

Computerization and its impact in technical library system

M. SULTAN OMER*¹ AND M. RAFAT²

¹MMAJ Academy of International Studies, Jamia Millia Islamia, New Delhi (India)

²Department of Applied Sciences and Humanities, Jamia Millia Islamia, New Delhi (India)

ABSTRACT

Computerization has affected all aspects of public life and professional activities. Libraries, particularly those associated with technical Institutions have benefited from the trend of computerization. In the present study the phenomenon of computerization is sought to be described in specific terms with reference to a number of libraries surveyed, the extent of computerization has been estimated, taking into account the various functions performed by libraries. With this background, the expected improvement in efficiency and quality is examined, consequent to computerization.

Key Words : Computerization, Information technology, Particular library

INTRODUCTION

Impact of Information Technology :

To quantify the impact of information technology on library management the following information was considered relevant

- 1) Computerization of office
- 2) Computerization of acquisition interface
- 3) Institutional networking
- 4) Interdepartmental networking
- 5) Users' membership record
- 6) Computerization of circulation services
- 7) Computerization of cataloguing
- 8) Classification software scheme
- 9) Availability of e-journals
- 10) Availability of CD ROM

Each of the above points were allotted 10 marks. The computerization status of a given library was therefore calculated on a 100 point scale. The score is denoted by the symbol C. The symbol C is Library Computerization Index. It gives an estimate of the impact of computerization on a particular library.

The Table 1, 2, 3, bar chart Fig 1.2, 3 and graph Fig 1.2, 3 are shown representing the values of C in State of Haryana, U P and Delhi.

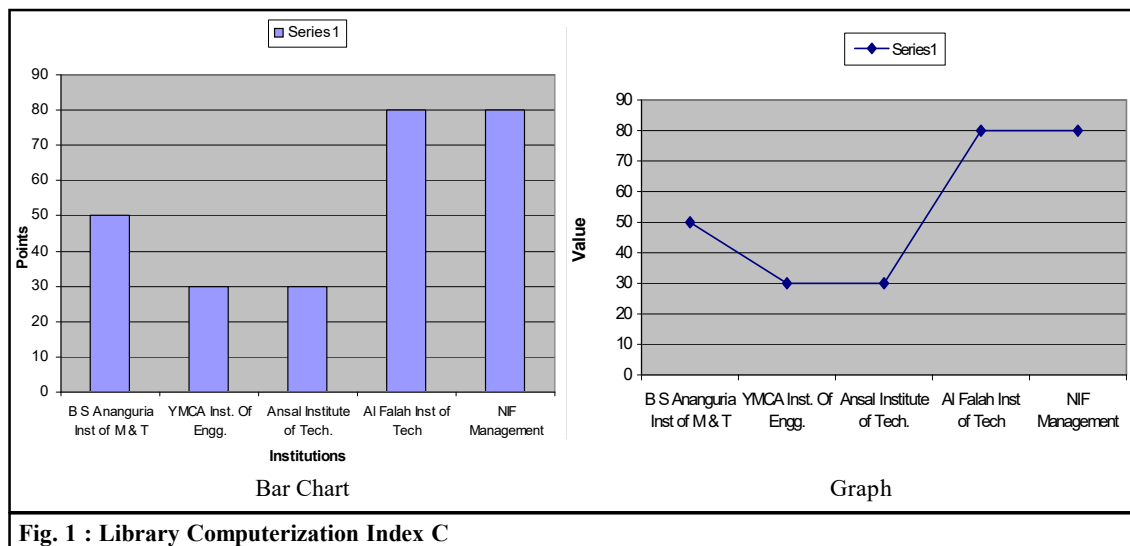


Fig. 1 : Library Computerization Index C

Table 2 : U.P. Computer Index C

| Sr. No. | Office | Acquisi | Institutional Networking | Interdepart Networking | Users' Membersh | Circulation | Catal | Classifica | E Journals | CD ROM | Total Pts |
|---------|----------------------------|---------|--------------------------|------------------------|-----------------|-------------|-------|------------|------------|--------|-----------|
| 1. | Galgotia Institute of Tech | 10 | 10 | 0 | 10 | 10 | 10 | 0 | 10 | 10 | 80 |
| 2. | J S S Academy | 10 | 10 | 10 | 10 | 10 | 10 | 0 | 10 | 10 | 90 |
| 3. | Jaipuria Institute of Tech | 10 | 10 | 10 | 10 | 10 | 10 | 0 | 10 | 0 | 80 |
| 4. | I M T | 10 | 10 | 10 | 10 | 10 | 10 | 0 | 10 | 10 | 90 |
| 5. | AKG College of Engg. | 10 | 10 | 10 | 10 | 10 | 10 | 0 | 10 | 10 | 90 |

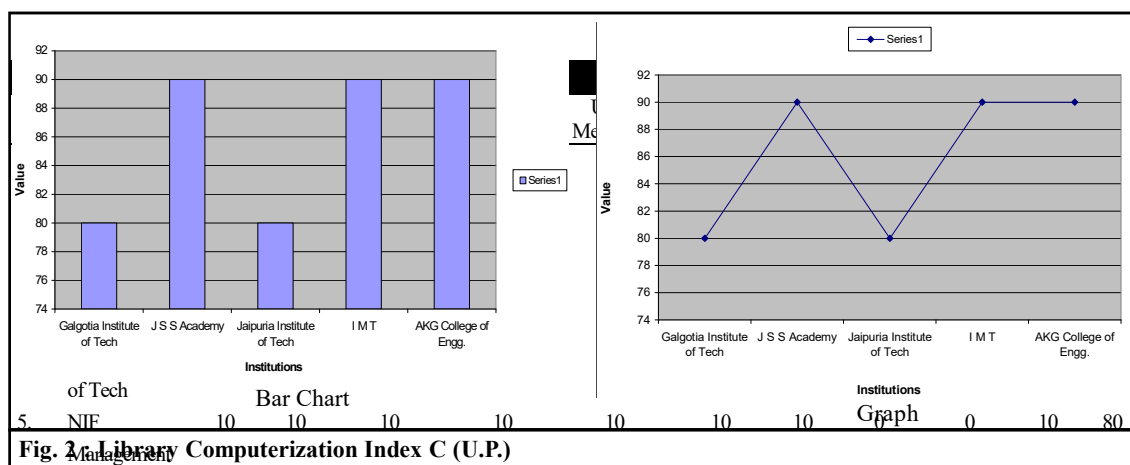


Fig. 2 : Library Computerization Index C (U.P.)

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| Sr. No. | Institute of Hotel Manag. | Office | Acquisi | Institutional Networking | Interdepart Networking | Users' Membersh | Circulation | Catal | Classifica | E Journals | CD ROM | Total Pts |
|---------|------------------------------|--------|---------|--------------------------|------------------------|-----------------|-------------|-------|------------|------------|--------|-----------|
| 1. | Institute of Hotel Manag. | 10 | 0 | 0 | 0 | 0 | 00 | 0 | 0 | 0 | 0 | 10 |
| 2. | Delhi College of Engg. | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 0 | 10 | 10 | 90 |
| 3. | D Inst of Pharm Sc & Res | 10 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 30 |
| 4. | Jamia Hamdard | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 0 | 10 | 10 | |
| 5. | C R R I | 10 | 10 | 10 | 10 | 0 | 10 | 0 | 0 | 0 | 10 | 60 |
| 6. | Apayjee Inst of Mang & I T | 10 | 10 | 0 | 10 | 10 | 10 | 10 | 0 | 10 | 10 | 80 |
| 7. | IILM, Lodi Road | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 0 | 10 | 10 | 90 |
| 8. | GGSIU | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 0 | 10 | 10 | 90 |
| 9. | School of Planning and Arch. | 10 | 0 | 10 | 10 | 0 | 0 | 10 | 0 | 0 | 0 | 40 |
| 10. | TERI | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 0 | 10 | 10 | 90 |

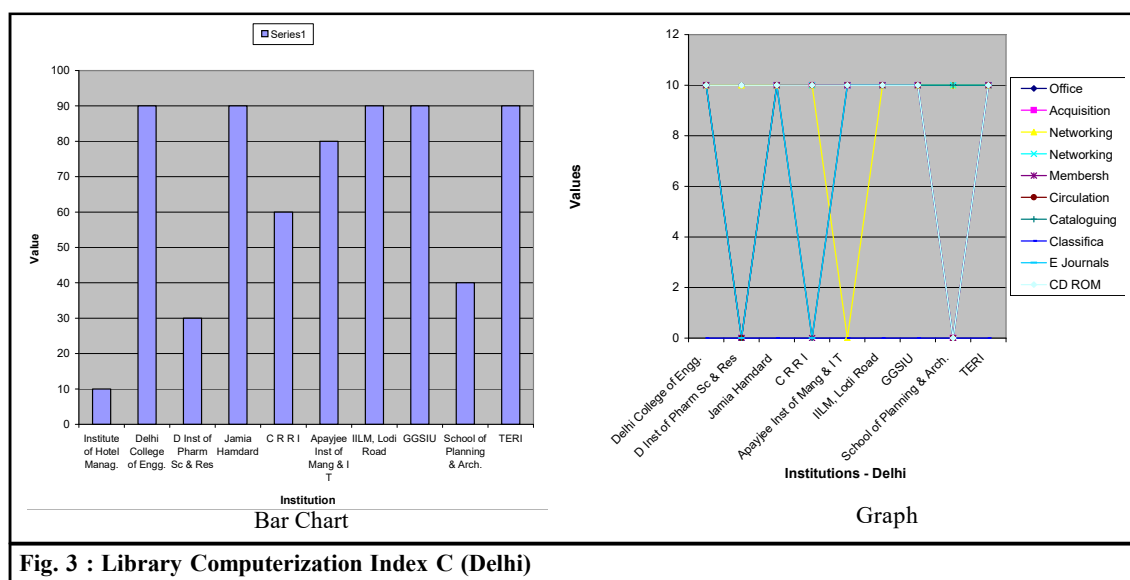


Fig. 3 : Library Computerization Index C (Delhi)

State of computerization :

Of 20 libraries surveyed in the study 10 libraries have fully automated all their functioning and 8 libraries have partially computerized their library routines. All 8 partially computerized libraries have their circulation system on the computer.

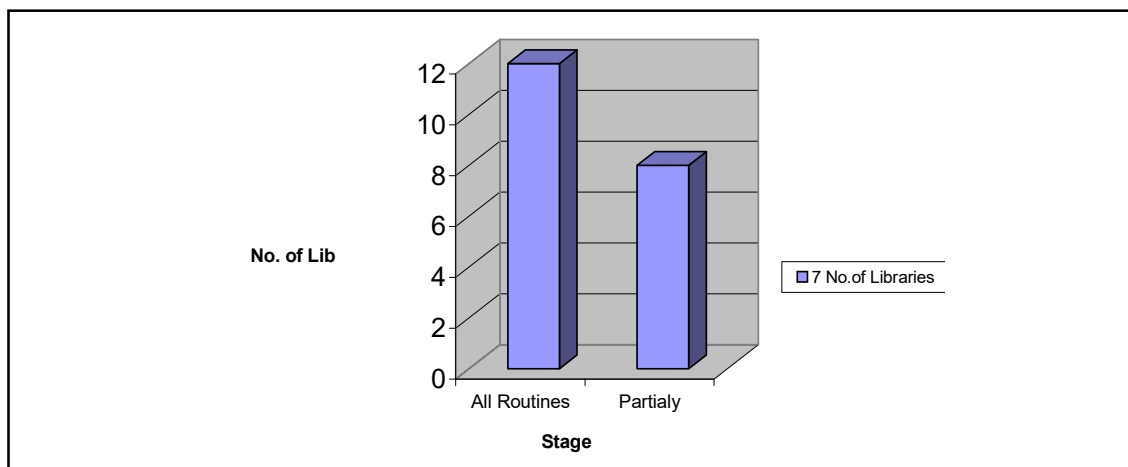


Fig. 4: State of computerization

Expenditure on computer infrastructure :

Several institutions surveyed in the study take care of hardware requirement for the library at institutional level as such the libraries do not have the separate budget for purchase of computer infrastructure for their library. However budget is being allocated to the library specially for purchase and maintenance of integrated library software package. Moreover the budget allocation for computer infrastructure is of nonrecurring kind. The figure No. 5 is pictorial representation of budget allocated to 20 libraries surveyed in the study which ranges from 1 lac to 2 lacs incase of 10 libraries and 6 lacs and above in case of 4 libraries.

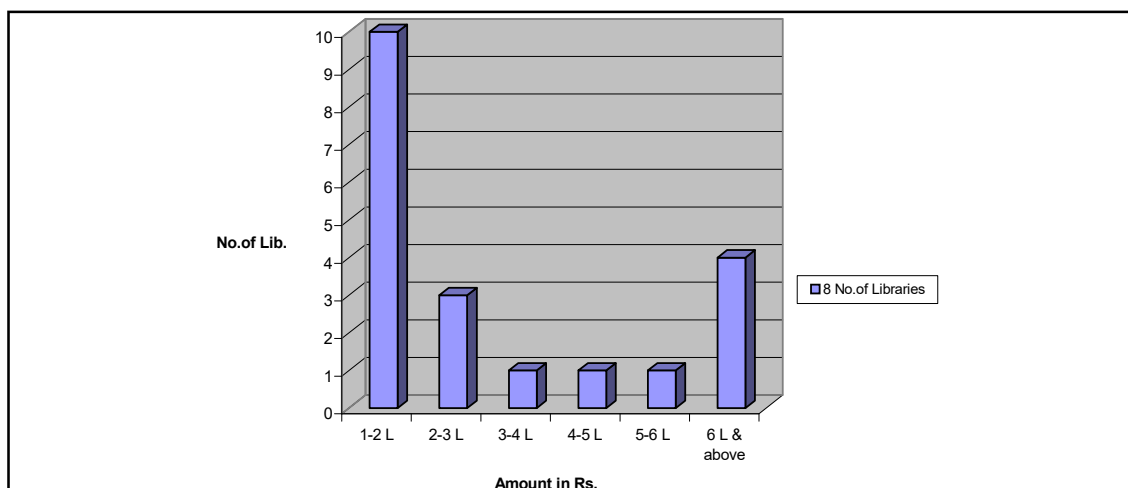


Fig. 5 : Expenditure on Computer infracture

Number of computers :

While most libraries have 1 to 2 PCs only, that are equally distributed for staff and users. Only one library has more than 10 computers available for their staff and users, respectively. The Fig. 6 is pictorial representation of number of computers provided to staff and User in 20 libraries surveyed.

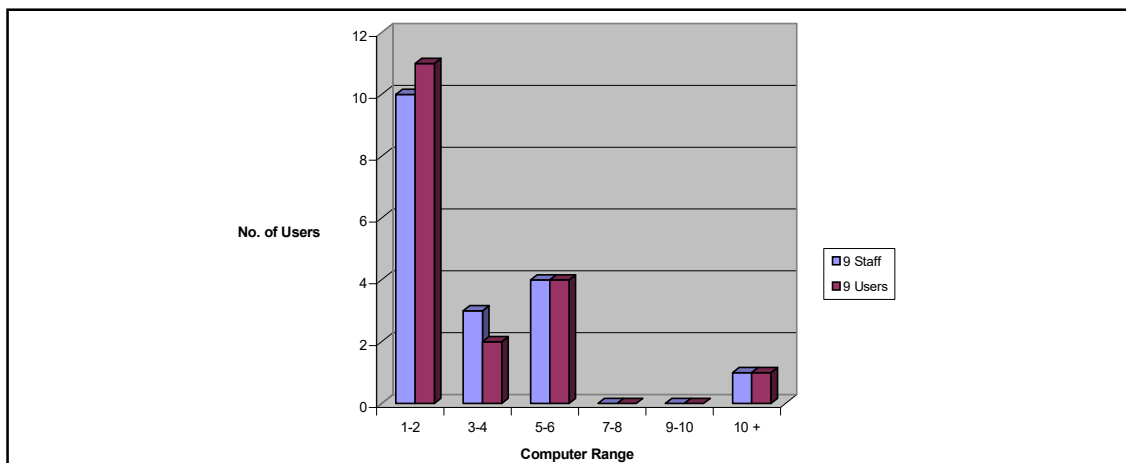


Fig. 6 : Computers

Services :

Of 20 libraries surveyed, all libraries invariably provide Circulation and Photo copying services. Of 20 libraries surveyed 18 libraries provides reference services, 15 libraries each provide Reservation of documents and Current Awareness Service, 13 libraries offer ILL and 12 libraries claim to provide Indexing and Abstracting services. None of the libraries amongst those surveyed provide Translation Services. Only 4 libraries provide Document Delivery Service. The Fig. 7 is pictorial representation to Services of 20 libraries surveyed.

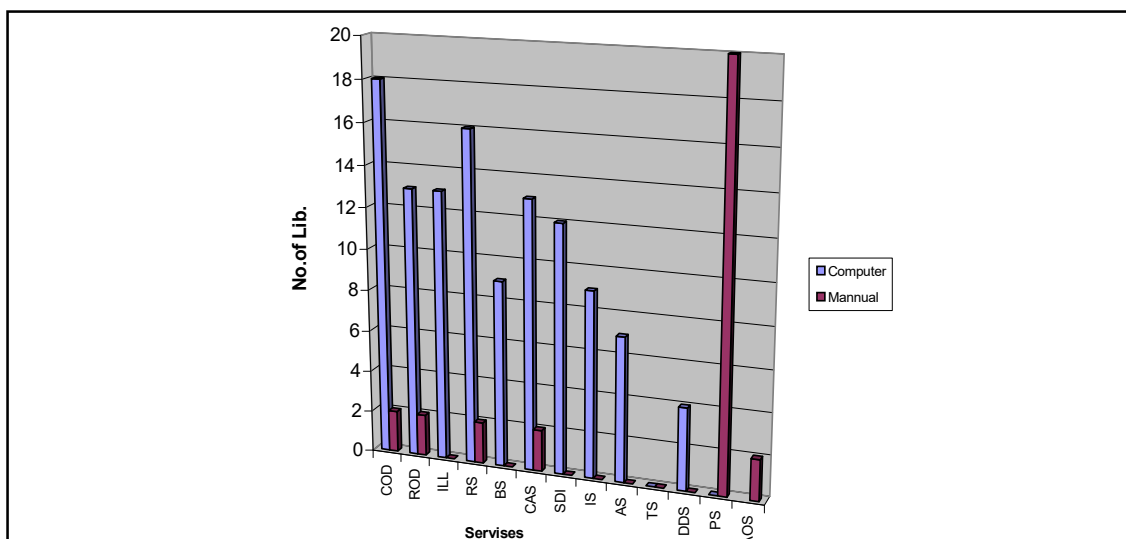


Fig. 7 : Service providers

Extent of computerization :

The extent to which specific libraries were computerized, was judged on a 100 point scale. The status of computerization was indicated by an index C.

In the state of U P; the average value of computerization index was quite high. The average

was 84 with a maximum variation of 6 from the average.

In the state of Haryana the average value was 54 and the variations was quite high. The variation in this region had a maximum value of 26 points. There are regions of Haryana, which show higher computerization tendency as compared to other region in the same state.

In Delhi, the average value of the computerization index was found to be 67. Variations were again large and in a particular institution, the computerization index had a very low value of 10 points.

On the whole, in the three regions studied the computerization index had very high values (they always exceeded 50%). Thus computerization is proceeding at a rapid rate.

Conclusion:

Finally it emerges from the study that computerization tends to have a beneficial impact on the quality status and efficiency of the functioning and management of a library as well as on the services that it provides. The impressions of library users tends to agree with these assessments. Hence computerization attempts need to be given encouragement and incentives.

Appendix above Questionnaire for Librarians :

| | | | | | |
|--|----------|-----------|---|----------|---|
| 1) Name of the Institution | _____ | | | | |
| 2) Specific name of the Library, If any | _____ | | | | |
| 3) Name of the Person | _____ | | | | |
| 4) Designation and Grade | _____ | | | | |
| 5) Year of establishment | _____ | | | | |
| 6) Total Budget | a) Books | 2002 (Rs. |) | 2004(Rs. |) |
| b) Journals | | 2002(Rs. |) | 2004(Rs. |) |
| 7) Finance Received from: | a). UGC | 2002 (Rs. |) | 2004(Rs. |) |
| b). MHRD | | 2002 (Rs. |) | 2004(Rs. |) |
| c) AICTE | | 2002 (Rs. |) | 2004(Rs. |) |
| d). Institutional Budget | | 2002 (Rs. |) | 2004(Rs. |) |
| e). Special Grant | | 2002 (Rs. |) | 2004(Rs. |) |
| f) Marketing of Library Products and Services | | 2002 (Rs. |) | 2004(Rs. |) |
| g) Any other Source | | 2002 (Rs. |) | 2004(Rs. |) |
| 8) Total Number of Professional Staff | | 2002 (|) | 2004 (|) |
| 9). Total Floor Area | | 2002 (|) | 2004 (|) |
| 10). Total Stacking Area | | 2002 (|) | 2004 (|) |
| 11). Scope for future extension of Library | | | | | |
| Vertically | | Y(|) | N (|) |
| Horizontally | | Y(|) | N (|) |
| 12). Number of Reading seats in each reading room | | | | | |
| General Books Sections | | 2002 (|) | 2004 (|) |
| Text-Books Section | | 2002 (|) | 2004 (|) |
| Reference Book Section | | 2002 (|) | 2004 (|) |
| Periodicals Section | | 2002 (|) | 2004 (|) |
| 13). In which year your libraries was computerized | | | (|) | |
| 14). What expenditure the Library has made on: | | | | | |
| a) Software | | (Rs. |) | | |

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- b) Hardware (Rs.)
 c) Infrastructure (Rs.)
 d) Retro Conversion (Rs.)
 e) Training of Staff (Rs.)
- 15). How much expenditure Library has made on Up gradation of infrastructure ()
- 16). From where the Library has received the grant for computerization:
- | Agency | Year | Amount |
|---|------|--------|
| a) UGC | () | () |
| b) MHRD | () | () |
| c) AICTE | () | () |
| d) Allocation from Institutional Budget | () | () |
| e) Special Grant | () | () |
| f) Marketing of Library Products and Services | () | () |
| g) Any other source _____ | () | () |
- 17). Grant Library received for Up gradation ()
- 18). How Many Terminals are there for users ()
- 19). What is the Hardware Configuration of server _____
- 20). Is OPAC available in:
- | | 2002 () | 2004 () |
|---------------|----------|----------|
| Cubicles | () | () |
| Reading Rooms | () | () |
- 21). Does the Library has separate reading room /Cubicles
- | | 2002 () | 2004 () |
|----------------------------------|----------|----------|
| For faculty or Research Scholars | () | () |
- 22). If yes, Then each cubicles or reading room for Faculty/Research scholar is equipped with Terminal
- | | 2002 () | 2004 () |
|--|----------|----------|
| | () | () |
- 23). Do your Library do online acquisition also
- | | 2002 () | 2004 () |
|--|----------|----------|
| | () | () |
- 24). Does the software support the
- | | () |
|-------------|-----|
| a). Barcode | () |
| b). MARC 21 | () |
| c). CCF | () |
- 25). Do you acquire Periodicals Journals Through
- | | () |
|--------------------|-----|
| a). Indian Agents | () |
| b). Foreign agents | () |
| c). Sponsors | () |
| d). Publisher | () |
| e). Any other | () |
- 26). Number of Periodicals Subscribed
- | Types of Periodicals/Journals | | India | Foreign | Total |
|-------------------------------|------|-------|---------|-------|
| Primary | 1992 | () | () | () |
| | 2002 | () | () | () |
| | 2004 | () | () | () |
| Secondary | 1992 | () | () | () |
| | 2002 | () | () | () |
| | 2004 | () | () | () |
- 27). a). No. of Full text Journals available in the Library ()
 b). Name of E journals databases Library has access

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

- 28). Do your library subscribe Periodical/Journal
- | | 1992 | 2002 | 2004 |
|---------------------|------|------|------|
| In print form | () | () | () |
| On CD ROM | () | () | () |
| On Line | () | () | () |
| Printed with CD ROM | () | () | () |
- 29). Has The Bar Coding of Books been done ()
- 30). What are the services and facilities provided by library to its reader
- | Services | 2002 | 2004 | Comp.is used from |
|--------------------------------|------|------|-------------------|
| a). Circulation of Documents | () | () | () |
| b). Reservation of Documents | () | () | () |
| c). Inter Library Loan | () | () | () |
| d). Reference Services | () | () | () |
| e). Bibliographical Services | () | () | () |
| f). Current awareness Services | () | () | () |
| g). SDI Services | () | () | () |
| h). Indexing Services | () | () | () |
| i). Abstracting Services | () | () | () |
| j). Translation Services | () | () | () |
| k). Document Delivery services | () | () | () |
| l). Photocopying Services | () | () | () |
| m). any other Services | () | () | () |
- 31). Does the Library has or connected to LAN ()
- 32). Does the Library has CD Roam Facility 2002 () 2004 ()
- 33). Does the Library use:
- | | |
|---------------------------|-----|
| a). One Server | () |
| b). More than one Server | () |
| c). if yes to b, How many | () |
- 34). What is the configuration of the Server
- | | |
|--------------------|--|
| a) Processor Speed | |
| b). RAM | |
| c). Hard Disc | |
- 35). Does the Library have converted some in house collection in digital form? ()
- 36). Does the Library has built up some digital Collection ()
- 37). What is the name of software used for building Digital Collection _____
- 38). From where the software has been acquired _____ Cost _____
- 39). How Much Library has spent on digitization in:
- 1997 _____, 1998 _____, 1999 _____, 2000 _____,

2001_____, 2002_____, 2003_____, 2004_____

40). Other accessories required for conversion from print to digital?

i. _____, ii. _____, iii. _____

iv. _____, v. _____, vi. _____

41). Any other Information

Name _____

Signature _____

Contact Number _____

Email _____

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