CHAPTER I
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CHAPTER I

1.1 INTRODUCTION

“Information” is the communicating of news, knowledge, or facts. It consists of data endowed with relevance and purpose. Its main function is to present facts so that man’s vision is broadened, thereby enabling him to fight against the problems faced by ignorance and superstitions. It is therefore considered to be a basic need of man, ranking after air, water, food, clothing and shelter. Modern means of transport, computers, and telecommunications have reduced the world to a global village, wherein one need only plug in, in order to be connected to the whole world. (Vyas, 1997).

The library and information centre is an important component of any educational institution, which is hub of the teaching, and learning activities where students, researcher and teachers can explore the vast resources of information. In the traditional libraries users have to send more time for searching a small piece of information and for that have to depend mainly on the library professional or library staff. But in the age of information communication technology, computers are being used for day-to-day house keeping activity of the library which saves the time of the end users, and library professional also and at the same time avoid duplication of work and make the library service smooth and effective. (Sinha, 2008).

Information Technology is the combination of telecommunication and computer technology, which facilitate transmission, collection, processing, interpretation, and distribution of information. Information technology is considered to be useful to us in the digital world. The Library has been involved in resource sharing initiatives for many years, yet the advent of new technologies, such as the World Wide Web, have fostered unprecedented growth in the number of institution impacting the world with rapidly evolving information products and services. Electronic information resources are of increasing importance in modern library services, particularly in special libraries that are oriented towards science and technology. (Sridevi & Sonker, 2004).
1.2 NETWORKING IN LIBRARIES

Resource sharing is defined as a mode of operation, whereby information resources are shared by a number of participants having the same objectives in mind. Thus the user of one library can have his requirements fulfilled by another library if the local library fails to serve his needs. Some of the essential prerequisites for effective resource sharing include:

- Possession of shareable resources by the participating libraries, Willingness to share the resources, A planned mechanism of sharing;
- Precise understanding of the use and information potential of their respective collections and common bibliographic access to the collections of the participating libraries.

The ultimate aim of networking is to achieve maximum results with minimum input. Networking is inevitable in all types of libraries, for it enables users to have access to the resources of many other libraries, in addition to their own. (Vyas, 1997).

The benefits which accrue from resource sharing are the following:

- Preparation of union catalogues
- Preparation of the cataloguing data
- Provision of bibliographies
- Optimum utilization of rare collections
- Cooperative exchange and distribution and storage of documents
- Savings - of both technical work and collections
- Reduction in the cost of library services in the long run
- Above all, the provision of more materials at low cost and in less time

Networking systems have been developing fast at local, state, national and international levels all over the world since the 1980s. Thus, libraries have to plan their acquisitions keeping in mind the resources available in other libraries in the area, so that they can get the maximum number of books and publications which are not available in their vicinity. In the past few years, considerable progress has taken place in the planning and building of library and information networks. As a result, four
major networks - INFLIBNET, DELNET, CALIBNET and BONET- have started functioning in libraries. (Vyas, 1997).

1.3 CONSTRAINTS OF NETWORKING

There are several constraints in the networking of Indian libraries. Higher education authorities still have a dilemma as to whether or not resource sharing is possible through networking. UGC has to provide adequate funds to academic libraries for computer software and hardware. Therefore, if INFLIBNET is to be of any help to the libraries, it surely has to provide funds for capital investment in software and hardware.

Following are the major problems faced by the libraries:

- Information infrastructure is not up to date and there is a lack of trained manpower.
- Lack of effective networking and communication technology.
- Less effective implementation of proposed networks.
- Lack of uninterrupted power supply.
- Lack of foreign exchange for importing proper hardware.

Automation and networking of libraries are still in their formative stages in India. INFLIBNET, DELNET, and other metropolitan networks are providing training facilities for computer applications. The ILA, IASLIC, and NISSAT have jointly helped academic libraries in the choice of software and hardware, and in manpower training. Every year, INFLIBNET organizes a conference. (Vyas, 1997).

Health information is essentially required by all types of people at all times in the society. The medical information is a vital resource in various health care and health welfare programmes. The dental college libraries are fundamental sources to develop dental professionals who can work to satisfy such information needs of the country. The well equipped library can support as tool in planning and implementing. It is basic need in the developing countries like India to realize the importance of dental information to overcome various problems being faced in dental departments. In this context, dental college libraries are of significant importance for national
development. The efficiency and effectiveness of information services provided in dental college libraries are considered to be basic needs in health education. From this point of view evaluation of information services rendered by dental college libraries is of quite significant role on the basis of library automation and networking among them. (Park, 2005).

1.4 STATEMENT OF THE PROBLEM

The information supply in the dental college libraries is mostly constrained by the major factors as under:

- Poor funding to these libraries.
- Poor bibliographic control of up-to-date literature.
- Inadequate and poor collections.
- Non availability of professional staff.
- Lack of management support.

The consequences of the above problems hinder dental college libraries to render effective information services to their users. The lack of services restricts access to information. Though, their role in providing access to information is major, there are no minimum standards ascertained for their libraries. The provision of access to required information is the base for overall development of dental college libraries. Taking into consideration these factors, the present research work is undertaken and it has been titled as: ‘A STUDY OF LIBRARY AUTOMATION AND NETWORKING IN DENTAL COLLEGE LIBRARIES AFFILIATED TO RAJIV GANDHI UNIVERSITY OF HEALTH SCIENCES, BANGALORE’.

DEFINITION OF THE TERMS

1.4.1 A STUDY

A setting of the mind or thoughts upon a subject; hence, application of mind to books, arts, or science, or to any subject, for the purpose of acquiring knowledge. (http://www.brainyquote.com/words accessed on 02/02/2011)
1.4.2 LIBRARY AUTOMATION

a. **Library automation may be defined** as the application of automatic and semiautomatic data processing machines (computers) to perform traditional library housekeeping activities such as acquisition, circulation, cataloguing and reference and serials control. Today “Library Automation” is by far the most commonly used terms to describe the mechanization of library activities using the computer. *(Uddin, 2009).*

b. **Encyclopedia of Library and Information sciences**

   “Library Automation is the use of automatic and semiautomatic data processing machines to perform such traditional library activities as acquisitions, cataloguing, circulation although these activities are not necessarily performed in traditional ways, the activities themselves are those traditionally associated with libraries; library automation may thus be distinguished from related fields such as information retrieval fields such as information retrieval, automatic indexing and abstracting and automatic textual analysis.” *(Kent, 1977).*

c. **McGraw Hill Encyclopedia of Science and Technology**

   It defines automation as “a coined word having no precise generally accepted technical meaning but widely used to imply the concept, development, or use of highly automatic machinery or control systems”. *(McGraw, 1982)*

d. **Webster’s Third New International Dictionary of English Language**

   Automation is defined as “automatically controlled operation of an apparatus, process or system by mechanical or electronic device that takes place of human organs of observation, effort and decision”. *(Gove, 1986).*
e. The Oxford English Dictionary

It defines automation as “application of automatic control to any branch of industry or science by extension, the use of electronic or mechanical devices to replace human labour.” (Simpson & Weiner, 1989).

1.4.3 NETWORKING

In the world of computers, networking is the practice of linking two or more computing devices together for the purpose of sharing data. Networks are built with a mix of computer hardware and computer software. (http://www.businessdictionary.com/definition accessed on 02/02/2011)

1.4.4 DENTAL COLLEGE LIBRARIES

The Library provides study and research facilities for the Faculty of Dentistry. Dental practitioners may also apply for library access on a payment basis. The Dental College Library maintains extensive collections in Dentistry, Biomedicines and Speech and Hearing Health Sciences and is particularly strong in serials collection and holdings of audio-visual materials.

1.4.5 AFFILIATION

Affiliated college “means a college imparting education in Health Sciences which has been granted affiliation by the University.” (MUHS Act - 1998 English Version.htm)

1.4.6 RAJIV GANDHI UNIVERSITY OF HEALTH SCIENCES

Rajiv Gandhi University of Health Sciences, centered in Bangalore, India, is a unitary university set up in 1996 by the government of Karnataka, India, for the regulation and promotion of higher education in health sciences throughout the state of Karnataka.
The Rajiv Gandhi University of Health Sciences, Karnataka, aims at bringing about a Confluence of both Eastern and Western Health Sciences to enable the humankind “Live the full span of our lives allotted by God in perfect health”

It should strive for achievement of academic excellence by educating and training health professionals, who shall recognize health needs of community, carry out professional obligations ethically and equitably and in keeping with National Health Policy, It should promote development of scientific temper and health sciences research. It should encourage inculcation Of Social Accountability amongst students, teachers and institutions. ([http://www.rguhs.ac.in accessed on 02/02/2011](http://www.rguhs.ac.in))

1.4.7 BANGALORE

Bangalore also known as Bengaluru (Kannada: ಬೆಂಗಳೂರು) is the capital of the Indian state of Karnataka. Located on the Deccan Plateau in the south-eastern part of Karnataka, Bangalore is India's third most populous city and fifth-most populous urban agglomeration.

Though historical references to the city a modern written history of continuous settlement exists only from 1537, when Kempe Gowda I, who many regard as the architect of modern Bangalore, built a mud-brick fort at the site and established it as a province of the imperial Vijayanagara Empire. During the British Raj, it became a centre of colonial rule in South India. The establishment of the Bangalore Cantonment brought in large number of migrant from other parts of the country. ([http://www.wikipedia.org/wiki/bangalore accessed on 02/02/2011](http://www.wikipedia.org/wiki/bangalore))

1.5 SELECTION OF THE PROBLEM

The Library automation which started in late 70s in few special libraries has now reached at most of the university libraries. Research is not satisfactory at college libraries due to various problems. It is essential to identify the barriers, analyze the convenient steps for automation of the libraries and thereby network the libraries for benefit of the society. ([Uddin, 2009](#)).
The present status of the dental college libraries and the extent of library automation and networking are not standardized. The library services rendered by these libraries may not be satisfactory of the users, because of their weaknesses. The present state of such information services shows that some of the information services may not be to the user’s expectation. It is assumed that the information services should fully benefit to the user community. With this point of view, the researcher has to undertaken this problem for the present study. (Sharma & Tripathi, 1989).

It is crystal clear from the above discussion that the information services rendered in dental college libraries are basic in providing information to the users according to their needs. The students, teachers, researchers and the clinical staff require information from the library to keep them up-to-date and abreast of new developments in their specialized areas of interest. The effective library information services only can support these needs of the users. Hence, the researcher planned to evaluate such information services provided in dental college libraries. (Lucille, 1951).

Hence the problem the researcher has planned to undertake is to evaluate the various information services provided in dental college libraries and to find out barriers to make the library state-of-the art in terms of standard and quality of those services as well as suggest cost-effective solutions to overcome those barriers and to provide suggestions for successful planning of Automation and Networking of libraries.

1.6 RATIONALE AND SIGNIFICANCE OF THE STUDY

Automation of Library ensures automated service to the clients as well as automated in-house library work. Automation envisages training of knowledgeable technicians. The Library Automation is planned for the purpose of automated acquisition, technical processing, circulation, cataloguing, serial control and online public access catalogue, etc. (Gupta, 1992).
There are various library software’s available in the present day like in-house developed library software, commercially developed library software and co-operative based developed software which form the backbone of this training. One, among the available software should be taken up for training of automation and networking of libraries. (Kumar, 1987).

Today we live in the era of information technology, and libraries are expected to use Information and Communication Technologies (ICT) Applications to provide information more expeditiously and exhaustively than before computerization of library “housekeeping” operations is an important activity in this context. “Automation,” when used in a library or similar environment, refers to the computerization or mechanization of activities. (Harinarayana, 1991).

Finance plays a significant role in the organization and management of a library. However, today in this world of information explosion, traditional tools which were developed from last so many years have proved to be inadequate. This is due to greater awareness of the importance of information for socioeconomic improvement. Traditional methods for running successful libraries are considered as impediments in today’s information based society. Therefore, to maintain high standards of service, libraries demand the perceptive librarians to confront unprecedented developments in information libraries. This will enable them with a new set of alternatives for gathering, organizing & disseminating the information. The libraries would then successively meet the challenges of new technology. (Vyas, 1997).

1. 7 AIMs AND OBJECTIVES OF THE STUDY

Aims:

The main and very purpose (aim) of the research work is to study the various barriers of library Automation and Networking of Dental college libraries and to provide the feasible and cost effective solution to remove these barriers and allow libraries to cater the standard and quality services to the user community.
More specifically the objectives of the study are enlisted as given below:

1. To study the present status of Library Automation and Networking in Dental College Libraries Affiliated to Rajiv Gandhi Health University, Bangalore.
2. To study the provision of Budget for Library Automation and Networking during last three years.
3. To study the Computer Skilled Professional Staff for Library Automation. (qualification, experience)
4. To evaluate the Library Software/ Hardware adopted by the Dental College Libraries.
5. To study the **Housekeeping Operations** (Acquisition module, Circulation, Cataloguing, Serial Control, OPAC/ WEB-OPAC (Intranet/ Internet).
6. To find the **various barriers** in the process the automation and networking faced by dental college libraries such as inadequate staff, insufficient budget, etc.
7. To study the usage of networking facility for sharing of information and resources used to cater various services to user community. (here by services we mean access to library resources outside the library using **campus link** and **outside the campus on the WEB** which is possible with only proper Automation and Networking of library.
8. To provide suggestions and solutions to improve the quality of library automation and networking in dental college libraries in terms of library operations, equipments and technology usage towards catering quality and standards of services to its user community.

### 1.8 SCOPE AND LIMITATION OF THE STUDY

Rajiv Gandhi University of Health Sciences is located at Jayanagar in Bangalore. Established in 1996, it aims to advance standards of teaching, research, publication and distribution of knowledge in all areas of health sciences.

The university has given affiliation to 242 undergraduate colleges, 68 institutions conducting post graduation courses and 6 institutions offering super specialty courses in the field of health sciences such as medical, dental, nursing,
pharmacy, physiotherapy, ayurveda, homeopathy, unani, and paramedical. Ph D programs are conducted in the areas of medicine, dentistry and pharmacy.

As per the RGUHS web site dated 10/10/2009, 39 Dental colleges are affiliated to the Rajiv Gandhi University of Health Sciences, Bangalore. Maximum 13 dental colleges are located in Bangalore city.  (http://www.rguhs.ac.in accessed on 30/06/2010)

1 The present study is based on Library Automation and Networking in Dental Colleges Libraries Affiliated to Rajiv Gandhi University of Health Sciences, Bangalore.

2 The scope of the study includes all dental college libraries in Karnataka state.

3 The level of automation in various housekeeping operations and the services provided due to automation is studied in these college libraries.

**The Limitations of the study are as follows:**

1 The study is to be completed as per time period of Ph.D. rules and guidelines.

2 Only Dental college libraries, which are affiliated to Rajiv Gandhi University of Health Sciences, Bangalore are undertaken for the research study.

Regarding the types of libraries, only Dental college libraries are undertaken to study the implementation of the automation and networking process.
# THE DENTAL COLLEGE LIBRARIES UNDERTAKEN FOR THE STUDY

## TABLE- 1.1
NAME OF THE COLLEGE LIBRARY (LIBRARY CODE)

<table>
<thead>
<tr>
<th>SR.NO</th>
<th>NAME OF THE COLLEGE LIBRARY</th>
<th>PLACE</th>
<th>LIBRARY CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A.M.E’S DENTAL COLLEGE LIBRARY</td>
<td>RAICHUR</td>
<td>A</td>
</tr>
<tr>
<td>2</td>
<td>AJ INSTITUTE OF DENTAL SCIENCES LIBRARY</td>
<td>MANGALORE</td>
<td>B</td>
</tr>
<tr>
<td>3</td>
<td>AL-AMEEN DENTAL COLLEGE LIBRARY</td>
<td>BIJAPUR</td>
<td>C</td>
</tr>
<tr>
<td>4</td>
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<td>GULBARGA</td>
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<td>E</td>
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<td>6</td>
<td>BAPUJI DENTAL COLLEGE LIBRARY</td>
<td>DAVANGERE</td>
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<td>VIRAJPET</td>
<td>H</td>
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<td>BANGALORE</td>
<td>I</td>
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<tr>
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<td>BANGALORE</td>
<td>J</td>
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<tr>
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<td>DR. SHYAMALA REDDY DENTAL COLLEGE LIBRARY</td>
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<td>O</td>
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<td>SHARAVATHI DENTAL COLLEGE LIBRARY</td>
<td>SHIMOGA</td>
<td>Z</td>
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<td>TUMKUR</td>
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</tr>
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</table>

(Rajiv Gandhi University of Health Sciences website www.rguhs.ac.in accessed on 30/06/2010)

The above mentioned dental college libraries affiliated to the Rajiv Gandhi University of Health Sciences, Bangalore is considered for the study.

1. 9 HYPOTHESES

Hypothesis is an important intellectual instrument of research. Hypothesis is a tentative solution to the problem. James E Creighton defines ‘A Hypothesis is a tentative supposition or provisional guess which seems to explain the situation under observation’. (Creighton, 2000).

P.V. Young define ‘a provisional central idea which becomes the basis for fruitful investigation is known as hypotheses’. (Young, 1973).

A Hypothesis states that there is no difference between two classes. Hypotheses are of two types’ Null hypothesis and Alternative hypothesis. A
Hypothesis that is tested for its rejection is null hypothesis. In other words, Null Hypothesis is framed as negation.

Formation of hypothesis is one of the steps in the process of good research. Hypothesis is in a sense a type of supposition or assumption. Hypothesis is usually considered as the principal instrument in research. The main function of hypothesis is to suggest new experiments and observations. Hypotheses are capable of being objectively, verified and tested.

A research hypothesis is the statement created by a researcher when they speculate upon the outcome of a research. The hypothesis is generated via a number of means, but is usually the result of a process of inductive reasoning where observations lead to the formation of a theory.

A hypothesis must be testable but must also be falsifiable for it’s acceptance as true science. Statistical tests often uncover trends, but rarely give a clear-cut answer, with other factors often affecting the outcome and influencing the results.

A hypothesis must be testable, taking into account current knowledge and techniques, and be realistic. A hypothesis must be verifiable by statistical and analytical means, to allow a verification or falsification.

In fact, a hypothesis is never proved, and it is better practice to use the terms ‘supported’ or ‘verified’. This means that the research showed that the evidence supported the hypothesis and further research is built upon that.

The following hypotheses have been formulated for the present study.

1. The present status of library automation and networking of the dental college libraries is not satisfactory.
2. IT/ network based information services are not fully developed.
3. The funds provided for library automation and networking are inadequate.
4. The present staff of the library is insufficient and not trained for handling of library software, automation and networking.
5. The facility of Campus-link (Network), outside –link and Access on WEB in dental college libraries is in progress.
1.10 RESEARCH METHODOLOGY AND TECHNIQUES TO BE USED

The term ‘methodology’ means, “The techniques and frames of reference by which researchers approach and carry out an enquiry”. (Busha & Harter, 1980).

Research methodology means “research methods or techniques refer to the methods, the researchers use in performing research operations”. (Kothari, 2004).

The study is basically an analytical one. For this purpose primary data were collected. The following research methods were adopted in the study.

1.10.1 DESCRIPTIVE METHOD OF RESEARCH

In descriptive type of research, the researcher has only to present the things which are happening. Thus it is based on surveys and fact finding enquiries of various types. For this purpose researcher has to arrange the enquiries for achieving the exact things that he has to determines. This method studies the description of the state of affairs as it exists at present. Descriptive method is a method of research or investigation which is based on survey. Young defines it, as the systematic method of discovering new facts or of verifying old through sequence, inter-relation, casual explanation, and the natural laws that cover them. (Young, 1973).

The study is based on descriptive method of research includes surveys and fact-findings enquiries of different kinds. The major purpose of descriptive research is description of the state of affairs as it exists at present. In social science and business research we quit often use the term Ex post facto research for descriptive research studies. The main characteristic of this method is that the researcher has not control over the variables; he can only report what has happened or what is happening. It is a method or research or investigation which is based on survey. Many techniques are employed by the surveyors to collect the factual data in descriptive research viz. case study, interview and questionnaire techniques. (Kothari, 2004).
1.10.2 SURVEY TECHNIQUES (QUESTIONNAIRE)

Survey method is one of the most common methods used to conduct research in Social Science. When adequate information about some social problem is not available in records like files, and other resources, the researcher has to gather data from the population through personal contact, interviews or other techniques that are commonly called as social surveys. Fredrick Whitney says that surveys research is an organized attempt to analyze, interpret and report the present status of a social institution, group or area. This method is applied in Library and Information science to assess an existing situation, to check library system or to evaluate area of librarianship in order to remove shortcomings and inadequacies and to plan further accordingly. (Karande, 1989).

In Library and Information Science a survey is a systematic collection of data concerning libraries and information centers, their activities, operations, staff, users at a given time over a given period. The survey method consists of various techniques like observation, questionnaire and interview but only questionnaire technique is discussed in length as it is used to collect data. A short structured questionnaire was designed and distributed among the respondent in the college under the study.

1.11 SOURCES OF DATA

The researcher has collected necessary information/data from primary sources of information available in libraries, information/documentation centers and offices. These sources include: books, journals, reports, thesis and dissertations, conference/seminar proceeding, etc. It is found through internet search that more specifically on the research topic, no information is available on the concerned websites.

Further, for collecting primary data which forms the fundamental base to lead to the conclusions, survey method was used to collect such data from the dental college libraries which are undertaken for the study. The survey enables the investigator to understand users’ requirements properly. It provides the fundamental
input for designing of need based products and services. It is the most effective way to determine the information need of the users.

In addition to ‘survey’ the ‘observation’ tools was also adopted for recording researcher’s impressions and experiences about the facts. The primary data were collected through questionnaire for completing the research work.

1.12 METHOD OF DATA COLLECTION

As the research is descriptive in nature, the present study will use the pre-tested, structured questionnaire and administered observation and interview will also be used to generate data to make the study reliable.

1.13 TOOLS USED FOR DATA COLLECTION

Questionnaire is widely used for data collection in social research, particularly in surveys. It is fairly reliable tool for gathering data from large, diverse, varied and scattered social groups; it is used in obtaining objectives and data as well as in gathering information of qualitative nature. It is treated as ‘heart of the survey operation’. In most studies it is used in combination with other tools and techniques. A questionnaire is a list of question sent to a number of persons or institutions for their answers and which obtains standardize results that can be tabulated and treated statistically. Goods and Hatt treats it as a device for securing answers to questions by using a form which respondent fills in himself. It is defined as “group of sequence of questions designed to elicit information upon a subject or sequence of subject from information”. (Sharma, Prasad & Satyanarayana, 1983).

In this method a questionnaire is sent to the persons concerned with a request to answer the questions and return the questionnaire. A questionnaire consists of a number of questions printed or typed in a definite order. The questionnaire is mailed to respondents who are expected to read and understand the questions and write down the reply in the space, which is meant for the purpose. The respondents have to answer the questions on their own.
The present study is a survey using a **structured questionnaire** as a tool. The addresses of institutions in the area were collected through formal and informal sources. A short structured questionnaire was sent to these colleges. The questionnaire will focus on above aims and objectives.

### 1.13.1 DESIGNING THE PROFORMA

**Kunz, Rittel & Schwuchow, (1977)** has given the following factors are to be taken into consideration while designing the proforma:

1. The proforma should be designed on the basis of the objectives of the study.
2. Most of the information should be obtained through YES/NO answers or through one of the answers provided in the proforma.
3. The contents in the proforma should be familiar to the respondents to draw out objective information.
4. The statements/questions should be both open ended and closed ended.
5. The contents in the proforma which are not self-explanatory, for such statement/questions, instruction should be included by the surveyor.

### 1.13.2 MERITS OF THE QUESTIONNAIRE METHOD

**Kothari, (2004)** has given the merits of questionnaire method are as follows:

1. There is a low cost even if the universe is large.
2. The study is free from bias of the interviewer.
3. Respondents have adequate time to give well thought-out answers.
4. It can draw proper responses according to the objectives of the study.
5. Respondents, who are not easily approachable, can also be reached conveniently.
6. It can be designed to gather background information about respondents as well as original hard-to-obtain data.
1.13.3 DEMERITS OF QUESTIONNAIRE METHOD

*Busha & Harter, (1980)* has given the demerits of questionnaire method are:

1. Low rate of return of the duly filled in questionnaire.
2. No control over the respondents i.e. whether the person who has filled in the questionnaire is the actual person is not known.
3. There is a possibility of ambiguous replies or omission of replies.
4. All the questions may not be answered.
5. This method can be used only when the respondents are educated and cooperating.
6. Poorly worded or direct questions may arise antagonism or inhabitation on part of respondents.
7. Difficulty in obtaining responses from a representative cross-section of the target population.

1.14 ANALYSIS, INTERPRETATION AND PRESENTATION OF DATA

The data collected through questionnaires and the empirical data collected through personal visits/ observations are analyzed, interpreted and presented through tables, graphs, pie-diagrams/percentage circles. The findings are also considered as important guidelines to draw the conclusions. The data were collected form 35 dental college libraries affiliated to Rajiv Gandhi University of Health Sciences, Bangalore. This data is collected for the period of September 2010 to February 2011

1.15 CONSPECTUS OF THE STUDY

The organization of thesis had been planned into seven chapters as following.

CHAPTER I : INTRODUCTION

The present research work as outlined in seven chapters. It is structured to cover all related aspects of research topic undertaken for study. In this Chapter-I ‘Introduction’ as stated earlier, the research work undertaken is presented with its
library automation and networking –its various definitions, significance, selection of problems, objectives, scope and limitations, hypotheses, research methodology and the organization of the study are also included in this chapter.

CHAPTER II: REVIEW OF LITERATURE

The literature search is an attempt to identify, locate and synthesize completed research reports, articles, books and other materials about the specific problems of a research topic.

CHAPTER III: HISTORY AND DEVELOPMENT OF DENTAL COLLEGE LIBRARIES

In this Chapter-III gives information regarding history and development of dental college libraries, Resources of digital information, list of free online dental journals, brief information of Dental Council of India, Location of Karnataka, total number of BDS colleges in India, State wise number of BDS colleges in India, total number of MDS colleges in India, the number of Health Science Institutions affiliated to RGUHS, Bangalore and Libraries and Information Network in Karnataka.

CHAPTER IV: LIBRARY AUTOMATION AND NETWORKING IN DENTAL COLLEGE LIBRARIES

The Chapter –IV deals with the details regarding history of automation in India, meaning of automation, definition of library automation, objective of library automation, need of library automation, steps in library automation, implementing library automation and housekeeping operations. It also describe automated library services, barriers of library automation, networking, objective of networking, need of networking and contribution by various National and International networking associations.
CHAPTER- V: ANALYSIS AND INTERPRETATION OF DATA

The relevant data collected through questionnaire and interview schedules designed for the study will be analyzed and interpreted by the way of tables, graphs, pi-charts and percentage circles etc.

CHAPTER–VI: MODEL PLAN FOR LIBRARY AUTOMATION AND NETWORKING IN DENTAL COLLEGE LIBRARIES

In this Chapter-VI Researcher design the model plan for library automation and networking in dental college libraries affiliated to Rajiv Gandhi University of Health Sciences, Bangalore.

CHAPTER- VII: FINDINGS, SUGGESTIONS AND CONCLUSION

On the basis of analysis and interpretation of data the researcher would like to arrive at specific findings and important suggestions will be configured based on the findings of the study and test the hypotheses and fulfill the objectives of the study. The conclusion of this chapter will be helpful in determining the need of improving the dental college libraries selected by the study.

Bibliography

APPENDICES

1 List of Dental Colleges
2 Dental College Libraries: at a glance
3 Questionnaire
1.16 CONCLUSION

Library automation is the process which needs proper planning, timely implementation and periodical evaluation. The librarian with the administrators has to set the priorities after analyzing the current status and future requirements. Selection of the suitable integrated library management package according to the needs of the users and the library is important. Retrospective conversion, OPAC, circulation and serials control, etc. should be conducted with care. Staff training and user education are keys to the success of the process. Library automation invites realistic approach. Here, those institutions which freed their visions from the traditional shackles of financial insecurities and fears of making proper decisions can only set the pace of journey to excellence.

Academic achievement of a student is closely related to his/her ability to find, evaluate and use the required information according to the curriculum needs. An automated dental library with a variety of resources and user oriented services can lead them to the goals.
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