CHAPTER - 8

AUTOMATION OF INTELL ENGINEERING COLLEGE LIBRARY
Library automation in simple terms is the application of computers and utilisation of computer based products and services for carrying out different library operations and functions.

Automation implies a higher degree of mechanization where routine and repetitive tasks or operations are to be performed by machines with little or no intervention by human beings. The lesser the degree of human intervention, the greater the degree of automation.

Azeez rightly points out the Characteristics of a computer system that are particularly significant for libraries: They are

1. It can store large quantities of information. For instance, an entire library collection data can be stored on one or more magnetic discs on a computer.

2. It can process, information rapidly and accurately. For instance, a computer can be used to manipulate bibliographic data to produce catalogue cards, sorted list of books etc.,

3. Information stored in the computer system can be searched and retrieved rapidly.

4. Information stored in the computer can be edited and modified easily.

5. Information stored in the computer system can be communicated at high speed over telecommunication lines to remote locations connected to the computer.(1)

Purpose of Library Automation:

The main purpose of the Library Automation of Intell Engineering College is to provide better services at minimum cost, effort and time. It aims at eliminating manual labour in repetitive and routine activities.
AREAS OF LIBRARY AUTOMATION IN
INTELL ENGINEERING COLLEGE

Mechanisation of library house keeping operations predominantly by computerisation is known as Library Automation. The most commonly known house keeping operations are acquisition control, serials control, cataloging control, and circulation control. (2)

Library automation is the use of automatic and semi automatic data processing machines to perform such traditional library activities as acquisition, cataloging and circulation. In the recent years the advent of micro computers and many application software packages has made the information professionals to switch over to automate their library routines. Thus, a large number of libraries in the world have automated one or more of the functions.

1. Acquisition.
2. Cataloging
3. Circulation
4. Serials control.

Depending on the type of library, all or some of these functions may be computerised according to their priority. Circulation control may be given a first priority in public library, while serial control may be given a top priority in a special library, similarly Acquisition may be computerised first in University libraries. (3)

Here, an attempt is made to develop a few modules for the following house keeping operations using FoxPro, to automate Intell Engineering College Library.
1. Acquisition Control.
2. Cataloging.
3. Circulation control.
4. Serials Control.

MENU DESCRIPTION

Main menu includes ten sub menus. They are:

1. **STOCK ENTRY**: This sub menu is completely related to stock or books. Under this sub-menu there are three options applicable for different operations. They are
   a) Adding book
   b) Editing book
   c) Deleting book

   a) Adding book : This option is used to add the new books to the total collection.

   b) Editing book : This option is used to edit or change any particulars of the book.

   c) Deleting book : This option is used to delete any book from the collection.

2. **STUDENT ENTRY**: This sub-menu is related to students or users. This sub-menu includes three options. They are
   a) Adding
   b) Editing
   c) Deleting

   a) Adding : This option is used for adding the details of student who is newly joined.

   b) Editing : This option is used to changing any particulars of the student.

   c) Deleting : This option is used to deleting any student from the data.

3. **ISSUE**: This sub-menu is used to issue the books to the users.
4. **RETURN**: This sub-menu is used to returning the issued books from the users.

5. **REPORTS**: This is used to know the report of issues, returns and students. This includes two options. They are
   a) Daily Report
   b) Query
   a) **Daily Report**: This includes two sub-options i. Issue ii. Return
   i) **Issues** : It shows the no.of issued books of a particular day.
   ii) **Return** : It gives the report of returned books of a particular day.
   b) **Query** : It includes two sub-groups.
      i) **Available**
      ii) **Student**
      i) **Available** : This option helps us to know whether the book is available in the library or not.
      ii) **Student** : This option enables us to know the number of books issued on a particular student’s account. It also gives the book details, issue date, due date.

6. **PURCHASE ORDER**: It is used to acquire the book for the library. It includes four options. They are
   a) **Add**
   b) **Edit**
   c) **Delete**
   d) **Print**
   a) **Add** : It is used to add the books to the purchase order list.
   b) **Edit** : It is used to change any details of the books in the purchase order list.
c) **Delete:** It is used to delete any book from the list.
d) **Print:** It is used to take final printout.

7. **PRINT** : This sub menu is used to take any printouts.

8. **CATALOGUE:** It includes three options.
   a) **Subject**
   b) **Author**
   c) **Title**

   a) **Subject:** It is used to know how many books are available on a particular subject in the library.

   b) **Author:** It is used to know how many books of a particular author are available in the library.

   c) **Title:** It is used to know how many books are available on a title in the library.

9. **PERIODICAL:** It is used to know the details of periodical which are subscribed by the library. It includes four options. They are

   a) **Adding**

   b) **Edit**

   c) **Delete**

   d) **Query**

   a) **Adding:** It is used to add the new periodical to the periodical collection

   b) **Edit:** It is used to edit any periodical description.

   c) **Delete:** It is used to delete any periodical from the periodical collection.

   d) **Query:** It is used to know how many issues of a particular periodicals are received by the library.

10. **EXIT** : It is used to terminate the process.
8.1 AUTOMATION OF ACQUISITION CONTROL SYSTEM

INTRODUCTION:

Acquisition is the general term applied to the function of obtaining the library materials which make up a library’s collection. The acquisition function may be performed by an acquisition department, acquiring materials by all appropriate means, by an order department, or other specialized departments within the library.

ACQUISITION PROCESS:

The acquisition work is split into many stages. They are

1. Selection.
2. Checking for duplication.
3. Demand of books
4. Deciding a vendor
5. Ordering
6. Sending reminders for item not received
7. Receiving the documents.
8. Making arrangement for payment

FILES TO BE MAINTAINED:

1. PURCHASE ORDER FILE:

Contains all information about the book such as the name of the supplier, name of the requester, purchaser order number which is the important field generated by the computer using date of order and running serial no.
2. **ACCESSION FILE:**

   This is the file which contains complete information about the procured book. Accession records of the new books are automatically created when the book is received.

3. **LEFT OVER LIST FILE:**

   This is the file which contains the left over list of purchase order. That is the list of books which are not received.

   In main menu one sub-menu is using for acquisition. That is Purchase Order

1. **PURCHASE ORDER**

   This sub menu is used to order the books for the library. Initially the following details of books are typed under the heads:

   1. S.No.
   2. Title
   3. Author
   4. No.of Copies

   The number for each purchase order like 1,2,3,.....is given

   The sub menu PURCHASE ORDER contains four options for different operations. They are

   a) Add
   b) Edit
   c) Delete
   d) Print

   a) **Add** : This option is used to add more books to the ordering list.
When select ADD under sub-menu PURCHASE ORDER the screen displays the fields as follows:

Purchase order S.No
   Title
   Author
   Publisher
   No.of Copies
   Do you want save
   Do you want continue y/n   

After typing the details of books at their appropriate places the screen displays as follows (fig.8.1)

If, typing ‘y’ in the last column the screen is ready for next adding record.

If, typing ‘n’ in the last column the screen returns to PURCHASE ORDER menu.
<table>
<thead>
<tr>
<th>Purchase Order S. No.</th>
<th>Mastering V.B.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Laxmi</td>
</tr>
<tr>
<td>Author</td>
<td>TATA</td>
</tr>
<tr>
<td>Publisher</td>
<td>No. of Copies</td>
</tr>
<tr>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Do you want save</td>
<td>V</td>
</tr>
<tr>
<td>Do you want continue</td>
<td>y/n</td>
</tr>
</tbody>
</table>

**Fig. 8.1**
b) **EDIT**: This option is used to edit or change anything in the purchase order list.

When select the EDIT option the screen displays as follows:

<table>
<thead>
<tr>
<th>Purchase order S.No</th>
<th>Title</th>
<th>Author</th>
<th>Publisher</th>
<th>No.of Copies</th>
<th>Do you want save</th>
<th>Do you want continue y/n</th>
</tr>
</thead>
</table>

Make changes if necessary, then select y/n to continue or return.

The screen displays as follows: \( F_{\frac{q}{8}} \cdot 2 \)
Purchase Order No. 6

Title:  MAIRING U D
Author:  LAW
Publisher:  TATS
No. of Copies:  4
Do you want save:  N
Do you want continue y/n:  Y

Fig. 8.2
c) **DELETE**: This option is used to delete any record from the list. The screen displays the following heads, when selecting the DELETE option.

- Purchase order S.No
- Title
- Author
- Publisher
- No.of Copies

**Do you want DELETE**
Do you want continue y/n
If, type all the details the screen displays as follows: 

- If select 'y' the screen get ready for next record.
- If select 'n' the screen get return to the sub-menu purchase order.
Purchase Order S. No: 6
Title: Mastering UML
Author: DAWES
Publisher: TAB
No. of Copies: 20
Do you want DELETE: N
Do you want continue y/n: Y

Fig. 8-3
d) PRINT: This option is used to take print out of purchase order list.

The screen displays as follows when select the print option.

The print out of the purchase order list follows (Fig 8.4) & (Fig 8.5)
<table>
<thead>
<tr>
<th>P.No.</th>
<th>Title</th>
<th>Author</th>
<th>Publisher</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>C HOW TO PROGRAM</td>
<td>DIETEL &amp; DIETEL</td>
<td>PEARSON</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>DATA STRUCTURES &amp; ALGORITHMS</td>
<td>BRUNO R PREISS</td>
<td>JOHN WILEY</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>T C PROGRAMMING LANGUAGES</td>
<td>BRAIN W KERNIGHAN &amp; DENNIS</td>
<td>PHI</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>FUNDAMENTALS OF DATA STRUCTURE</td>
<td>ELLIS HOROWITZ SARTAJ</td>
<td>GALGOTIA</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>DATA STRUCTURE C &amp; C++</td>
<td>YEDIDYAH LANGSAM &amp; MOSHE</td>
<td>PHI</td>
<td>50</td>
</tr>
</tbody>
</table>
8.2 DATA ENTRY

After receiving the books or documents the data of books to be entered into the computer. At the same time users data also to be entered. This data entry is the very important task to circulate the books to the users. With the help of two sub menus the data entry is possible.

1. STOCK ENTRY
2. STUDENT ENTRY

1. STOCK ENTRY: This menu is used to enter the data of books into the computer. At the same time, it is used to add, edit and delete the records by using three options which are under the sub menu STOCK ENTRY. When, selecting the STOCK ENTRY sub-menu the screen will appear as follows. The three options of this menu are

1) Adding Book
2) Editing Book
3) Deleting Book.

(See Fig. 8.6)
**ADDING BOOK:** This option is used to add the new books to the total collection.

If **ADDING BOOK** option in the STOCK ENTRY menu is selected, the screen will appear as follows (Fig. 8.7):
If all particulars in the screen filled up the screen is ready for next record.

EDITING BOOK:

This option gives the following screen which is used to edit or change any particulars of the book. If press 'Y' against the column

Do you want continue Y/N Y  The screen is ready for next record. If press 'N' against the column.

Do you want continue Y/N N the screen will go back to stock entry menu.
If enter the book number which is not registered in the data the screen will appear as follows. (Fig. 8.9)
DELETING BOOK:

The last option of STOCK ENTRY menu is DELETING BOOK. This option is used to delete any book from the collection.

If, this option is selected, the screen will appear as follows. (Fig. 8.10)

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURCHASE ORDER NO.</td>
<td>1000</td>
</tr>
<tr>
<td>DDC 1</td>
<td>033.81</td>
</tr>
<tr>
<td>DDC 2</td>
<td>033.81</td>
</tr>
<tr>
<td>DDC 3</td>
<td>033.81</td>
</tr>
<tr>
<td>TITLE</td>
<td>INTERNAL COMBUSTION ENGINES</td>
</tr>
<tr>
<td>AUTHOR</td>
<td>AGARWAL</td>
</tr>
<tr>
<td>RATE</td>
<td>185.00</td>
</tr>
<tr>
<td>NO. OF PAGES</td>
<td>2</td>
</tr>
<tr>
<td>NO. OF PRELIMINARY PAGES</td>
<td>0</td>
</tr>
<tr>
<td>PUBLISHER</td>
<td></td>
</tr>
<tr>
<td>PLACE OF PUBLICATION</td>
<td></td>
</tr>
<tr>
<td>YEAR OF PUBLICATION</td>
<td>2018</td>
</tr>
<tr>
<td>DO YOU WANT DELETE PERMANENTLY</td>
<td>Y/N</td>
</tr>
<tr>
<td>DO YOU WANT CONTINUE</td>
<td>Y/N</td>
</tr>
</tbody>
</table>

![Fig. 8.10](image)
After, filling the details of deleting book, if press 'Y' against the last column the screen will ready for next record for delete. If press 'N' against the last column, the screen will go to STOCK ENTRY menu.

If, type the book number which is not registered in the collection data the screen shows as follows. (Fig  8.11)
STUDENT ENTRY:

This sub-menu is mainly used to enter the details of students. This menu contains three options.

a. Adding
b. Editing
c. Deleting

a. ADDING: This option is used to add the details of a student who is newly joined.

When selecting this option, the screen appears as follows. (Figure 8.12)

If select 'Y' from the last column, the screen will get ready for the next adding record.

If select 'n' from the last column, the screen will return to the sub-menu Student Entry.
REGISTER NUMBER 05741000282

NAME TREE

DO YOU WANT SAVE Y/N Y

DO YOU WANT ADD ONE MORE STUDENT Y/N Y

Fig 8.12
b) **EDITING:**

This option is used to edit or change any details of student. For example, at the time of entering the students data, any mistakes can takes place, correct the mistakes with the help of EDITING Option.

When select this option the screen will appears as follows. (Fig 8.13)

If select 'y' from the last column the screen will get ready for other record to edit.

If select 'n' from the last column the screen will get return to the sub menu STUDENT ENTRY.
When, type the ID number of the student which is not correct, or enter the ID No. which is not registered into the data the screen shows "STUDENT NOT FOUND" as follows (Fig. 8.14)
c) **DELETING**: This option is used to delete any records of students from the students data.

When select this option the screen shows as follows: *(Fig. 8.15)*

When select 'y' from last column the screen will get ready for next record to delete.

When select 'n' from last column the screen will get return to the sub-menu STUDENT ENTRY.

![Screen capture showing deletion process](image_url)
When, type the number which is not registered into the data the screen will appear as follows. (Fig. 8.16)

If select 'y' the screen will get ready to next record to delete.

If select 'n' the screen will get return to sub-menu STUDENT ENTRY.
8.3 AUTOMATION OF CIRCULATION SECTION

Introduction of computer in libraries have immensely enhanced the effectiveness of library services including efficient organisation and retrieval of information activities. In a library the activities may broadly be grouped into two broad categories.

1. House keeping activities and
2. Services.

Under the House keeping activities come Administration & maintenance, acquisition, classification, cataloguing, circulation serial control and stock verification. Under the services come variety of services such as Documentation service, Networking including resource sharing, providing information search facility and in-house publications, preparation of casual and regular bibliographies and indexes.

**Circulation** is one of the essential services of a library. It is a very important library operation. It is the combination of charging and discharging. Charging means issuing and discharging means returning the books (documents). Computer can very efficiently handle circulation programme of a library from using and receiving documents, to sending reminders.

The circulation operations are repetitive in nature, the procedures to be followed can be described systematically. The circulation control is vital and quite independent than any other library
activities. The circulation control system is designed to store and manipulate three types of information.

1. Information about the document. This includes accession number, call number, author, title, publication and cost.
2. Information about the borrower. This includes the borrower’s name, initial, identification number, Department to which he/she belongs to and sex.
3. Information about the loan itself. This includes the date of borrowing, due date, number of days of borrow and fines.

Library Circulation system includes “entering a new document, issuing required book to the user, returning of book, information retrieval and also print reminders.

**Design of Circulation Database:**

A centralised collection of data is called as database. Collection of related data items of entities having the same attributes may be referred to as a database. Database system is a general software which is mainly used for data storage and retrieval. This software serves as a base for application development.

**BAR CODING:**

Bar coding is an important printing technology for automatic identification of books as well as users. Barcodes are a series of black and white bars arranged in a predefined form to represent known codes of information. This code is read by a device which is called Bar Code scanner which causes a beam of light to pass over the bars. The white spaces reflect light which are translated into relevant signals for
the computers to read them without the risk of human error. Bar Coding facilities are available in Intell Engineering College. In this college library each book will have its own bar-code number. The accession number of the book itself is the bar code. Each student or user will have its own bar code. The identification number itself is the bar code for the student. (4)

**Usage of Bar Code:**

The usage of bar code is very easy and time saving. The bar code is in the form of sticker. This sticker is pasted in the respective book. In case of student the bar-code sticker paste back side of the card.

**Circulation Process:**

In main menu three sub menus are used for circulation work.

1. Issue
2. Return
3. Reports

1. **Issue:** This menu is used to issue the books to the students.

When select the ‘Issue’ option the screen displays

Book S.No

Now, the bar code of the book simply keep under the scanner, the screen displays the

Book S.No. XXXX
Title XXXX
Author XXXX
ID NO ____________
Now, the bar code of the library card, keep under the scanner, the screen displays as follows. (Fig. 8.17)
In Intell Engineering College Library only three books are permit to issue for the students. So the program can permit for three books to issue.

If, one student already issued three books, the program will not accept to issue fourth book. If try to issue the fourth book, the screen displays as follows:

$$\left( F_{i} \cdot 8 \cdot 18 \right) \leq \left( F_{i} \cdot 8 \cdot 19 \right)$$

The screen displays all the details of issued books also
Fig. 3.19
In case, if type the students ID No. which is not register in students data, the screen displays as follows: (Fig. 8.20)
i.e. STUDENT NOT FOUND

Fig. 8.20
In case, if type the accession number which is not register in the data, the screen displays 'BOOK IS NOT AVAILABLE' as follows. (Fig. 8.21)
2. **RETURN:** This option (menu) is used to return the books which are returned by the students.

In this process simply keep the bar code of the book under the bar code scanner the screen will appears as follows (Fig. 8.2.2)
In Intell Engineering College the duration for the issued book is one week. If the student returned the book after due date the screen displays the fine details as follows. (Fig. 8.23)
3. **REPORTS**: This menu is very much useful to the library staff and as well as users. This menu includes two options, they are

   a) **Daily Report**

   b) **Query**.

a) **Daily Report**: It is used to know transactions of a particular day. Under this option, further two sub-options.

   i) **Issues**: It is used to know the daily issues report (no. of issues). When select this sub-option the screen displays *Enter Date*.

   After entering the Date the screen displays list of all issued books of that particular day as follows: 

   \[ (F_{12} \cdot g \cdot a \cdot s) \]
<table>
<thead>
<tr>
<th>IDNO</th>
<th>SNO</th>
<th>B.name</th>
<th>&quot;B.initial&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>01741A00362</td>
<td>11594</td>
<td>DO ANANTHA CHARRDHAR</td>
<td></td>
</tr>
<tr>
<td>01741A00323</td>
<td>8789</td>
<td>B MODULI RASA</td>
<td></td>
</tr>
<tr>
<td>01741A00324</td>
<td>5987</td>
<td>C RAGHU NANDAN</td>
<td></td>
</tr>
<tr>
<td>01741A00325</td>
<td>11227</td>
<td>C RAGHU NANDAN</td>
<td></td>
</tr>
<tr>
<td>02741A00416</td>
<td>3393</td>
<td>AC LAKSHMI KONTHA</td>
<td></td>
</tr>
<tr>
<td>02741A00411</td>
<td>7408</td>
<td>M MADHUSUDHANA NANDU</td>
<td></td>
</tr>
<tr>
<td>02741A00420</td>
<td>12132</td>
<td>G MANJUNATH</td>
<td></td>
</tr>
<tr>
<td>01741A00420</td>
<td>18969</td>
<td>G MANJUNATH</td>
<td></td>
</tr>
<tr>
<td>02741A00422</td>
<td>7487</td>
<td>K KEERAJ</td>
<td></td>
</tr>
<tr>
<td>03741A00599</td>
<td>5525</td>
<td>CHANDRA MAHESH N</td>
<td></td>
</tr>
<tr>
<td>04741A0101</td>
<td>16464</td>
<td>MILLA ANJUMAN SAFREEN</td>
<td></td>
</tr>
<tr>
<td>04741A0101</td>
<td>22666</td>
<td>MILLA ANJUMAN SAFREEN</td>
<td></td>
</tr>
<tr>
<td>04741A0101</td>
<td>11953</td>
<td>G.M. ARUN KUMAR</td>
<td></td>
</tr>
<tr>
<td>04741A0101</td>
<td>4308</td>
<td>G.M. ARUN KUMAR</td>
<td></td>
</tr>
<tr>
<td>04741A0101</td>
<td>18223</td>
<td>KHALI ASHFAQ UMA</td>
<td></td>
</tr>
<tr>
<td>04741A0101</td>
<td>688</td>
<td>KHALI ASHFAQ UMA</td>
<td></td>
</tr>
<tr>
<td>04741A0101</td>
<td>22659</td>
<td>MAHJULA CHINNA MASTAN VA</td>
<td></td>
</tr>
<tr>
<td>04741A0101</td>
<td>11996</td>
<td>MAHJULA CHINNA MASTAN VA</td>
<td></td>
</tr>
<tr>
<td>04741A0101</td>
<td>4876</td>
<td>MAHJULA CHINNA MASTAN VA</td>
<td></td>
</tr>
<tr>
<td>04741A0005</td>
<td>16622</td>
<td>SANJEEVAREDDY VATDIREDDY</td>
<td></td>
</tr>
<tr>
<td>04741A0005</td>
<td>18217</td>
<td>SANJEEVAREDDY VATDIREDDY</td>
<td></td>
</tr>
<tr>
<td>04741A0007</td>
<td>40880</td>
<td>MALLIK KIRAN KUMAR</td>
<td></td>
</tr>
<tr>
<td>04741A0007</td>
<td>18064</td>
<td>J.S. MAHESH</td>
<td></td>
</tr>
<tr>
<td>04741A0007</td>
<td>2430</td>
<td>J.S. MAHESH</td>
<td></td>
</tr>
<tr>
<td>04741A0007</td>
<td>11599</td>
<td>J.S. MAHESH</td>
<td></td>
</tr>
<tr>
<td>04741A0007</td>
<td>3756</td>
<td>DESUR SUNRAMAYAN MAH</td>
<td></td>
</tr>
<tr>
<td>04741A0007</td>
<td>11142</td>
<td>DESUR SUBRAMANYAN MAH</td>
<td></td>
</tr>
<tr>
<td>04741A0007</td>
<td>4686</td>
<td>BEDUDURU MURALI KRISHNA</td>
<td></td>
</tr>
<tr>
<td>04741A0007</td>
<td>24898</td>
<td>BEDUDURU MURALI KRISHNA</td>
<td></td>
</tr>
<tr>
<td>04741A0007</td>
<td>12082</td>
<td>BEDUDURU MURALI KRISHNA</td>
<td></td>
</tr>
<tr>
<td>04741A0007</td>
<td>2483</td>
<td>APKARI RAJ KUMAR</td>
<td></td>
</tr>
<tr>
<td>04741A0011</td>
<td>18232</td>
<td>APKARI RAJ KUMAR</td>
<td></td>
</tr>
<tr>
<td>04741A0011</td>
<td>648</td>
<td>APKARI RAJ KUMAR</td>
<td></td>
</tr>
<tr>
<td>04741A0011</td>
<td>18232</td>
<td>B. RAJESH</td>
<td></td>
</tr>
<tr>
<td>04741A0011</td>
<td>22255</td>
<td>B. RAJESH</td>
<td></td>
</tr>
<tr>
<td>04741A0014</td>
<td>22255</td>
<td>MAHAUDA MOHAMMED SALEEM</td>
<td></td>
</tr>
<tr>
<td>04741A0014</td>
<td>11887</td>
<td>MAHAUDA MOHAMMED SALEEM</td>
<td></td>
</tr>
</tbody>
</table>

**Issue** [E: "Shastriyana Sutri"] | **Record** [787/782] | **Exclusive** |

**Fig. 8.24**
**Daily Issues Report**

<table>
<thead>
<tr>
<th>IDNO</th>
<th>SNO</th>
<th>B.name</th>
<th>&quot;B.initial&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>0471808120</td>
<td>2349</td>
<td>MANJULU SANJEEV KUMAR</td>
<td></td>
</tr>
<tr>
<td>0471808222</td>
<td>5399</td>
<td>SHAHID HAMEED DAWLAH</td>
<td></td>
</tr>
<tr>
<td>0471808127</td>
<td>597</td>
<td>NAGARAJU</td>
<td>B</td>
</tr>
<tr>
<td>0471808127</td>
<td>2232</td>
<td>NAGARAJU</td>
<td>B</td>
</tr>
<tr>
<td>0471808127</td>
<td>18234</td>
<td>NAGARAJU</td>
<td>B</td>
</tr>
</tbody>
</table>

Number of issues are 2232.
ii) **Return:** This sub-option is used to know the return report of a particular day. If select this option the screen displays

**ENTER DATE**

After typing the date the screen displays the details of returned books as follows

![Fig. 8.26](image)
b) **Query:** This option is used to know the position of the book. (Whether it is issued or present in the Library) and student (how many books are in his/her account) under this option there are two sub options namely.

   i) **Available**
   ii) **Student**

i) **Available:** It is used to know the position of the books, it means that whether the book, is issued out or available in the library.

When, select this option the screen displays

   S.No.___________

   When, type the S.No. the screen displays as follows (F: g • g • g • g)

   If ‘Y’ displays against the Issue ‘y’ the book is issued out. If there is blank against the Issue ______ the book is present in the library.
ii) **Student**: It is used to know the no. of books issued by a particulars student. It is used to know which books are issued by him/her. And also it is used to know the issued date.

When select the sub-option the screen displays

**ENTER STUDENT I.D.NO.**

When, keep the bar code of library card of a student the screen displays the details of issued books of that student as follows (Fig. 8.28)
8.4 AUTOMATION OF CATALOGUING

Library is growing organism. It grows in size as well. As a result of literature explosion, the size of the catalogue is increasing beyond expectations. In order to solve the span problem as well as for quick, accurate and pin pointed searching of required information, computer has come out to be of great help. (5)

The catalogues are prepared for scratching the material in the libraries, but these are not fully capable to search out the required material out of large chunk of the literature. By the use of computers a file is prepared for all possible entries of the documents and the file is organised in such a way that all the answer of various types of query, the entries prepared to provide access to the users are filled. The search for a record of a document may be done for various types of accesses in this system. It has become possible only due to the methods of searching by matching readable file, and which has become due to the efficiency of quick searching of the computers. The computer scorches the information from the file and also test the same (6)

Automation of cataloguing in an engineering college is very Simple. The user approach is in three ways. They are

- Subject approach
- Title approach
- Author approach
So there is a need to prepare three types of catalogues.

1. Subject Catalogue
2. Title Catalogue
3. Author Catalogue

With the help of a single program.

It is also aimed at achieving efficiency and economy, eliminating unnecessary duplication of labour, and making full use of available resources as well as the expertise. The card catalogue is traditional one. So for the convenience of the users, Intell Engineering College Library following the simple cataloguing process.

**Cataloguing Process:** Initially input the bibliographical data when recurred the books. These records are in periodical order. But with the help of computer all the related records are kept in one place easily. For this the cataloguing process done in three ways for fulfilling the different approaches of the users.

In main menu one sub menu is using for cataloguing. That is 'CATALOGUE'

The CATALOGUE sub menu contains three options.

a) **SUBJECT**

b) **AUTHOR**

c) **TITLE**

da)  **SUBJECT:** It represents the subject catalogue. This option helps us to know how many books are available on a particular subject. And also it lists the whole catalogue of particular subject with author. This catalogue depends on the DDC numbers of the books. When select the "SUBJECT" option the screen displays
Here

DDC1 represents first three digits of the DDC number
DDC2 represents next three digits of the DDC number
DDC3 represents the remaining number of the DDC number

After filling the DDC number the screen displays as follows (Fig. 8.29)
b) **AUTHOR:** It represents the Author catalogue. This option helps us to know how many books of a particular author are available in the library. When select the sub-menu AUTHOR the screen displayed Enter the name of the author ____________

When type the name of the author the screen displays all the books of a particular author, which are available in the library as follows. Fig. 8.30

![Author Catalogue](image_url)
C) **TITLE:** It represents the Title Catalogue. This option helps us to know how many books on same title are available in the library. When select the sub-menu TITLE the screen displays ENTER THE TITLE OF THE BOOK _____________. When type the title of the book the screen will appear as follows. *(Fig. 8.31)* It displays all the books which are of some title.

![Figure 8.31: Title Catalogue](image-url)
8.5 AUTOMATION OF SERIALS CONTROL

“A Library has been lightly charged with the functions of collecting, preserving, preparing and disseminating knowledge with a certain aim – the aim being the fulfillment of the purpose of the parent body”. These words are from “Acquisition of Serials in Indian University libraries Indian Librarian. V.18(June 1963) P.25 By R.L.Mittal”. The general aim of libraries is the provision of reading facilities to the public so that their personality is enlightened. These aims and purposes differ to some extent in different kinds of libraries. In public libraries, the aim of the library is to provide inspiration, recreation and information to the readers so that they can become ideal citizens and they may be able to perform their duties properly. In case of academic libraries, the libraries have to provide the reading materials particularly in accordance with the curriculum of various disciplines to help the students to grasp knowledge for examination purposes, besides their general mental development. These aims can be fulfilled only if all relevant reading materials including books, periodicals, etc., are made available of readers.(7)

Magazines, Periodicals and Journals are published at various intervals. The frequency of their publications may be daily, bi-weekly, weekly, fortnightly, monthly, bi-monthly, quarterly, half-yearly, annual or irregular.
as well. Automation minimises duplication the storage and renders the task of searching very much easier.

THE PROCEDURE OF AUTOMATED SERIALS CONTROL:

The simplest type of serials control system is the straight listing of information regarding each title. In such a system, the information is key punched or and then printed lists are obtained by title, by subject, or in any other sequence. Even in such a system, multiple copies of the library holdings can be produced easily and made available to users of library as well as potential users at remote points.

We also use a pre-punched cards for each issue of all the titles expected during a given period of time. The arrival during a given period of time. The arrival cards contain a brief title, information about the particular issue expected (volume number, issue number, date and other information required in receiving process, frequency of publication etc..) The cards can be organized in a manual file. When issues are received an attempt is made to match them against the corresponding arrival cards. These cards are pulled out and kept in a separate file. At the end of the month (assuming a monthly cycle of processing) the cards of the issues received are fed into the computer to update “holdings” information and it simultaneously punches another set of arrival cards for the next period. Any card remaining in the file at the end of a period represents issues which are potential claims.
Usually there will not be any card-reader in a microcomputer system. So if an automated serials control system is based on microcomputers, the arrival file may be maintained on floppy disks and appropriately processed.

The holding file of an automated serials control system can further be used to provide holding data (in machine readable form) to those (Ravi Chandra Rao) who want to compile union catalogue.

Functions of a Typical Automated Serials Control System:

According to Lucy Tedd, Computers are used to control the following functions of the serial system.

**BIBILOGRAPHY:**

Lists of serial holdings are produced. This is a fairly simple system to design and implement and many libraries have experimented with the use of computers to control this function because it can be implemented independently of other house-keeping procedures.

**ACCESSIONS:**

This procedures the selection, ordering checking in renewal of subscriptions and sending of claim notices when issues are not received. Most systems use the computer to assist rather than control the functions.
INVENTORY:

This includes the binding and circulation control of the issues of a serial.

According to Paul Pandian and Racichandra Rao view that the importance functions of a typical automated serial control system are

1. Inputting essential serial data
2. Ordering new serials
3. Renewals of presently subscribed serials.
4. Cancellation of presently subscribed serials if necessary.
5. Accessing of individual issues, as and when the issues are received.
6. Sending reminders, if necessary.
7. Selection follow-up of missing issues.
8. Preparation of various lists.
   a) List of periodicals received during a specified period.
   b) List of periodicals canceled during a specified period, and
   c) List of holdings with their status.
9. Keeping track of the amount spent on serials subscriptions, serials binding etc.,
10. Estimation of the budget for the next academic financial year.
11. Binding control.

These functions are not exhaustive. One can add many other functions according to local needs.

In main menu one sub-menu is used to control periodicals. That is ‘PERIODICAL’ Sub menus.
This sub menu helps us to order the periodicals, cancelling i.e. deleting the periodicals from the ordered list. And also it helps us to know how many issues are received by the library, how many missing issues etc.

The sub-menu PERIODICAL contains four options

a) Adding
b) Edit
c) Delete
d) Query

a) **Adding**: This option is used to add the new periodicals to the ordered list. When select this option the screen displays as follows.\[\text{Displayed screen}\]
PERIODICAL NUMBER 13
MAGAZINE NAME DIGIT
MONTH
YEAR 2005
MAGAZINE TYPE MONTHLY/WEAKLY M

DO YOU WANT SAVE
b) **Edit**: This option helps to change any particulars of periodicals in the ordered list. When select this option the screen displays as \( (\text{Fig. } 8.33) \) & \( (\text{Fig. } 8.34) \)
<table>
<thead>
<tr>
<th>PERIODICAL NUMBER</th>
<th>TIMES</th>
<th>YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAGAZINE NAME</td>
<td>TIMES</td>
<td>2005</td>
</tr>
<tr>
<td>MONTH</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>TYPE</td>
<td>MONTHLY/WEAKLY</td>
<td></td>
</tr>
<tr>
<td>DO YOU WANT SAVE</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>DO YOU WANT CONTINUE...</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 8.34

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If select 'Y' the screen will get ready for next record. If select 'N' the screen will return as follows.  (Fig 8.35)
c) **DELETE:** This option is sued to delete this periodical from the ordered list, if necessary. When, select the DELETE option the screen displays as follows. (Fig. 8.36)

If select ‘Y’ for the last column the screen will get ready for next record.

If select ‘N’ for the last column the screen will get return to the sub-menu ‘PERIODICAL’.
d) **QUERY:** This is the last and a very important option of the sub-menu **PERIODICAL**.

   It helps us to know how many issues of the particular periodical are received by the library. In case of weekly the screen displays as under. The screen explains the no. of issues of particular periodical issued in a month and year. The gap indicates the misusing issue of that periodical.

```
PERIODICAL-QUERY

Enter Title of the Magazine TIMES
Enter Year 2005
Magazine type WEEKLY

ALL THE ISSUES WHICH ARE RECEIVED FOR THE 2005

<table>
<thead>
<tr>
<th>Jan</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEB</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MAR</td>
<td>1</td>
<td></td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
```
In case of monthly the screen displays as follows: $(F_{18} - 8.38)$

It indicates the received issues of the periodical in a particular year by the library. Here the screen displays March, April, May, June of 2005. So the library received the 3 periodicals. But the January, February are not mentioned. So that two issues of 2005 are missing.
Enter Title of the Magazine: COMPUTER VICHANAM
Enter Year: 2005
Magazine type: MONTHLY
ALL THE ISSUES WHICH ARE RECEIVED FOR THE 2005
MAR
APR
MAY
JUNO
REFERENCES:

1. Azeez, T.A. Abdul Annals of Library and Information studies Vol 51 No.2, 2004 P.52


8. Mittal, R.L Acquisition of serials in Indian University Libraries, Indian Librarian V.18 June, 1963 P.25)