Section III
“Necessity is the mother of invention.” (Plato, 1996, p. 140). So the necessity for finding out proper methods for issuing books for home reading arises (Mittal, 1984). In this chapter we have tried to develop a model of manual circulation system. We have already gone critically through the existing literature available on circulation systems to determine and identify the factors influencing circulation activities in chapter 2, tried to comprehend the existing status the circulation systems of university libraries in West Bengal in chapter 3, made a comparative analysis of the circulation systems of the libraries in the chapter 4, and examined the attitudes of users towards circulation systems in university libraries of West Bengal in chapter 5, then we get a detail comprehension about the factors to be considered in designing a manual circulation systems for university libraries in West Bengal.

2 Objective

As we all know that there are so many young universities who are compelled to manage the circulation system manually. We have also observed that even the old universities also are not in a position to use semi automated/ fully automated circulation system due to lack of expertise and necessary infrastructure. Keeping in mind this fact we have focused our attention to manual circulation system besides the automated circulation system. In view of the above, here our objective is to design a
conceptual model and to provide some suggestions for the library authorities who are using/ will use manual circulation system.

3 Methodology

As is described in the chapter 1 introduction (*vide* Chap. 1, sec(t). 5).

4 Problems Faced in Manual Circulation System in University Libraries

These basic problems in circulation activities in the university libraries are as follows:

A. Time

1. The charging is a long and time consuming procedure (*vide* Chap. 3, sec(t). 4.1.7 and 4.2.5, Chap. 5, sec(t). 4.13).

B. Equipment

2. The number of equipments used in charging makes it complex (*vide* Chap. 3, sec(t). 4.1.7).

3. Writing of information on the borrower’s card and the register is time consuming and lengthy process (*vide* Chap. 3, sec(t). 4.1.7 and 4.8.6).

4. Library staff need to do a lot of work like writing on borrower’s card and register (*vide* Chap. 3, sec(t). 4.8.6).

C. Member Card

5. Multiple borrowers’ card is also cumbersome (*vide* Chap. 3, sec(t). 4.1.7, Chap. 4, sec(t). 4.9).

6. Information is written at the time of charging and discharging (*vide* Chap. 3, sec(t). 4.1.7 and 4.8.6).

D. Book Card

7. As the book does not contain any book card it is difficult to answer which book is issued to whom (*vide* Chap. 3, sec(t). 4.1.7).

9. Book cards, requisition slips and borrower’s card kept in same bunch so there have no need of book card otherwise book cards are to be arranged separately by call number (*vide* Chap. 3, sec(t). 4.3.5 & Chap. 4, sec(t). 4.28).

10. Users write information on book card so there may be a chance of mistakes (*vide* Chap. 3, sec(t). 4.8.6 & Chap. 4, sec(t). 4.27).

### E. Lending Slip

11. Borrowers slips are not returned to borrower, so if forget to dispose of it creates problem (*vide* Chap. 3, sec(t). 4.2.5, 4.3.5 & Chap. 4, sec(t). 4.38).

12. Fixation of time in sending requisition slips to find books is not desirable (*vide* Chap. 3, sec(t). 4.6.6).


### F. Date Label

14. Position of date label is not proper (*vide* Chap. 3, sec(t). 4.2.1).

15. Information on date label is not sufficient (*vide* Chap. 3, sec(t). 4.1.1 & Chap. 4, sec(t). 4.29.1).

16. Cross out the due date from the date label takes more time and looks bad (*vide* Chap. 3, sec(t). 4.3.5).

### G. Gate Pass

17. As the gate pass is checked twice and two staff are engaged for this purpose, the library needs additional staff (*vide* Chap. 3, sec(t). 4.2.5 & Chap. 4, sec(t). 4.30.1.1).

18. There have no duplicate gate pass to compare the actual issue of books (*vide* Chap. 3, sec(t). 4.3.5).

20. Gate pass is not issued for borrowing and it is very difficult to monitor; information of gate pass (vide Chap. 3, sec(t). 4.8.6 & Chap. 4, sec(t). 4.30).

H. Re-issue

21. The lack of provision for re-issue of books hampers the user’s interest (vide Chap. 3, sec(t). 4.2.5 & Chap. 4, sec(t). 4.41).
22. Re-issue is available on the next day and not on the day of return of book user has to come again to the library for the same work (vide Chap. 3, sec(t). 4.8.6).

I. Reservation

24. The lack of provision for reservation of books hampers the users’ interest (vide Chap. 3, sec(t). 4.2.5 & Chap. 4, sec(t). 4.44).
25. It is difficult to reserve books because reservation system cannot recognise who has issued the book (vide Chap. 3, sec(t). 4.1.7).

J. Demand

26. It is difficult to notice which book is in demand because the demand slips are kept separately and it is not possible to remember (vide Chap. 3, sec(t). 4.1.7 & Chap. 4, sec(t). 4.47.1).
27. The demand slips are not systematically kept (vide Chap. 3, sec(t). 4.3.5 & Chap. 4, sec(t). 4.47.1).
28. Simple method of keeping record of number of books issued in a day does not make it clear which books are more in demand and used (vide Chap. 3, sec(t). 4.6.6).

K. Fine

29. Books are not returned in time may be due to the reason that there is no late fine in most of the cases (vide Chap. 3, sec(t). 4.1.7 & Chap. 4, sec(t). 4.53).
30. The collection of over-dues is a lengthy process because the borrower has to fill up the fine slip (vide Chap. 3, sec(t). 4.2.5).
31. The fine collection is time consuming because fine is collected at the main cash counter located in the different buildings (vide Chap. 3, sec(t). 4.2.5).

32. If users pay fine early morning they still cannot issue any book until the fine slip comes from the cash counter and the update is done (vide Chap. 3, sec(t). 4.7.7).

L. Access

33. Closed access takes more time to collect the books (vide Chap. 3, sec(t). 4.3.5, Chap. 4, sec(t). 4.21 & Chap. 5, sec(t). 4.14).

M. Date Guide

34. It is very difficult to notice whether books are returned in time or not because the date guide is not there (vide Chap. 3, sec(t). 4.5.6).

N. Card Catalogue

35. At present unavailability of card catalogue makes it difficult to search a book if the computer database fails or there is a shortage of machine (vide Chap. 3, sec(t). 4.4.5).

36. If catalogue cabinet is not updated regularly, clear picture regarding availability of books becomes difficult (vide Chap. 3, sec(t). 4.6.6).

37. Lack of efficient staff makes the entire process complicated even if a simple mistake occurs (vide Chap. 3, sec(t). 4.6.6).

O. Notification

38. No notification is sent to the patron (vide Chap. 4, sec(t). 4.61, Chap. 4, sec(t). 4.49 & Chap. 5, sec(t). 4.32).

5 Proposed Model of Manual Circulation System
After analyzing the problems faced by the different university libraries (vide Chap. 3, 4 and 5) we have discussed the proposed model of manual circulation system given below.

5.1 Equipments

- **Membership Form**: When anyone wants to be a member of the library he/she has to fill up the membership form. The membership forms will be available from the library registration counter. While taking the membership form the applicant will have to mention his/her category. The registration counter will maintain registers for each category. The applicant at the time of taking the form will put his/ her signature in the relevant register against the form number. The membership form must be in card form as it is more flexible and durable than any other form and can also be preserved easily. Each membership form should have self attested photograph of the applicant and signed by the guardian and it is to be forwarded by the concerned head of the department. Other than students, the applicants should submit proof of their association with the academic institution to which they are attached. These membership forms are to be preserved as long as their memberships are continued. The membership form must be arranged under each category alphabetically by surname. This will help in easy retrieval. In this method one can easily find out member’s details both by the card number and by the surname.

- **Borrower’s Card**: There will be a single borrower card and a reference card. The borrower card should have a pocket system where the lending/requisition slips will be kept. Both cards must contain details of the member, signature of the member and the librarian, the photograph of the member for proper identification, the period of validity and rules regarding loss of cards (vide Chap. 5, sec(t). 4.34).

- **Lending Slips**: Lending/Borrower slip is essential one and it should have space to fill up borrower’s name and card number, signature of the borrower with date and bibliographical details of the book. This borrower’s slip is considered as requisition slip to bring down the book from the stack in case of closed access system and both for closed and open access system it is used for lending/borrowing books.
Chapter 6: Proposed Model of Manual Circulation System

- **Book Card:** Every book must have a book card where name of the library and bibliographical details of the book is written. It contains a tabular format to make entry of the borrower’s card number and date of return at the time of charging the book. Book cards are arranged according to call number in book card trays when the book is issued. With the help of book card, one may easily find out which book is issued to which borrower, as the borrower’s card number is written in the respective column of the book card.

- **Book Pocket:** Every book contains a book pocket where the book card is kept. The book pocket is to be pasted on the verso of the front cover page whereas recto of the first fly leaf contains the date label so that one can take out the book card from the book pocket and stamp the date of return on the date label easily at the time of charging. Thus the issue process can be faster. Important information regarding library rules can be printed on the book pocket precisely.

- **Date Label:** The date label is to be pasted on the recto of the first fly leaf. It must have columns where the return date and borrower’s card number can be written. Due to thickness of the book and the date label is pasted on the recto of the first fly leaf one can easily stamp the return date and borrower’s card number on the date label.

- **Gate Pass:** Gate pass is essential to take out the book outside the library building. It must contain the accession number, total number of books issued and the borrower’s card number to whom the books are issued. Signature of the library staff is essential. Each gate pass must have a gate pass number. The security counter must check and collect the gate pass and note down the accession number and it must be tallied with the circulation counter (vide Chap. 5, sec(t). 4.18).

- **Demand/Reservation slips:** There must be demand/reservation slip. The slip must be different in colour from lending/borrowing slip so that it can be easily visible to all. The demand slip is to be filled up by the borrower and then the slip is attached with the lending slip and kept within the borrower card’s pocket. When the book is returned or re-issued, the different colour demand slip will be easily visible which is attached with the borrower’s slip.

- **Overdue Slips:** Charging fine is a part of library activities. Some users are there who never return books in time. Fine system is to be implemented so that borrowers return library books in time. The process of charging fine must
be simple and less time consuming. If the provision of collecting fine is arranged within library premises, then it would be better as it saves lot of time of the member.

- **Book Drop Box:** Library members can drop their books at any time in the book drop box that is to be kept in outside of the library premises or it may be a central place or nearer to the hostel of the universities (*vide* Chap. 2, sec(t). 4.24 & *vide* Chap. 5, sec(t). 4.42).

- **Other Things**

  Some other things are also used there. They may be noted as:
  - Stationary materials like pen, pencil, gum, etc.;
  - Date stamp and ink-pad;
  - Filing trays for borrower’s cards;
  - Filing trays for book cards, etc.

5.2 Charging System

This model of circulation system needs a library which has both open and closed access systems. If the borrower gets the required book from the open access stack, then he fills up the lending slip and moves to the circulation counter to get his book charged. Otherwise if the book needs to be brought from the closed access system then the borrower has to fill up the lending slip and deposit it in the box specified from where it is sent to the stack for getting the book. If the book is not found there, the lending slip is returned to the borrower with a “not found” stamp; otherwise the book is brought down from the stack and given to the user. The library members submit the requisite book(s) at the charging counter along with the borrower’s card and the lending slips duly filled up as required. The person in charge of the counter takes them. He first takes out the book card from the book pocket and stamps the return date on the book card along with the borrower’s card number and keeps it separately to be filed later. The lending slips are inserted in the borrower’s card pocket. Then he puts the return date along with the borrower’s card number on the date label. The gate pass is given to borrower which allows him/her to take the books out of the library building. The book(s) is/are checked by security at the exit point of the library building and the gate pass is collected and kept back in a specified place. Thus the charging procedure seems to be complete by now. But still some other
works are left which are to be completed later. It includes filing of book cards in respective trays according to their call numbers. Borrower cards are arranged according to the borrower’s card numbers in a separate tray. The accession numbers of issued books must be noted down in a register from gate pass at the security counter and has to be cross checked with the circulation counter (vide Chap. 3, sec(t). 4).

5.3 Discharging System

The discharging procedure starts as the user enters the library building to return books. The user can drop the book in the book drop box also. At the gate, the book(s) is/are checked. The borrower then has to submit the book(s) at the discharging counter. The library staff collects the book from book drop box every day and discharges the books from the respective patrons. The circulation counter’s staff checks whether there is any overdue or not. If there is an overdue, the borrower is to pay the fine. The card is returned to the borrower along with the lending/borrower slips if there is no more books issued against his card; or if there is any book issued against his card then the borrower’s card is kept back and filed again. The discharging becomes apparently complete. Next the respective book card is taken out from the respective tray and kept in the book pocket which is sent back to the stack later or when they have free time. If this work is to be done later the work load is minimize at the time of lending. This completes the discharging procedure (vide Chap. 3, sec(t). 4).

5.4 Reservation/Demand

There must be the system of demand for those books that have been lent out (vide Chap. 4, sec(t). 4.44 & Chap.5, sec(t). 4.19-20). The borrower has to fill up a demand slip with bibliographic details of the book and the borrower’s name and card number with date and submit it at the circulation counter. The person in charge of the circulation counter finds out the borrower’s card with the help of book card against which the book is issued and pins up the demand slip with the borrower’s slip of that particular book (vide Chap. 3, sec(t). 4).

When the book is brought to the counter for re-issue/return, the books on demand are noticed and not re-issued again or not sends back to the stack. These books are kept out separately in different sequence at the circulation counter. There must be a register to note down the borrower’s name, card number and details of books that
have been kept on demand. The users check the register to find out whether their
demanded books have come or not. If possible the message should be sent to the
borrower who has demanded that particular book. If they find it then they take it to
the counter for issue. If the demand books are not taken within seven days, then these
are sent back to the stack (*vide* Chap. 3, sec(t). 4).

5.5 Re-issue

For re-issue of books, the borrower has to fill up the lending/borrower’s slip. He
writes the term re-issue on top of the lending/borrower slip. The person in charge of
the charging counter takes the book and the lending/borrower slip. He picks up the
borrower’s card from the respective tray. If previous lending/borrower’s slip is
attached with a demand slip, then that book is not re-issued; otherwise he puts a new
date of return on the date label along with the borrower’s card number and issues a
gate pass. He returns the old lending/borrower slip to the borrower and puts the new
lending/borrower’s slip in the borrower’s card pocket. At the time of re-issue there is
no need to take out the book card (*vide* Chap. 3, sec(t). 4.5.4)

5.6 Advantages

a. Membership registration forms are kept according to surname. It helps to find
out the borrower by his surname if anyone searches. Another register is kept
according to the borrower’s card number which helps to search by borrower’s
card number (*vide* Chap. 3, sec(t). 4.5.1).

b. Proof of membership of the academic institution that he/she is attached to, are
kept separately category wise that also helps to find out the borrowers
information, when required Membership registration forms are kept according
to surname. It helps to find out the borrower by his surname if anyone
searches. Another register is kept according to the borrower’s card number
which helps to search by borrower’s card number (*vide* Chap. 4, sec(t). 4.7).

c. Single borrower’s card with pocket can easily show how many books a
particular borrower issues because all the lending slips are kept within the
borrower’s card pocket and arranged according to the card numbers. It helps
not to exceed the limit of issue of the books that the borrower is entitled.
Multiple borrower cards also check the limit but it is expensive and time
consuming (*vide* Chap. 3, sec(t). 4.5.1).
Chapter 6: Proposed Model of Manual Circulation System

d. Both the book pocket and date label is to be pasted in close proximity to save time to find them out easily. The date label is to be pasted on the recto of the first fly leaf because it is advantageous to put the stamp of return date and write the borrower’s card number due to thickness of the book. The book pocket is to be pasted on the verso of the front cover page. If any library person opens the book for issue he can find both the date label and book card at one place (vide Chap. 3, sec(t). 4.3.4).

e. The return date along with the borrower’s number is written on the date label. The return date will easily show whether there is overdue or not and borrower’s number is used to search the borrower’s card without asking for the card number and that saves extra labour. Anyone can return the book without remembering the name and card number of the borrower (vide Chap. 4, sec(t). 4.29.1).

f. Book cards contain date of return and borrower’s card number which helps to find out to whom the book is issued and when the book is to be returned. The book cards are arranged according to call numbers so that it can be easily find out (vide Chap. 4, sec(t). 4.27A).

g. Gate pass contains the accession numbers, total number of books and signature of the employee’s which are essential for security reasons. The security counter collects and checks the gate pass and books those are issued to the borrowers. The accession numbers of the issued books are noted down and tallied with the numbers at the circulation counter (vide Chap. 4, sec(t). 4.31).

h. Re-issue system increases the issue of books. At the time of re-issue the book cards are not necessary to handle. Only the lending slip is exchanged with the term “re-issue” written by the borrower. It reduces the time of charging and discharging (vide Chap. 4, sec(t). 4.41-43.1).

i. Lending slips and demand slips are in different colours so these are easily visible. The demand slip filled up by the borrower which is lend out by someone and does not have an extra copy in the library. The demand slip is kept with the lending slip in the borrower’s card pocket. When the book is returned or re-issued, then different coloured demand slip will be easily
visible which is attached with the lending/borrower slip. If the demand slip is put on another place, then the demanded book will not be noticed when the book is re-issued (vide Chap. 4, sec(t). 4.47-47.1).

j. It allows the provision of checking whether the book(s) issued has the date label stamped and the book card removed (vide Chap. 4, sec(t). 4.30.1).

k. It keeps dual records of the book(s) issued and the borrower issuing it/them; one in book cards and other in lending slip (vide Chap. 3, sec(t). 4.2.4 and 4.5.6).

l. The lending slips coming with “not found” helps to identify the books in demand whose availability are low (vide Chap. 3, sec(t). 4.5.2 and 4.5.6).

m. It makes the division of work easy as the staff may be rotated for doing the charging, discharging and filing work (vide Chap. 3, sec(t). 4.2.4 and 4.5.6).

n. Book cards and borrower’s cards are filed later so load can be avoided during rush hours (vide Chap. 4, sec(t). 4.5.3).

o. Library members can drop their books at any time in the book drop box that saves the time of the library members (vide Chap. 5, sec(t). 4.42).

5.7 Disadvantages

As there is no dates guide it is time consuming to find out which books are not returned within specified time (vide Chap. 3, sec(t). 4.5.7). To overcome this problem we have given the following solutions:

5.8 Solution

To overcome which books are not returned within the particular time frame, another borrower’s slip or book card/ticket may be arranged according to date guide that reveals the delay of return automatically (vide Chap. 3, sec(t). 4.2.4). One extra slip/card may be kept and filed at the time of issue and again picked up at the time of
return and re-issue. So it will help to avoid lot of works that can delay the actual work or the circulation work. But it is not so important because borrowers automatically return books otherwise they are charged with a fine. If books are on demand, then the demand slip is attached with the borrower’s slip. If the borrower intentionally does not return the book then the reminder slip is to be sent to the borrower. Basically the academic institutions are semester based or have an annual examination system, so they are bound/compelled to return all books issued by them within that period. A routine checkup can be made at every session to find out which books are not returned.

6 Conclusion

Most of the Indian libraries till now depend upon manual circulation systems. University libraries purchase computer and its allied software but most of the university libraries are in initial stage of its operation. RBU till now has not used any library software. Other universities started library automation but not in a position to run satisfactorily or fully automated. We find that 25% universities are not using the circulation module. Remaining 67.5% universities started circulation module but all the universities simultaneously maintaining manual circulation systems. RBU not yet used any software for library automation. The manual systems have some lacunas. We have provided a model for manual circulation system that can hopefully solve the problems faced by the manual circulation systems run by different universities. The membership form must be in card form as it is more flexible and durable than any other form and can also be preserved easily. There will be a single borrower card and a reference card. The borrower card should have a pocket system where the lending/requisition slips will be kept (vide sec(t). 5.1 and 5.6 of this chapter). Lending/Borrower slip is essential one and it should have space to fill up borrower’s name and card number, signature of the borrower with date and bibliographic details of the book (vide sec(t). 5.1 of this chapter). Book cards are arranged according to call number in book card trays when the book is issued (vide sec(t). 5.1 and 5.6 of this chapter). The date label is to be pasted on the recto of the first fly leaf (vide sec(t). 5.1 and 5.6 of this chapter). It must have columns where the return date and borrower’s card number can be written. Gate pass is essential to take out the book outside the library building. The demand slip is to be filled up by the borrower and then the slip is attached with the lending slip and kept within the borrower card’s pocket. When the book is returned or re-issued, the different color demand slip will be easily visible which is attached with the borrower’s slip (vide sec(t). 5.1 and 5.6 of this chapter). Library members can drop their books at any time in the book drop box that is kept in
the outside of the library premises or it may be a central place or nearer to the hostel of the universities (vide sec(t). 5.6 of this chapter). To overcome which books are not returned within the particular time frame, another borrower’s slip or book card/ticket may be arranged according to date guide that can reveal the delay of return automatically (vide sec(t). 5.8 of this chapter).

References
