

**COMPUTERISATION OF CONTROL OF
STORES INVENTORY. A CASE STUDY
OF FEDERAL TECHNICAL COLLEGE
IKARE – AKOKO, ONDO STATE.**

BY

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PGD/MCS/1999/2000/881**

**THE FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA,
NIGER STATE.**

SEPTEMBER, 2001

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**A PROJECT SUBMITTED IN PARTIAL FUFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF A POST-GRADUATE DIPLOMA
IN COMPUTER SCIENCE OF THE DEPARTMENT OF MATHEMATICS/
COMPUTER SCIENCE FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
NIGER STATE, NIGERIA.**

SEPTEMBER 2001.

CERTIFICATION

This is to certify that this project work was carried out by YUSUF ABDULLAHI ADEWOLE (PGD/MCS/1999/2000/881) in the Department of Mathematics/Computer Science, School of Science and Science Education, Federal University of Technology, Minna, Niger State.

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SIGNATURE AND DATE

HEAD OF DEPARTMENT

DR. S.A. REJU

SIGNATURE AND DATE

EXTERNAL EXAMINER

SIGNATURE AND DATE

DEDICATION

This project work is dedicated to Almighty Allah, the omniscient, and the king of the day of judgement.

ACKNOWLEDGEMENT

I thank Almighty Allah for his guidance and protection throughout this course of study. I would also like to express my gratitude to the Head of Department Dr. S.A. Reju. My sincere appreciation also goes to my able supervisor, Mr. L.N. Ezeakor, and other lecturers in the department.

In addition, my profound appreciation goes to my parents. Alh. Yusuf Adewole (Ologbin) and Alhaja Raliat Yusuf Adewole. Sincere gratitude goes to my wife, Mrs. Yusuf Medinat Tinuke and my children for their support and endurance throughout this period.

Also, I am equally grateful to my friend and college Mr. Thomoas Maiyaki for his assistance. I also wish to thank my dear in – law Mr. Wasiu Abdul – Karim, and his friends like Mr. Musa (Baba Azez) and Mr. Ibrahim. I will also like to express my thanks to my brothers and colleague like Mr Gamabari A.I, and Mr. Sheu Ahmad Tijani.

Lastly, I wish to register my thanks to the principal FTC Ikarer Akoko Mr. S.O. Ajo, and the Ag. Vice – Principle of the college, Mr. E.B. Ayodele for their co-operation and assistance throughout this course of satudy. My colleagues at FTC Ikare – Akoko are wonderful I cannot forget them as far as this project work is concerned. May God reward you all.

ABSTRACT

This project comprises development, implementation and maintenance of an application software package on inventory control system at Federal Technical College, Ikare-Akoko, Ondo State.

It most especially takes into consideration the practical training materials, the science laboratory equipment and chemicals, and the products.

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CHAPTER ONE

1.1 INTRODUCTION

Inventory Control is the systematic management of the balance on hand of inventory items involving the supply, storage, distribution and recording of items.

Inventory on business is a list of property held on stock by an organization including finished goods held for sale, goods on the process of production, raw materials and goods that will be consumed in the process of producing goods to be sold and converted in cases within a year. They are reported as current assets on the balance sheets.

DEFINITIONS

Inventory: Inventory is a detailed list of goods, plants machinery and furniture held in stock by an organization including finished goods held for sale, goods in the process of production, raw materials and goods that will be consumed (utilized) in the process of producing goods.

Raw materials: Raw materials are items to be processed into stable products. Goods in process are goods started but not yet completed.

Finished Goods: Finished goods are goods that have undergone complete processing and awaiting consumption.

1.2 AIM OF INVENTORY CONTROL

The aim of inventory control is to calculate capital inventory size. That is the point at which combination of losses resulting from lost sales, because of inadequate supplies are held to a combined minimum. Direct mathematical techniques such as calculus are used for smaller inventory problems. Computer simulations are more effective for larger problems.

Majority of organizations includes among their assets stock and work in progress. Measuring the quantity and value of this asset is tedious subject differing methods, time consuming and there is much potential for error.

1.3 TYPES OF STOCK

Stocks of incomplete or unconsumed items can be categorized as:

- (i) Finished goods held for sale
- (ii) Work in Progress
- (iii) Raw Materials and components purchased for incorporation into products for sale.

Consumable stores: Lubricants, chinks, chemicals, foodstuffs, fuel, spare parts, etc.

The balance sheet usually shows the stock analyzed into categories either on the balance sheet proper or preferably in a note attached to the balance sheet.

INCLUSION IN COST.

For financial statements, inventories are valued at cost or at realizable value whichever is lower. However, the term 'cost' needs some more precise definition.

The expenditure which has been incurred in the normal course of business in bringing product or service to its present location or conduction.

Cost should include:

- (i) Cost of Purchase including transport and handling costs (e.g. carriage in) and any other directly attributable cost, rebates and subsidies.
- (ii) Cost of Conversion

COST OF CONVERSION

It comprise of:

One, cost which are specifically attributable to units of production, that is, direct labour, direct expenses and sub-contracted work. Two, Production overheads. Lastly, other overheads, for example of administration, if any attributable to the particular circumstances of the business to bring the product or service to its present location and condition. In practice, few of

these costs are ever included. Production overheads are overheads incurred for production, based on the normal level of activity. Overheads to be included are all those related to production notwithstanding that they may be accrued wholly or partly on a time basis.

1.4 VALUATION METHODS

The cost of an item in stock should be measured as nearly as possible to the actual industrial cost of that particular item. For instance, in the College store of FTC, Ikare-Akoko, there are Two Hundred Packets of chalk. The most recent purchase of chalk were:

DATE (2000)	QUANTITY	AMOUNT (N)
April 5	160 Packets	225 each
April 14	60 Packets	230 each
April 26	100 Packets	250 each

The cost of each packet of chalks depends on which consignment the individual packets arrived in and this may not be known as the packets are indistinguishable from one another. That is they are tangible assets.

1.5 STOCK TAKING

In practice, stocktaking is a difficult task. Stock is not easy to determine as to quantity and to value. Errors are early committed.

The needs specifically are:

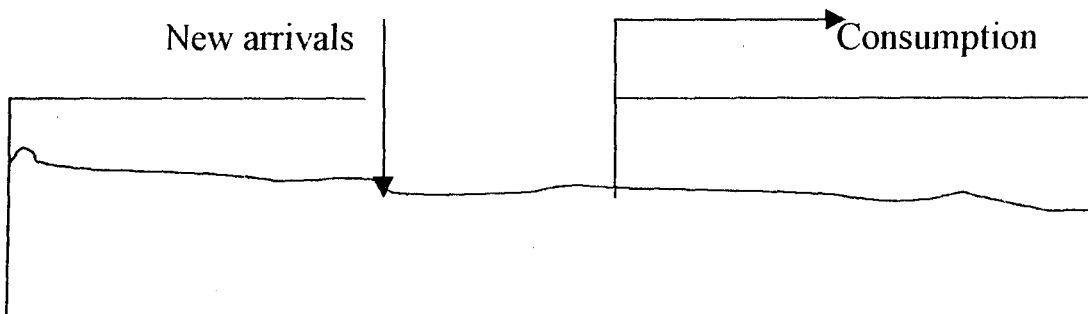
- (i) Identifying precisely (accurately) each item the stock.
- (iii) Counting, weighing or measuring each item of the stock, with a view to quantifying it.
- (iv) Entering the details, entirely, on stock sheets.
- (v) Ensuring that all stock sheets are included. If a stock sheet is left out identification of a stock sheet may become a problem.
- (vi) Determining the cost for each item.
- (vii) Extending quantity price accurately to give value.
- (viii) Identifying and valuing items which need to be valued at net realizable value.
- (ix) Summary, that is, adding together all the values.
- (x) Ensuring accurate cut-off.

Good stocktaking will include:

- (1) Good early planning of the stock taking operation.
- (2) Issuing and taking a decision on instructions to staff.

In practice, organizations use one of the following methods of stock rotation for actually dealing with stock.

- (i) The oldest are used up first, especially for perishable items like food stuffs.
- (ii) The latest arrivals are used first. This seems unlikely but if the goods are stacked in a bin as shown in the figure 2 it will be seen that this can occur.



- (iii) Consumption is from old and new stocks selected randomly. In case of valuation of the year-end stock, a method is selected which approximates (i), (ii), (iii). The methods to correspond with (i), (ii), and (iii) are:

- (a) First in First Out (FIFO)
- (b) Last in First Out (LIFO)
- (c) Average Cost (AVCO).

- (3) Division of the entire stock into manageable areas for control purpose.
It is easier to manage small area of stock than a big one.
- (4) Adequate and proper instructions for counting, weighing, measuring, and checking.
- (5) Two persons are to be involved in counting, weighing, and measuring of each item.
- (6) Procedures, that is the methods, for marking items which have been counted.
- (7) Control of movement when stocktaking is taking place.
- (8) Cut-off procedures.
- (9) Procedures, that is the techniques, for identifying damage, obsolete and stock which are not fast moving.
- (10) Identification of stock on the premise owned by third parties and of stock held by outside parties.
- (11) Control over the issue of blank stock sheets and the return of completed and unused stock sheets.

2.1 HISTORICAL BACKGROUND

Federal Technical College Ikare-Akoko was established in January, 1999 by Federal Ministry of Education.

The College is divided into Academic and Non-Academic both working towards making teaching and learning smoother and more profitable.

The non-academic consists of Maintenance section, Accounts, Central Administration, Kitchen, Security, and Clinic departments.

The academic consists of General studies, Commercial and Engineering departments. The General studies are concerned with English Language, Mathematics, Physics, Chemistry, Social Studies, and Small Business Management. The Engineering department comprises of courses like Radio and Television (RTV), Electrical Installation and Maintenance (EIM), Carpentry and Joinery (C & J), Cabinet Making, and Building, Bricklaying and Concreting (BBC). The commercial consists of courses like the Catering Craft Practice, BookKeeping, Accounting, and Computer. The College Authority gave the Engineering and Commercial the authority to produce and sell what they can produce.

The Accounts departments are splitted into Accounts and Stores sections. The account section takes care of Finance, Budget, and Stores with the help of the Accountants and Clerks.

The Stores section of the College has a small Store, each of these stores has a linkage with the main store. Hence, store work hand-in-hand with every section of the College.

PROBLEM DEFINITION

Computerized inventory control for FTC Ikare - Akoko

2.2 INVESTIGATION OF THE EXISTING SYSTEM

The Accounts and Stores sections work hand- in-hand with other sections to ensure that inventory taking is properly done. The stores section issues out the stores Issues Voucher and Stores Receipt Vouchers to the various sections. Delivery note, Purchase Order status, and related documents are sent to the Accounts section where the inventory clerk now enters all the information into their respective files on daily basis.

2.3 OBJECTIVE OF THE EXISTING SYSTEM.

The objectives of the existing system are:

- (i) To take accurate stock of items for inventory.
- (ii) To reduce and stop pilferage
- (iii) To calculate optimal inventory size
- (iv) Control the issues of blank stock sheets and the return of completed and unused stock.
- (v) To determine the cost of purchasing and producing goods.

2.4 ANALYSIS OF THE EXISTING SYSTEM.

The analysis of the current inventory control system at FTC Ikare-Akoko was made possible with the assistance of the Accounts section of the College.

During the process of the analysis, the current system was found to be full of holes.

2.5 LIMITATIONS OF THE EXISTING SYSTEM.

The following are the limitations of the current system:

- (i) Information are not processed on time since all the processing depend on the clerks and officers concerned.
- (ii) The speed with which data is accessed is very slow since a lot of files have to be checked.

(iii) No responsive service between the stores and the other sections in the College.

(iv) There is lots of duplication of information.

Therefore, the existing systems altogether needs to be improved.

2.6 METHOD OF DATA COLLECTION

It is done to seek additional information about the problems and objectives under investigation. Emphasis was given to the strength and weakness of the existing data and information processing system. The internal source of data was used. That is the College Organogram, forms, documents, data processing documentation manuals, the accountants, clerks and officers. The tools used in the collection of data here are interviews and direct observation.

Physical Inventory Count Sheet

It provides a method of recording physical inventory. An optional Quantity-on-hand column for comparison with physical inventory is purchased.

Inventory adjustment report

It shows adjustments made to the price/quantity of stock items. It is therefore used as an audit trail for price/quantity of stock items.

stock. The returnable/non-returnable goods gate pass is for the goods that are either for consignment or samples. The blue copy of the quadruplet goes to the consignee, the brown copy to the Accountants, the red to the Security and lastly the black to the book.

Bin Card

The Bin Card is always attached to a particular item in the Bin. The Bin is the location of a stock item in the store. On the Bin card we have the machine, name of part, card number, the date stock was received, reference number, the number of goods received, the number issued and the balance between them, initials of the person issuing from the store. This card is usually attached to the stock items in the store.

Purchase Order Requisition Form

It is like the material requisition form. It contains the type of stock to be purchased. This is usually after the stock has been obtained to its re-order level. The economic order quantity is always taken into consideration here.

Other methods of data collection used on the College Store include:

Goods Received Note

Goods received note is just to show whenever the supplies brought in the required quantity of items or not. The note has its own unique number. The number is usually written on the invoice gotten.

Material Requisition / Issue Form

This form is in quadruplet. It shows the code/item number of the item, the quantity issued and the description of the items issued, the individual approving and receiving the issues, and also the date of the issues. Each of its copy goes to the book, security, store and accounts respectively.

Stock Card

The stock card is very important in stocktaking. It is used to record three main processes. Material received issues, and their balance. For materials received, it has the date of receipt, reference number (unique) of the material, its quantity, unit price and value. While for stock issues it has the date stock was issued, requisition number, job number, quantity, unit price and value. Lastly, we have the quantity, unit price value and the date the stock was checked for a particular item for the balance. At the foot of the sheet we have that maximum and minimum quantity level, order level, the rack level, bin, price and the description of the particular item.

Returnable/Non-returnable goods gate Pass

This form like the stock issues/requisition form is on quadruplet. It contains the serial number, description, quantity, unit price, amount, remarks about the item of the stock concerned. The signature of the person receiving, authorizing and the plate number of the vehicle that conveyed the

Way Bill

The way bill is always attached to the items to be supplied or the items that are bought. It has the L.P.O. number on it, the description of the item, the date of dispatch, time, quantity and the stamp of the customer receiving, the dispatch and the receiver.

Inventory Control File

It is regarded as the most significant of all other files. All purchases and receipts, stock issues are all recorded on it.

Coding/Numbering

To make inventory control easier and faster items are all coded or numbered to reduce the possibilities of duplication and a long varying descriptions.

2.7 COST/BENEFIT ANALYSIS

COST OF CHANGING THE EXISTING SYSTEM

Since the existing system is a manual one and the system being worked upon is a computerized one, we have:

Items	Cost (N)
System Analysis (2 months)	25,000.00
Software Acquisition	20,000.00
Cost of Computer System	100,000.00
Cost of Printer	30,000.00
Installation Cost	10,000.00
Computer stationeries (12 months supply)	10,000.00
Hiring and training of personnel	30,000.00
Personnel (cost per annum)	90,000.00
Networking system	60,000.00
TOTAL	375,000.00

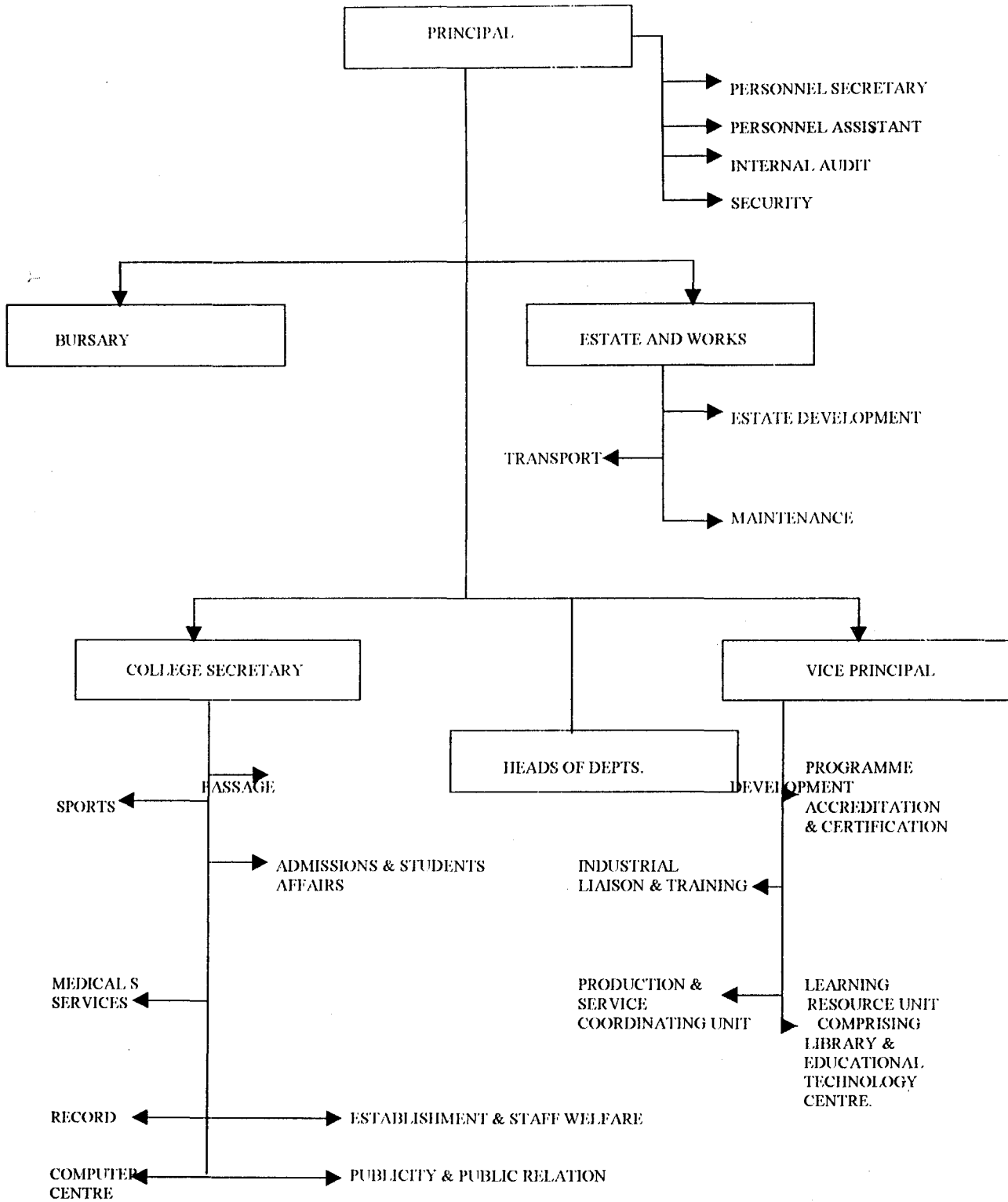
The following are the benefits of changing the existing system.

1. It will reduce the duplication, inconsistency on data.
2. It will promote shareability of the data and its integrity.
3. The number of personnel working on stock will be greatly reduced.
4. Accuracy with which data is processed is increased, the same thing with the speed.
5. Loss of forms and documents will not cause major problems.

6. Human error is reduced.
7. Maintenance cost is cheap.
8. Auditing is simplified.

ORGANOGRAM OF THE COLLEGE AT MATURITY

ORGANOGRAM OF THE COLLEGE AT MATURITY



3.1 INVENTORY CONTROL PROGRAMME DESIGN

The emphasis of system design is to develop a new system that helps to achieve the goals and objectives of the organization and overcome some of the shortcomings and limitations of the existing system. In order to make the design of inventory control system for FTC Ikare-Akoko to work, we consider the stock items (data), functional design, output design, input design, processing file and database design, procedures design, personnel and job design.

3.2 DATA

This is the raw material or input to any data processing system. For this to work, the data include, the practical training material used for production, stock issued forms, the Bin Card, Purchase Order forms and so on.

STOCK ITEMS AT FTC IKARE-AKOKO

Code No./Item	Description	Group
1	Rubber Cork	Training materials
2	Filter Paper	Training materials
3	Caustic Soda	Training materials
4	Bleaching Powder	College overheads
5	Garri	Food stuffs
6	Yam	Food stuffs
7	Sugar	Food stuffs
8	Rice	Food stuffs
9	Beans	Food stuffs
	Palm Oil	Food stuffs

3.3 INTERACTIVE DESIGN CONSIDERATION

Most computer systems allow the use of interactive processing. People directly interact with the computer system through computer terminals. The computer and the user respond to each other in a real time mode – which means within a matter of seconds or minutes. This design approach includes menu-driven system. With a menu-driven system, the

user or operator simply picks what they want to do and the computer then provides them with another menu.

This design is to be used in the proposed system since most of the people working at FTC, Ikare-Akoko do not have extensive computer training. So, with this, they simply respond to questions the computer asks, and the computer does the rest.

3.4 GENERAL DESIGN CONSIDERATION

A large design effort requires a number of general design considerations.

- (a) FUNCTIONAL DESIGN: The proposed system has a top to bottom modular program approach. Each module has one entering point and one exit point. The module at the top of the structure makes decisions that directs and control the modules below or at the bottom. Each module performs one general function. Such as reaching data, making a computation, or outputting a result, which will meet the organizational requirements.
- (b) OUTPUT DESIGN: Output is the result of the processing activities. The output of the proposed system is in form of print charts and screens. The output device considered here is the printer. There

would be printer set up to accommodate different paper form. The video display unit is the device for the screens. The screens either accept data or output them.

- (d) INPUT DESIGN: Input is the data processing function of capturing or obtaining original data and placing it into the data processing system. In the proposed system, the war will work with a screen-based image of a form since it is menu driven. The computer will ask question.
- (e) PROCESS DESIGN: Processing is the manipulation, classification, sorting, summarizing, calculating and storage of input data to produce a desired output, to meet the functional requirements of the organization.
- (i) **Program Design**: Program is a set of instructions used to direct or control the operation of the computer in order to solve a problem or to perform a particular task. Coding is the process of writing instructions in a programming language. A program flow chart, that is, a diagram that uses symbols and interconnecting lines to show logic and sequence of specific program operations. The program flow-charts for inventory control system is given in Fig. 3.

(ii) Designing for Performance: There are three most common measures of performance: response time, throughput, and availability.

(a) Response time: The time that elapses between the initiation of an activity and the availability of the result. It is a function of the volume of information processing at each stage, and the speed capacity of each component.

(b) Throughput: It is the amount of work the system can process in a unit of time.

(iii) Estimating resource requirement: It serves to check that response time and throughput performance requirement can be met. The response time is calculated by adding the time required by each resource-line transmission, processor and disk access and the calculating querying factor, which is a function of the utilization of each resource involved. If resource utilization is less than 100%, then throughput requirement may be met.

(e) FILE AND DATABASE DESIGN: File is a collection of records while database is a collection of integrated and related master files. The arrangement of database exterminates data redundancy. Access to files is provided by Database Management system. Database Management

system is a software package that manages and maintains data to facilitate the processing of multiple applications.

(i) **Database field description**

The main databases needed are for inventory items, issues, requisition, inquiry and purchase. They are the parent structure in the database structure.

(a) Inventory items. This file contains the title of the stock items, description, type, element Num (that is, the number of elements in its pack), References, Access code and Department indexed using item number.

(b) Issues (isstemp): It will contain the requisition number, issue number, issue date, Asset – number, Issue type, Issue by, description, cleared by (clearing authority) the job number of the item, and part code. Indexed using using number.

(c) Sales Orders (sorders): This is for all the sales orders made. It contains the sales order number, order date, requisition date, sales number, amount paid, balance payment, delivery charge, and user identity. Indexed using sales order number.

(d) Requisition items (reqitems): This file is for all requisitions, made. It consists of the requisition number, item number, quantity required,

quantity supplied, job number, and requisition status. It is indexed using the requisition number.

(e) Purchase items (Poctemp): This file is for all the purchases to be made. It contains the purchase number, quantity ordered, unit cost, quantity received, balance of the item ordered, issue status, receipt date, total order, order date and Total received. Indexed using purchase number.

(ii) DATA STRUCTURE

No.	FIELD NAME	TYPE	WIDTH	DEC
1	PCODE	CHARACTER	2	
2	TITLE	CHARACTER	30	
3	DESC	CHARACTER	45	
4	TYPE	CHARACTER	1	
5	XREF	CHARACTER	30	
6	PROG	CHARACTER	12	
7	PARAMETERS	CHARACTER	51	
8	ACCESS CODE	CHARACTER	1	
9	JOB STATUS	CHARACTER	1	
10	DEPARTMENT	CHARACTER	10	

ISSTEMP DEF

No.	FIELD NAME	TYPE	WIDTH	DEC
1	FREQNUM	CHARACTER	10	
2	FISSNUM	CHARACTER	10	
3	FISSDATE	DATE	8	
4	FASSET NUM	DATE	10	
5	FISS TYPE	CHARACTER	12	
6	FISSUE BY	CHARACTER	25	
7	FDESIGN	CHARACTER	20	
8	FDPT CODE	CHARACTER	10	
9	FJOBNUM	CHARACTER	10	

SORDERS DBF

No.	FIELD NAME	TYPE	WIDTH	DEC
1	SALORDNO	CHARACTER	10	
2	FPONUM	CHARACTER	10	
3	ORDDATE	CHARACTER	8	
4	REQ DATE	DATE	8	
5	SALE NUM	CHARACTER	10	
6	COST NUM	CHARACTER	10	

7	AMT PAID	CHARACTER	15	2
8	BAL PAY	CHARACTER	15	2
9	DELVCHG	CHARACTER	15	2
10	ORD STOP	CHARACTER	1	
11	POST DATE	DATE	10	
12	ORDSTATUS	CHARACTER	1	

REQITEMS

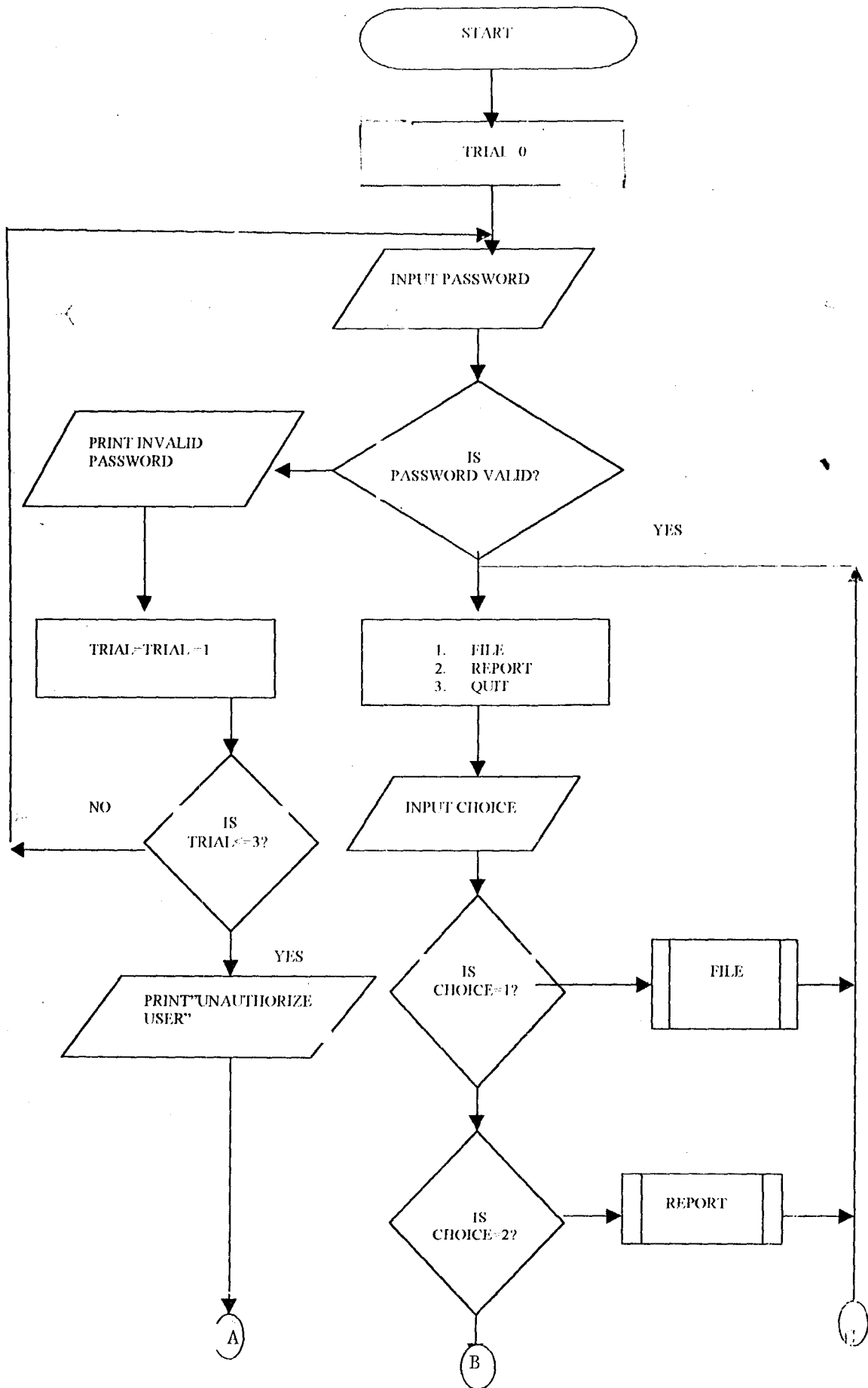
No.	FILDNAME	TYPE	WIDTH	DEC
1	FREQNUM	CHARACTER	10	
2	FITEMNUM	CHARACTER	10	
3	FQTYREQ	NUMERIC	10	
4	FBALREQ	NUMERIC	10	
5	FQTYSUPP	NUMERIC	10	
6	FJOBNUM	CHARACTER	10	
7	FREQSTAT	CHARACTER	1	
8	FRISTATUS	CHARACTER	1	

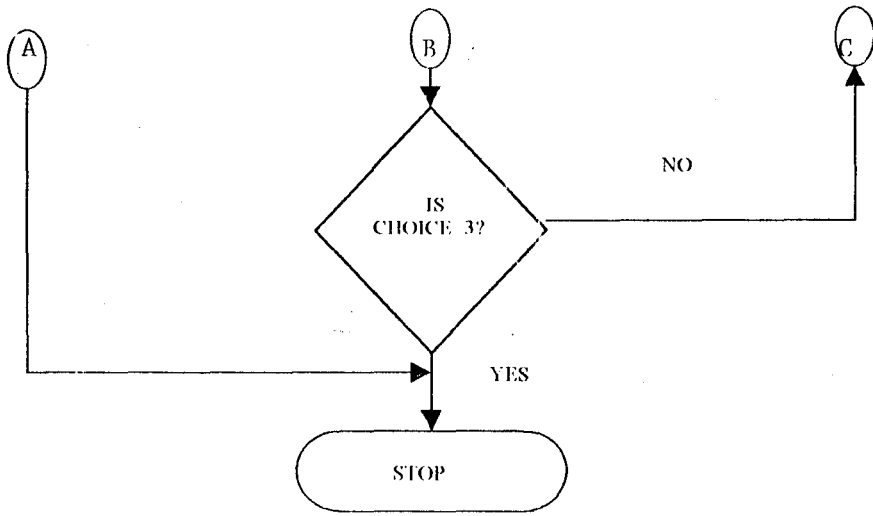
POITEM DBF

No.	FIELDNAME	TYPE	WIDTH	DEC
1	FPONUM	CHARACTER	10	
2	FITEMNUM	CHARACTER	10	
3	FUNITCST	NUMERIC	12	
4	FQTYRCD	NUMERIC	10	
5	FBALORD	NUMERIC	10	
6	FPISTATUS	DATE	1	
7	FRCPPDATE	NUMERIC	8	
8	TUTORDER	NUMERIC	14	
9	TOT RCPT	NUMERIC	14	

(f) PERSONNEL AND JOB DESIGN: This takes into consideration the individuals that would be using the system. It takes into consideration the level of expertise or specialization of the people. If a person is not qualified to work with any particular section, the Access level would be specified and strictly adhered. The proposed work is designed to realize the College's aim, objectives and requirements.

(g) PROCEDURE DESIGN: It comprises of the following flowcharts:





FILE

- 1. INVENTORY ITEM
- 2. ISSUES
- 3. SALES ORDER
- 4. REQUISITION
- 5. PURCHASING ITEM
- 6. VENDOR MAINTENANCE
- 7. RETURN

INPUT CHOICE

IS CHOICE 1?

YES

INPUT DATA

IS CHOICE 2?

INPUT DATA

IS CHOICE 3?

INPUT DATA

IS CHOICE 4?

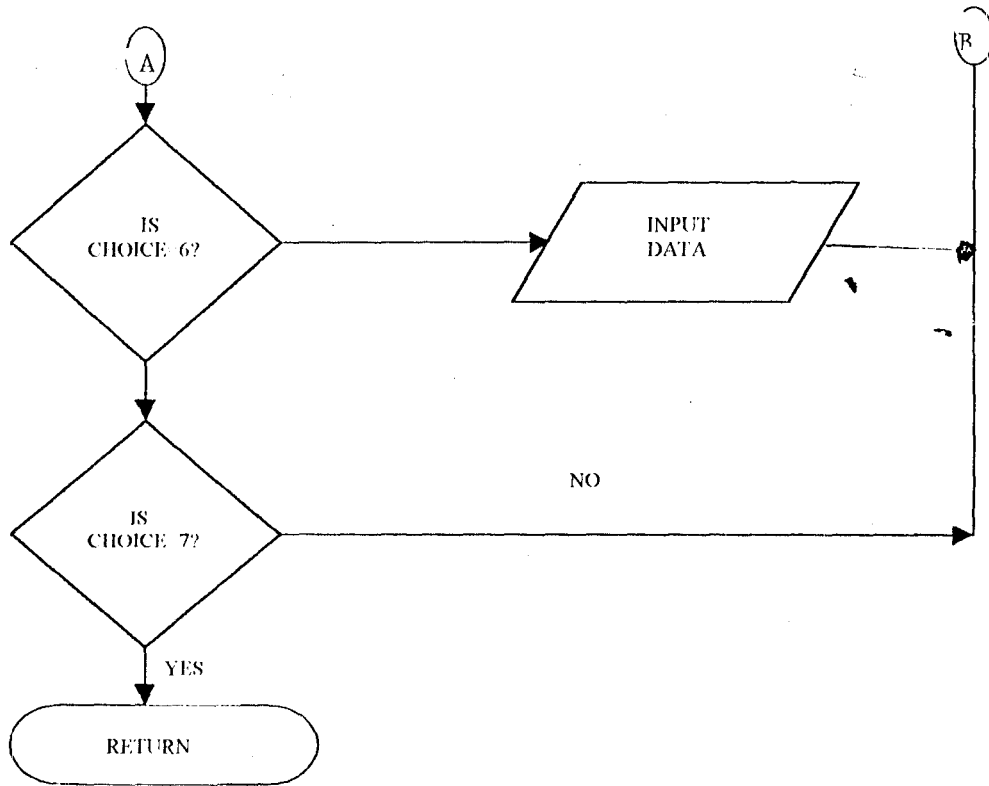
INPUT DATA

IS CHOICE 5?

INPUT DATA

A

B



REPORT

- 1. INVENTORY ITEM
- 2. ISSUES
- 3. SALES ORDER
- 4. REQUISITION
- 5. PURCHASING ITEM
- 6. VENDOR MAINTENANCE
- 7. RETURN

INPUT CHOICE

IS CHOICE = 1?

YES

PRINT REPORT

IS CHOICE = 2?

YES

PRINT REPORT

IS CHOICE = 3?

YES

PRINT REPORT

IS CHOICE = 4?

YES

PRINT REPORT

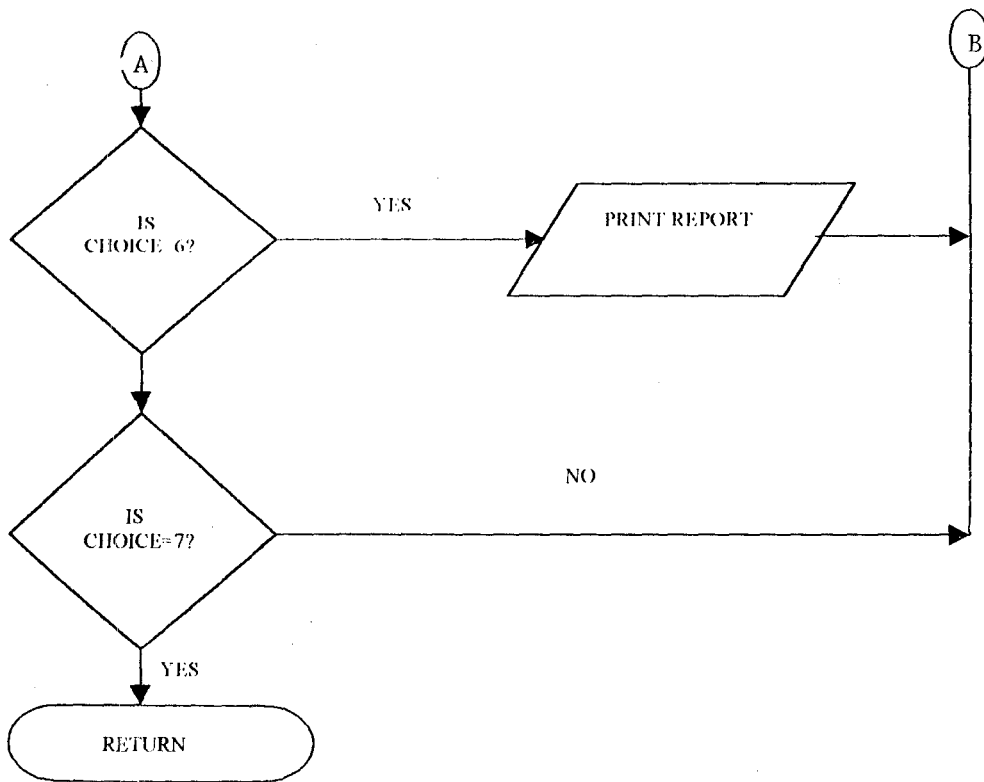
IS CHOICE = 5?

YES

PRINT REPORT

A

B



(h) PROGRAMMING LANGUAGE JUSTIFICATION

Visual FoxPro is the programming language chosen for the proposed work, the work is mainly on record keeping.

Visual Foxpro, a relational database (data is stored in rows and column) is used because it is both a database management system (DBMS) and a computer language. As a DBMS, it can be used directly from the keyboard to help keep track of business records and as a computer language because it allows the writing of simple programs to make record-keeping more efficient.

Most importantly, visual foxpro is chosen because it is mainly a non-procedural language and has about the independent work areas, which can each contain an open database file. That is, we can have up to ten data base files at any one time. Each work area can have up to seven open index files, a format file, and an active record filter as well as a linkage to a database file that is currently in use in another work area.

In conclusion, foxpro was chosen because of its data manipulating features.

PROGRAM IMPLEMENTATION

System implementation is the process of taking a system and replacing in into operation. It involves:

4.1 SOFTWARE ACQUISITION

The application software can either be bought or developed. In this case, the application software for computerizing the inventory control system of FTC Ikare-Akoko was developed after the technical operation and economic feasibility of it had been checked.

4.2 HIRING AND TRAINING OF STAFF

Since FTC Ikare-Akoko is a big organization, about two or three data processing personnel are hired or two or three of its clerks are reassigned and trained on how to use the computer and the application package. Since they would be using the system, and its success depends on them. The fears and apprehension of the employee is reduced during the training.

4.3 SITE PREPARATION

For the preparation of the actual location of the new data processing system, the accounts office and the conference room are utilized. The rearrangement of furniture, placement of air conditioning systems and implementation of new security measures are necessary for the preparation.

4.4 DATA PREPARATION

All the inventory are converted to computer files. Two to three temporary data-entry operators are hired or two of the clerks are shown how to convert ordinary data computer files. After conversion of the data temporary data entry staff are released or the clerks reassigned since the software maintains and updates these computer files.

4.5 INSTALLATION

This is the physical placement of the computer equipment on the site and making it operational. The systems are tested to ensure that it is working normally.

4.6 FINAL TESTING AND START-UP

The entire data processing system is involved in the final testing. It requires testing each of the individual programs testing each of the individual program, testing the entire system of programs without data and with a large volume of data. Start up begins with the final tested data processing system. There are four methods of testing start-up.

- (i) **Parallel:** Under this system, the new program is run with the existing system. If there are any problems with the new program, they can be corrected while the existing system is still being used. After the bugs are out, the new programs are slowly phased in, while the older system is slowly phased out.
- (ii) **Direct Change Over:** The operator of the old system is replaced by the new system immediately.
- (iii) **Pilot Approach:** The working version of the system is implemented in one part of the organization based on the feed back. Changes are made and the system is installed on the other part either at once or gradually.
- (iv) **Phase In Method:** Many new programs to be implemented, this phaseout methodfor each program, one at a time.

4.7 MAINTENANCE

This process includes the periodic checking of the computer system to make sure everything is operating as intended, and taking corrective action when necessary. In addition to hardware, software is also maintained. It is one of the most expensive aspects of software development and use.

A major cause of program maintenance is due to user requests for program enhancements. There is always a tendency to demand additional reports and outputs from the program. In addition to data storage and organization, Program bugs, and other emergency program repairs are other important causes for maintenance.

4.8 POST IMPLEMENTATION

The final step is the post-implementation review. It is during this step that we determine whether the new system was developed within the specified time and within the original goals. Time and budget comparisons are also made to investigate the difference between the planned time and cost estimates and the actual time and cost expended. It is used to determine whether the entire project was over-budgeted or under-budgeted.

4.9 OUTPUT DESCRIPTION

The output of the inventory control system is in form of screens and reports. The screens are visible on the computer terminal whereas the reports can either be printed directly from the computer via a printer that is attached or spooled to files and viewed.

These reports keep the user in control of the inventory. Some of the key reports include:

- A. REPORT ON ISSUE: Lists information on Requisition Number, Issue Date, Issue Number, Issue Type, Description, Asset Number, Department Code, the person that issued it.
- B. REPORT ON VENDOR MAINTENANCE: It provides information Group of stock item, description, and code number of item.
- C. REPORT ON PURCHASE: It lists information on Order Date, Purchase Number, Item Number, Quantity Required, Unit Cost, Total Order, Receipt Date, Total Received, Issue status, and Balance of the item ordered.
- D. REPORT ON REQUISITION OF ITEMS: This list for each stock item the Requisition Number, Requisition Status, Item Number, Issue

status, Job Number, Quantity Required, Quantity supplied, and Balance.

- E. REPORT ON SALE ORDERS: This furnishes the user with information pertaining to Order Date, Requisition Date, Order Number, Order Status, Sales Number, Order stop, Delivery charge, Amount Paid, and Balance Paid.
- F. REPORT ON INVENTORY OF ITEMS: This gives information on the Title of the stock Items, Description, Type, Department, Access Code, Purchase Code, Parameter, Job status, and References.

In addition, for the screen to get the output when a new stock is added click on Add New; to change a stock item click on Modify; to cancel or erase a stock item strike on Delete. To get information on the first stock item click on First. To see how the next stock item look like click on Next and if it is the previous on click on Previous. If it is desired to examine the last stock item click on last. When you are satisfied with the information you obtained so far, and you do not want to bother yourself any longer you click close.

Furthermore, the screens, which are visible on the computer terminal, included menus such as stock items, Issues, Inventory Item, Sales Order, Requisition Item, Purchase Item.

5.1 DOCUMENTATION

Documentation is the final design consideration. The designed inventory system is a simple but sophisticated system that make sure that the user has information about their organization's vendors, items they supply and the items currently expected of them. The user also has information about the materials or components they have in stock, including information about those that have been reserved for some work and where they are currently stored.

The designed inventory system is a system driven by menu which provides the basic level of an inventory and it accomplishes basic stock control through the use of a series of operating reports. It has an inbuilt purchase order/work order module.

5.2 USING THE SYSTEM (system installation).

This is the process of transferring the develop at development programs [name] from the floppy disk to a computer hard disk.

However, due to vast improvement in recta operating system, the installation of the software of a very simple operation. The procedure is as follows.

STEP	PROCEDURE	RESULT
1. Go to start	Click	Start popup menu is displayed
2. Run submenu	Click	Run dialog box displayed.
3. Insert name diskette into A _____	_____	_____
4. Type the source drive (A:\)	Browse	Counter of A : \ displayed
5. Select setup	Double click	Installation begins
6. Follow the instruction that follow		
7. Destination	_____	Software installation (:\) Successfully.

Bringing the software from (:\) To Window program Submenu.

Steps	Procedure	Result
1. Go to start	Click	_____
2. Settings Submenu	Click	Taskbar dialog box displayed
3. Choose taskbar and Start menu	Click	_____
4. Select start menu program	Click	_____
5. Browse to select (name software)	Double-click	_____
6. Select folder	Click	_____
7. Destination	Click	Name-software copies into program submenu successfully

At the end of the installation, the floppy diskette becomes a backup and should be well safe guarded against any damages for future use.

However, the designed Input forms used in this system and the Reports (Output) generated are documented in the Appendixes i.e.

Designed Input forms - Appendix A

Reports (Output) produced - Appendix B

The Source Code - Appendix C

i.e. the Program Listing.

5.3 PROBLEM OF THE STUDY

Obtaining facts from the store of federal technical college, Ikare – Akoko is a Herculean task. Photocopying any document from store is taboo. The store people will tell you that it is contrary to the public service rules and regulations to release official secret, so it is only the information they could afford to give me that The researcher used. without this restriction this restriction the research work will have been better carried out.

5.4 CONCLUSION

The inventory control system of most large organizations need interactive processing which brings new opportunities for good and effective design which include menu driven systems. Applications such as inventory control, payrolls, personnel, fixed assets are on real time and on line environment.

The system is designed to provide management with timely information since the computer and the user respond to each other in real time mode. To ensure proper security and accountability in Federal Technical College, Ikare-Akoko, the system has a section for the system administrator to give different access levels and passwords to the user and is enhanced with an end-of-month processing and timely reports generated after the processing of all transactions.

The implementation of the proposed system will result in improvement in terms of accuracy, security, effectiveness and reliability of the inventory control system at Federal Technical College, Ikare-Akoko.

5.5 RECOMMENDATION

The inventory control system package was tested and found to be working very effectively.

However, for the proposed inventory control system to perform effectively on real-time and on-line environment, a minimum of 3861BM compatible system, with at least 640MB Hard disk storage capacity and a process or speed of at least 66 MHz is recommended because of the large volume of data to be manipulated.

In addition, the clerical staff in the stores section of the college should be sent for a month or two training on computer basics and data-entry.

REFERENCES

1. Adolph Matz & Othel J. Curry (1986) Cost Accounting Planning and Control. Fifth Edition. International Business and Management. London.
2. Brown & Hoivard (1986) Managerial Accounting and Finance. Second Edition. Macdonald. New York.
3. Morrison, P. (1985) Storage and Control of stock. Third Edition. Pitman Toronto.
4. Eric L. Kohler (1985) A dictionary for Accountants. Fourth Edition. Prentic Hallinc. Oklahoma City.
5. Macrae B. (1987) Computers and Accounting Fifth Edition. Wily. Singapore.
6. Ralph M. Stair Jr. (1986) Computers in Today's World. Third Edition. Irwin. Tokyo.
7. Robert A. Byers (1986) D base III plus for every Business. Second Edition. Irwin. Moscow
8. William Pickless Larrety (1986) Accountancy Question and key. Second Edition. Pitman. London.

*-- Form: form1 (c:\inventory\first.sex)

*-- ParentClass: form

*-- BaseClass: form

* MS... CL("K...")

DEFINE CLASS form1 AS form MS... CL("Readonly")

MS... CL("Readonly")

Top = 5

Left = 12

Height = 350

Width = 600

DoCreate = .T.

Picture = "wizflax.bmp"

BorderStyle = 0

Caption = "COMPUTERISING CONTROL OF STORES INVENTORIES"

Icon = "pc04.ico"

Name = "Form1"

ADD OBJECT timer1 AS timer WITH ;

Top = 96, ;

Left = 108, ;

Height = 23, ;

Width = 23, ;

Interval = 400, ;

Name = "Timer1"

ADD OBJECT timer2 AS timer WITH ;

Top = 96, ;

Left = 314, ;

Height = 23, ;

Width = 23, ;

Interval = 3200, ;

Name = "Timer2"

ADD OBJECT timer3 AS timer WITH ;

Top = 85, ;

Left = 48, ;

Height = 37, ;

Width = 61, ;

Interval = 3000, ;

Name = "Timer3"

ADD OBJECT label1 AS label WITH ;

FontBold = .T., ;

```
FontSize = 12, ;
BackStyle = 0, ;
Caption = "COMPUTERISING CONTROL OF STORES
INVENTORIES", ;
Enabled = .T., ;
Height = 25, ;
Left = 84, ;
Top = 24, ;
Width = 432, ;
ForeColor = RGB(128,0,0), ;
Name = "Label1"
```

```
ADD OBJECT label2 AS label WITH ;
FontBold = .T., ;
FontSize = 12, ;
BackStyle = 0, ;
Caption = "( CASE STUDY OF STUDY IKARE, ONDO STATE)", ;
Height = 25, ;
Left = 113, ;
Top = 48, ;
Width = 374, ;
ForeColor = RGB(128,0,0), ;
Name = "Label2"
```

```
ADD OBJECT label7 AS label WITH ;
AutoSize = .T., ;
FontBold = .T., ;
FontItalic = .F., ;
FontSize = 11, ;
BackStyle = 0, ;
Caption = "MATHS/COMPUTERS DEPARTMENT", ;
Height = 20, ;
Left = 180, ;
Top = 180, ;
Width = 266, ;
ForeColor = RGB(255,0,128), ;
BackColor = RGB(0,64,128), ;
Name = "Label7"
```

```
ADD OBJECT label3 AS label WITH ;
AutoSize = .T., ;
FontBold = .T., ;
FontItalic = .F., ;
FontSize = 14, ;
BackStyle = 0, ;
Caption = "A project developed by:", ;
Height = 25, ;
```

Left = 204, ;
Top = 84, ;
Width = 222, ;
ForeColor = RGB(128,64,0), ;
BackColor = RGB(128,0,64), ;
Name = "Label3"

ADD OBJECT label8 AS label WITH ;

AutoSize = .T., ;
FontBold = .T., ;
FontItalic = .F., ;
FontSize = 12, ;
BackStyle = 0, ;
Caption = "FEDERAL UNIVERSITY OF TECHNOLOGY BOSSO,
MINNA", ;

Height = 22, ;
Left = 108, ;
Top = 208, ;
Width = 445, ;
ForeColor = RGB(255,0,128), ;
BackColor = RGB(0,64,128), ;
Name = "Label8"

ADD OBJECT label9 AS label WITH ;

AutoSize = .T., ;
FontBold = .T., ;
FontItalic = .F., ;
FontSize = 11, ;
BackStyle = 0, ;
Caption = "IN PARTIAL FULFILMENT FOR THE REQUIREMENT
FOR THE AWARD OF ", ;

Height = 20, ;
Left = 36, ;
Top = 234, ;
Width = 527, ;
ForeColor = RGB(255,0,128), ;
BackColor = RGB(0,64,128), ;
Name = "Label9"

ADD OBJECT label10 AS label WITH ;

AutoSize = .T., ;
FontBold = .T., ;
FontItalic = .F., ;
FontSize = 11, ;
BackStyle = 0, ;
Caption = "POSTGRADUATE DIPLOMA IN COMPUTER
SCIENCE.", ;

```
Height = 20, ;
Left = 120, ;
Top = 265, ;
Width = 385, ;
ForeColor = RGB(255,0,128), ;
BackColor = RGB(0,64,128), ;
Name = "Label10"
```

```
ADD OBJECT label5 AS label WITH ;
```

```
AutoSize = .T., ;
FontBold = .T., ;
FontItalic = .F., ;
FontSize = 16, ;
BackStyle = 0, ;
Caption = "YUSUF A. A.", ;
Height = 27, ;
Left = 238, ;
Top = 120, ;
Width = 124, ;
ForeColor = RGB(84,18,109), ;
BackColor = RGB(0,64,128), ;
Name = "Label5"
```

```
ADD OBJECT label6 AS label WITH ;
```

```
AutoSize = .T., ;
FontBold = .T., ;
FontItalic = .F., ;
FontSize = 10, ;
BackStyle = 0, ;
Caption = "PGD/MCS/99/2000/881", ;
Height = 18, ;
Left = 231, ;
Top = 142, ;
Width = 138, ;
ForeColor = RGB(84,18,109), ;
BackColor = RGB(0,64,128), ;
Name = "Label6"
```

```
PROCEDURE timer1.Timer
```

```
if (width + thisform.left <= maxw)
thisform.left = thisform.left + 1
else
thisform.left = -15
endif
```

```
ENDPROC
```

```
PROCEDURE timer2.Timer
    thisform.release()
ENDPROC
```

```
PROCEDURE timer3.Timer
    i = 0.025
    DO WHILE(THISFORM.WIDTH >= 0 AND THISFORM.HEIGHT
>= 0)
        IF !(THISFORM.WIDTH = 0 OR THISFORM.HEIGHT = 0)
            THISFORM.WIDTH = THISFORM.WIDTH - i
            THISFORM.HEIGHT = THISFORM.HEIGHT - i
        ELSE
            THISFORM.VISIBLE = .F.
            THISFORM.RELEASE
            EXIT
        ENDIF
    ENDDO
ENDPROC
```

```
ENDDDEFINE
```

```
*
```

```
*-- EndDefine: form1
```

```
.....
```

```
PUBLIC oform1
```

```
oform1=NEWOBJECT("form1")
oform1.Show
RETURN
```

```
*****
```

```
*-- Form: form1 (c:\inventory\inventory.scx)
```

```
*-- ParentClass: form
```

```
*-- BaseClass: form
```

```
*
```

```
DEFINE CLASS form1 AS form
```

```
    Top = -9
```

```
    Left = 9
```

```
    Height = 453
```

```
    Width = 494
```

```
    DoCreate = .T.
```

```
    Caption = "INVENTORY ITEM"
```

```
    Icon = "pc04.ico"
```

```
    Name = "Form1"
```

```
ADD OBJECT txtpcode AS textbox WITH ;  
    Comment = "" ;  
    ControlSource = "m.pcode", ;  
    Height = 23, ;  
    Left = 183, ;  
    TabIndex = 1, ;  
    Top = 0, ;  
    Width = 155, ;  
    Name = "txtPcode"
```

```
ADD OBJECT lblpcode AS label WITH ;  
    AutoSize = .T., ;  
    FontBold = .T., ;  
    WordWrap = .T., ;  
    BackStyle = 0, ;  
    Caption = "PCODE", ;  
    Left = 7, ;  
    Top = 3, ;  
    Width = 40, ;  
    TabIndex = 19, ;  
    Name = "lblPcode"
```

```
ADD OBJECT txttitle AS textbox WITH ;  
    Comment = "" ;  
    ControlSource = "m.title", ;  
    Height = 23, ;  
    Left = 184, ;  
    TabIndex = 2, ;  
    Top = 28, ;  
    Width = 219, ;  
    Name = "txtTitle"
```

```
ADD OBJECT lbltitle AS label WITH ;  
    AutoSize = .T., ;  
    FontBold = .T., ;  
    WordWrap = .T., ;  
    BackStyle = 0, ;  
    Caption = "TITLE OF THE STOCK ITEMS", ;  
    Left = 7, ;  
    Top = 28, ;  
    Width = 155, ;  
    TabIndex = 20, ;  
    Name = "lblTitle"
```

```
ADD OBJECT edtdesc AS editbox WITH ;
```

```
Comment = "" ;  
Height = 42 ;  
Left = 384 ;  
TabIndex = 10 ;  
Top = 118 ;  
Width = 108 ;  
ControlSource = "m.desc" ;  
Name = "edtDesc"
```

```
ADD OBJECT lblDesc AS label WITH ;
```

```
AutoSize = .T. ;  
FontBold = .T. ;  
WordWrap = .T. ;  
BackStyle = 0 ;  
Caption = "DESCRIPTION" ;  
Left = 297 ;  
Top = 133 ;  
Width = 77 ;  
TabIndex = 21 ;  
Name = "lblDesc"
```

```
ADD OBJECT txtType AS textbox WITH ;
```

```
Comment = "" ;  
ControlSource = "m.type" ;  
Height = 23 ;  
Left = 120 ;  
TabIndex = 3 ;  
Top = 60 ;  
Width = 156 ;  
Name = "txtType"
```

```
ADD OBJECT lblType AS label WITH ;
```

```
AutoSize = .T. ;  
FontBold = .T. ;  
WordWrap = .T. ;  
BackStyle = 0 ;  
Caption = "TYPE" ;  
Left = 7 ;  
Top = 58 ;  
Width = 29 ;  
TabIndex = 22 ;  
Name = "lblType"
```

```
ADD OBJECT edtRef AS editbox WITH ;
```

```
Comment = "" ;  
Height = 36 ;
```


Left = 120. ;
TabIndex = 8. ;
Top = 180. ;
Width = 168. ;
ControlSource = "m.ref". ;
Name = "edtRef"

ADD OBJECT lblref AS label WITH ;

AutoSize = .T. ;
FontBold = .T. ;
WordWrap = .T. ;
BackStyle = 0. ;
Caption = "REFERENCES". ;
Left = 7. ;
Top = 192. ;
Width = 74. ;
TabIndex = 23. ;
Name = "lblRef"

ADD OBJECT txtacode AS textbox WITH ;

Comment = "" ;
ControlSource = "m.acode". ;
Height = 23. ;
Left = 120. ;
TabIndex = 4. ;
Top = 84. ;
Width = 156. ;
Name = "txtAcode"

ADD OBJECT lblacode AS label WITH ;

AutoSize = .T. ;
FontBold = .T. ;
WordWrap = .T. ;
BackStyle = 0. ;
Caption = "ACCESS CODE". ;
Left = 7. ;
Top = 84. ;
Width = 82. ;
TabIndex = 24. ;
Name = "lblAcode"

ADD OBJECT txtdept AS textbox WITH ;

Comment = "" ;
ControlSource = "m.dept". ;
Height = 23. ;
Left = 120. ;

```
TabIndex = 5, ;  
Top = 108, ;  
Width = 156, ;  
Name = "txtDept"
```

```
ADD OBJECT lbldept AS label WITH ;
```

```
AutoSize = .T., ;  
FontBold = .T., ;  
WordWrap = .T., ;  
BackStyle = 0, ;  
Caption = "DEPARTMENT", ;  
Left = 7, ;  
Top = 116, ;  
Width = 78, ;  
TabIndex = 25, ;  
Name = "lblDept"
```

```
ADD OBJECT txtjob_status AS textbox WITH ;
```

```
Comment = "", ;  
ControlSource = "m.job_status", ;  
Height = 23, ;  
Left = 120, ;  
TabIndex = 6, ;  
Top = 132, ;  
Width = 156, ;  
Name = "txtJob_status"
```

```
ADD OBJECT lbljob_status AS label WITH ;
```

```
AutoSize = .T., ;  
FontBold = .T., ;  
WordWrap = .T., ;  
BackStyle = 0, ;  
Caption = "JOB STATUS", ;  
Height = 17, ;  
Left = 7, ;  
Top = 144, ;  
Width = 73, ;  
TabIndex = 26, ;  
Name = "lblJob_status"
```

```
ADD OBJECT txtprog AS textbox WITH ;
```

```
Comment = "", ;  
ControlSource = "m.prog", ;  
Height = 23, ;  
Left = 120, ;  
TabIndex = 7, ;
```

Top = 155. ;
Width = 168. ;
Name = "txtProg"

ADD OBJECT lblprog AS label WITH ;

AutoSize = .T. ;
FontBold = .T. ;
WordWrap = .T. ;
BackStyle = 0. ;
Caption = "PROG" ; ;
Left = 7. ;
Top = 164. ;
Width = 33. ;
TabIndex = 27. ;
Name = "lblProg"

ADD OBJECT edtparameters AS editbox WITH ;

Comment = "" ;
Height = 36. ;
Left = 384. ;
TabIndex = 9. ;
Top = 80. ;
Width = 96. ;
ControlSource = "m.parameters" ; ;
Name = "edtParameters"

ADD OBJECT lblparameters AS label WITH ;

AutoSize = .T. ;
FontBold = .T. ;
WordWrap = .T. ;
BackStyle = 0. ;
Caption = "PARAMETERS" ; ;
Height = 17. ;
Left = 294. ;
Top = 90. ;
Width = 79. ;
TabIndex = 28. ;
Name = "lblParameters"

ADD OBJECT container2 AS container WITH ;

Top = 224, ;
Left = 0, ;
Width = 487, ;
Height = 38, ;
TabIndex = 29, ;
ForeColor = RGB(128,0,64), ;
BackColor = RGB(238,214,213), ;
Name = "Container2"

ADD OBJECT cmdfirst AS commandbutton WITH ;

AutoSize = .F., ;
Top = 228, ;
Left = 204, ;
Height = 29, ;
Width = 52, ;
FontBold = .T., ;
FontItalic = .F., ;
FontName = "Times New Roman", ;
FontSize = 11, ;
FontUnderline = .F., ;
Caption = "<First", ;
TabIndex = 14, ;
SpecialEffect = 0, ;
ForeColor = RGB(128,0,64), ;
DisabledForeColor = RGB(128,128,128), ;
Name = "cmdfirst"

ADD OBJECT cmdclose AS commandbutton WITH ;

AutoSize = .F., ;
Top = 228, ;
Left = 432, ;
Height = 29, ;
Width = 49, ;
FontBold = .T., ;
FontItalic = .F., ;
FontName = "Times New Roman", ;
FontSize = 11, ;
FontUnderline = .F., ;
Caption = "<Close", ;
TabIndex = 18, ;
SpecialEffect = 0, ;
ForeColor = RGB(128,0,64), ;
DisabledForeColor = RGB(128,128,128), ;
Name = "cmdclose"

ADD OBJECT cmdprevious AS commandbutton WITH ;

```
AutoSize = .F. ;
Top = 228, ;
Left = 311, ;
Height = 29, ;
Width = 69, ;
FontBold = .T. ;
FontItalic = .F. ;
FontName = "Times New Roman", ;
FontSize = 11, ;
FontUnderline = .F. ;
Caption = "\<Previous", ;
TabIndex = 16, ;
SpecialEffect = 0, ;
ForeColor = RGB(128,0,64), ;
DisabledForeColor = RGB(128,128,128), ;
Name = "cmdprevious"
```

ADD OBJECT cmdlast AS commandbutton WITH ;

```
AutoSize = .F. ;
Top = 228, ;
Left = 381, ;
Height = 29, ;
Width = 50, ;
FontBold = .T. ;
FontItalic = .F. ;
FontName = "Times New Roman", ;
FontSize = 11, ;
FontUnderline = .F. ;
Caption = "\<Last", ;
TabIndex = 17, ;
SpecialEffect = 0, ;
ForeColor = RGB(128,0,64), ;
DisabledForeColor = RGB(128,128,128), ;
Name = "cmdlast"
```

ADD OBJECT cmdnext AS commandbutton WITH ;

```
AutoSize = .F. ;
Top = 228, ;
Left = 257, ;
Height = 29, ;
Width = 53, ;
FontBold = .T. ;
FontItalic = .F. ;
FontName = "Times New Roman", ;
FontSize = 11, ;
FontUnderline = .F. ;
Caption = "\<Next", ;
TabIndex = 15, ;
```

SpecialEffect = 0, ;
ForeColor = RGB(128,0,64), ;
DisabledForeColor = RGB(128,128,128), ;
Name = "cmdnext"

ADD OBJECT cmdaddnew AS commandbutton WITH ;

AutoSize = .F., ;
Top = 228, ;
Left = 6, ;
Height = 29, ;
Width = 74, ;
FontBold = .T., ;
FontName = "Times New Roman", ;
FontSize = 11, ;
Caption = "\<Add New", ;
TabIndex = 11, ;
ForeColor = RGB(128,0,64), ;
DisabledForeColor = RGB(128,128,128), ;
Name = "cmdaddnew"

ADD OBJECT cmddelete AS commandbutton WITH ;

AutoSize = .F., ;
Top = 228, ;
Left = 141, ;
Height = 29, ;
Width = 62, ;
FontBold = .T., ;
FontItalic = .F., ;
FontName = "Times New Roman", ;
FontSize = 11, ;
FontUnderline = .F., ;
Caption = "\<Delete", ;
TabIndex = 13, ;
SpecialEffect = 0, ;
ForeColor = RGB(128,0,64), ;
DisabledForeColor = RGB(128,128,128), ;
Name = "cmddelete"

ADD OBJECT cmdmodify AS commandbutton WITH ;

AutoSize = .F., ;
Top = 228, ;
Left = 81, ;
Height = 29, ;
Width = 59, ;
FontBold = .T., ;
FontItalic = .F., ;
FontName = "Times New Roman", ;

```
FontSize = 11, ;
FontUnderline = .F., ;
Caption = "<Modify", ;
TabIndex = 12, ;
SpecialEffect = 0, ;
ForeColor = RGB(128,0,64), ;
DisabledForeColor = RGB(128,128,128), ;
Name = "cmdmodify"
```

```
PROCEDURE cmdfirst.Click
  IF USED("tinventory")
    SELE tinventory
  ELSE
    SELE 0
    USE tinventory
  ENDIF
  IF !BOF()
    GO TOP
    SCATTER MEMVAR MEMO
    THIS.ENABLED = .F.
  ELSE
    MESSAGEBOX("This is the First Record", "Warning")
  ENDIF
  THISFORM.REFRESH
  THISFORM.cmdlast.ENABLED = .T.
ENDPROC
```

```
PROCEDURE cmdclose.Click
  THISFORM.RELEASE
ENDPROC
```

```
PROCEDURE cmdprevious.Click
  IF USED("tinventory")
    SELE tinventory
  ELSE
    SELE 0
    USE tinventory
  ENDIF
  IF NOT BOF()
    SKIP -1
    SCATTER MEMVAR MEMO
    THISFORM.REFRESH
    ThisForm.cmdlast.ENABLED = .T.
  ELSE
    ThisForm.cmdfirst.ENABLED = .F.
    MESSAGEBOX("This is the First Record", 0 + 64, "Warning")
    THIS.ENABLED = .F.
```

```
ENDIF
THISFORM.cmdnext.ENABLED = .T.
ENDPROC
```

```
PROCEDURE cmdlast.Click
IF USED("tinventory")
    SELE tinventory
ELSE
    SELE 0
    USE tinventory
ENDIF
IF !EOF()
    GO BOTTOM
    SCATTER MEMVAR MEMO
    THISFORM.REFRESH
ELSE
    MESSAGEBOX("This is the Last Record", 0 + 64, "Warning")
ENDIF
THIS.ENABLED = .F.
THISFORM.cmdfirst.ENABLED = .T.
ENDPROC
```

```
PROCEDURE cmdnext.Click
IF USED("tinventory")
    SELE tinventory
ELSE
    SELE 0
    USE tinventory
ENDIF

IF NOT EOF()
    SKIP 1
    THISFORM.cmdfirst.ENABLED = .T.
    SCATTER MEMVAR MEMO
    THISFORM.REFRESH
ELSE
    THISFORM.cmdlast.ENABLED = .F.
    MESSAGEBOX("This is the Last Record", 0 + 64, "Warning")
    THIS.ENABLED = .F.
ENDIF
THISFORM.cmdprevious.ENABLED = .T.
ENDPROC
```

```
PROCEDURE cmdaddnew.Click
IF THIS.CAPTION = "\<Add New"

    THISFORM.SETALL("ReadOnly",.F., "Textbox")
```


FILE REPORT QUIT

COMPUTERISING CONTROL OF STORES INVENTORIES
(Case Study of Federal Technical College, Ikare Akoko, Ondo State.)

A project developed by:

YUSUF, A. A.
PGD/MCS/99/2500/831

INVENTORY CONTROL DEPARTMENT
FEDERAL TECHNICAL COLLEGE OF TECHNOLOGY BOSSO, MINNA
IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD

BY THE UNIVERSITY OF JOS

FILE REPORT QUIT

- INVENTORY ITEM
- ISSUES
- SALES ORDERS
- REQUISITION
- PURCHASE ITEMS
- VENDOR MAINTENANCE

COMPUTER SYSTEMS

_ 5 X

FILE REPORT QUIT

INVENTORY

- □ X

PCODE	PU		
TITLE OF THE STOCK ITEMS	STENCILS		
TYPE	G		
ACCESS CODE	AC001	PARAMETERS	FOOLSCAP
DEPARTMENT	EXAMINATION OFFICE	DESCRIPTION	MADE IN NIGERIA
JOB STATUS	S		
PROG	COMMON ENTRANCE		
REFERENCES	1235A		

Add New	Modify	Delete	Next	Previous	Last	Close
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COMPUTER SYSTEMS

_ 5 X

FILE REPORT QUIT

SALES

- □ X

ORDER NUMBER	1
ORDER DATE	03/01/1999
REQUISITION DATE	03/03/1999
SALES NUMBER	20.00
SALES ORDER NUMBER	5
AMOUNT PAID	10000.00
BALANCE PAYMENT	500.00
DELIVERY CHARGE	50.00
ORDER STOP	1

Add New	Modify	Delete	Next	Previous	Last	Close
---------	--------	--------	------	----------	------	-------

FILE REPORT QUIT

GROUP		COLLEGE OVER HEAD
DESCRIPTION		BLEACHING
CODE NO. OF ITEM		4
Add New	Modify	Delete
Next	Previous	Last Close

REQUISITION NUMBER		FTC/99/001
ISSUES NUMBER		001
ISSUE DATE		03/03/2000
ASSET NUMBER		AA002
JOB NUMBER		QW220
DEPARTMENT CODE		RTV002
ISSUE TYPE		2ND
ISSUE BY		A. A. HASSAN
DESCRIPTION		STAGE COVER AL GASKE
Add New	Modify	Delete
Next	Previous	Last Close

REQUISITION NUMBER	FTC/99/001
ITEM NUMBER	003
QUANTITY REQUIRED	150
QUANTITY SUPPLIED	100
JOB NUMBER	03
REQUISITION STATUS	FOOD STUFFS
BALANCE	50
ISSUE STATUS	FOOD STUFFS

Add New	Modify	Delete	
Next	Previous	Last	Close

COMPUTER

FILE REPORT QUIT

PURCHASE

PURCHASE NUMBER	1
ITEM NUMBER	20
UNIT COST	400
QUANTITY REQUIRED	30
BALANCE OF THE ITEM ORDER	5
ISSUE STATUS	REAMS OF P
RECEIPT DATE	02/02/2000
TOTAL ORDER	35
ORDER DATE	01/01/2000
TOTAL RECEIVED	30

Add New	Modify	Delete	Next	Previous	Last	Close
---------	--------	--------	------	----------	------	-------

COMPUTERIZING CONTROL SYSTEMS REPORT ON PURCHASE

01

ORDER DATE	PURCHASE NUMBER	ITEM NUMBER	QUANTITY REQUIRED	UNIT COST	TOTAL ORDER	RECEIPT DATE	TOTAL RECEIVED	ISSUE STATUS	BALANCE OF THE ITEM ORDER
1/00	1	20	30	400	35	02/02/00	30	REAMS OF P	5
2/00	2	50	70	10	85	05/02/00	70	P	15
3/00	3	20	50	3800	70	03/03/00	50	BAGS OF RI	20
2/00	4	100	100	1200	130	04/03/00	100	PIECES OF B	30
3/00	5	100	10	3000	13	05/03/00	10	BAGS OF CE	3

REPORT ON INVENTORY OF ITEMS

09/01/01

TITLE OF THE STOCK ITEMS	DESCRIPTION	TYPE	DEPARTMENT	ACCESS CODE	PCODE	PARAMETER	JOB STATUS	REFERENCES
STENCILS	MADE IN NIGERIA	G	EXAMINATIO	AC001	PU	FOOLSCAP	S	1235A
FOOD STUFFS	HIGHER THAN USUAL	B	KITCHEN	AC011	P1	NIL	F	1237A
WORKSHOP	MADE IN JAPAN	H	ELECTRICAL	AC223	PO	LARGE SIZE	E	1335A
CHEMICAL	M & B	C	GENERAL	ACQ002	PQ	500 GRAMM.	Y	1246A
WORKSHOP	OLD TELEVISION	W	RTV	AQW1003	PW	14 INCHES	P	AA1235A

COMPUTERIZING CONTROL

REPORT ON ISSUE

09/01/01

REQUISITION NUMBER	ISSUE DATE	ISSUES NUMBER	ISSUE TYPE	DESCRIPTION	ASSET NUMBER	JOB NUMBER	DEPARTMENT CODE	ISSUE BY
FTC/99/001	03/03/00	001	2ND	STAGE COVER	AA002	QW220	RTV002	A. A. HASSAN
FTC/99/002	04/04/00	002	Y51	COPPER TUBE	QW002	PHY002	GST002	A. A. HASSAN
FTC/99/003	04/04/00	003	Y61	PIPETTE	WQ003	CHE003	GST003	A. A. HASSAN
FTC/99/004	06/04/00	004	Y71	TALPA OIL	WS004	CJ004	C & J	MR. M. A.
FTC/99/005	05/04/00	005	Y78	1ST FACE	QW005	EC005	ELEC005	A. O.

COMPUTERIZING CONTROL OF STORES INVENTORY REPORT ON REQUISITION OF ITEMS

09/01/01

REQUISITION NUMBER	REQUISITION STATUS	ITEM NUMBER	ISSUE STATUS	JOB NUMBER	QUANTITY REQUIRED	QUANTITY SUPPLIED	BALANCE
FTC/99/001	FOOD STUFFS	003	FOOD STUFFS	03	150	100	50
FTC/99/002	MAINTENANCE	002	MAINTENANCE	02	200	180	20
FTC/99/003	EXAMINATION	003	EXAMINATION	03	150	100	50
FTC/99/004	LAB. EQUIPMENTS	004	LAB. EQUIPMENT	04	180	120	60
FTC/99/005	WORKSHOP	005	WORKSHOP	05	200	180	20

COMPUTERIZING CONTROL OF STORES INVENTORY

REPORT ON VENDOR MAINTENANCE

08/30/01

GROUP	DESCRIPTION	CODE NO. OF ITEM
COLLEGE	BLEACHING	4
FOOD STUFF	GARI	5
FOOD STUFF	YAM	6
FOOD STUFF	SUGAR	7
FOOD STUFF	RICE	8

REPORT ON SALES

09/01/01

ORDER DATE	REQUISITION DATE	ORDER NUMBER	ORDER STATUS	SALES ORDER NUMBER	SALES NUMBER	ORDER STOP	DELIVERY CHARGE	AMOUNT PAID	BALANCE PAYMENT
07/03/99	10/03/99	6		10	350.00	6	350.00	35000.00	3500.00
04/03/99	10/03/99	2		150	200.00	2	200.00	20000.00	1000.00
01/03/99	03/03/99	1		5	20.00	1	50.00	10000.00	500.00
03/03/99	05/03/99	3		7	50.00	3	150.00	20000.00	1500.00
06/03/99	08/03/99	5		9	250.00	5	250.00	30000.00	3000.00

