank correlation coefficient between two variables and (ii) draw frequency polygon and ogive curves from given group of data.

About 90% of the candidates attempted the question but performance was poor.

The major pitfalls in the candidates' answer were their inability to use appropriate class intervals for the given data and their failure to correctly construct the required frequency polygon and ogive graphs.

Candidates are advised to study these concepts more critically and develop the necessary skills needed for their graphical representation.

SOLUTION 6

- a. (i) From the available information in the question, the relevant formula for the computation of the value of the investment after 5 years (A) is:

$$\begin{aligned} A &= P (1 + i)^n \\ \text{where } P &= \text{N}250,000 \\ i &= 4\% \text{ or } 0.04 \\ n &= 5 \end{aligned}$$

$$\begin{aligned} \Rightarrow A &= 250,000 (1 + 0.04)^5 \\ &= 250,000 (1.04)^5 \\ &= \text{N}304,163.23 \end{aligned}$$

- (ii) The interest earned over the period is
 $\text{N}304,163.23 - \text{N}250,000 = \text{N}54,163.23$

- b. (i) The total amount (TA) to be paid back to the bank in order to liquidate the loan 4 years after can be calculated using

$$\begin{aligned} \text{TA} &= P (1 + t r) \\ \text{where} \\ \text{TA} &= \text{Total amount due} \\ P &= \text{N}250,000 \text{ (original principal (the borrowed sum))} \\ t &= 4 \text{ (the time period)} \\ r &= 7.5\% \text{ or } 0.075 \text{ (simple interest rate)} \end{aligned}$$

By substitution, we have

$$\begin{aligned}
 \text{TA} &= 250,000 (1 + 0.075(4)) \\
 &= 250,000 (1 + 0.30) \\
 &= 250,000 (1.30) \\
 &= \text{₦}325,000
 \end{aligned}$$

(ii)

(i)	(ii)	(iii)	(iv)	(iii) + (iv)
Loan	Amount Paid	Unpaid bal.	Int. on unpaid Bal	New bal
325,000.00	-	32,500.00	3,250.00	328,250.00
328,250.00	25,000	303,250.00	3,032.50	306,282.50
306,282.50	25,000	281,282.50	2,812.83	284,095.33
284,095.33	25,000	259,095.33	2,590.95	261,686.28
261,686.28	25,000	236,686.28	2,366.86	239,053.14
239,053.14	25,000	214,053.14	2,140.53	216,193.67
216,193.67	25,000	191,193.67	1,911.94	193,105.61
193,105.61	25,000	168,105.61	1,681.06	169,786.67
169,786.67	25,000	144,786.67	1,447.87	146,234.54
146,234.54	25,000	121,234.54	1,212.35	122,446.89
122,446.89	25,000	97,446.89	974.47	98,421.36
98,421.36	25,000	73,421.36	734.21	74,155.57
74,155.57	25,000	49,155.57	491.56	49,647.13
49,647.13	25,000	2,464.13	<u>246.47</u>	24,893.60
24,893.60			Additional total interest	
			<u>₦24,893.6</u>	

SOLUTION 6 Alternate solution

a.

(i)

$$\begin{aligned}
 A &= P \left(1 + \frac{i}{100} \right)^n \\
 &= 250,000 (1.04)^5 \\
 &= \text{₦}304,163.23
 \end{aligned}$$

∴ The value of the investment after 5 years is ~~₦~~304,163.23.

- (ii) The interest earned over the period is ~~₦~~(304,163.23 – 250,000)
= ~~₦~~54,163.23

ALITER TO 6a(i) & 6a(ii)

6a(i)

					₦
1 st Year:	I	=	250,000 x 1 x 0.04	=	10,000.00
At the end of the 1 st year:	Amount	=	250,000 + 10,000	=	260,000.00
2 nd year:	I	=	260,000 x 1 x 0.04	=	10,400.00
At the end of 2 nd year	A	=	260,000 + 10,400	=	270,400.00
3 rd year:	I	=	270,400 x 1 x 0.04	=	10,816.00
At the end of 3 rd year	A	=	270,400 + 10,816	=	281,216.00
4 th year:	I	=	281,216 x 1 x 0.04	=	11,248.64
5 th year:	A	=	281,216 + 11,248.64	=	292,464.64
5 th year:	I	=	292,464.64 x 0.04	=	11,698.59
At the end of 5 th year:	A	=	292,464.64 + 11,698.59	=	304,163.23

∴ Value of the investment after 5 years = ~~₦~~304,163.23

6a (ii)

$$\begin{aligned} \text{Total interest earned} &= 10,000 + 10,400 + 10,816 + 11,248.64 + 11,698.59 \\ &= \text{₦}54,163.23 \end{aligned}$$

- b (i) The total amount to be paid back to the bank in order to liquidate the loan for years after denoted by TA can be calculated using

$$TA = P(1 + Tr)$$

Where

TA = Total amount due
P = Original principle (the borrowed sum)
T = The time period
r = Simple interest rate

NOTE:

TA = $P (1 + T r)$
P = ₦250,000
T = 4 years
r = $7\frac{1}{2}\%$ or 0.075

Thus,

TA = ₦250,000 $[1 + 4 (0.075)]$
= ₦250,000 (1 + 0.3)
= ₦250,000 (1.3)
= ₦325,000.00

6b

(i)

	(C1)	(C2)	(C3)	(C4)	(C5)
Month	Outstanding loan (₦)	Amount Paid Fix (₦)	Unpaid bal. (₦) (C1 – C2)	Int. on unpaid Bal (₦) 1% of unpaid bal.	New bal (₦) (C3 + C4)
0	325,000.00	-	32,500.00	3,250.00	328,250.00
1	328,250.00	25,000	303,250.00	3,032.50	306,282.50
2	306,282.50	25,000	281,282.50	2,812.83	284,095.33
3	284,095.33	25,000	259,095.33	2,590.95	261,686.28
4	261,686.28	25,000	236,686.28	2,366.86	239,053.14
5	239,053.14	25,000	214,053.14	2,140.53	216,193.67
6	21,619.67	25,000	191,193.67	1,911.94	193,105.61
7	193,105.61	25,000	168,105.61	1,681.06	169,786.67
8	169,786.67	25,000	144,786.67	1,447.87	146,234.54
9	146,234.54	25,000	121,234.54	1,212.35	122,446.89
10	122,446.89	25,000	97,446.89	974.47	98,421.36
11	98,421.36	25,000	73,421.36	734.21	74,155.57
12	74,155.57	25,000	49,155.57	491.56	49,647.13

13	49,647.13	25,000	2,464.13	<u>246.47</u>	24,893.60
14	24,893.60			Additional total interest	
				N 24,893.60	

NOTE: How the entries in the above columns are calculated.

The balance at the beginning of the month from 6b(i) above is ~~N~~325,000.00.

* See month 0 column C1 in the table

1% of the unpaid balance = $0.01 (\text{N}325,000) = 3250$

* See month 0 column C4

∴ The new unpaid balance

$$= \text{N}325,000 + \text{N}3,250 = \text{N}328,250$$

* See month 0 column C5

Outstanding loan at the beginning of the next month

* See month 1 column C1

If the debtor pays ~~N~~25,000, then his new unpaid balance will be $\text{N}328,250 - \text{N}25,000 = \text{N}303,250$

* See month 1 column C3

The interest on this new unpaid balance $0.01 (\text{N}303,250) = \text{N}3,032.5$

* See month 1 column C4

The new balance = $\text{N}303,250 + \text{N}3,032.5 = \text{N}306,282.5$

(See month 1, column C5)

Note that after making the 14th payment of ~~N~~25,000, the new unpaid balance is

$(\text{N}24,893.6 - \text{N}25,000) = - \text{N}106.4$, which indicates that ~~N~~24,893.6 must be his last payment.

EXAMINER'S REPORT

The question tests candidates' understanding of the concepts of simple interest and compound interest and their applications in finance.

About 70% of the candidates attempted the question and performance was fair.

The commonest pitfalls of candidates in answering the question include the use of wrong simple interest formulae, inadequate computation skills and misinterpretation of the requirements of the b(ii) part of the question.

Candidates should develop their computational skills, improve their grasp of basic formulae in mathematics, business and finance and spend adequate time in reading and digesting questions before answering them.

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

FOUNDATION LEVEL EXAMINATION - NOVEMBER 2014

BUSINESS AND FINANCE

Time Allowed: 3 hours

SECTION A: MULTIPLE-CHOICE QUESTIONS (20 Marks)

ATTEMPT ALL QUESTIONS IN THIS SECTION

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

1. The latin word “agenda” means
 - A. Matters arising
 - B. Notice
 - C. Correspondence
 - D. Report
 - E. Things to be done
2. Which of the following should **NOT** be the social objective of a business organisation?
 - A. Pay tax as at when due
 - B. Obey laws enacted by the National Assembly
 - C. Keep clean environment
 - D. Encourage tax avoidance
 - E. Encourage tax evasion
3. Which of the following is **NOT** a factor to be considered when deciding the form of a business enterprise?
 - A. The degree of personal liability
 - B. The willingness to share decision making powers and risks
 - C. The cost of establishing the business
 - D. The location of the business
 - E. The legal requirements concerning the provision of public information

4. The following are the advantages of decentralisation **EXCEPT** that it:
- A. Promotes development of general managers
 - B. Aids adaptation to fast-changing environment
 - C. Enhances a uniform policy
 - D. Relieves top management of some burden of decision making
 - E. Gives managers more freedom and independence in decision making
5. Which of the following defines the purpose of an organisation and gives the direction in which it is heading?
- A. Vision statement
 - B. Mission statement
 - C. Business objective
 - D. Strategic intent
 - E. Organisational goal
6. The management function that ensures that things are done in accordance with established policies and practices is
- A. Organising
 - B. Coordinating
 - C. Controlling
 - D. Planning
 - E. Motivating
7. The financial structure of a firm is made up of the following components **EXCEPT**
- A. Ordinary shares
 - B. Preference shares
 - C. Debentures
 - D. Undistributed profits
 - E. Dividends
8. Political, Economic, Social and Technological (PEST) analysis is used to assess
- A. Staff of the organisation
 - B. Business environment

- C. Board of Directors
 - D. Shareholders
 - E. Corporate Affairs Commission
9. Which of the following is **NOT** a discounted cash flow investment appraisal technique?
- A. Net present value
 - B. Internal rate of return
 - C. Profitability index
 - D. Discounted payback period
 - E. Payback period
10. Ethics is a science of
- A. Religion
 - B. Philosophy
 - C. Psychology
 - D. Physiology
 - E. Morals
11. Leaders who possess special ability to bring about innovation in organisational processes and development can be referred to as
- A. Transactional leaders
 - B. Transformational leaders
 - C. Inventional leaders
 - D. Facilitative leaders
 - E. Strategic leaders
12. Organisational culture relates to all of the following **EXCEPT**
- A. Norms
 - B. Belief
 - C. Values
 - D. Change
 - E. Tradition

13. A work group which manages its own work practices and job allocation within the group is known as
- A. Team group
 - B. Operative work group
 - C. Autonomous work group
 - D. Cooperative work group
 - E. Joint work group
14. The “threat of entry” part of the Porter’s Five Forces Model is influenced by
- A. Supplier competitiveness
 - B. Economies of scale
 - C. Inflation
 - D. Terrorism
 - E. Financial Reporting Council Regulation
15. The objective of a not-for-profit organisation should be the pursuit of
- A. Cost effectiveness
 - B. Profit minimisation
 - C. Shareholders wealth maximisation
 - D. Value for money
 - E. Market position
16. Which of the following provides a good example of agency relationship in a typical business organisation?
- A. Employees and Employer
 - B. Employees and Creditors
 - C. Creditors and Shareholders
 - D. Creditors and Governments
 - E. Debtors and Creditors
17. The environment of a business operating outside its own country of incorporation is called environment.
- A. International

- B. Multilateral
 - C. Cultural
 - D. Multinational
 - E. National
18. Organisational design that is influenced and facilitated by the advent of the internet and other communication technologies is known as organisation.
- A. Network
 - B. Virtual
 - C. Horizontal
 - D. Matrix
 - E. Departmental
19. The plan that explains how the business is structured, what resources are required and how these resources are employed to achieve business objectives is plan.
- A. Operational
 - B. Strategic
 - C. Budget
 - D. Marketing
 - E. Tactical
20. Which of these management writers is regarded as the father of “Scientific Management”?
- A. Charles Babbage
 - B. Robert Katz
 - C. Henry Mintzberg
 - D. Frederick Taylor
 - E. Henri Fayol

SECTION B: ATTEMPT ANY FOUR OUT OF SIX QUESTIONS

(80 Marks)

QUESTION 1

The business environment comprises a diversity of business organisations ranging from very simple enterprises to huge multinational corporations.

a. Identify **FIVE** features of a sole proprietorship. (10 Marks)

b. Identify **FIVE** characteristics of a Public Limited Liability Company. (10 Marks)

(Total 20 Marks)

QUESTION 2

a. In today's business environment, organisational structure is an important element of business management because the way organisation is structured will go a long way in determining the organisation's efficiency and effectiveness.

Explain briefly the following forms of organisational structure:

i. Centralisation

ii. Decentralisation

iii. Matrix

iv. Network organisation

(Total 10 Marks)

b. Continuous pressure on modern business organisations has made many top managers to concede more authority to middle level and lower level managers. State **FIVE** advantages and **FIVE** disadvantages of decentralisation.

(10 Marks)

(Total 20 Marks)

QUESTION 3

The financial market is a mechanism by which surplus and deficit units of an economy can be brought together to accelerate the growth and development of the economy.

Required:

- a. Explain the primary and secondary segments of the Nigerian financial market. (4 Marks)
 - b. State and explain **FOUR** advantages that a company would derive from listing on the stock exchange. (8 Marks)
 - c. List in a tabular form **FOUR** listing requirements each of the first-tier and Alternative Securities Markets. (8 Marks)
- (Total 20 Marks)**

QUESTION 4

Management decisions regarding acquisition of non-current assets and other long-term investments involve huge capital outlay and they are critical to future profitability and success of the company.

Gboza Limited proposed to buy a plant costing ₦2,000,000 which is expected to generate annual net cash flow of ₦600,000 for six years at a cost of capital of 10%.

Required:

- a. Appraise the project using the internal rate of return. (13 Marks)
 - b. Should the plant be purchased? (2 Marks)
 - c. State **TWO** advantages and **THREE** disadvantages of accounting rate of return as an investment appraisal technique. (5 Marks)
- (Total 20 Marks)**

QUESTION 5

Leadership power promotes vision, creativity and change in the organisation. Identifying the sources of a leader's power is important in understanding leadership.

Required:

- a. Explain the concept of power. (5 Marks)
 - b. State and explain **FIVE** sources of power. (15 Marks)
- (Total 20 Marks)**

- 18. B
- 19. B
- 20. D

EXAMINER'S REPORT

The multiple-choice questions (MCQs) test candidates' general knowledge of the basic elements and principles of business and finance as outlined in the ICAN syllabus.

Candidates performed well as 75% of them scored 50% and above of the allocated marks.

SECTION B:

SOLUTION 1

- a. The features of sole proprietorship are:
 - i. It is owned by an individual
 - ii. It is relatively small in size
 - iii. It is not a legal entity because the owner cannot be separated from the business. It can neither sue nor be sued.
 - iv. The owner has unlimited liability.
 - v. It requires little formalities in setting up
 - vi. The scope of operation is limited by the capabilities of the owner.
 - vii. The death of the owner may affect continuity.
 - viii. It is simple to operate
 - ix. Limited sources of funds
 - x. The owner enjoys all the profit and takes all the risk alone.
- b. Characteristics of a public limited liability company
 - i. Minimum shareholders of 50 persons.
 - ii. No maximum number of shareholders required.
 - iii. Perpetual succession - The death of one member does not end the business.
 - iv. Large capital requirement.
 - v. Shares are transferable.

- vi. Requirement to disclose financial information to the public.
- vii. It is a legal entity. It can sue and can be sued.
- viii. Separation of ownership from management.
- ix. Liability of members is limited to the amount of unpaid capital.
- x. Easy access to raising of capital
- xi. Government control and regulation
- xii. Double taxation on the owners

EXAMINER'S REPORT

The question tests candidates' knowledge of the types of business and Limited Liability Company.

The question was well attempted and the performance was very good. About 90% of the candidates attempted the question and they scored over 70% of the allocated marks.

Candidates' commonest pitfall was their inability to express themselves and interpret the question correctly.

Candidates are advised to cover the syllabus so as to prepare very well.

SOLUTION 2

2(a)

- i. Centralisation: is the process by which the activities of an organisation, particularly those regarding planning and decision-making, become concentrated within a particular location and/or group or keeping all of the important decision-making power within head office or the centre of the organisation. In centralised organisation, all decisions, even some of the most basic, must be referred to top managers.
- ii. Decentralisation: is the granting of decision-making authority by top management to subordinates. Decentralisation increases as the degree, importance, and range of lower level decision making increases and the amount of checking up by top management decreases. In a decentralised organisation, action can be taken more quickly to solve problems, more people provide input into decisions, and employees are less likely to feel alienated from those who make the decisions that affect their work lives.

iii. **Matrix Structures:** Matrix structure is a type of organisational structure that combines both the function and product forms of departmentalisation. In matrix designs, managers play three major roles. First, there is the top leader - the individual who has authority over both lines (the one based on function and the one based on product or project). It is this individual's task to enhance co-ordination between functional and product managers and to maintain an appropriate balance of power between them. Second, there are the matrix bosses - people who head functional departments or specific projects. Since neither functional managers nor project managers have complete authority over subordinates, they must work together to assure that their efforts align rather than conflict. In addition, they must agree on issues such as promotions and compensation for specific people working under their joint authority.

Finally, there are two-boss managers - people who must report to both product and functional managers, and attempt to balance the demands of each.

iv. **Network Organisation:** Network organisations get their name from the fact that their only function is administrative oversight. They do not actually produce what they sell. All production-related and marketing functions are carried out by independent companies under contract to the network organization.

b. Advantages of Decentralisation

- i. Relieves top management of some burden of decision making.
- ii. Encourages decision making and assumption of authority and responsibility.
- iii. It speeds up operational decisions by enabling line units to take local actions without reference back all the time.
- iv. Aids in adaption to fast-changing environment.
- v. Makes comparison of performance of different units of the organisation possible.
- vi. Gives managers more freedom and independence in decision making.
- vii. It encourages initiative and motivation.
- viii. Promotes the establishment and use of board controls that may. increase motivation as training opportunities for subordinates.
- ix. Facilitate diversification.
- x. Quicken decision making.

- xi. It improves control and supervision.
- xii. It promotes executive development.

Disadvantages of Decentralization

- i. It makes it difficult to have a uniform policy.
- ii. Increases complexity of coordination of decentralized organisations units.
- iii. It may result in some loss of control by upper-level managers.
- iv. It may be limited by inadequate control techniques.
- v. It involves considerable expenses for training managers
- vi. It can lead to inconsistency of treatment of customers, clients or the public, especially in service industries.
- vii. It could encourage dysfunctional organizational.

EXAMINER'S REPORT

The question tests candidates' understanding of the various forms of organisational structures.

Most candidates attempted the question and the average pass rate is 58%.

The commonest pitfall was candidates' inadequate understanding of Matrix structure and Network forms of organizational structure.

Candidates are advised to prepare well for future examinations.

SOLUTION 3

- a. **Primary Market:** This is a market where securities are sold directly by the issuer to raise funds for the first time. It can also be referred to as the new issue market. **Secondary market** is the segment of the stock market in which stocks, are traded after they have been issued by companies. It is the section of the capital market where securities are bought and sold between investors (traded). The existence of the secondary market encourages trading in the primary market.

- b.
 - i. **Free advertisement and publicity:**
Nearly every newspaper carries on a daily basis, the list of quoted companies and their share prices.
 - ii. **Enhanced prestige and reputation:**
Quoted companies are more respected than the unquoted or private companies.
 - iii. **Easy valuation of the company:**
Since the share price of a quoted company is easily available, it becomes easy to value the quoted company.
 - iv. **Ability to raise fund at a lower cost.**
 - v. **It helps enhance the possibility of using such shares for settlement of mergers/acquisition consideration.**
 - vi. **Survival and continuity:** For a quoted company with many shareholders, it will be very difficult for the shareholder to allow the company to collapse.
3. **Listing requirements for the First tier and second tier market.**

	First Tier Market	Alternative Securities Market
i.	Company to be listed must be a public limited company registered by the Corporate Affairs Commission (CAC)	The company must be a public limited company registered with the Corporate Affairs Commission (CAC)
ii.	The company must submit to the exchange its financial statements and business records for the past five (5) years	The company must submit to the Stock Exchange its financial reports for the last three (3) years.
iii.	Evidence to indicate that its shareholders are not less than three hundred (300).	Evidence to show that its current shareholders are not less than 100.
iv.	It must submit to the Stock Exchange an audited Financial Statements that is not more than	It must provide evidence that the date of its latest audited account is not more than nine

	nine months prior to its listing.	months prior to the time of filling its application.
v.	Evidence of payment of tax (Tax Clearance Certificate) for the period of its operation.	Evidence of payment of tax for the period of its operation.
vi.	The application for listing must be sponsored by one of the dealing members of the exchange.	The company's application for listing must be sponsored by one of the dealing members of the exchange.
vii.	It must provide a guarantee that at least 25% of the issued share would be made available to the public.	Evidence to indicate that not less than 10% of its issued capital will be taken up by the public.

EXAMINER'S REPORT

The question tests candidates' understanding of the operations of the financial market, specifically the segments of the capital market.

The candidates displayed a poor understanding of the question.

The performance was not impressive as more than 70% of the candidates that attempted this question scored less than 50% of the allocated marks.

Candidates are advised to familiarise themselves with every part of the syllabus.

SOLUTION 4

Appraisal of the project using Internal Rate of Return.

GBOZA LIMITED

Year	Cashflow	DF @ 10%	PV	DF @ 20%	PV
	₦		₦		₦
0	(2,000,000)	1.000	(2,000,000)	1.000	(2,000,000)
1	600,000	0.909	545,400	0.833	499,800
2	600,000	0.826	495,600	0.694	416,400
3	600,000	0.751	450,600	0.579	347,400
4	600,000	0.683	409,800	0.482	289,200
5	600,000	0.621	372,600	0.402	241,200

6	600,000	0.564	<u>338,400</u>	0.335	<u>201,000</u>
			<u>612,400</u>		<u>(5,000)</u>

$$\text{Internal Rate of Return (IRR)} = DF_p + \left[\frac{NPV_p}{NPV_p + NPV_w} \times (20\% - 10\%) \right]$$

$$= 10\% + \frac{612,400}{612,400 + 5,000} \times 10\%$$

$$= 10\% + \frac{612,400}{617,400} \times 10\%$$

$$= 10\% + 0.992 \times 10\%$$

$$= 10\% + 9.92\%$$

$$= \underline{\underline{19.92\%}}$$

Where

DF_p = Discount factor yielding positive NPV

DF_n = Discount factor yielding negative NPV

NP_p = Positive NPV

NP_n = Negative NPV

ALTERNATIVE SOLUTION

Year	Cashflow	DF@10%	PV	DF@20%	PV
	₦		₦		₦
0	(2,000,000)	1.000	(2,000,000)	1.000	(2,000,000)
1-6	600,000	4.3553	<u>2,613,180</u>	3,3255	<u>1,995,300</u>
			<u>613,180</u>		<u>(4,700)</u>

$$\text{Internal Rate of Return} = DF_p + \left[\frac{NPV_p}{NPV_p + NPV_n} \times (DF_n - DF_p) \right]$$

$$= 10\% + \frac{613,180}{613,180 + 4,700} \times 10\%$$

$$= 10\% + 9.92\%$$

$$= 19.92\%$$

b. The decision rule

Accept all projects whose IRR are greater than the company's cost of capital (k).

- i.e. Accept if $IRR > K$
- Reject if $IRR < K$
- May accept if $IRR = K$

If mutually exclusive projects are being considered the rule is to accept the project that produces the highest IRR.

Following from solution 4(a) above.

Cost of capital $K = 10\%$

$IRR = 19.92\%$

Conclusion:

The project should be accepted because $IRR = 19.92\%$ is greater than the cost of capital $K = 10\%$ i.e. $IRR = 19.92\% > K = 10\%$

c. The advantages of accounting rate of return are:

- i. It is easy to calculate
- ii. It is simple to understand and use
- iii. Unlike the payback period, it considers the profit over the entire life of the project.
- iv. It uses readily available accounting data.
- v. It presents the analysis in terms of a familiar percentage figure that can be easily understood and interpreted by all the users of the data.
- vi. It could be used to compare performance for many companies.

The disadvantages of accounting rate of return are:

- i. It uses accounting profits in appraising the project.
- ii. There are no rules for setting the minimum acceptable ARR by the management.
- iii. It ignores time value of money.
- iv. It is an average concept and will hide the size and timing of individual cash flows.
- v. It does not recognise the risk associated with each project and attitude of the management to risks.
- vi. There is no unique definition of Accounting Rate of Return.
- vii. It is a relative measure rather than an absolute measure.

EXAMINER'S REPORT

The question tests candidates' knowledge of investment appraisal techniques.

About 59% of the candidates who attempted the question scored 50% or more of the allocated marks.

Most of the candidates did not have deep knowledge of basic investment appraisal techniques.

Candidates are advised to study very well for the examination.

SOLUTION 5

- a. **The concept of power:** This is the ability to influence others to get something done by way of accomplishing tasks and objectives. It has the ability to control others, to hire, to fire, to determine who uses what resources. It has the ability to co-ordinate the human resources. It has to do with the ability to co-ordinate the human and material resources of the organisation in order to attain set goals.
- b. **Sources of Power**
POSITION POWER:
- Legitimate power
 - Reward Power
 - Coercive Power
- PERSONAL POWER:**
- Expert Power
 - Referent Power

POSITION POWER

- i. **Legitimate Power:** This type of power generates from the formal authority tied to a superior position in the organisation's structure. For example, the position of sales manager confers on him or her the power to elicit co-operation from the field workers in meeting sales targets.
- ii. **Reward Power:** It is the ability to bestow or grant rewards such as promotion, pay rises and merit-pay to subordinates for excellent performance.

- iii. **Coercive Power:** This kind of power has to do with authority to force compliance from others through punishment. The punishment could be in the form of delayed or denied promotion, demotion or outright retrenchment.

PERSONAL POWER

- i. **Expert Power:** This sort of power stems from a leader's special knowledge or skill to perform a specialised task. Leaders at supervisory levels are often respected by both their superiors and subordinates because of the technical skills they possess in their fields.
- ii. **Referent Power:** Referent power relates to charismatic qualities of the leader. A leader's personality characteristics can elicit follower's or subordinates identification, respect and admiration. Because of these personality traits, subordinates often regard their leaders as their mentors and wish to emulate them.

EXAMINER'S REPORT

The question tests candidates' knowledge of the concept of power and sources of power in work organisations. The general performance was poor as about half of the candidates scored below 50%.

The major pitfall noticed was that most of the candidates addressed the question from the literal meaning/knowledge they had of sources of power. The candidates are encouraged to acquire and study the recommended texts for the course.

SOLUTION 6

Factors that constitute barriers to effective communication.

- i. Factors relating to the attributes of the sender (personality of the speaker)
 - Conflicting or inconsistent signals
 - Credibility
 - Reluctance

ii. Factors relating to the receiver:

- Poor listening habits
- Pre-dispositions
- Distractions

iii. Factors relating to both the sender and receiver:

- Semantic problems (misconstrued words or sentences)
- Status differences
- Power differences
- Different perceptions

iv. Environmental factors:

- Noise
- Information overload
- Information underload
- Inappropriate timing
- Inappropriate channel of communication

6(b) Methods of improving communication effectiveness

i. Method for the sender:

- Encourage two-way communication e.g. use of suggestion boxes
- Be aware of language and meaning, use simple expressions
- Maintain credibility
- Be sensitive to receiver's perspective and be open-minded

ii. Approaches for the receiver:

- Listen to the other group or persons intently, that is, be attentive
- Be sensitive to sender's perspective.
- Get into the right mood and frame of mind.

iii. Methods for both the sender and receiver:

- Follow up and encourage feedback.
- Regulate information flow to avoid over-load or under-load of information
- Select appropriate channel of communication

- Respect each other's opinion.

EXAMINER'S REPORT

This question tests candidates' understanding of the factors that constitute barriers to effective communication and strategies for eliminating them. Candidates performed fairly well. More than half of the candidates who attempted the question scored above 50% of the allocated marks. The major pitfall was that candidates approached the question using general knowledge of communication. Candidates are advised to pay more attention to business communication.

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

FOUNDATION LEVEL EXAMINATION - NOVEMBER 2014

BUSINESS LAW

Time Allowed: 3 hours

SECTION A: MULTIPLE-CHOICE QUESTIONS (20 Marks)

ATTEMPT ALL QUESTIONS IN THIS SECTION

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

1. Law contained in judgements of courts is
 - A. Case Law
 - B. Statute
 - C. Civil Law
 - D. Criminal Law
 - E. Company Law
2. The body that recommends persons for appointment as Judges of State High Courts in Nigeria is
 - A. State Solicitor-General
 - B. State Advisory Judicial Committee
 - C. National Judicial Council
 - D. State Ministry of Justice
 - E. State Attorney-General
3. A company is regarded in law as
 - A. Corporate aggregate
 - B. Corporate personality
 - C. Corporate trustee
 - D. Corporate proprietorship
 - E. Corporate municipality

4. The minimum number of persons that could form a Public Limited Liability Company is
- A. 28
 - B. 21
 - C. 14
 - D. 7
 - E. 2
5. The first meeting of a Public Limited Liability Company is called
- A. Annual General Meeting
 - B. Shareholders' meeting
 - C. Statutory Meeting
 - D. Extra-Ordinary General Meeting
 - E. Class Meeting
6. A company director who breaches his/her fiduciary duty to the company is liable to being
- A. Removed from office
 - B. Reported to the Economic & Financial Crimes Commission (EFCC)
 - C. Reported to the Independent Corrupt Practices Commission (ICPC)
 - D. Reported to the Police
 - E. Rusticated
7. A floating charge over a company's properties will cover all of the following **EXCEPT**
- A. Cash
 - B. Stock-in-Trade
 - C. Plant and Machinery
 - D. Rent
 - E. Dividends
8. A company may be declared insolvent in any of the following situations **EXCEPT** if it
- A. Fails to file annual returns
 - B. Has been wound-up

- C. Is a judgment debtor
 - D. Is not a judgment creditor
 - E. Is incapable of meeting its financial obligations
9. The basic law relating to theft, fraud and deception in Nigeria is
- A. International law
 - B. Labour law
 - C. Constitutional law
 - D. Criminal law
 - E. Law of contract
10. The crime of bribery involves all of the following **EXCEPT** the existence of
- A. A giver and a receiver
 - B. The guilty mind of the giver and the act of giving
 - C. The guilty mind of the receiver and the act of receiving
 - D. The exchange of money or any other material
 - E. Refusal to issue receipt for the money involved
11. The basic law relating to bribery could be found in the
- A. Criminal Code, Penal Code, Corrupt Practices and Other Related Offences Act and EFCC Act
 - B. Criminal Code, Criminal Practices & Other Related Offences Act, CAMA, EFCC Act
 - C. Penal Code, ICPC Act
 - D. Judicature Act, ICPC Act, EFCC Act and CAMA
 - E. Criminal Code, Penal Code, Judicature Act, EFCC Act
12. The basic law on money laundering in Nigeria is the
- A. Money Laundering (Prohibition) Act 2011
 - B. Criminal Code
 - C. Penal Code
 - D. Companies and Allied Matters Act
 - E. Criminal Procedure Act

13. Nigeria Deposit Insurance Corporation Act 2003 established the Nigeria Deposit Insurance Corporation which is aimed at protecting
- A. Insurance Industry in Nigeria
 - B. Life Insurance Industry in Nigeria
 - C. Depositors' money in banks
 - D. Government bond
 - E. Commercial Banks' deposit with the Central Bank of Nigeria
14. The essential elements of a contract include the following **EXCEPT**
- A. Offer
 - B. Acceptance
 - C. Consideration
 - D. Intention to create legal relationship
 - E. Invitation to treat
15. An agent that represents a principal in the disposal of real property is called a/an
- A. Broker Agent
 - B. Factor Agent
 - C. Auctioneer
 - D. Mercantile Agent
 - E. Del-credere Agent
16. In Sale of Goods Act, goods include the following **EXCEPT**
- A. Ships
 - B. Aeroplanes
 - C. Tubers of yam
 - D. Chattels
 - E. Money
17. Generally, a Hire Purchase contract has the following characteristics **EXCEPT**
- A. Bailee and Bailor
 - B. Written agreement
 - C. Deposit of a specified sum of money
 - D. Possession of goods by the hirer
 - E. The agreement that cannot be terminated

18. The capital requirement for Re-insurance business is

- A. ₦1 billion
- B. ₦2 billion
- C. ₦3 billion
- D. ₦4 billion
- E. ₦10 billion

19. **ONE** of the duties of a bank to its customers is the duty of/not

- A. Employment
- B. Pay on their behalf without mandate
- C. To assist them
- D. Secrecy
- E. To give scholarship to their children

20. A Trust is managed by the

- A. Beneficiaries
- B. Trustee
- C. Person that created it
- D. Court
- E. Bailiff

SECTION B: ATTEMPT ANY FOUR OUT OF SIX QUESTIONS (80 Marks)

QUESTION 1

a. The laws of Nigeria may be classified into civil law and criminal law.

You are required to explain any TWO distinctions between civil law and criminal law. (5 Marks)

b. One of the conditions attached to loans obtained by a registered company is the creation of a charge on the properties of the company.

You are required to explain briefly any TWO differences between fixed charge and floating charge. (5 Marks)

- c. i. Vicarious liability is an aspect of the law of torts.

Explain vicarious liability briefly, and give **TWO** examples of a situation in which it occurs. (4 Marks)

- ii. 'X' employed 'Y' as a driver and asked 'Y' to take a parcel to X's head office. 'Y' decided to visit a friend who lives five kilometres away from the route to X's office. On his way, 'Y' knocked down 'A' and injured him. 'A' wants to sue 'X'.

Required:

Can 'A' successfully sue 'X'? State your reasons. (6 Marks)

(Total 20 Marks)

QUESTION 2

- a. "The Memorandum and Articles of Association of a company are together the Constitution of the company".

You are required to list any **FIVE** contents of the Articles of Association.

(5 Marks)

- b. Decisions at company meetings are taken by resolutions.

You are required to:

- i. Explain briefly **ONE** type of such resolutions. (4 Marks)
ii. State the quorum at a company meeting and who may convene an Extra-Ordinary General Meeting. (2 Marks)
iii. List **THREE** issues that are considered ordinary businesses at the Annual General Meeting. (3 Marks)

- c. A director that fails to observe fiduciary duties will be liable to sanctions.

You are required to list and explain briefly any **THREE** of such sanctions.

(6 Marks)

(Total 20 Marks)

QUESTION 3

- a. Limited liability companies and partnerships are different in formation and characteristics.

Required:

- i. State any **FIVE** distinctions between a limited liability company and a partnership. (5 Marks)
- ii. Explain briefly the duty that a director's interest shall not conflict with his duties to the company and its consequences. (4 Marks)
- b. Persons proposing to form a company are required to present certain documents to the Corporate Affairs Commission.

You are required to state any **EIGHT** of the documents to be presented to Corporate Affairs Commission for the incorporation of a company. (8 Marks)

- c. Meetings of incorporated companies are for diverse purposes. State the **THREE** types of company meetings. (3 Marks)
- (Total 20 Marks)**

QUESTION 4

- a. Suzee operates a current account with Life Bank Plc. On Monday, she was informed that the credit balance on her account was ₦125,000. She anticipated that on Tuesday, her mother would lodge cash of ₦65,000 into her account, but the mother did not do so.

On Wednesday, she issued a cheque in favour of Timmy for the sum of ₦140,000. On Friday, when Timmy presented the cheque, it was returned unpaid because the credit balance on Suzee's account still remained ₦125,000. Timmy is aggrieved and alleges that an offence has been committed.

Required:

Explain the legal issues surrounding Suzee's act of issuing that cheque. (6 Marks)

- c. The law of agency deals with rules that govern the relationship between commercial agents, their principals and third parties.

You are required to explain briefly any THREE types of agents. (6 Marks)
(Total 20 Marks)

QUESTION 6

- a. i. For a Trust to be validly created, “three certainties” are essential.
You are required to state and explain any TWO of the certainties. (6 Marks)
- ii. Generally, a trustee may be appointed to replace another trustee named in the instrument setting up the Trust.

Required:

State any **FOUR** situations in which a trustee may be so appointed.
(4 Marks)

- b. One of the innovations introduced into the hire purchase contract by the Hire Purchase Act of 1965 is the preparation of a memorandum evidencing the agreement.

Required:

State and explain any **TWO** information that a hire purchase memorandum must contain.
(5 Marks)

- c. A contract of employment, like any other contract, must contain the necessary ingredients to make the agreement enforceable.

Required:

State any **TWO** ways in which a contract of employment could be formed and any **THREE** methods of bringing the contract to an end.
(5 Marks)
(Total 20 Marks)

MULTIPLE CHOICE SOLUTIONS

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

EXAMINER'S REPORT

The questions fairly cover all topics in the syllabus.

Candidates' performance was very good.

SOLUTION 1

(a) The distinctions between civil law and criminal law are as follows:

- (i) While civil law regulates the relationship between two or more persons, criminal law deals with offences that are punishable by the State;
- (ii) The parties in a civil case are referred to as the plaintiff/ claimant and defendant while; the parties to a criminal case are the State or Police Vs the accused.
- (iii) The onus of proof in civil law is on the party that alleges, while the onus of proof in criminal law is on the prosecution;
- (iv) The standard of proof in a civil case is balance of probability or preponderance of evidence while the standard of proof in criminal case is proof beyond reasonable doubt; and
- (v) Whereas civil law is to protect and enforce the rights of individuals who may receive compensation for wrong done to them, criminal law is to punish the wrongdoer.

(b) A charge on a company's property is an interest created in favour of a creditor (e.g. a debenture holder) to secure an outstanding debt of the company.

The differences between a fixed charge and floating charge are as follows:

- i. A fixed charge is in the form of a legal mortgage over specified assets of the company e.g. land, building or fixed plant, while floating charge is not attached to any particular asset;
- ii. The asset so charged in a fixed charge cannot be disposed without the consent of the debenture holder, while for a floating charge the company is free to dispose of any of the assets; and

- iii. For a floating charge, new assets acquired by the company are available to the debenture holder when the charge crystallizes, while for a fixed charge, only the existing assets are covered by the charge.

(c) (i) **VICARIOUS LIABILITY**

This is a situation where a person that has authority over another person will be held liable for the action of the subordinate party that has caused injury to a third party. The conditions under which the rule would apply are:

- Where there is a relationship between the wrongdoer and the person found liable, e.g master and servant.
 - The wrong has been done in the course of employment and within the scope of employment of the wrong doer.
- (ii) In the problem question, there is a relationship of master and servant between 'X' and 'Y'.
- 'Y' committed the wrong for which "X" was being threatened with liability five kilometers away from the head office where he was supposed to go.
 - 'Y' had the accident when he made a detour from his course of duty.
 - 'Y' therefore, was outside the course of his duty when he knocked 'A' down. He was on a frolic of his own.
 - That being so, 'X' cannot be vicariously liable to 'A', even though there was a special relationship of master and servant between 'X' and 'Y'.

EXAMINER'S REPORT

The question tests candidates' knowledge of civil law and criminal law, fixed and floating charges, and vicarious liability principles. Over 80% of the candidates attempted the question.

Candidates' performance was good.

Pitfall: A few candidates confused floating charges and fixed charges with bank charges.

Candidates are advised to study this topic more deeply.

SOLUTION 2

(a) The contents of Articles of Association include:

- (i) The name of the company;
- (ii) Restriction on transfer of shares, if any;
- (iii) Classes of shares and how the shares can be transferred;
- (iv) Names, addresses and description of shareholders;
- (v) Forfeiture of shares;
- (vi) Commission and brokerage on the issued shares;
- (vii) Alteration of share capital; and
- (viii) Company meetings.

- (b) (i) There are two types of resolutions namely:
- Ordinary resolution
 - Special resolution

Ordinary Resolution

Ordinary resolution is a resolution passed by a simple majority of the votes of members present at a meeting and entitled to vote either in person or by proxy.

Notice of the resolution will normally be given but the length of notice depends on type of meeting at which the resolution is to be passed.

Issues requiring ordinary resolution include ordinary businesses of the Annual General Meeting, such as, election/removal of directors, declaration of dividend, appointment of auditors and other matters such as increase of capital.

Special Resolution:

A special resolution is a resolution passed by three-quarters or 75% of the members entitled to vote personally or by proxy at a general meeting, of which not less than 21 days notice has been given, specifying the intention to pass the resolution as a special resolution.

A special resolution is required to make important decisions such as alteration of the businesses of the company, change of name of the company, alteration of the Memorandum/Articles, reduction of capital, winding up, re-registration as public limited company.

- 2b (ii) The quorum for a company meeting shall, unless otherwise stated in the articles, be $\frac{1}{3}$ of members or 25 members (whichever is lesser).
- (iii) Transactions that are considered as ordinary businesses at the Annual General Meeting are:
- Declaration of dividend;
 - Presentation of the financial statements;
 - Election of directors in place of those retiring;
 - Appointment and fixing of Auditors' remuneration;
 - Appointment of members of the Audit Committee; and
 - Election of members of the Audit committee.
- (c) A director that fails to observe fiduciary duties will be liable to the following sanctions:
- (i) **Action in Negligence:** If the breach is negligent in nature, the company can bring an action in court in negligence against the director;
- (ii) **Legal Action for Breach of Duty:** The company can bring an action in court against the director for breach of duty;

- (iii) **Legal Action for Breach of Contractual Obligation:** Where the director is an executive director, he will be liable for such breach as contained in his letter of appointment.
- (iv) **Removal:** A director can be removed by the members at the Annual General Meeting for breach of fiduciary duties;
- (v) **Suspension:** An errant director can be suspended by members at the Annual General Meeting for breach of his fiduciary and official duties; and
- (vi) **Recovery of Secret Profit Made by the Director:** This means that if the director uses any company information for his personal benefit, the company can institute a legal action against the director to recover any secret profit or benefit made by him.

EXAMINER'S REPORT

The question tests candidates' understanding of the contents of the Articles of Association of companies, company meetings and resolutions as well as directors' fiduciary duties.

About 85% of the candidates attempted it. Candidates displayed mastery of the question, and performance was excellent.

SOLUTION 3

- (a)(i) A company is different from a partnership in several ways which include the following:
- A company is formed by incorporation under the Companies and Allied Matters Act while a partnership may be formed by mere agreement which may be in writing or otherwise;
 - Membership of a private company is fifty and limitless for public companies, while the maximum number of partners in a partnership is twenty, except for partnership of professionals in law, accounting and the members in a cooperative society;

- A company, once formed, becomes a juristic person that can sue and be sued. A Partnership does not have a legal personality;
 - The liability of shareholders in a company is limited to their shares, while in partnership, the liability of partners is unlimited, except for limited partners;
 - A company has perpetual succession while in partnership, the death of a member dissolves the partnership if the member is not a limited partner;
 - Management of a company is by directors who may not be shareholders, while management in partnership is by partners excluding limited partners; and
 - A company, being a creation of law, can only come to an end through winding-up while a partnership can come to an end for various reasons such as effluxion of time, death of partners, etc.
- (ii) The principle is that the interest of a director must not conflict with his duties to the company. (S.289 of CAMA).

A director shall not in the course of management of the affairs of the company make secret profit. If he does, he must account to the company.

A director shall not take a bribe in cash or in kind to induce the company to transact business with the person he took the bribe from. Furthermore, a director is not entitled to benefit from the use of company information, property or opportunity to derive secret self-benefit. The consequence of this is that, where it is established that the director took a bribe, or abused his office for self-benefit, he may be removed, or forced to resign from office as a director.

- (b) The documents that are required for incorporation of a company are as follows:
- (i) The Memorandum of Association;
 - (ii) The Article of Association;
 - (iii) The statement of the authorized share capital;
 - (iv) Statutory declaration of compliance sworn to by a legal practitioner;

- (v) Notice of the address of the registered office of the company;
 - (vi) Returns on allotment of share;
 - (vii) Particulars of directors together with their consent to save;
 - (viii) The particulars of the Secretary, if named in articles; and
 - (ix) Any other document which may be required by the Commission.
- (c) Three types of company meetings are:
- (i) Statutory meeting;
 - (ii) Annual General Meeting; and
 - (iii) Extra-ordinary General Meeting.

EXAMINER'S REPORT

The question tests candidates' understanding of the distinction between Limited Liability Companies and Partnerships, company incorporation documents, and types of company meetings.

Over 85% of the candidates attempted it. Candidates understood the question in its entirety, and performance was very good.

SOLUTION 4

- (a) The legal issues surrounding Suzee's act of issuing the cheque are as follows:
- (i) The issuance of a cheque on an account that does not have enough credit balance to cover the value of the cheque is an offence;
 - (ii) A cheque that is returned unpaid by a bank due to insufficient funds in the account is called a dud cheque;

- (iii) Issuance of a dud cheque is an offence under the Dishonoured Cheques (Offence) Act, Laws of the Federation of Nigeria; and
- (iv) The punishment for issuing a dud cheque is imprisonment under the Dishonoured Cheques (Offences) Act, Laws of the Federation of Nigeria.

In summary, the issuance of the cheque by Suzee on an account that does not have sufficient funds is an offence that attracts a term of imprisonment.

- (i) A person that has been convicted by the court for one or all of the offences of theft, fraud or deception may be sentenced by the court as a form of punishment to
 - **Term of imprisonment:** The sentence of a term of imprisonment may be with or without a hard labour, as determined by the court.
 - **Payment of fines:** A person that has been ordered by a court to pay a fine must pay the fine into the coffers of the government.
 - (ii) The consequences of being convicted of an offence include:
 - The creation of a criminal record against the convict;
 - Inability of the convict to contest for any public office;
 - Inability of the convict to hold any political office; and
 - Social stigmatization, which may lead to being shunned by some members of the society.
- 4(c)(i) The veil of incorporation of a company may be lifted in any of the following circumstances:
- Where membership of the company falls below the statutory minimum of two members. In that case, the remaining member will be held liable for the debts of the company;
 - If, in the course of winding up, it appears that certain acts were done or business had been carried out with intent to defraud the creditors or for any other fraudulent purpose;

- Where there is evidence that the company was used to evade payment of tax, the tax authorities could seek recovery of the unpaid tax from the members of the company;
- Where it becomes necessary to determine whether or not the company complies with the laws of the country;
- To determine the nationality of the members where it is suspected that the company is an enemy company; and
- Where those managing the company's affairs fail to disclose to the public that they are acting on behalf of the company.

(ii) The duties of a seller in a sale of goods contract include:

- The duty to ensure that the title he has in the goods is a good one because the law is that a person cannot give what he does not have, (*nemo dat quod non habet*);
- **Duty to ensure that the goods are of merchantable quality, or that they are not goods that are damaged or spoilt.** They must be of good quality in the market;
- **Duty to deliver the goods to the buyer:** This is an essential duty which goes to the roots of the sale of goods contract. The seller must deliver possession of the goods to the buyer. In the absence of delivery of the goods by the seller the contract of sale is not complete; and
- **Duty to ensure that the goods are fit for the purpose for which they are meant:** Once the seller is aware of the purpose that the buyer requires the goods for, then, the seller must ensure that the goods satisfy that purpose.

EXAMINER'S REPORT

The question tests candidates' knowledge of the laws on dud cheques, fraud and financial crimes, lifting the veil of incorporation, and sale of goods.

Around 84% of the candidates displayed understanding of the topics, and performance was very good.

SOLUTION 5

(a) Differences between Private Trust and Public Trust are as follows:

- (i) A Public trust cannot fail for uncertainty of object, but a private trust may fail for such uncertainty. *Cypres* doctrine applies to public trust when the original objective of the trust becomes impossible to perform, and the court is allowed to amend the original intention in order to prevent the trust from failing. However, the doctrine is not applicable to private trust;
- (ii) A private trust pays income tax to the government, whereas a public trust is exempted from paying tax;
- (iii) A public trust can last forever, whereas a private trust in most cases, has limited life span because it is subject to the rule against perpetuity and trust accumulation; and
- (iv) A private trust is enforced by the beneficiaries while a public trust is enforced and managed by the office of the Attorney-General or Public Trustee.

(b) Some of the general obligations of the hirer at Common Law are:

- (i) The duty to take delivery of the goods, which is the subject-matter of the hire purchase transaction, from the owner;
- (ii) The duty to take reasonable care of the goods to avoid loss or damage;
- (iii) The obligation to pay the installment as and when due or as agreed with the owner;
- (iv) The duty to give back the goods to the owner upon expiration of the period of the hire purchase if he is not interested in exercising his option to purchase, or if he defaults in paying the installment due; and
- (v) The duty to give the owner information about where the goods are kept as and when so demanded by the owner.

(c) **The following are the types of agents in the law of agency:**

- **Special Agent:** This is someone who has authority to do some particular act on behalf of his principal, though not on a continuous basis, for instance on a special order to purchase a house or a vehicle;
- **General Agent:** This is someone who has the power to act for his principal in all matters involving business or trades for example, a solicitor or legal practitioner;
- **Factor Agent:** This is an agent who sells or disposes of goods that are entrusted to him. His activities are governed by the Factors Act of 1889;
- **Broker Agent:** This agent negotiates and makes contract for the use and purchase of goods. However, unlike a factor agent, he is not left in possession of the goods. Typical examples are Insurance brokers and Stock brokers.
- **Universal Agent:** This is someone who represents various principles in many aspects of trade. He is appointed by a deed under power of Attorney and has wide powers;
- **Mercantile Agent:** He represents someone in commercial and certain aspects of trade transactions. His duties are similar to those of the factor agent;
- **Auctioneer:** He represents a principal in the disposal of real properties and other assets. He is usually licensed to sell properties of mortgagors who have defaulted and other assets declared for sale by government and individuals. The auctioneer acts between the vendor and the purchaser. He receives commission and invariably sells to highest bidder;
- **Estate Agent:** This agent deals in the acquisition rent-lease and disposal of landed properties. The agent receives commission on such transaction from the property owner; and

- ***Del credere Agent:*** This is a mercantile agent who, in consideration of extra pay, called del credere commission, guarantees to his principal that the third party with whom he enters into contract on behalf of the principal shall duly pay the sum becoming due under the contract.

EXAMINER'S REPORT

The question tests candidates' knowledge of types of Trusts, duties of the hirer and types of agents.

Over 60% of the candidates attempted it. Performance was good overall, but below average in Law of Trusts.

Major pitfall: Most of the candidates lacked adequate knowledge of the Law of Trusts. Candidates should cover this topic for future examinations.

SOLUTION 6

6(a)(i) The three certainties for the creation of a valid trust are:

- **Certainty of words:** The words used in a trust must point unmistakably to an intention to create a Trust. The words must be imperative and unambiguous. They must not be precatory words;
- **Certainty of subject-matter:** This means that the property which is the subject-matter of the Trust must be clearly described and sufficiently identifiable; and
- **Certainty of object:** This means that there must be identifiable beneficiaries, that is, the persons who are to benefit from the Trust.

(ii) A trustee may be appointed to replace one that

- Is dead;
- Is outside the country for over one year;
- Desires to be discharged;
- Refuses or is unfit to act;
- Is incapable of acting; or

- Is a minor or infant.

6(b) The information that the hire purchase memorandum must contain are:

- **A statement of the cash price:** The memorandum must contain the cash price of the goods and the currency denomination;
- **A statement of the hire purchase price of the goods:** Being a hire purchase agreement, the price must be different from cash price. The hire purchase price is cash price plus interest;
- **The statement of date when each installment is to be paid:** The date of the hire purchase installment payment is crucial to the agreement so as to determine the number of installments and when the hirer can exercise option to purchase;
- **A statement of the deposit paid:** This will enable the hirer to know the outstanding balance of the purchase price. This balance is payable by agreed installments;
- **A statement of the true rate of interest:** Without this information, the hirer cannot determine the total cost of the goods under hire; and
- **A list of the goods to which the agreement relates:** This would enable the parties to see at a glance the total number of goods the agreement covers.

6(c)(i) A contract of employment may be formed in any of the following ways:

- Orally or by words of mouth;
- In writing;
- By conduct, or attitude of the parties; or
- Partly orally and partly in writing.

(ii) A contract of employment may be brought to an end by any of the following means:

- Notice from either party;
- Termination of the employees' appointment
- Effluxion of time of the contract of employment;

- Dismissal of the employee;
- Frustration of the contract of employment;
- Death of any of the parties;
- Retirement of the employee;
- Resignation of the employee.

EXAMINER'S REPORT

The question tests candidates' understanding of trusteeship, new innovations introduced into hire purchase contracts, and contract of employment.

55% of the candidates attempted it, and their performance was good. Some candidates displayed very shallow knowledge of trusteeship.

Candidates should get familiarised with the topic.