

**INTEGRATED PERSONNEL AND PAYROLL SYSTEMS
(A CASE STUDY OF NICON INSURANCE CORPORATION)**

By

**Kabiru Wajeje Adamu
(PGD/MCS/2003/2004/1135)**

A Thesis report submitted to the
POSTGRADUATE SCHOOL
FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
In Partial Fulfillment of the
Requirement for the award of
**POSTGRADUATE DIPLOMA
(COMPUTER SCIENCE)**

MATHEMATICS /COMPUTER SCIENCE DEPARTMENT
SCHOOL OF SCIENCE AND SCIENCE EDUCATION

May, 2006

DECLARATION

I hereby declare that this thesis was written by me and it is a record of my own research work. It has not been presented before in any previous application for a higher degree. References made to, published and unpublished literatures have been duly acknowledged.

.....
Kabiru Wajeje Adamu

Date:.....

The above declaration is confirmed.

.....
Mal. M. B. Abdullahi

Date:.....

CERTIFICATION

This thesis report entitled *Integrated Personnel and Payroll System (A case study of NICON Insurance Corporation)* by Kabiru Wajeje Adamu meets the regulations governing the award of the Postgraduate diploma (PGD) of Federal University of Technology, Minna - Nigeria, and is approved for its contribution to knowledge and literature presentation.

.....
Mal, M. B. Abdullahi
Supervisor

Date.....

.....
Dr. L. N. Ezeako
Head of Department

Date:.....

.....
External Supervisor

Date:.....

DEDICATION

I dedicate this thesis work to Almighty God and my dear loving and caring parents. May Allah be with them. Amen.

ACKNOWLEDGEMENT

I wish to thank numerable people who have given me assistance in so many different ways. I acknowledge the commitment of my supervisor in person of Mal. M. Bashir Abdullahi, for putting up enough time and all it take to supervise a work like this, Prof. K. R. Adeboye, Dr. L. N. Ezeako, the Head of Department, Dr. U. Y. Abubakar, the PG Coordinator, Dr. Y. M. Aiyesimi, Dr. N. I. Akinwande, Alh. D. Y. Hakimi, the Departmental Exam Officer, Alh. A. Isah, Mal. A. A. Mohammed, and other members of staff of Mathematics/Computer Science department. I also acknowledge the cooperation of the staff of NICON Insurance Corporation particularly Haruna Rabiou and Jolade of the salary section, Charles Eze, Chinyere Igwe and Ngozi Nnenna of MIS, Chonkia of personnel section and Segun Akintoye of DTCA for giving me most of the necessary data required and for all their contributions. I extend my thanks as well to Ralph C. Armstrong-Ikeri, Nurudeen Adamu, Musa Zubairu, Y. A. Odoma, Ibrahim Ahmed, K. D. Ibrahim (Mrs.) and all the staff of my department for encouragement/contribution both materially and otherwise. Finally, I acknowledge the utmost support of my parent for their morals and spiritual encouragement. May Almighty God reward them abundantly.

Amen.

ABSTRACT

The need for efficient processing of data with little efforts and less resource is the primary (major) objective of any organization or individual. Over the years processing of data has become very difficult to most organization and private individuals because of the manual processes involved, which makes data not to be processed in good time. Also, manual procedures of storage and access to information are time consuming and error-prone. In this thesis we designed a framework that integrates personnel information, salaries and wages computation. We use Microsoft access programming Language to develop the system. Amongst the benefits to be derived includes that the system will provide an effective and speedy search for information that has to do with staff emolument in an accurate, reliable and timely manner.

TABLE OF CONTENTS

Title page	i
Declaration	ii
Certification	iii
Dedication	iv
Acknowledgements	v
Abstract	vi
Table of Contents	vii
List of Figures	ix
List of appendices	x

CHAPTER ONE: General Introduction

1.1	Introduction	1
1.1.1	History of NICON Insurance Corporation	1
1.1.2	Corporation Activities	1
1.1.3	Corporation Management	2
1.1.4	The Management Structure	3
1.1.5	Functions of Personnel and Account Departments	5
1.2	Statement of the Problem	6
1.3	Scope and Limitation	6
1.4	Justification	6
1.5	Aim and Objectives	7

CHAPTER TWO: Literature Review

2.1	The Computer	8
2.2	Characteristics of a good Software	10

CHAPTER THREE: System Analysis and Design

3.1	System Analysis	12
3.1.1	System Investigation	12
3.1.2	Problem areas Identified	13
3.2	The Proposed System	15
3.3	System Specification	16
3.3.1	System Input	16
3.4	Benefits of the new System	23

CHAPTER FOUR: System Implementation

4.1	Choice of Programming Language	24
4.1.1	Microsoft Access	24
4.2	System Changeover	25
4.3	User's guide	25
4.4	Software Installation	25

CHAPTER FIVE: Discussion of Results

5.1	Discussion of Results	28
-----	-----------------------	----

CHAPTER SIX: Summary, Recommendation and Conclusion

6.1	Summary	30
6.2	Recommendation	30
6.3	Conclusion	31

REFERENCES	32
-------------------	-----------

LIST OF FIGURES

Figure 1.1: Organizational Chart	4
Figure 3.1: first point login window	17
Figure 3.2: change password window	17
Figure 3.3: the second point login window.	18
Figure 3.4: Staff entry module	19
Figure 3.5: Personnel Records Sub menu	19
Figure 3.6: Salary Advance Sub menu	20
Figure 3.7: Vehicle Loan Sub menu	20
Figure 3.8: Setup Module	21
Figure 3.9: Salary Increase Sub Menu	22
Figure 3.10: Salary Setup Sub Menu	22

LIST OF APPENDICES

APPENDIX A

Program Flowchart

APPENDIX B

Program Output

CHAPTER ONE

1. GENERAL INTRODUCTION

1.1 INTRODUCTION

1.1.1 HISTORY OF NICON INSURANCE CORPORATION

In 1992, an Indian expatriate, Mr. I. K. R. Rao, who was an adviser to Federal Government on insurance matters, submitted a feasibility study on the advantages of insuring the Nigerian produce and marketing Board with an indigenous insurance organization. The study formed the basis of subsequent discussions and suggestions on the formation of an indigenous, government owned insurance company. The discussions centre on its form, scope and areas of operation. As a result of political problems, the discussions were suspended in 1966.

NICON Insurance Corporation: - African's leading insurer is fully owned by Federal Government of Nigeria. The corporation was established by Decree No.22 of 1969. (cap. 263 LFN of 1966 as amended) with the main objective of assisting in the development of insurance industry in Nigeria and specifically to ensure that Federal Government assets and property are fully protected by way of insurance.

Mission Statement: "Providing superlative insurance and financial services to customers, wherever, whenever and in what ever form desire".

1.1.2 CORPORATION ACTIVITIES

(1) International Activities

The Corporation also has a contact office in London for its international operation. NICON Insurance Corporation spearheaded the introduction of the ECOWAS Brown

Card Scheme to assist Motorist traveling within the sub region. NICON serves as the National Bureau for the scheme in Nigeria.

The corporation becomes fully commercialized in 1992 under the supervision of the Technical Committee on privatization and commercialization (now Bureau for public Enterprises).

(2) Investments

The corporation is widely invested in major quoted stock as well as in a number of projects all over the nation. Some of the corporation contributions to the economy of the country include establishment of the Agricultural Insurance Company, the export Insurance Guarantee Scheme and support to National Economic Reconstruction Fund (NERFUND). Through one of the subsidiary companies, NICON has a substantial participation in the five star deluxe NICON Hilton Hotel in Abuja. This has contributed to making Abuja, our new Federal capital a reality.

(3) Claims settlement

Above all the corporation emphasizes the prompt settlement of claims. In recognition of the importance of paying claims, several measures have been taken to ensure that genuine claims are paid when due devoid of bottlenecks.

1.1.3 CORPORATION MANAGEMENT

The corporation is currently been managed by a team of professionals headed by Mrs. P. M. G. Soares as its Managing Director/Chief Executive Officer, Executive Director (Technical), Executive Director (Special Risks); Executive Director (Finance & Admin.). There are other professionals assisting the Executive Management. They include General Manager, (6) Deputy General Managers (16) Assistant General Managers (9) Senior

Managers, Over (40) Managers and about (50) Assistant Managers. In the entire corporations have over one thousand one hundred & fifty (1,150) employees.

1.1.4 THE MANAGEMENT STRUCTURE

By the very nature of insurance, any cumbersome structure will affect prompt delivery of service to its clients. At the top of the organizational chart in NICON is the Board made up of both the Managing Director and Executive and non-Executive Directors. The Managing Director and Executive Directors make up what is generally called Executive Management. This has recently been expanded to include Deputy General Managers, the Head of London contact office and the corporation secretary/legal adviser. There are four Directorates, namely; Technical, Special Risks, Finance and Administration and Managing Director. Each of them is headed by an Executive Director except that of the Managing Director's Office, which is supervised by the Chief Executive. The directorates supervise the activities of divisions and department under them.

The Technical Directorates oversees the activities of the 10 zones. The Managing Directors Directorate oversees the activities of some support services divisions and departments. They are legal, corporate affairs, audit and organization and methods. The executive management is followed by senior management, which comprises assistant general managers and senior managers. Managers and assistant managers constitute what is known as general management.

NICON Insurance Corporation is parastatals under Federal Ministry of Finance, with about ten (10) Zonal offices, Forty-seven (47) branch offices and one (1) sub-office throughout the federation. The corporation underwrites all kinds of insurance policies including life and pensions. The organization chart is shown below:

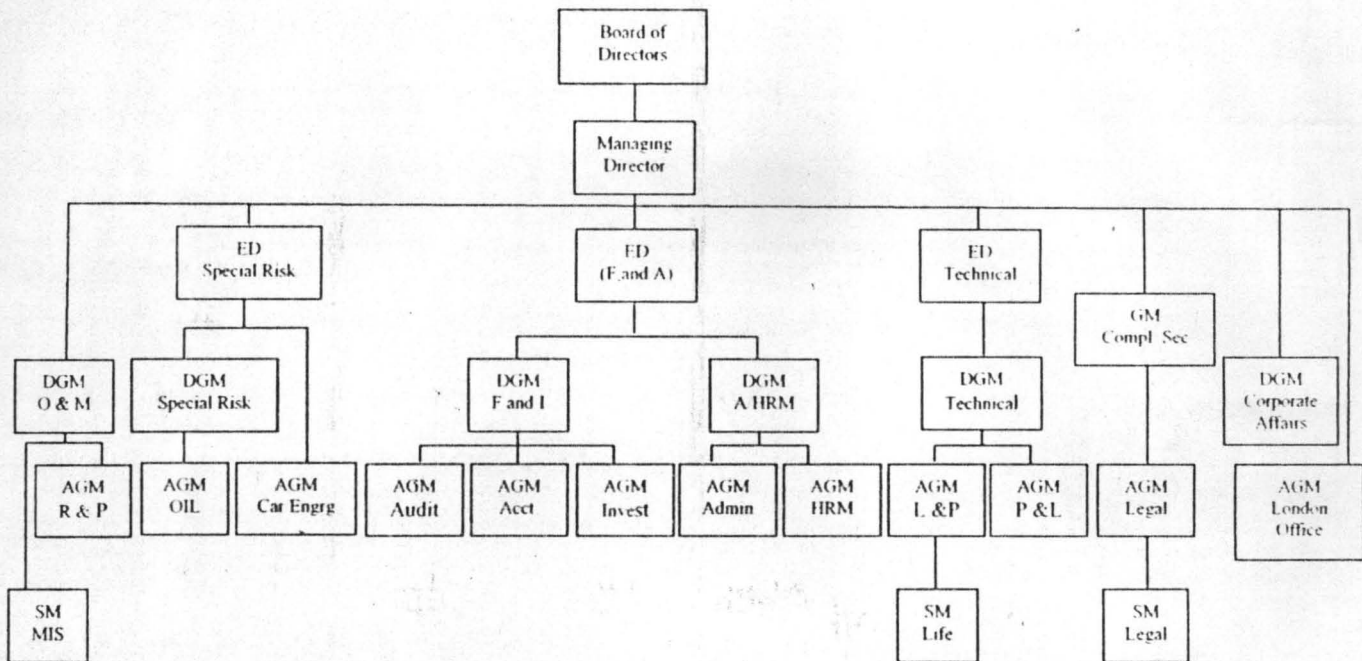


Figure 1.1: Organizational Chart

Keys

ED = Executive Director

GM = General Manager

DGM = Deputy General Manager

AGM = Assistant General Manager

SM = Senior Manager

F and A = Finance and Administration

MIS = Management Information System

P & L = Property & Liability

L & P = Life & Pension

F and I = Finance and Investment

O & M = Organization & Methods

HRM = Human Resources and Management

Car/Engrg = Car/Engineering

1.1.5 FUNCTIONS OF PERSONNEL AND ACCOUNTS DEPARTMENTS

PERSONNEL DEPARTMENT

- (1) The department is responsible for recruitment of qualify staff to the various department, training, promotion, transfer, staff welfare, leave management, loans, disciplinary action and process all approvals for payment to account department.
- (2) **Salary Administration:** This is one of the primary functions of personnel department and also is equally the custodian of all personnel information. So integrating the feature of these functions makes it more convenient in payroll process.

For example: on engagement of a new staff, the following information will be supplied to enable salary processing.

Employee Static Information

- | | |
|------------------------|-----------------------------|
| (i). Directorate | ▪ Cash (Zones and branches) |
| (ii). Division | ▪ Bank Transfer |
| (iii). Department | (viii). Bank Code |
| (iv). Location | (ix). Bank Account |
| (v). Band | (x). Type of Account |
| (vi). Notch | ▪ Savings |
| (vii). Mode of Payment | ▪ Current |

By mere modification of staff band or notch on promotion or annual increment such a staff will automatically receive salary of that Band or Notch.

ACCOUNTS DEPARTMENT

The department;

1. is responsible for all receipts, payments and disbursement of funds to zones and branches
2. is responsible for the co-ordination and preparation of capitals/recurrent, revenue and manpower estimates and
3. ensures adequate provision of essential infrastructural facilities such as office equipments, maintenance of buildings, budget production and custody of stores.

1.2 STATEMENT OF THE PROBLEM

Personnel and payroll operations were performed manually with some problems encountered, the audit check routine takes a lot of time to accomplish. Thus, it affects prompt payment of salaries/wages.

These among other problems give birth to the Integrated Personnel and Payroll System (IPPS) framework in order to minimize the energy and scarce resources involved in manual method of preparing personnel work, salaries/wages and also incorporate checks and balances, which prohibits fraudulent act.

1.3 SCOPE AND LIMITATION

NICON Insurance Corporation Headquarters has the sole responsibility for the recruitment, payment of staff salaries/wages and other relevant entitlements/benefits to all zonal and branch offices. Thus, our computerized system will cover headquarters' personnel and accounts departmental operations only. Not to be connected using network.

1.4 JUSTIFICATION

NICON Insurance Corporation requires a computer based system to handle their various data collection, storage analysis and to meet their timely need of personnel information and salary payments. Payroll is designed to handle and provide all information relating to

the processing of employees salary and these information are to be provided by personnel department. We are now in an emerging technology society, where all manual operations are being computerized for easy access, security, easy search and retrieval of information, performance and reliability. Therefore, integrating electronically, the operations of the personnel and accounts departments will promote the growth of the organization.

1.5 AIM AND OBJECTIVES

The aim of this research work is to provide an effective, accurate, and reliable framework for managing personnel records and payroll. The objectives include:

1. To eliminate the ghost workers syndrome.
2. To manage audit trail records
3. To facilitate generation of various employee and financial reports, this will enhance management decision-making.
4. To eliminate human-errors.
5. To provide an effective and speedy search for information.

CHAPTER TWO

2. LITERATURE REVIEW

2.1 The Computer

The birth of the computer has been facilitated by the increasing needs for faster methods of processing and producing information. Since, the dawn of civilization, people have been searching for information to aid them in their personal battle for survival as well as their attempt to manage their organization/business.

Information is an important basic resource in today's society. It could be seen as data e.g. raw facts or observations that have been put into a meaningful and useful context. This gives the information value for specific persons and meets their particular information needs. Thus, information is a basic resource that individuals and organizations must have to survive and succeed in today's society (O' Brien, 1990).

The computer, being one of the most sophisticated machines ever produced, is a device that accepts data (raw fact), processes it, stores it and gives it out as output.

Input: - The computer accepts data from the user for processing.

Storage: - The computer holds data internally before, during and after processing.

Processing: - The computer performs a specific operation on the data held, depending on what the user specifies to be done to the data.

Output: - The computer produces data out from within for external view, use.

"Program" stored within the computer determine the processing operations of a computer.

A program is a set of instruction that tells the computer to perform a specific task. The computer as a machine only understands binary codes of which any written statement has

to be translated into the machine code equivalence before it can be understood by the computer.

Going through the above discussion a computer machine can now be defined as “a device that works under the control of stored programs, automatically accepting, storing and processing data”.

The computer system can be divided into three main parts namely:

1. **Hardware:** This is the name given to all the physical parts of computer. This includes all visible parts of the computer like monitor, keyboard, mouse and the computer cabinet (containing the power unit, the p-rocessor, main memory, disk drives and the parts for the input and output devices).
2. **Software:** This is the term used to describe the various programs that may be used on the computer system together with their associated documentation. Unlike the hardware where every part fixed on the computer has a definite effect on the capabilities of the system and the functional ability of the computer system, the software can be installed on a computer system, and if not loaded will just be occupying space. Therefore, software that is needed by a particular user could be installed on the computer because it may be useful for another user. There are two main categories of software and they are as follows:
 - (i). **Application software:** program with associated documentation designed specifically to carryout a particular task. For example a payroll program or a program for keeping students' record.
 - (ii). **System software:** These are programs that controls the way the computer operates or provide facilities that extend the general capabilities of the

system. A good example is the operating system and utility software e.g. Window XP and Window 98 etc.

3. **Human ware:** This is the operator of the computer.

2.2 CHARACTERISTICS OF A GOOD SOFTWARE

1. **Reliability:** A program is readable if it is correct and robust. A correct program is one that meets its specifications. For any valid input data, the program produces the output called by the specifications. A robust program is one that continues to execute despite such problems as invalid input data, hardware malfunctions, and even errors within the program responds with an informative error message.
2. **Testability:** This refers to the ease with which the program can be tested for proper operation. The specifications should state precisely the behaviour that the program is to exhibit; testing is meaningless if we are not sure what the program is to do at first place. The program should be constructed from well –defined modules which can be tested individually.
3. **Usability:** Regardless of its technical characteristics, a program must be a practical and convenient tool for accomplishing the task for which it was designed.
4. **Efficiency:** An efficient program executes as rapidly as possible and uses a little memory as possible.
5. **Portability:** A program is readable if it can be readily adapted for use on computer systems other than the one for which it was originally written. Portability is important whenever programs are to be distributed to persons or organizations that may not all use the same computer system.

6. **Maintainability:** This refers to the ease with which a program can be modified to correct bugs or to improve its performance. The programmers, who maintain a program, usually are not the same ones who write it originally. Since, a programmer cannot modify a program without first understanding how it works, simplicity and clarity are keys to maintainability.

CHAPTER THREE

3. SYSTEM ANALYSIS AND DESIGN

3.1 SYSTEM ANALYSIS

A system can be defined as a set of components interacting to achieve a common goal. Thus the integrated of human-ware, software and computer hardware constitute a system.

System analysis is the process of answering questions about how the system under the investigation actually works. Answering question must be preceded by gathering information. At this stage in the software development, requirement definition, which describes an appropriate solution to the existing problems of the current system, is produced. System analysis consists of series of stages forming the life cycle of the computerized system (new system).

3.1.1 SYSTEM INVESTIGATION

System investigation is a method used in gathering all necessary information about an existing system, knowing the strength and the weakness. This method helps us greatly to design the new system. We employed three of the methods of investigation. These include:

1. INTERVIEW

Interview was conducted because of its flexibility, clarity of facts and with the fact human language is ambiguous and different meaning can be attached to a question. Some key officers in account and personnel department were interviewed. Particularly the head of account department, salaries/wages officers and other accounting and personnel officers that are of relevance to the study, some of who are directly or indirectly involve in the

preparation of personnel work and salaries/wages. Therefore, interview was also conducted to see the the problems encountered when preparing their personnel work, salaries/wages and sought to know whether the idea of computerizing their personnel and payroll systems are widely accepted. The entire staff co-operated without bids to the question asked. Other methods employed from the research include the following:

2. OBSERVATION

Observation was carried out on the emolument form, which gives details on the various data to be collected for the processing of salaries in the present system.

3. DOCUMENT REVIEW

Documents such as accounts journals were reviewed. So we obtained there from the format of the existing system on how overdraft and loans are treated. Also it spelt out the conditions necessary for granting both loans and overdraft which are being processed and approved by personnel department.

3.1.2 PROBLEM AREAS IDENTIFIED

Recognition of a problem or need is the point at which a system life begins. Some sort of problem or need is identified. The problem or need could result to fundamentals of computer science and Technology. Because, as organization grows so the transaction volume or information processing requirements. It could also be that of the management of an organization find themselves always in a fix at decision-making meetings as a result of non-availability of important information which should have been made available if not that they are being processed manually. The need might also emerge from sophistication in the use of computers. When the problems are identified, solution plans may easily be put in place for a new or replacement system.

These among other problems are stated below.

Payroll is one of the accounting systems and therefore demands accurate investigation and clarification. With the manual processing of personnel and payroll system in NICON Insurance Corporation, they encountered some problem with major ones being lack of feedback as improper supply of information to the section before the commencement of salary preparation. For example; routines such as loan deductions, payment of allowances and stoppage of salary, experience some delay in most cases because the personnel and salary section are not adequately informed.

In another development, some staff who obtained loan and advances normally would forget expiration date. Despite the staff strength of the personnel and salary section, it is found out that preparation of monthly salary starts as early as the first week of every month. Data of various allowances, loans management etc were collected from personnel department in batches and enter into the personnel emolument card (P.E) as master records which could hardly be changed within a period of time. It takes staff of the unit two weeks to round up this task which will in turn spend another one week with internal audit for cross-checking and verification.

Staff of the section consider the starting period important so as to make sure salary and wages are paid on schedules stating that some banks take a whole week or more, to clear salary cheques. This makes it a bit difficult for those employees whose pay remains in the mercy of these banks. However, those who receive cash (mostly junior staff) collect their pay immediately depending on when the auditors finish their routine checks.

In a nutshell, the problems may be lack of:

1. effective and speedy search for information

2. audit trail records management
3. prompt payment of monthly salary
4. generation of individual pay record cards
5. generation of salary schedules for the banks
6. generation of schedule of deductions and
7. performing salary analysis

The method is however considered ineffective and it is believed that if an integrated personnel and payroll system is adopted, much more improvement could be achieved in terms of general office routine work and time schedule for payment of staff salaries.

3.2 THE PROPOSED SYSTEM

The propose system is not a contrast to the old system but an improvement over the old with little changes. The operational principles still remain the same. The new system, however, displays much higher level of efficiency, and reduces time redundancy to a bearable minimum.

The propose system is user-friendly. It can accommodate a casual user like wise a novice who has a little prior knowledge of what is expected of him/her in a computer generation. It has a little Graphical User Interface (GUI) that makes the software easy to understand and use. To prevent unauthorized access to the sensitive data manipulated by the software, access code would be used. This software generates report for loans, information about staffs of the organization, shares, payment of salary. The objectives of this are:

- To handle large amount of data
- To reduce storage problems
- Provision of a continuous member record list

- Easy compilation of staff's records, etc
- Easy production of staff's records, using any key field e.g. Grade Level
- Easy retrieval of information regarding a staff

3.3 SYSTEM SPECIFICATION

A description of the input and output requirements of the software are given below:

Users: Two or more users can use this software. Ranging from the personnel department to the payroll section of the organization, but for increase in security the system analyst has overall check on any operation processes made.

3.3.1 System Input

The user does input via the keyboard. Input can be made in any of the modules

- (i). Login module
- (ii). Payroll module
- (iii). Setup module

(1) LOGIN MODULE

In this module, there are two points at which a user will be required to enter password. The first part will request for the user's password while the second part request the password that allows a user to access the section chosen (Payroll or setup). Though; the second point will be available after the authentication of the user at the first point. The first login window below allows a user to change his/her password.

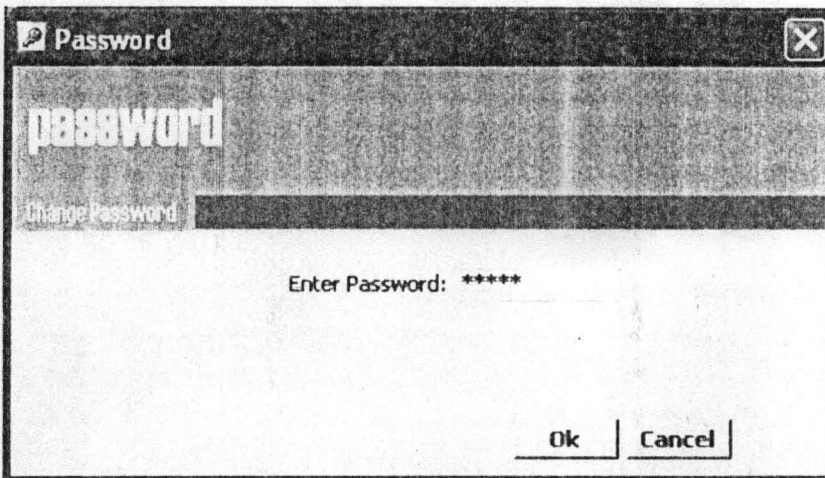


Figure 3.1: first point login window.

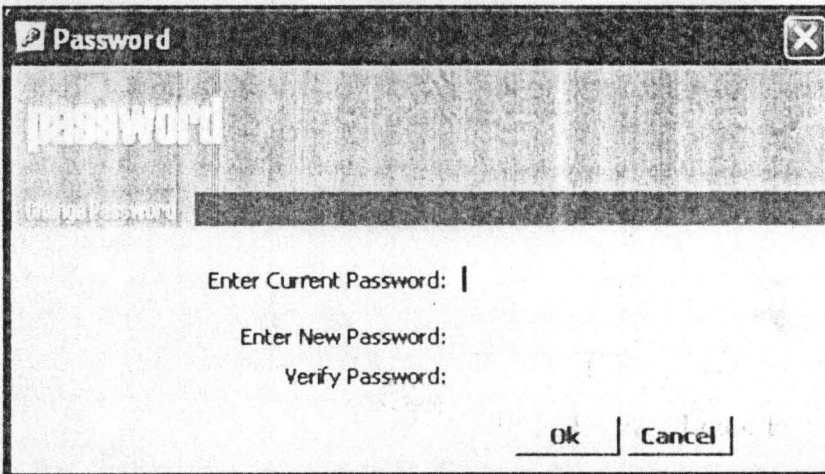


Figure 3.2: change password window.

(2) PAYROLL MODULE

This is the main module, which integrates personnel and payroll records together. It has fourteen sub modules (see Figure 3.4):

Personnel, Salary Advance, Overpayment, Vehicle Loan, Furniture Loan, Housing Loan, Prepare Payroll, Payroll Record, Summary of Payroll, Personnel Emolument, Bank Schedule, Loan Record, Breakdown of Payment and Pay Slip.

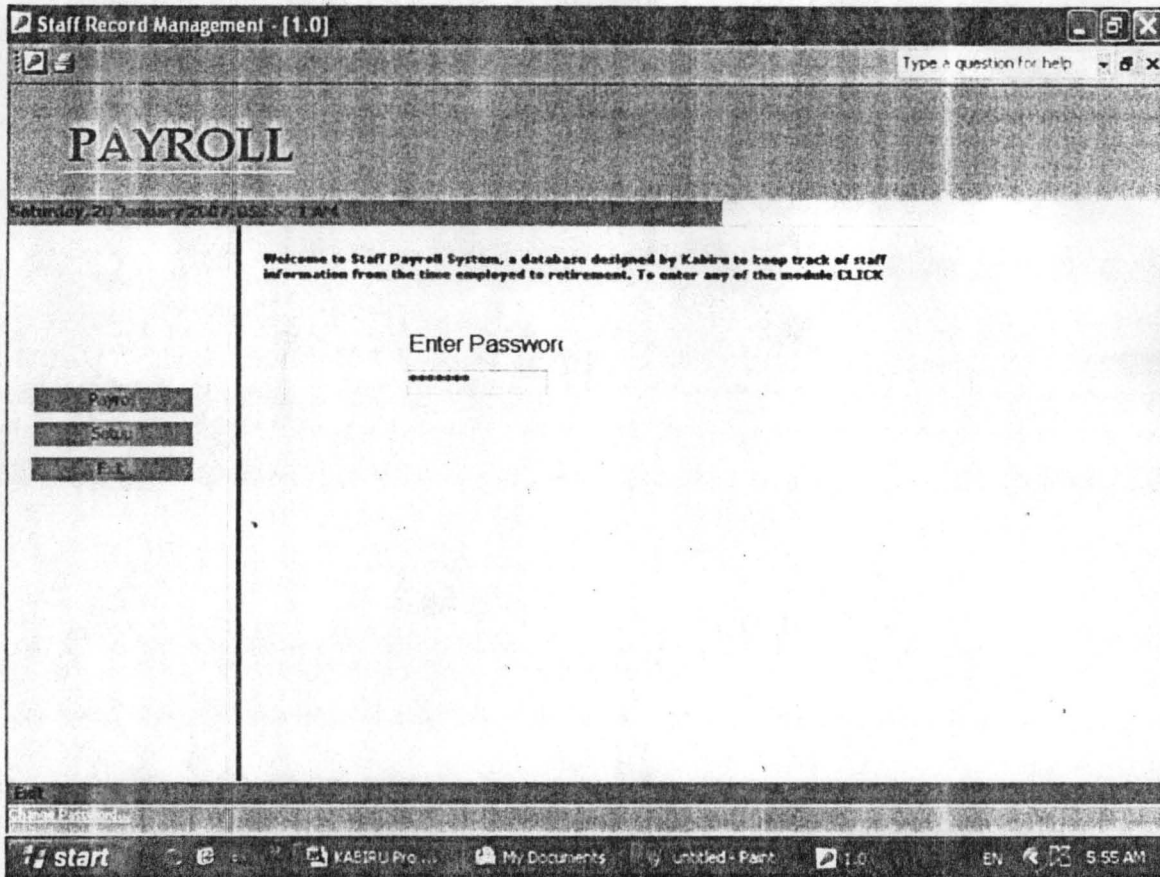


Figure 3.3: the second point login window.

(i). Personnel Entry Sub Menu

In this module input of member's personal data is allowed. This may be done at any time there is a new member, provision is made to modify all data enter at anytime in case of any emergency (see Figure 3.5).

(ii). Salary Advance Sub Menu

This sub menu is used to prepare a salary advance for a staff. The name of the staff will first be selected using file number (see figure 3.6).

(iii). Vehicle Loan Sub Menu

This sub menu is used to prepare vehicle loan deduction process for a staff. The name of the affected staff will be first selected using file number (see Figure 3.7). e.t.c.

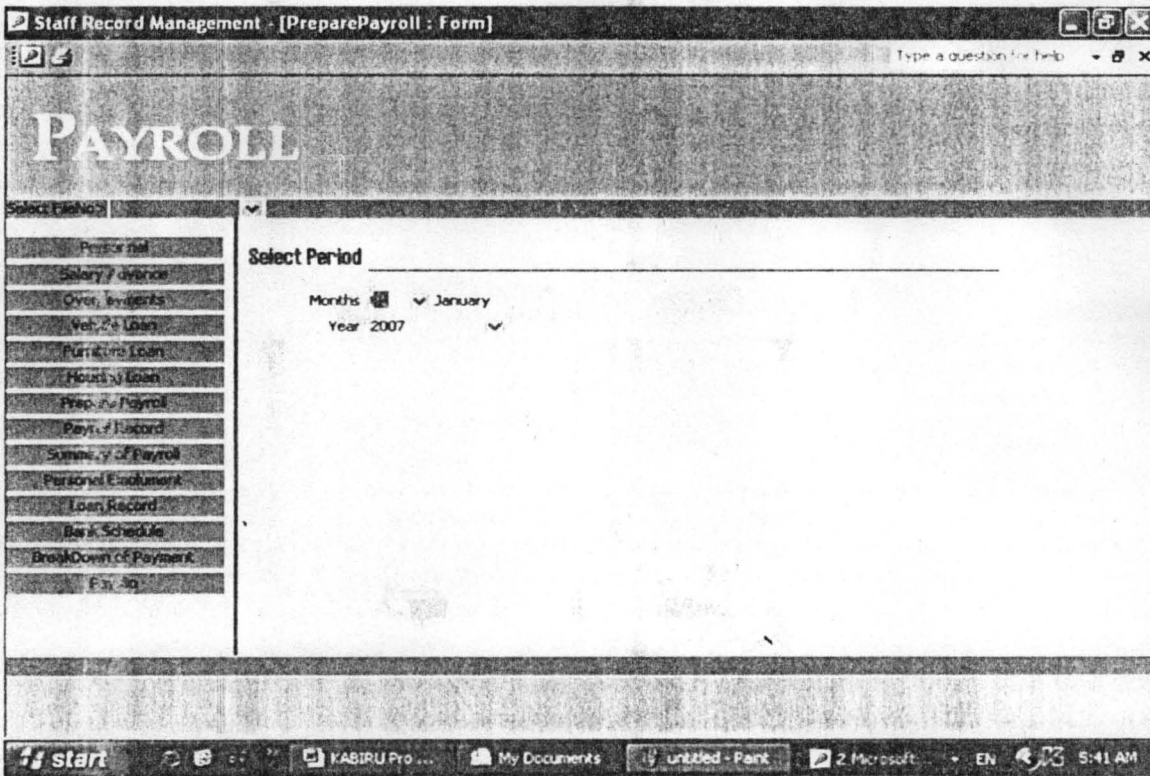


Figure 3.4: Staff entry module

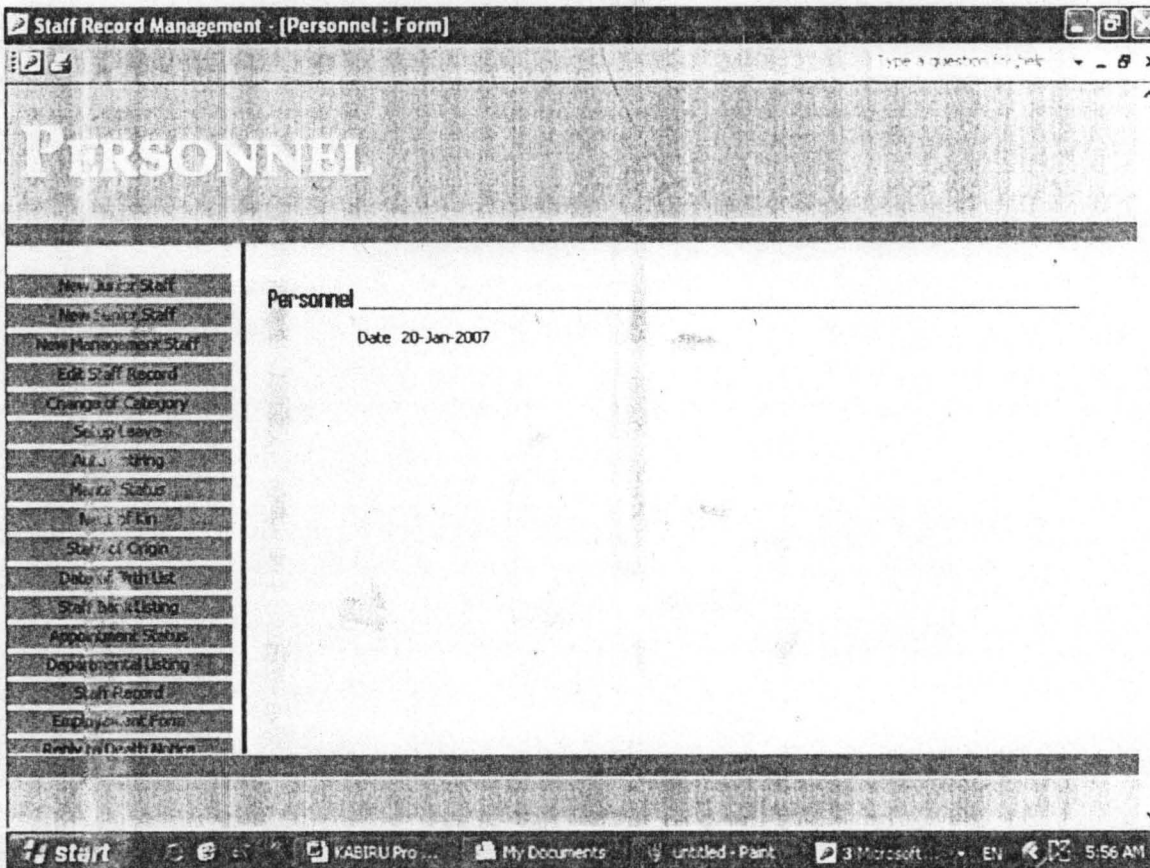


Figure 3.5: Personnel Records

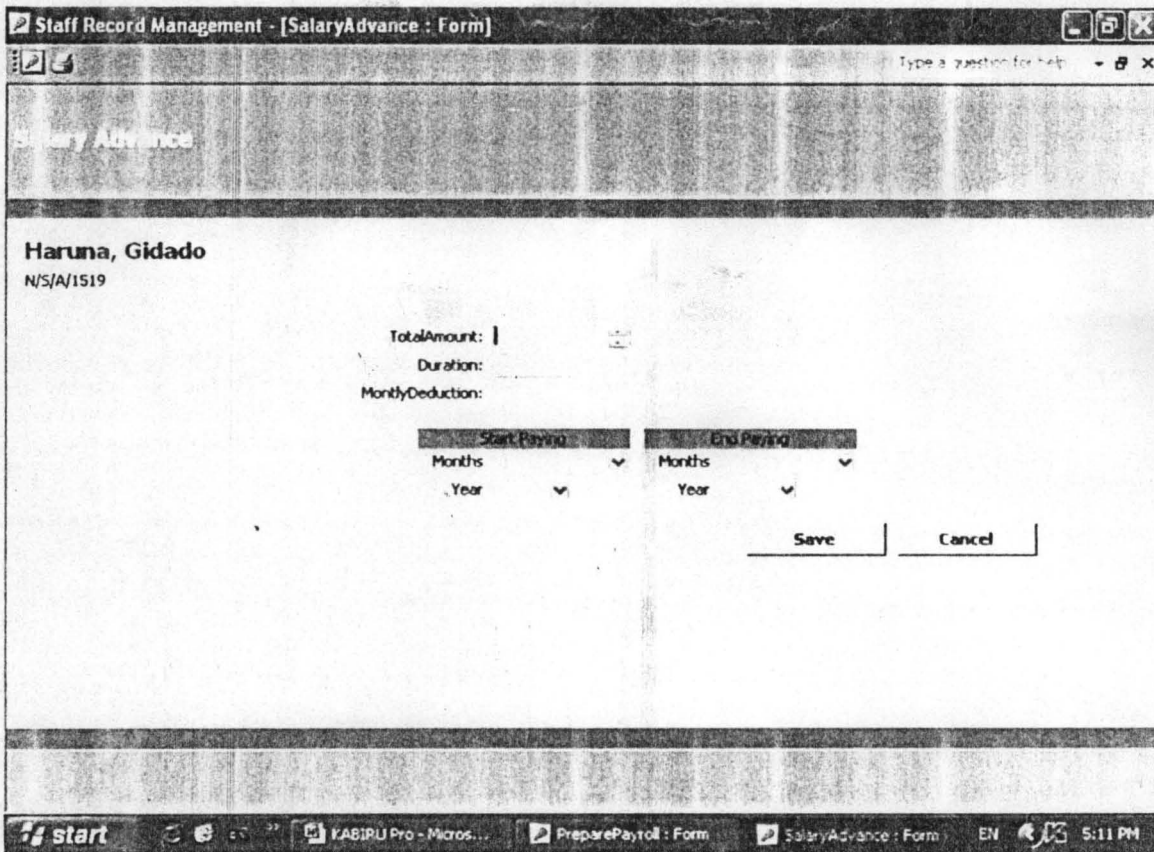


Figure 3.6: Salary Advance Sub menu

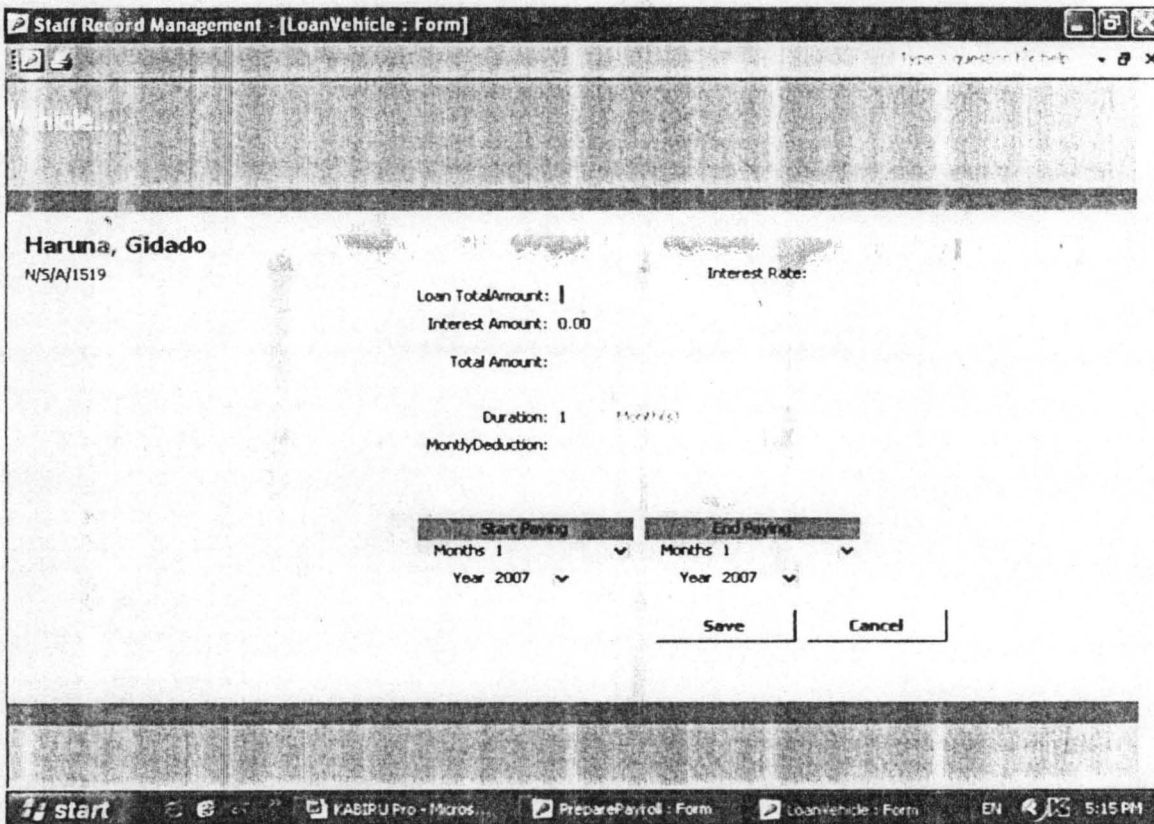


Figure 3.7: Vehicle Loan Sub menu

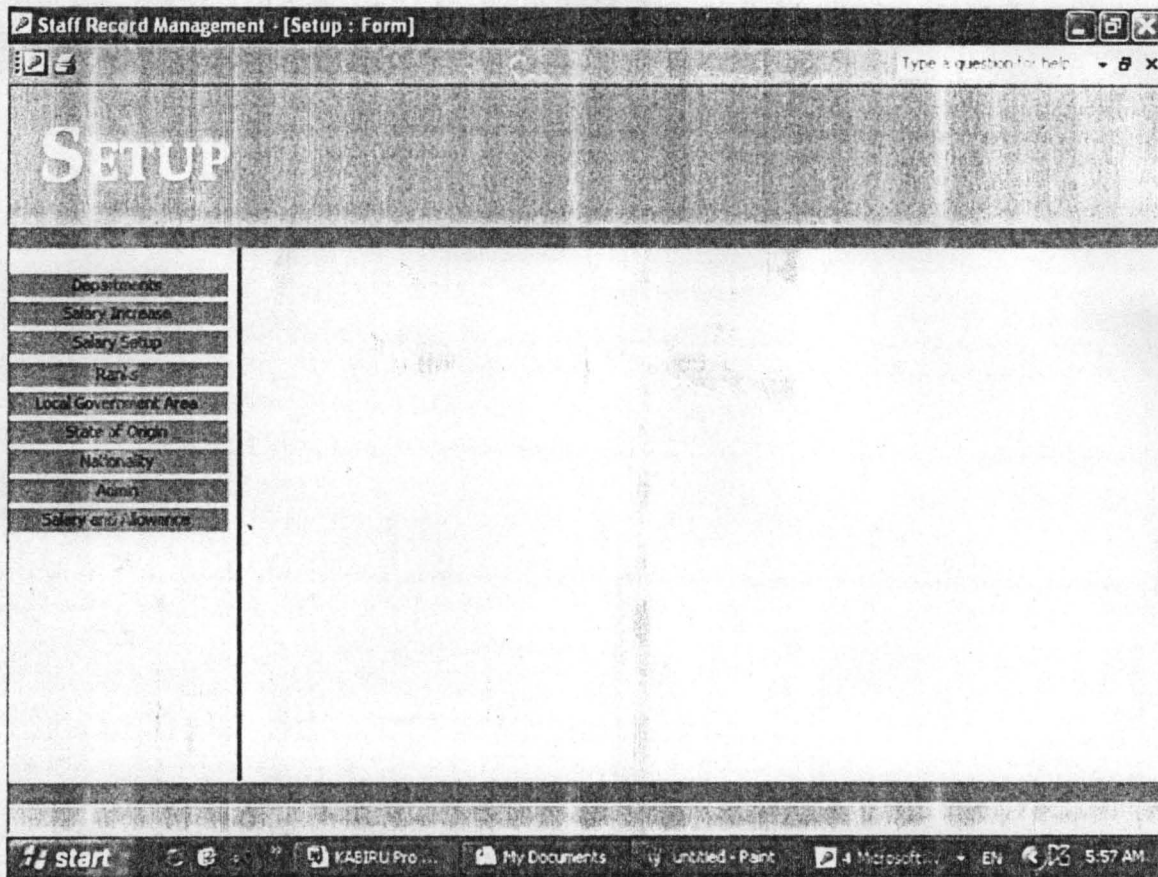


Figure 3.8: Setup Module

(3) Setup Module

This module allows setting up of various operations relating to the salary preparation. These include: department, salary increase, salary setup, ranks, local government area, state of origin, nationality, administration and salary and allowances.

(i). Salary Increase Sub Menu

This sub menu allows a salary increase to a staff to be processed. The band and percentage of the increase will be selected then process (see Figure 3.9).

(ii). Salary Setup Sub Menu

This sub menu allows a salary to be setup for a staff. The band and notch will be selected and the entitlements and deductions will be displayed. e.t.c.

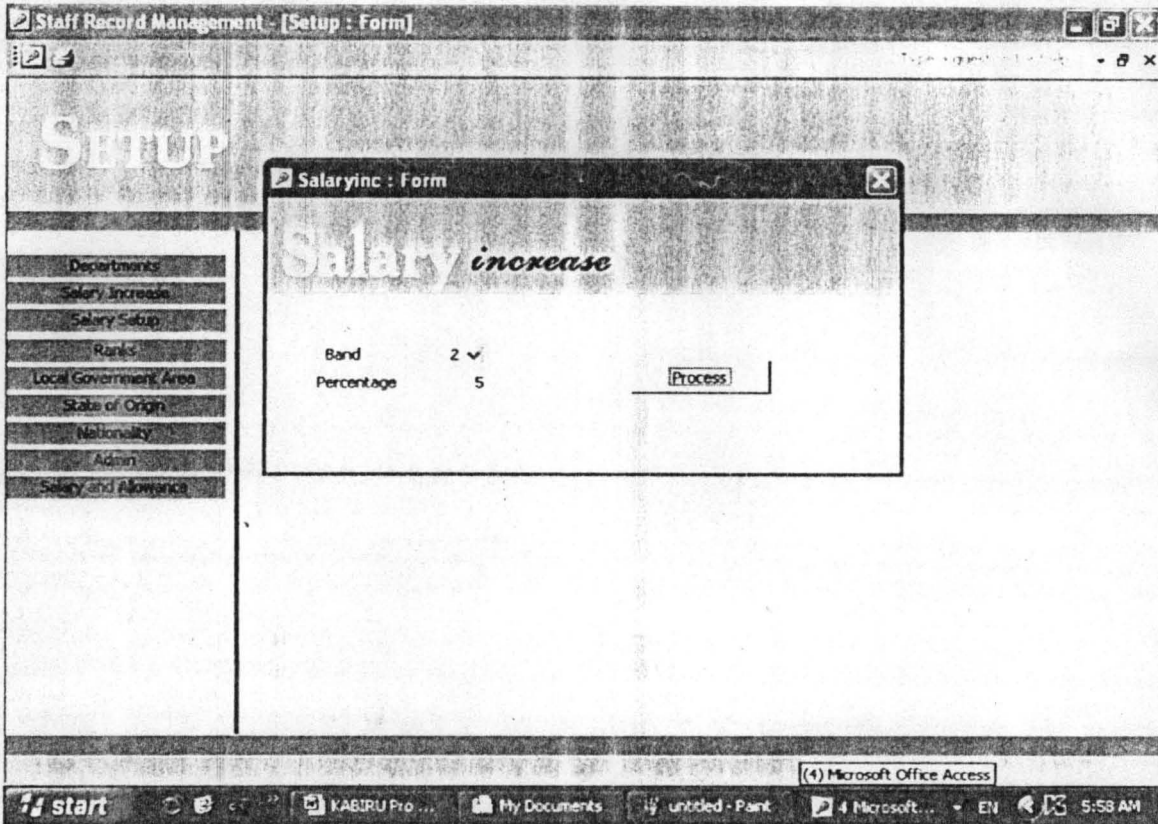


Figure 3.9: Salary Increase Sub Menu

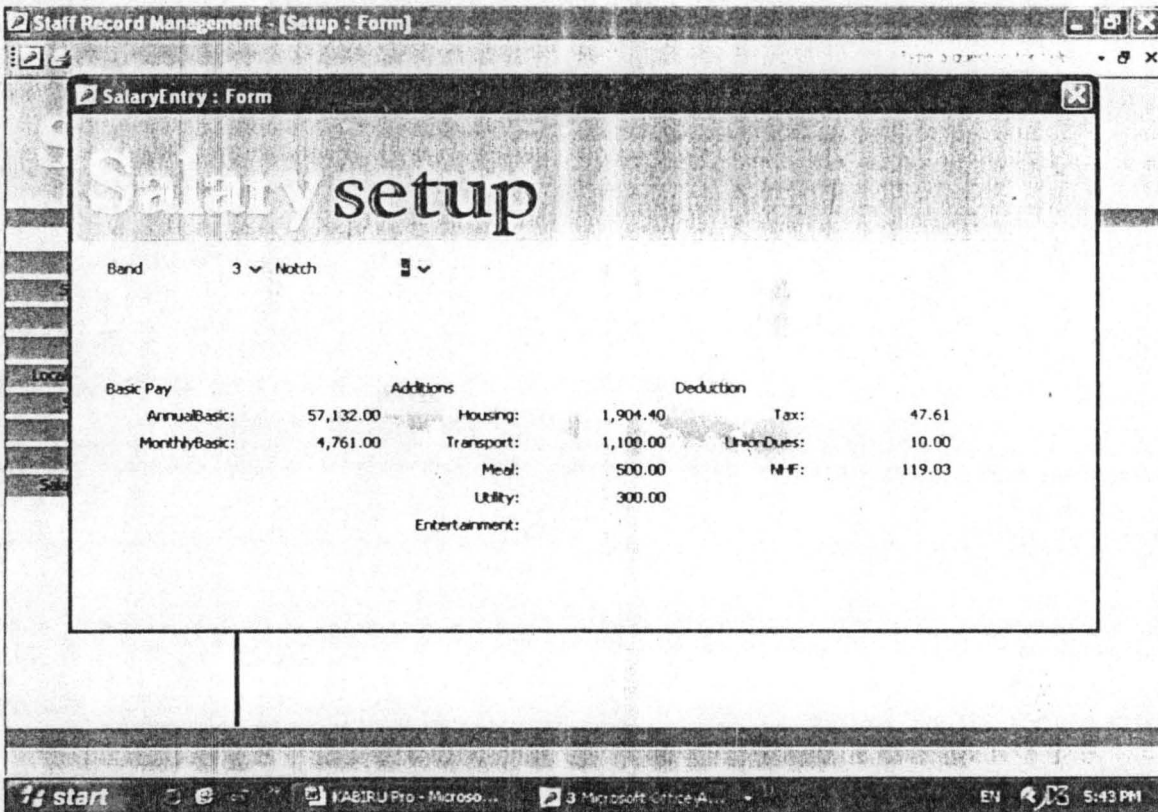


Figure 3.10: Salary Setup Sub Menu

3.4 BENEFITS OF THE NEW SYSTEM

The benefits to be derived from the computerized integrated Personnel and payroll system includes:

1. It has the capacity and capability of eliminating “ghost” workers from the company’s payroll thereby saving money for the management of the company, which can be channeled into other needs.
2. It simplifies the processing of monthly salaries and wages by providing easy-to-implement user interfaces and highly friendly environment that requires minimal training.
3. It provides an effective and speedy search for information that has to do with staff emolument in an accurate, reliable and timely manner.
4. It eliminates human-errors by providing in-built facilities that simplifies most of the tedious tasks such as computation of salary arrears and overtime.
5. For the purpose of auditing, it saves monthly pay details thereby enabling the tracing of various kinds of information such as individual pay voucher, salary arrears and lots more.

CHAPTER FOUR

4.0 SYSTEM IMPLEMENTATION

After the design of a program, the various steps in the program designed are coded into the statements of a programming language. This process is referred to as implementation.

4.1 CHOICE OF PROGRAMMING LANGUAGE

Program: A series of instructions written in a programming language, which specifies processing operations that the computer is to carry out on a particular task.

Programming Language: This is the language in which the program is written, there are various programming languages which are classified under the three levels below.

- Machine language
- Low-Level Language
- High-Level Language

A high-level language was used in the design of this software package, unlike some other programming languages, it is not machine dependent. Source programs are written in "English-like" statement, a great advancement over mnemonics.

4.1.1 MICROSOFT ACCESS

Access is the programming language used in the design of this software package. It is a language widely used specifically for management of databases. Although it is DBASE based, it is substantially different from it.

Access is object oriented, that is revolves around ready-made objects, and it is event driven, one or two events triggers all the activities in a program.

4.2 SYSTEM CHANGEOVER

Validation is the process of assuring that software meets the users' needs. Verification is ability of a program to meet its functional specification. Testing is one method of checking what particular software will give e.g. the new software will be supplied with data that has already been worked on using the old system; if the output of the new system works out to be the same output then the software is working well for that particular organization. Implementation is a process that follows testing which means the software has been accepted and will be used instead of the old software or along side with the old one. Prints out of results of tested data are attached (see appendix C).

4.3 USERS' GUIDE

Any user can use the software, as far as he/she has a little knowledge of computer appreciation. The software package has with it installation software Microsoft Access 2003.

4.4 SOFTWARE INSTALATION

First load Microsoft Access 2003 on the computer system that is to be used for the software, then load the software to your hard disk from the provided CD Rom.

After loading the software, restart your computer system. After booting, from "my computer" go to sector "c" and load the software by double clicking its folder. The program loads to the home page where a password is needed.

LOGIN/PASSWORD

This is the first window that is displayed on the screen on loading the software. Only authorized users will be allowed to have the password to the system. Once the password entered corresponds, access is will be granted to the user.

The Main Menu

This comes after the login window, when access has been granted to the user. Here the user can select option from the following

1. Setup Coding

This includes:

(i). Bank Coding

This is a form where various Banks used by the user are being entered with a particular code of which will be used in the program.

(ii). Salary Coding

This is a form, which allows the user to modify or add to data of a particular grade level for example the tax.

(iii). Tax Table

This is a standard tax table

2. Staff payroll Entry

This includes:

(i). Personnel records

On this menu this is where personal data about a person are being entered.

(ii). Salary

This has two categories:

- Monthly Update: - This is the form used to list what are to be deducted from the salary of a particular staff before the calculation on the net payment for a particular month.
- Reports: - This category generates include the following:
 - Pay Slip
 - Bank Schedule

- Bank Summary
- Details of Payment

3. Exit

This allows the user to quit from using the software.

CHAPTER FIVE

5.1 DISCUSSION OF RESULTS

Personnel/accounting system generally has a great deal of information about the operation of firms. Computer can be used for different personnel and accounting functions such as editing personnel records and pay rolling. Personnel/payroll systems were manually performing with some problems encountered, and it takes a lot of time to accomplish the pay cheques, which affects prompt payment of salaries/wages.

The system initiate all the paper works necessary to pay each employee basic salary and allowances. It reduces and eradicates the problems encountered during the manual method of preparing payroll, which eventually delays the salary payment. It also made editing of personnel record easy, facilitate generation of report, eradicate the ghost workers syndrome, eliminate problems encountered by the use of vouchers and keep an accurate list of staff for easy retrieval. The machine receives the pay rates and allowances for each employee as input data, process the data with written program to calculate necessary deductions and produce the pay cheques as output.

It also makes all the process very easy, interesting and has advantages over the manual/conventional method. Such advantages are:-Efficiency, accuracy, adequate security and of course convenience can not be over emphasized.

Among other advantages are flexibility, stability and high speed of operation, multipurpose, diligence and cost effectiveness.

Integrated personnel and payroll system is considered to be the best and easiest way of retrieving personnel data and preparing staff salaries/wages voucher for final accounting

system. History of staff and their total deduction including their pay slip as well as generated financial reports are produced.

Integrated personnel and payroll system can never be compared to manual system as the result from each has a very wide difference for these reasons; it is advisable for organization to adopt this new system in order to subdue the problem of manual methods of personnel record and payroll system.

The usefulness of computer has now become part of humanity. It is only better imagined what life would have been without them.

CHAPTER SIX

5.0 SUMMARY, RECOMMENDATION AND CONCLUSION

5.1 SUMMARY

Data processing of personnel/payroll system of any department many years ago was manually executed. In view of the shortcomings of this type of system, learned individuals all over the world made concerted efforts and came out with an invaluable breakthrough. Integrated personnel/payroll system has made general personnel and accounting procedure very easy and interesting, advantages such as efficiency, accuracy, adequate security and, of course convenience cannot be over-emphasized. It is worthy of note that integrated personnel/payroll system in NICON Insurance Corporation are in perfect order to measure up with the present period of the millennium bug (the Y2K compliance).

5.2 RECOMMENDATION

The various segment of this project has been tested, and some parts that requires hard copies, have been tested too using a fast and durable non-impact printer.

However, at the beginning of each year, every sectional heads should forward a signed list of offices in his/her section to the head of personnel section. This list should be forwarded along with individual personnel emolument form (PE), and the head of personnel division are to call the list and incite a circular to be issued in November or the preceding year. It is expected that every officers irrespective of his/her grade or status complete the personal emolument form starting the particulars required in the form.

Further more, we recommend that a more capable person(s) should be deployed to man these systems. Computer room should not be opened to dust, sunrays and should be

moderately cool, not damp; this increases the life span of these electromechanical equipments.

5.3 CONCLUSION

This project has been critically analyzed and successfully designed programs are tested and certified workable. The programs are dynamic as though modifications and maintenance culture could be possible if needed to suit the operation of a given department.

Outline below are some advantages of integrated personnel/payroll system:

- (a) Accuracy: It could be relied on in terms of data manipulation and calculation.;
- (b) Flexibility: It could be easily modified;
- (c) Stability: Could hardly be corrupted, because data are firmly secured;
- (d) High Speed of Operation: Cannot be measured or compared with the conventional method of personnel/payroll operation;
- (e) Multi-purpose: personnel record, Journals, Vouchers, bank statements/vouchers etc could be proceed with ease;
- (f) Diligence: It is logically oriented;
- (g) Cost Effectiveness: Reduce labor cost;
- (h) Adequate security: No more alteration of staff salaries/records;

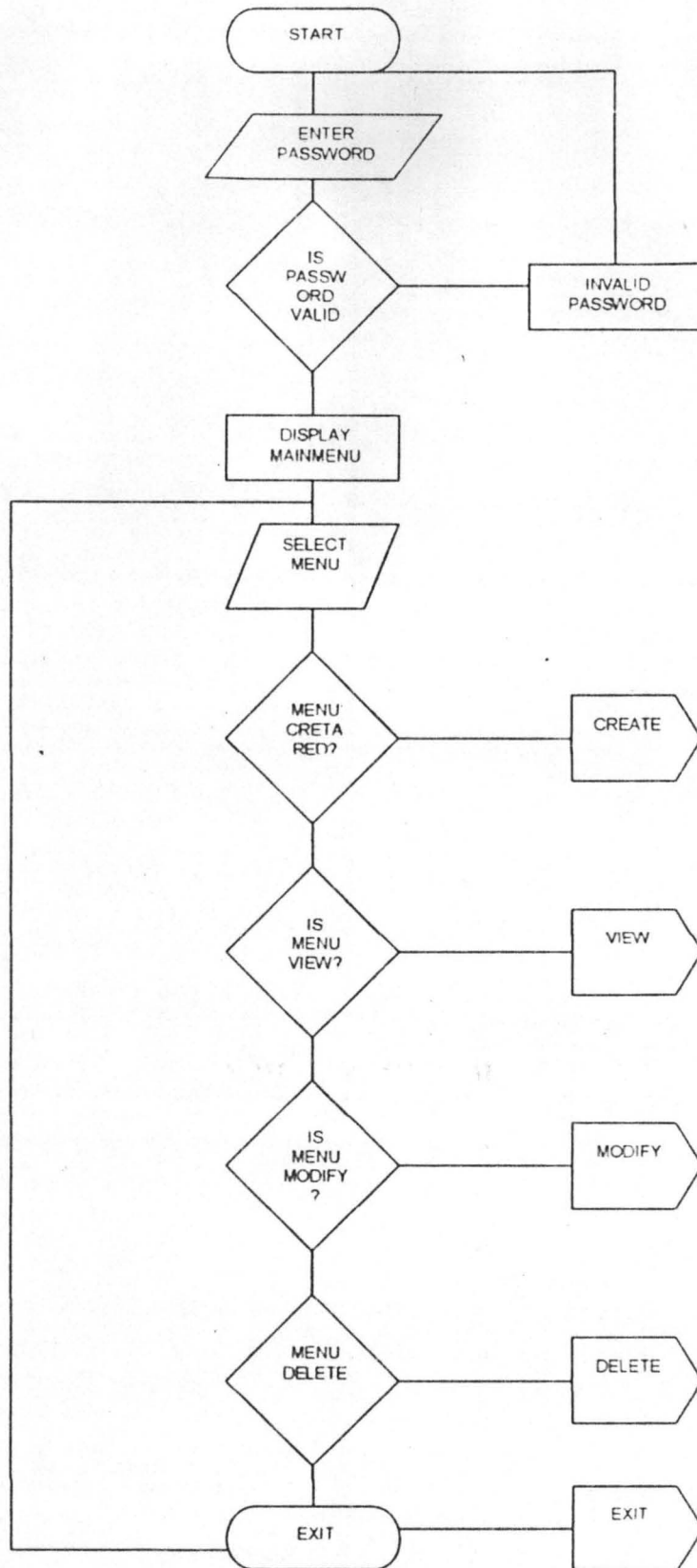
Finally, integrated personnel and payroll system is highly recommended for the effective of operation and manipulation with regards to the above stipulated advantages and to also Keep abreast with modern age technologies.

REFERENCES

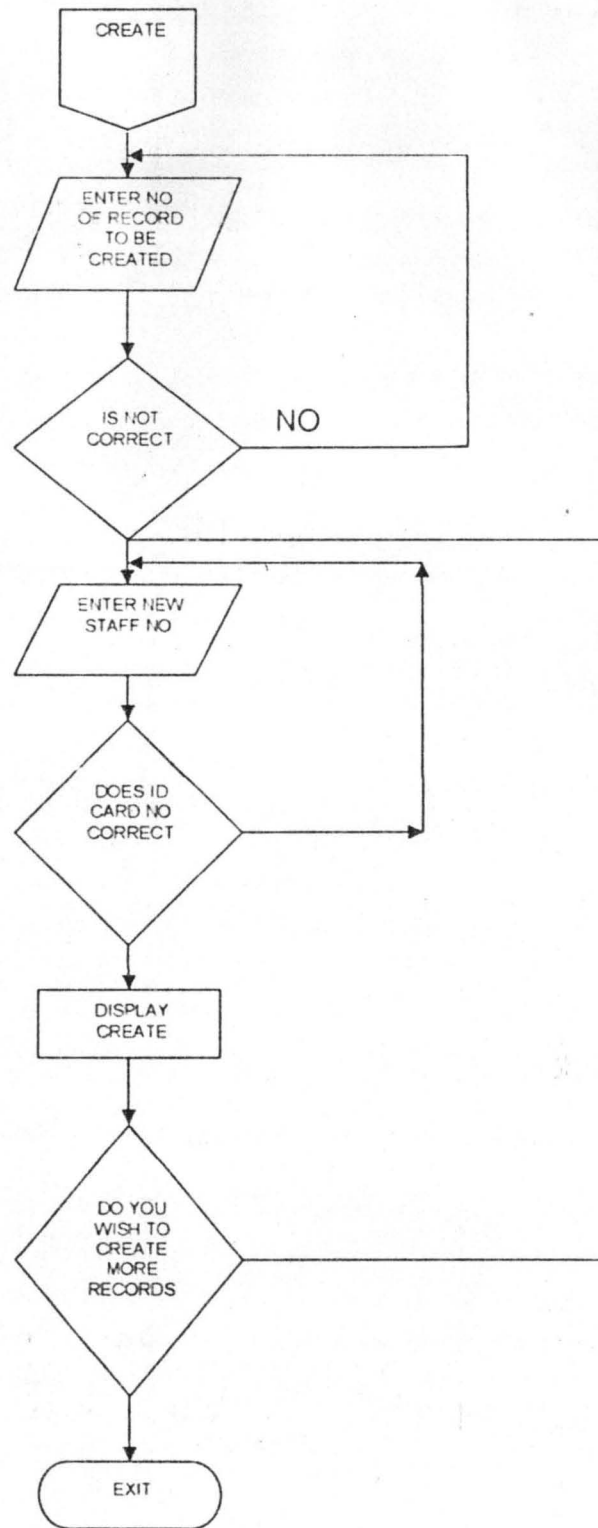
- Ayeni k. J. et at (2001) "An introduction to computer Fundamentals"
Nathdex printers, Nigeria.
- George Oyetola (2000) Students' Training Manual "Introduction to Access
Programming" unpublished.
- Harryskieweyz, I. T. (1989) "Introduction to System Analysis and Design"
McAuthur Press.
- Mallam Hakimi Danladi Lecture Note on File Processing, FUT, Minna.
- O'Brien, James A. (1990) "Management Information System" IRMIN
Homewood, Boston.
- Paramount Computers (2003) "Introduction to Operating System" Students'
Manual
- Staff's Handbook NICON Insurance Corporation

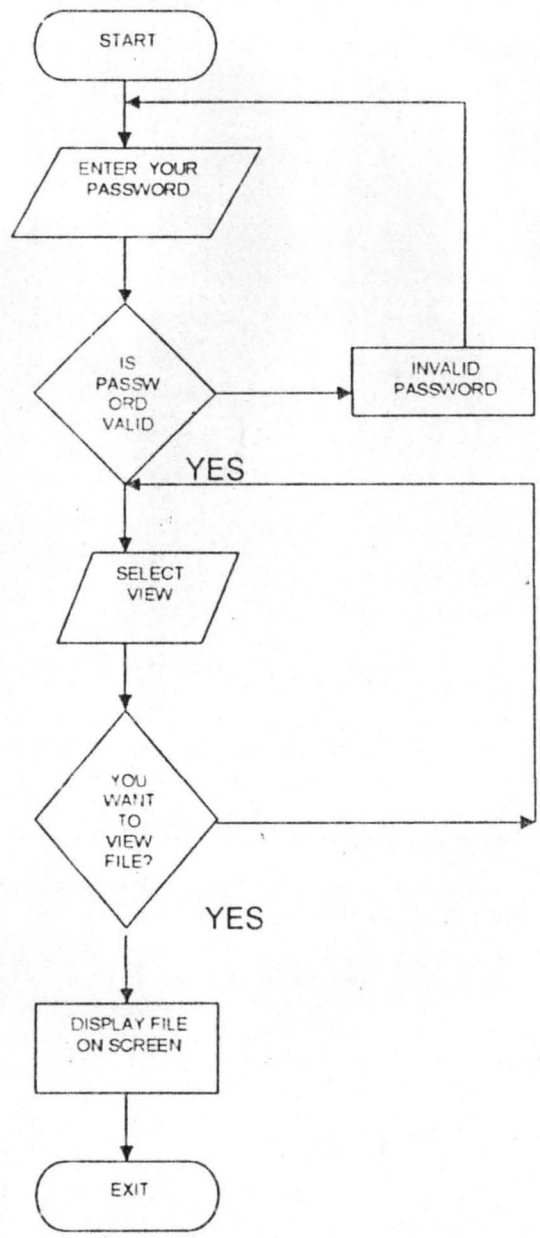
Appendix A

MAIN MENU PROGRAM



CREATE FLOWCHART





Appendix B

Haruna, Gidado

Institution Attended
Working Experience
Contributory Records
Family Records
Change of Department
Promotion
Retirement Notice
Death Notice
Commendations

BIODATA

FileNo: N/S/A/1519
Surname: Haruna
Firstname: Gidado
Lastname:
MaidenSurname:
Sex: Male
MaritalStatus: Married
DateofBirth: 01-Nov-1167
PlaceofBirth: Kaduna
LGA: Suleja
StateofOrigin: Kaduna
Address: Wurno Close, Kaduna, Kaduna State 15 barby Clr Abuja
NextofKin: Gilsod haruna
Abuja Gardens, Opp. National Hospital Abuja
Nationality: Nigeria
DateofMarriage: 12-Dec-2000
EntryQualification: B.Tech

Appointment Records

Appointment Schedule:
Date: 01-Nov-1997 01-Oct-2002
GL: 7/12 7/12
Rank: System Analyst System Analyst
Category: Senior
StaffStatus: Active
Department: Administration

ModeofPay: Bank

Bank: Standard Trust Bank

AccountNo: 1234gh889990





NICON Insurance

Staff Listing using Grade Level

FileNo	Name	Sex	GL/Step	Rank	Category
N/S/A/1519	Haruna,Gidado	Male	7/12	System Analyst	Senior
N/S/A/1492	Garba,Bawa	Male	13/1	System Analyst	Management
N/S/A/1111	oye T T,Tola Tokunbo	Male	1/2		Junior
N/S/A/rgrg	grgr,grgr				Senior
N/S/A/derh	,rh rh				Junior
N/S/A/etet	,				Junior
N/S/A/fhmj	,				Junior
485455	jdvdv,JFJFJF QJJOJ	Male			Senior

PAYROLL PERSONNEL GENERAL



NICON Insurance

Rank Listing

FileNo	Name	Sex	GL/Step	Rank	Category
N/S/A/derh	,rh rh				Junior
N/S/A/etet	,				Junior
N/S/A/fhmj	,				Junior
485455	jdvdv,JFJFJF QJJOJ	Male			Senior
N/S/A/1111	oye T T,Tola Tokunbo	Male	1/2		Junior

System Analyst

FileNo	Name	Sex	GL/Step	Rank	Category
N/S/A/1492	Garba,Bawa	Male	13/1	System Analyst	Management
N/S/A/1519	Haruna,Gidado	Male	7/12	System Analyst	Senior

May-2006
Management/Pension

Garba,Bawa
N/S/A/1492

MonthlyBasic: 20,011.00
Arrears: 0.00
Total(Taxable) 20,011.00

Housing: 8,124.40
Transport: 1,700.00
Meal: 800.00
Utility: 650.00
LeaveBonus: 0.00
OtherBonus: 0.00
Total(Non-Taxable) 11,274.40
GrossPay 31,285.40

UnionDues: 10.00
Tax: 1,015.55
NHF: 507.78
SalaryAdvance: 0.00
Furniture: 0.00
HousingL: 0.00
Vehicle: 0.00
Overpayment: 0.00
Contributory: 0.00
Total(Deduction) 1,533.33
NetPay 29,752.07

Audit Stamp

May-2006
Senior/Administration

Haruna,Gidado
N/S/A/1519

MonthlyBasic: 12,033.00
Arrears: 0.00
Total(Taxable) 12,033.00

Housing: 4,813.20
Transport: 1,450.00
Meal: 700.00
Utility: 500.00
LeaveBonus: 0.00
OtherBonus: 0.00
Total(Non-Taxable) 7,463.20
GrossPay 19,496.20

UnionDues: 10.00
Tax: 360.99
NHF: 300.83
SalaryAdvance: 833.33
Furniture: 0.00
HousingL: 0.00
Vehicle: 0.00
Overpayment: 0.00
Contributory: 0.00
Total(Deduction) 1,505.15
NetPay 17,991.05

Audit Stamp

BREAKDOWN OF PAYMENT
May-2006

Bank	NetPay
Standard Trust Bank	47,743.12
Total:	47,743.12

CERTIFICATE

I hereby certify that the above represent the true position of Salary Transaction for the Month of May-2006

Name of Officer in charge

Sign

Date

Chief Accountant(Name)

Sign

Date

Audit Unit(Name)

Sign

Date



NICON Insurance

Staff Listing using Grade Level

FileNo	Name	Sex	GL/Step	Rank	Category
N/S/A/1519	Haruna,Gidado	Male	7/12	System Analyst	Senior
N/S/A/1492	Garba,Bawa	Male	13/1	System Analyst	Management
N/S/A/1111	oye T T,Tola Tokunbo	Male	1/2		Junior
N/S/A/etet	,				Junior
N/S/A/fhmj	,				Junior
485455	jdvdv,JFJFJF QJJOJ	Male			Senior