Conclusion
ICT is the biggest achievement in the evolution and development of information society. The present information society is characterized by ever-growing significance of information. The multidimensional and multi-folded information can be handled and managed with the help of Information and Communication Technology (ICT). Now information can not only be stored, retrieved, communicated and broadcasted electronically in enormous quantities and phenomenal speed, but can also be rearranged, selected and transformed. The impact has been well-known in case of service activities in libraries and information centers. Today libraries are shifting their role from the custodian of traditional information resources to the provider of service-oriented digital information resources and services. ICT has provided libraries with new opportunities to improve their resources and services. The services rendered with the help of ICT are faster and more effective. Moreover, it creates faith and confidence about the products and services of an organization among its users. Widespread use of computers, increased reliance on computer networks, storage technology, communication technology, rapid growth of the Internet and explosion in the quality and quantity of information compelled libraries to adopt new means and methods for the storage, retrieval and dissemination of information.

ICT has changed the traditional methods of library activities and services providing new dimensions for teaching, learning and research in higher educational institutions. It is important to assess the ICT applications in academic library and information centers in the context of changing user needs. The growth of application of ICT in number of areas coupled with its success prompted many academic libraries to adopt ICT and use it for various library operations and services. Initially, the computer applications were limited to data storage and retrieval only. With the advancements in ICT, the academic libraries are gearing up to make use of these technologies to
provide the information quickly. The application of ICT in academic libraries are indispensable and is being adopted in the libraries for collection development, housekeeping activities, storage and retrieval, reference work, dissemination, administration, preservation, conservation and archiving.

The college libraries in India have a significant role to play in higher education. College libraries are not the exemption from the impact of ICT. Such libraries are very much interest in incorporating the latest ICT in their administrative functions, technical works and user services. The college libraries are established to support learning, teaching and research activities. These libraries have been affected by information Communication technology (ICT). The ICT has given the college libraries an opportunity to provide value-added services and access to wide range of electronic information resources to their users. Developments in ICT have made significant impact on all spheres of college libraries. The impact of ICT has been affecting the structure of the services of college libraries to a great extent. The information and Communication Technologies have brought many benefits of library and information systems and services. ICT has become an integral part of all aspects of the library. ICT has profoundly affected the college library operations, information resources, services, and staff skills requirements and users expectations.

In the present study it is concluded that the ICT has been implemented for providing modern as well as traditional library services and housekeeping activities in degree colleges affiliated to Delhi University. The ICT based services are much popular and demanded by the users and they are also satisfied with the libraries. The ICT based services has put much positive impact than negative on users. The college libraries are not suffering by budget and infrastructure problems, but for quality control more funds should be allocated and modern infrastructure should be provided by formulating a
standardized policy, so that obstacle of information retrieving in future could be removed. ICT has been facilitated the resource sharing among libraries and information institutions and helped in qualitative collection development, the college libraries has been collected and developed qualitative electronic and web resources with the help of ICT and users are also satisfied by them. Some users have been felt the need of assistance while using the ICT based resources and services, so it should be provided by the libraries. The orientation, education and training programme should be given by the libraries for users to be more confident and work shop, training programme, seminar, conferences, and short term courses etc. should be provided for the library professionals for improving the ICT skills.

ICT has become an integral part of all aspects of the library. ICT has profoundly affected library operations, information resources, services, staff skills requirements and user’s expectations. ICT has influenced every sphere of college library activity in the form of collection development, library networks and resource sharing and library services. The college libraries are using ICT to automate their core functions such as catalogues, circulation, etc., implement management information systems, developing digital collections, implement efficient and effective library networks and providing ICT based modern services for ICT-based capacity building programmes for library professionals and the users as well.

**Recommendations:**

On the basis of study the recommendations are as follows:

1. To develop competitive personnel in a technologically advanced world, the library professionals have to develop skills in ICT applications, library management and soft skills.

2. Proper ICT training should be given to the library professionals of the library to improve their ICT skill.
3. Job of the library professionals should be rotated and every professional should be given the chance to work with ICT in library.

4. The study recommended to give priority to consortia based subscription and recruitment of information Communication Technology trained staff for better ICT based services.

5. Funds should be made more available to equip e-libraries with sophisticated technological equipment needed for e-resources and ICT based services.

6. Training courses should be organized for the awareness and use of ICT based services and e-resources for information professionals and users.

7. The college libraries should organized extension programme, training programme, user training, orientation and education programme for optimum use of library resources and services.

8. In some colleges, management can motivate their staffs by providing proper salary structure.

9. Seminar and conferences on ICT should be held time to time to create awareness among the library professionals and users.

10. In ICT era library should be well equipped that all the functions can run smoothly and users can get used all enriched resources of the library.

11. More online journals and resources should be incorporated. Training and knowledge must include to spreading of awareness of users.

12. The college library should be the part of NKN and other academic networks for the fulfillment of educational needs.

13. The social network services (Web 2.0) can be utilized for the college libraries popularity and better utilization.
Proposed College Library Network

The degree colleges affiliated to Delhi University may be interlinked through a network for purpose of academic library services and resource sharing. The web server, application server, client-server database and OPAC may be developed and managed by the Network. This network may be named as DUCOLNET (Delhi University College Library Network). The DUCOLNET will help colleges and other academic institutes for the purpose of consortium benefits, access of ICT based services and resources.

Objectives of DUCOLNET

The objectives of the proposed DUCOLNET may be:

1. For better use of ICT based library services and resources in economical manner.
2. To take initiatives for the promotion of higher education research and development.
3. To strengthen the library resources, services and help in the development for new ICT based information services.
4. To facilitate the cooperation and communication among the member libraries.
5. For the pooling, sharing and electronic accessing of the library service and resources.
6. To coordinate in for suitable collection development and to avoid unnecessary duplication wherever possible.
7. To develop a wide range of academic information services and enhance the quality of ICT based information services.
8. To evolve standards and uniform guidelines for electronic information organization and management.
9. To establish a referral centre for maintaining a central online union catalogue of books, serials, project report, dissertation and theses. Subject gateways and portals, academic records and non-book materials of all participating libraries; and

10. To coordinate with other national and international networks for exchange of information and documents.

**Topology of the Proposed Network**

There are two basic categories of network topologies; Physical topology and logical topology. The cabling layout used to link devices is the physical topology of the network. The logical topology in contrast, is the way that the signals act on the network media or the way that the data passes through the network from one device to the next without regard to the physical interconnection of the devices. On the basis on the of logical classification, network topology may be classified in the categories: Point-to-point Topology; Bus Topology; Star Topology; Mesh Topology; Tree Topology; and Hybrid Network Topology. Different network topologies have their own advantage and limitations. Hence, in reality, a pure star or ring or completely connected network is rarely used. Instead, an organization normally uses a hybrid network that is a combination of two or more different network topologies. Exact configuration of a network depends on needs and structure of the organization. In some case of DUCOLNET, hybrid network may suitable to connect college’s nodes.
Model of the Proposed Delhi College Library Network (DUCOLNET)

**Implementation of the Proposed Delhi College Library Network:** A central server may be established at central node. The central node receives data from affiliated colleges. After processing of the collected data, the following services may be provided to the member colleges.

1. Union Catalogue of Books
2. Union List of Journals
3. Union Catalogue of Journals
4. Articles Database
5. Union List of CD-ROMS
6. E-Journals
7. E-Books
8. Document Delivery Services (Articles)
9. Library Software Support
10. Training Programmes
11. Database of Theses and Dissertations
12. Inter Library Loan
13. Union List of Sound – Recording
14. Consortia Database Services

Areas for Further Research

The analytical study of ‘Impact of Information Communication Technology on the Library services of Degree Colleges affiliated to Delhi University’ was studied from a user’s or librarian’s point of view separately in depth and it would be helpful to improve the services in college libraries. In this field the ICT based resources and services model of Degree College libraries affiliated to Delhi University to share the resources including ICT based services can be a subject for research. The degree colleges in Delhi are prosperous in resources, so a comparative study can be carried between colleges in metropolitan cities and other areas. The information retrieving efficiency of standards may be a subject of research in an ICT enabled library. The problems and prospects of shifting traditional into ICT enabled libraries may be a further area of research.