Literature Review:

- **D. Shivalingaiah (2009)** observed that, Research and development are the index of prosperity of the nation. The LIS research in India is gaining the attention of LIS researchers. The number of researchers registering for doctoral research is increasing over the years. Though the output is increasing over the years, the productivity of individual universities is not very encouraging. There could be several factors contributing this situation. It is high time that the universities and research supervisors take stock of current status of research and initiate corrective measures to improve the productivity of qualitative research. In the era of internet, the ICT supported and professional related subject areas call for the attention of LIS researchers and research in those areas will definitely contribute to the growth of knowledge and country.

- **Fatemeh Malekabadizadeh (2009)** observed that, LIS is vitally important for development. Therefore librarians, libraries, and library associations, as well as information systems, all play a role in fostering creativity, innovation, and dealing with people’s needs and expectations. LIS can overcome its problems and shortcomings and meanwhile adapt itself to rapid social changes. Librarians should consider what is needed for national development and train sophisticated professionals to deal with development issues (234). This requires qualified LIS teachers who have adequate knowledge and experience to train the best students.

- **International Seminar on ‘Libraries on the Agenda’ (2008)** supported by the National Knowledge Commission had come out with certain action plan out of the Workshop results. The workshop resolved to take up on priority basis the following three recommendations out of the ten recommendations of NKC.

- **Prof. Krishan Kumar (2010)** observed that, Libraries hold a special position in the development of a society is evident from the fact that rulers took keen interest and are responsible for the origin of LIS education in the country. Experts from abroad were invited to provide a strong base and an international touch to it. LIS education in India is fortunate to have its torch bearer none other than the father of library science, the great
Prof. S.R. Ranganathan. Of all his qualities, his being a teacher was a boon to library science in India.

- **S. P. Singh (2003)** observed that, Today, the LIS profession has attained the status of a full-fledged discipline in India. However, it has low recognition and has not been regarded at par with other well-known professions. As a result, most students do not opt for librarianship as a first choice of study. National bodies such as ILA, IATLIS and IASLIC should give serious thinking to find the timely solutions for the problems prevailing today. There should be a National Accreditation Body to apply rigorous parameters before granting accreditation to a library school. This will help to establish quality control in LIS schools.

- **UGC Model Curriculum (2001)** stated that, Library and Information Science (2001) was prepared to bring standards and quality in LIS education in the country. It is to provide dynamic model / guidelines for an updated curriculum for LIS schools in the country. The model curriculum realized that it has to give emphasis to IT component and IT tools and techniques be made central to the LIS programmes. The CDC report makes recommendations that ‘LIS Departments should be equipped with adequate number of practical tools..... such as classification schedules, catalogue codes, list of subject headings and thesauri in the ratio of 1:2.... and collection of reference tools both in print and electronic media’.

- **Divatankar N.I.** stated in ‘Curriculum Development in the Light of ICT Applications and Networking in Libraries : A Case Study of DLIS, Shivaji University, Kolhapur’, Curriculum is an organized plan of course, activities based on objectives. Infrastructure of ICT and teaching experiences are to be used for managing traditional knowledge and electronic knowledge to modernize the library services. Similarly the NKC and NAAC have recommended modernizing the library services for better and quality education. In the ICT era, due to lack of expertise and skills, the professionals other than LIS professionals are encouraching the spheres of LIS. Therefore, it is the dire need and responsibility of the LIS schools that they should generate the technically trained / skilled LIS professionals in order to meet the present and future challenges.
• **Dennis Ocholla** observed that, notwithstanding variations, there are common trends in the growth and development of LIS schools. These include periodic curriculum reviews and revision; increased application and use of ICTs; decreasing or increasing student numbers; mergers and reorientations; the relocation of LIS programmes; and expansion and closure. The number of LIS schools is decreasing in South Africa. This decline perhaps supports the view that the LIS job market is growing smaller or shrinking. A number of LIS schools have closed. We also note that certain expansions are not necessarily justified by market needs.

• **Hadgali Gururaj (2010)** studied on ‘Role of National and International Association in Addressing Emerging Challenges and Lingering Issues in LIS Education, Research and Training’ and stated that, National Laboratory Associations have to play a significant role in strengthening the abilities of the professional workers to be proactive in promoting the lifelong learning in the networked environment. Library Association needs to focus the attention to enable the professional workers to inculcate and imbibe such skills and techniques to provide access to a vast range of global resources using both traditional and electronic media. It is also necessary to enhance the new skills and methods to assist the users to use computer, to navigate around the set of databases and also act as able mediators between the learners, provider and learning resources.

• **Jagtar Singh (2010)** observed that, we may like it or not, but the change will continue to take place. If we don’t want to suffer the destiny of dinosaurs, then we will have to make our LIS courses and resources consistent with the needs and expectations of the job-market. Collaboration at national and regional level must be promoted in South Asia. We must train our students to be critical thinkers and independent learners. Otherwise, it will be difficult for them to survive and thrive in a highly competitive and uncertain future. There is no substitute to a competent person. The biggest challenge for the LIS education providers in India is how to bridge the gap between theory and practice on the one hand, and between push and pull technology on the other. Opportunities exist to expand and fine-tune our professional services and LIS programmes to match the market need. Professional associations should play their role in giving directions and framing policies and even reformulate policies under changed circumstances.
Kannappanavar B.U. (2010) studied on ‘Role of UGC in Reengineering the LIS Education’ and stated that, in recent years, the Indian Higher Education System has become fully aware of the need for quality. As India becomes integrated into the international economic system and participates in a competitive environment, it has become imperative to provide quality LIS education and thereby produce quality LIS professionals who can work in multiracial and multi-cultural environments. Quality and excellence could not be attained overnight. Organized and focuses efforts by various agencies, viz. Central Government, State Government, UGC, AIU, University administration, LIS professionals, teachers and students are needed to achieve this goal.

Linda Ashcroft observed that, Findings of a pilot research project have identified the contribution to a large portfolio of English language LIS journals by authors whose first language is not indicated as English to reflect subjects which are topical and of international interest. This includes LIS education, which is an area of focus not only for academics but also for practitioners in terms of changing professional skill requirements. Various possibilities are suggested to bring the research and professional expertise from countries with national languages spoken by relatively few numbers to the attention of the English speaking world.

National Knowledge Commission (NKC) stated that, NKC which aims at developing knowledge workers for the knowledge society both for India and also for extending the knowledge to the world over countries. National Knowledge commission (2005) identifies libraries as Gateways to National and Global Knowledge. It states that its prime focus is on five key areas of knowledge paradigm - access to knowledge, knowledge concepts, knowledge creation, knowledge application and development of better knowledge services. The central objective as stated by NKC is to examine the present standards and services of libraries - public, private, institutional an specialized - and other information centers and resources - to create mechanisms and institutions that will serve the people. The goal is to transform libraries from guarded store houses of publications into open stock piles of knowledge. Further, the third recommendation of the ten NKC recommendations is to ‘revamp library and information science education, training and research facilities’.
• **Pratibha Gokhale (Sept 2010)**, stated that ‘Library and Information Science education in India is undergoing a fundamental change in its basic framework and is being re-orientated to meet the current needs of the information society. This paper highlights the programme of study, the current state of affairs and the different components of the LIS syllabi taught in the universities in Maharashtra. The discussion is limited to teaching, research, and course content through regular learning. Distance learning and vernacular media courses are not covered.’

• **Nagarkar Shubhada**, Suresh K Patil and Asmita Patil studied on ‘Model Based On-line Courses for Students of the University of Pune’ and stated that, Implementation of Model in the Department of Library and Information Science, University of Pune is successful to a great extent. The courses are designed for all students of the university. They will take courses at any time and keep themselves update with the latest information. Model is interactive and students can interact with each other through ‘Groups and News Forums’. At present the courses are designed for all students but in future, each department can take an active part to create specialized courses in their field of research. Model administrators will have a continuous feedback from students which will make it more informative and error free. The novel feature of this project is the participation of master’s degree students of Library and Information Science (LIS). LIS professionals can contribute to create an ‘Information Literate Society’ with the help of e-learning tools.

• **Pravakar Rath** observed that, 21st Century compelled Library professionals to Information Professionals through “Education for Information”. International initiatives and Developments forced the Developing Countries to keep pace with such Developments. LIS Schools and Educators must be committed to act as qualitative Problem Solvers and Effective Information Managers. Possessing broad range of capabilities to meet the highest demand in the information sectors (academic, corporate, government) to meet the challenges in new millennium. Quality Assurance is not the Destination but a journey to continuously improve.

• **P.K.Jain** observed that, Library and Information Science students in India have to compete with other professionals to survive in the information business; they have to be
equipped with a curriculum, which can make them function as competent information professionals. In the networked environment there is a strong need for continuing professional education and training. Library professionals require training and retraining to use IT-based resources and services, such as e-mail, FTP, delnet, www, browsers, search engines, databases, system software, application software, electronic journals, computer conferences, scholarly discussion lists, mailing lists, Usenet news groups, websites, CDs and DVDs. The ground reality of the present LIS education system in India indicates that the quality improvement is essential and unavoidable, not only for its survival but also for facing the major changes and challenges of today and tomorrow. Library schools in India need to look forward and take full advantage of the opportunities lying ahead of us. The use of information technology for training LIS students and professionals has become crucial for meeting the challenges of the twenty-first century. It has been predicted that a country that leads information revolution will prove to be more powerful than any other country. The significance of the role of library schools to train manpower for coming decades can contribute to the progress of the nation.

S. Sudarshan Rao stated that, One of the major problems faced by the LIS schools in India is poor infrastructural facilities in LIS departments, except in a few central universities, where funding is available to build infrastructural facilities. The other problem of great concern to LIS schools in India is the inadequate or ill-equipped faculty, who are not well trained on IT aspects to train the students suitably on the emerging IT challenges on LICs. The young generation of faculty in LIS departments in many a case, possess comparatively better skills on computers and IT, but their skills are not properly utilized for want of IT / Computer labs or facilities to train the students. Recruiting the faculty positions in the existing vacancies in the university departments on creating the new positions and appointing the faculty became a far cry of the LIS profession for quite long. In view of the inadequate infrastructural facilities, computer of IT labs and the expertise with the LIS schools, now it becomes imminent that the facilities available with certain modernized Library and Information Centers, especially of scientific, technical, research and academic institutions in the region of LIS schools have to be explored by developing collaborative arrangements / agreements on an urgent basis to make use of their resources and expertise for providing certain practical component of the LIS
programmes, so that the students of LIS schools develop the competencies to work in the modern day libraries. LIS education in India is strong in its theoretical aspects but poor in providing the practical aspects. The LIS professionals, largely do not come out of the box, after all, they are more like a programmed lot and do not dare to deviate from the already set programme or parameters. They work in the libraries in a routine, traditional manner and never look forward in how best to improve library services and products to benefit the customers and bring honour to the profession.

- **Fatemeh Malekabadizadeh (2008),** "Development" is a desirable goal for most people and nations. While development is associated with economic progress, the economy is not the only factor. There are other factors involved, including life skills and security (127:15). Science and technology, and access to information are crucial factors in development. To achieve the goal of development, professional education is essential, and we must make fundamental changes in higher education systems. LIS is vitally important for development. Therefore librarians, libraries, and library associations, as well as information systems, all play a role in fostering creativity, innovation, and dealing with people's needs and expectations. LIS can overcome its problems and shortcomings and meanwhile adapt itself to rapid social changes. Librarians should consider what is needed for national development and train sophisticated professionals to deal with development issues (234). This requires qualified LIS teachers who have adequate knowledge and experience to train the best students.

- **Sadhana Misra** stated that, Information technology has brought about significant and far reaching changes in the life of the citizens of the country. It has enabled the wealth of knowledge to become much more easily accessible and available to all. In order to keep oneself updated, the demand for information is changing very fast. To cope up with this changing environment and to secure a better survival, LIS field needs a total make-over. Despite certain genuine constraints which some LIS schools are facing in our country the LIS education should prove its importance in the society. To sum up in short, how to put our best foot forward to save the quality of LIS profession solely depends upon us.

- **Sonal Singh** in the study of ‘Lingering Issues in LIS Curriculum : A Case study of Vikram University, Ujjain’ stated that, The quality of LIS education has a direct impact
on quality of well informed society. Thus, it is the prime responsibility to give serious consideration to practice on hand. For speedy access to information, tailoring and repackaging the information, conversion of information sources to digital media, ability to satisfy the end user, ability to reach the unreached and globally reaching anywhere and everywhere, anytime and every time, establishing free flow of information by becoming an indispensable part of global information system, the teachers should be given in service training for computerized library work, and teachers should be ready to shoulder the responsibility of providing intensive practical training to students. The teachers should develop and attitude to produce knowledgeable and skillful products and not only the degree holders. ICT techniques should be used in classroom teaching. Thus, only by avoiding the linger on mentality and providing intensive practical training, with full time devotion, the quality products with an ability to feet in the changing information scenario can become a reality.

Singh Ibohal studied on ‘LIS Education in North East India : A Study of the Existing Curricula’ and stated that, The LIS schools in the North East India have to go a long way to produce professionals who are supposed to be competent in the international era. The curricula adopted in these schools require to be revised and updated from time to time to suite with the challenges situations. The existing lingering issues need to be resolved in which the schools have to take a pivotal role. The concerned authorities also need to realize the changes and developments that have taken place in the field of library and information activities with the applications of new emerging technologies. The national level professional bodies like ILA, IASLIC, IATLIS, on the other hand, should extend their activities and programmes to reach this part of the region. The initiatives taken up by the INFLIBNET Center, Ahmadabad have given opportunities towards this end by way of modernizing the existing academic libraries, developing infrastructure, training manpower, etc. The schools need to find out means to foster their schools to face the challenging problems with the adoption of new curricula which should incorporate emerging technologies so as to make the professionals competent to serve in the changing environment.
Sangharsh S. Gajbe and Shashank Sonwane stated that, the discipline of library and information science has its own peculiarities and problems. It embraces all kinds of activities involved in the whole process of collection, organization, analysis and dissemination of information, and thereby includes a variety of problems, professionals and organizations and intellectual commitments. Hence, a summary treatment of the research work done in this field is covered in the M. LISc, M. Phil. an Ph.D. programmes.

UGC Model Curriculum (2001) stated that, Library and Information Science (2001) was prepared to bring standards and quality in LIS education in the country. It is to provide dynamic model / guidelines for an updated curriculum for LIS schools in the country. The model curriculum realized that it has to give emphasis to IT component and IT tools and techniques be made central to the LIS programmes. The CDC report makes recommendations that ‘LIS Departments should be equipped with adequate number of practical tools..... such as classification schedules, catalogue codes, list of subject headings and thesauri in the ratio of 1:2.... and collection of reference tools both in print and electronic media’. It also recommends that the LIS Departments should be equipped adequately to enable the students to acquire the knowledge and skills in the use of IT tools and services. For this, IT lab with network facilities is to be established. There were some other recommendations made by the CDC report to offer training for the faculty members of LIS departments in the area of application of computers and IT, and to appoint LIS teachers with degree / diploma in computer applications / computer science. Out of 16 papers identified for M. LISc. Course in the CDC report, there are two traditional practical papers viz., Information Processing and Retrieval and Information Sources and Services, followed by one practice paper on IT applications. This is a clear indication of imbalance between practical and theory components in LIS programmes. Such curriculum can only build the theoretical base of the subject but not the practically sound professionals.

Dr. G. Saroja (2006) observed that, the content analysis of two open universities reveals that there is not much variation in the content. They differ mainly in the electives offered in M.L.I.Sc program. The content in both the universities represents a mix of
traditional and modern concepts which is more suitable for Indian situation. In India, several academic libraries are managed using traditional methods, while several others have adopted the Information Technology based Library Services. In this situation, the LIS schools may have to provide educational inputs for both manually operated traditional library systems as well as fully computerized and networked libraries. Offering IT courses or course on digital libraries as electives will be a convenient option.

Topics like - Information Literacy, Library in the multi-cultural society, digitization received very less attention in the LIS curricula of IGNOU and Dr. B.R.A.O.U. The survey of Dr. B.R.A.O.U. learners revealed some interesting findings. While Management skills, Technical skills and Resource building skills have proper coverage in the curriculum, the adequacy of IT skills and Personal skills received least attention. Learner's expressed the need to re-orient the curriculum to incorporate skills to work in the digitized and networked environment.

An observation of the duties performed in various library jobs makes it clear that different levels of library positions require different skill sets. At the basic level, the learners may require practical skills to perform the job and at the middle and top levels they need to improve their managerial, professional and good communication skills. LIS educators should take this into consideration while framing the syllabus for LIS courses at different levels i.e., certificate, Graduate and Post Graduate levels. The survey analysis in the context of livelihood reveals that the learners of Dr. B.R.A.O.U. have settled down well in the profession with gross salary ranging between Rs.10,000 to 40,000. All the respondents who joined the course without employment have secured jobs. For others, the degree has helped them in the change of their designation, Career Advancement and in securing higher positions in the profession.

Because of the multi-disciplinary nature of the new information jobs, the LIS courses should provide the learners with necessary skills with which they can gain employment upon graduation, as well as give them a vision and understanding to cope with the rapidly changing world.
• **Krishan Kumar and Jaideep Sharma (2010)** observed that, Libraries hold a special position in the development of a society is evident from the fact that rulers took keen interest and are responsible for the origin of LIS education in the country. Experts from abroad were invited to provide a strong base and an international touch to it. LIS education in India is fortunate to have its torch bearer none other than the father of library science, the great Prof. S.R. Ranganathan. Of all his qualities, his being a teacher was a boon to library science in India. He contributed everywhere, whether initiating departments, courses, outlining contents or planning a research base for the discipline. Department of library science in the University of Madras, Banaras Hindu University, University of Delhi, DRTC are all his babies and still have a name amongst others. We need to take stock of the situation: what have we achieved, where we are, where we could not reach, and how to improve. History is a great teacher. We learn from our tradition; what led to a name for the country in LIS education throughout the globe. One obvious reason is Ranganathan. But library professionals need to ponder over what he taught us and continue on those lines. Canons of context and currency are some of his important teachings. Library science need to change according to the needs of the time. It is high time, librarians and teachers should come together to overcome all shortcomings and take LIS education to greater heights.

**Bidyarthi Dutta, Anup Kumar Das (2001) observed that,** since dawn of civilization man has been striving to know the unknown. On the long voyage of exploration of unknown man has collected innumerable pearls and pebbles and tried to preserve those, undoubtedly a very fundamental attitude of mankind that initiated the concept of preservation of thought contents or knowledge and gave rise to the concept of library later on. The Vedas for instance have been passed from generation to generation through oral tradition, known as Shruti and Smriti, i.e. to listen and to retain. Side by side, we had also the tradition of preserving manuscripts at places like temples, dargahs (tombs and shrines), madrasas, mosques and tools (schools). The tradition continued during the Middle Ages. So, ‘librarianship’ in the sense of collecting and preserving books and manuscripts has existed in India since time immemorial, but only in the early part of the twentieth century it began to be treated as a distinct field of specialization with its own principles, techniques, theories and practices.